



Innovation Marketplace

October 22-23

2013

San Diego, CA

Presented by:

NORTHROP GRUMMAN

Hosted by:

CONNECT

and the

**San Diego Regional
Economic Development
Corporation**

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WITI

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About WBT Innovation Marketplace

In 2001 Development Capital Networks, serving as manager of the National Association of Seed and Venture Funds, was approached by the Federal Laboratory Consortium with a tech transfer conundrum.

The FLC was seeking a way to introduce federal lab technologies to investors and Fortune 1000 licensees. The NASVF was looking for new sources for deal flow for their investor-members. The concept quickly took form and in 2002, DCN launched the first ever World's Best Technologies (WBT) forum in Pittsburgh, PA.

Today, the WBT Innovation Marketplace has emerged as the premier forum of pre-screened, prepped, undiscovered companies and technologies, sourced from universities, labs, and garages located across the country and around the globe. The WBT is the culmination of a year-long effort of investors, licensees, and tech commercialization professionals. This two day event in San Diego, CA is deal-focused and industry-diverse, showcasing companies and technologies that vary by geography, funding source, and type of research institution.

Now in its 11th year, the WBT has sourced, screened and mentored over 730 companies and technologies from coast-to-coast, and from more than 26 countries. Nearly one in three WBT Innovation Marketplace presenters go on to secure venture capital, license their technology, or sell their IP outright. More than \$800 million in private capital has been invested in WBT technologies.

The 2013 WBT Innovation Marketplace is presented by Northrop Grumman Aerospace Systems, and hosted by CONNECT and the San Diego Regional Economic Development Corporation.

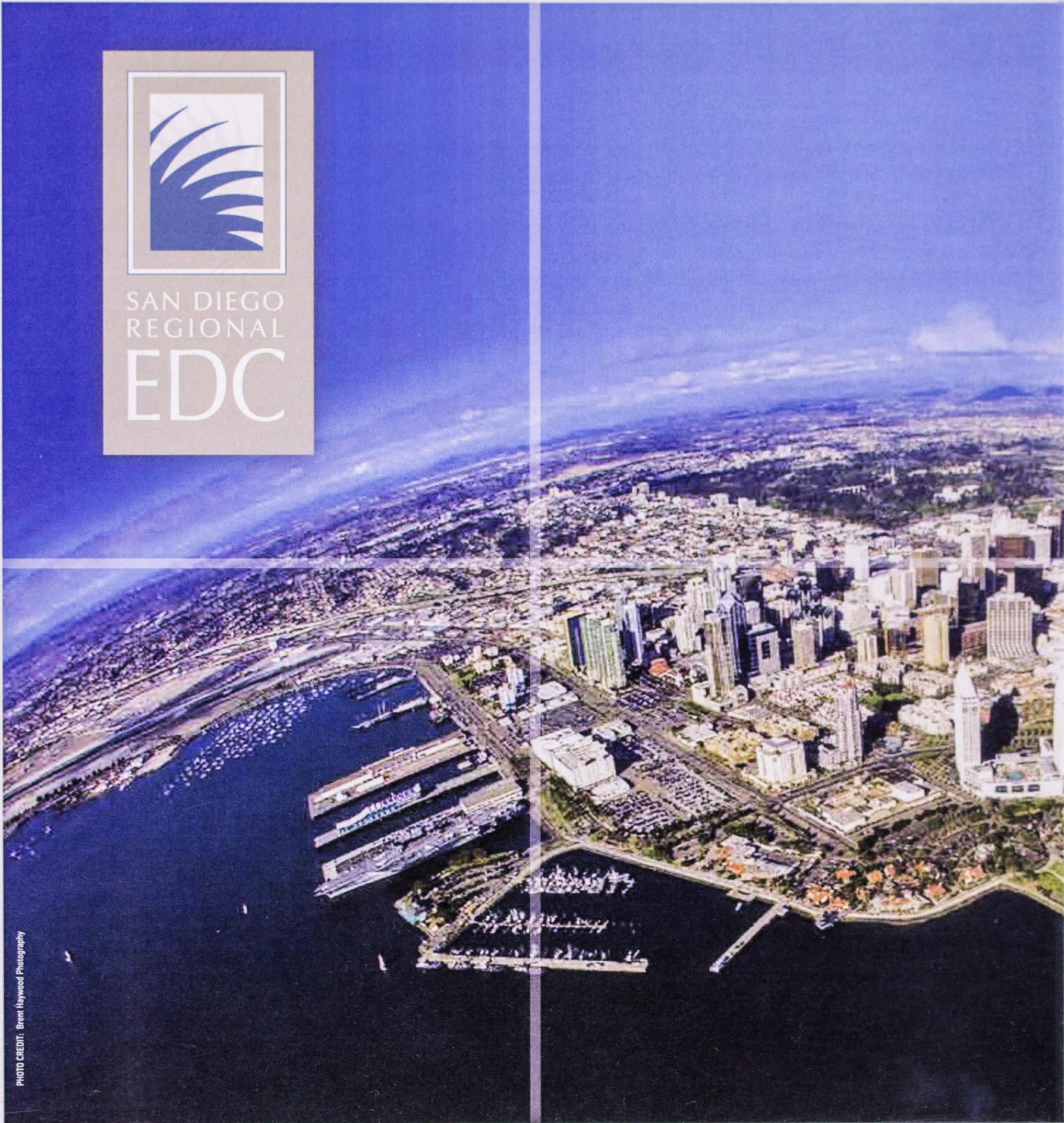
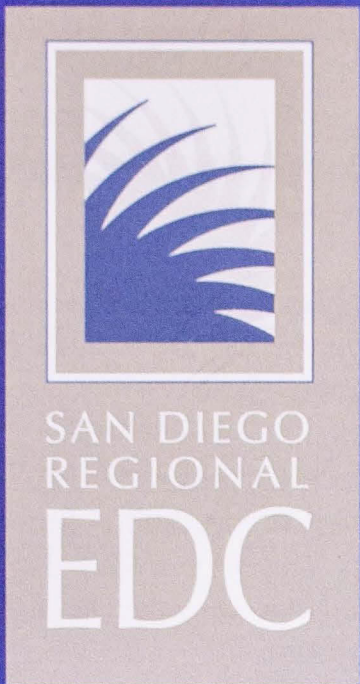


PHOTO CREDIT: Brent Hayward Photography



INNOVATION



TOURISM



MILITARY



LOCAL



INTELLECT

With unparalleled natural beauty, game-changing technology and research, and the largest military concentration in the world, the San Diego region is the total package. Our bi-national region is working together as never before. Southern California's San Diego County, Imperial County and the state of Baja California in Mexico have become one of the top emerging mega-regions in the world. With a combined population of more than six and a half million people, a 27,000 square mile footprint, two major international airports, three land ports of entry and two major seaports, our bi-national mega-region - which we call Cali Baja - offers incomparable development opportunities for global businesses.

THE BIG PICTURE

REGIONALLY FOCUSED. GLOBALLY COMPETITIVE.



CONTACT US

For more than 45 years, the San Diego Regional Economic Development Corporation has mobilized business, government and civic leaders to maximize the region's economic prosperity and global competitiveness. Discover how our culture of collaboration can work for you.

530 B Street, 7th Floor
San Diego, CA 92101

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NORTHROP GRUMMAN

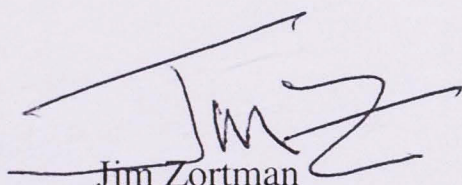
Dear Participants,

On behalf of Northrop Grumman, welcome to the 2013 World's Best Technology Innovation Marketplace in beautiful San Diego, California.

I am honored to be your keynote speaker and host of this great event that unites innovators from around the globe to showcase the best research, technology and partnerships aimed to challenge and further advance our world.

Some of today's attendees were inspired by the early inventors and entrepreneurs such as Henry Ford, Burt Rutan, Steve Jobs, Kelly Giard, Trip Hawkins, Mark Price...and others. These individuals are unique for more than their life-changing inventions. They were bold risk takers, willing to make the impossible, possible, and leaders in their field. Much like many of you here today.

Enjoy your time here. Ask questions. Meet new people. Challenge yourself to learn something new. You never know what innovative ideas presented during this event will find a way into the world we live. I know I'm looking forward to finding out.



Jim Zortman

Sector Vice President Global Logistics and Operational Support
Site Manager, Unmanned Systems Center of Excellence
Northrop Grumman



Dear WBT Participants:

We welcome you to the WBT (World's Best Technologies) Innovation Marketplace and San Diego. For the second consecutive year, we are honored to host the WBT Innovation Marketplace in one of America's leading innovation hubs.

As America's Finest City, San Diego is well known as a city of entrepreneurs and innovation startups. With strong industry clusters in biotech, high tech and clean tech, San Diego received the distinction as one of only 12 California Innovation Hubs designated by the California Governor's Office of Business and Economic Development in 2010. The region's climate of collaboration and commitment to innovation expansion makes it the ideal new home for the WBT Innovation Marketplace.

This year's conference has many activities in store for you – a showcase of 70 of the coolest emerging technologies from around the world; a university poster session highlighting the next generation of young entrepreneurs; two dedicated networking sessions; a Student Venture Open Competition as well as outstanding technical sessions and plenary presentations.

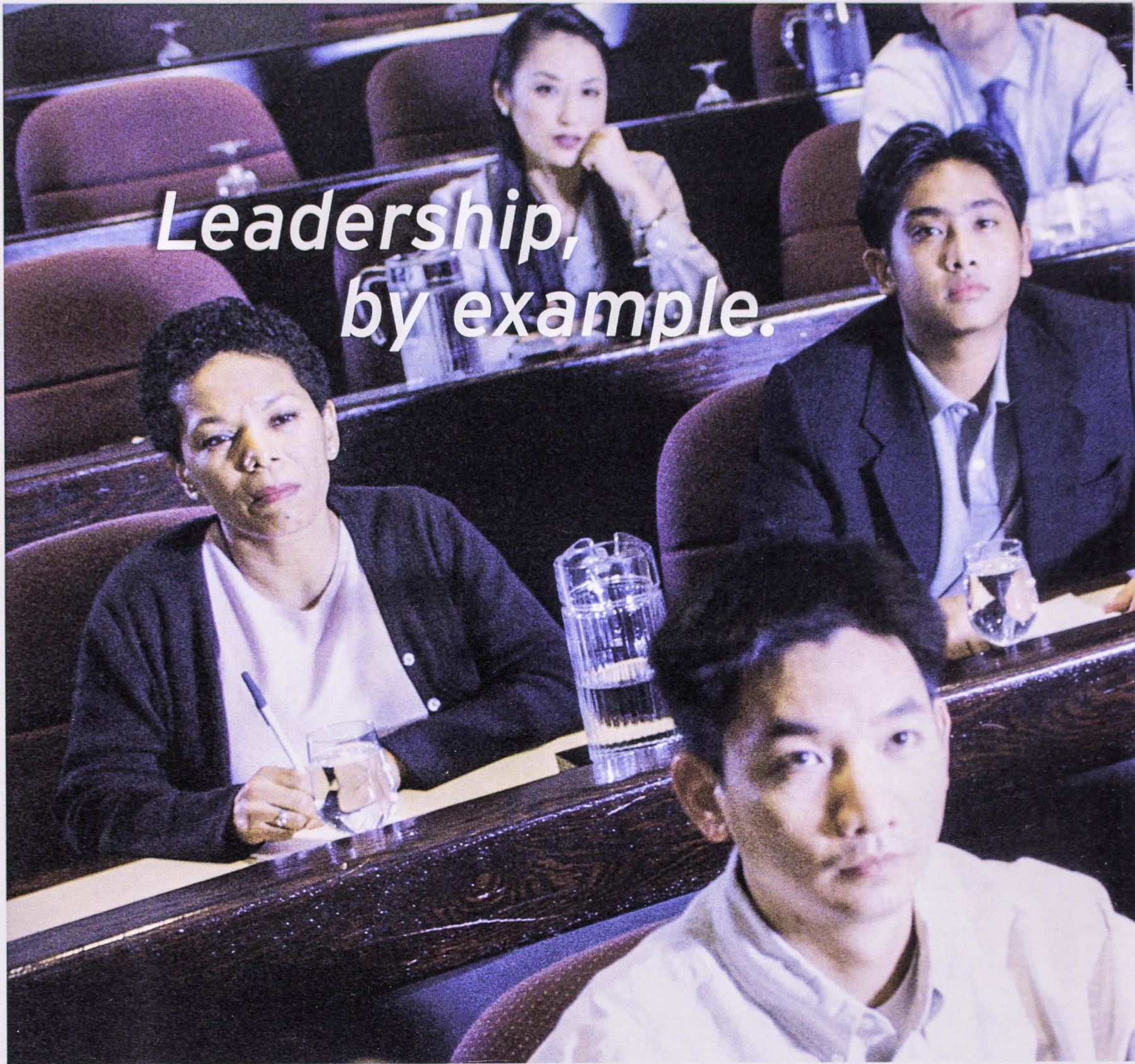
The WBT Innovation Marketplace first premiered in San Diego in 2012 due in large part to the vision and driving force of Duane Roth, the former CEO of CONNECT. Sadly, he passed away on August 3, 2013 from injuries sustained in a bicycling accident two weeks earlier. Duane had an incredible passion for entrepreneurship, and knew that assisting innovators in bringing their emerging technologies to market would result in the growth of the innovation economy ... which is what the WBT Innovation Marketplace is all about. If he were here today he would inspire you to enjoy this incredible conference, discover new connections, and foster new partnerships.

CONNECT, together with our sponsors and partners, invites you to enjoy, explore and take full advantage of all that the WBT Innovation Marketplace and San Diego has to offer.

Regards to all,

A handwritten signature in black ink, appearing to be "Tyler Orion", written in a cursive style.

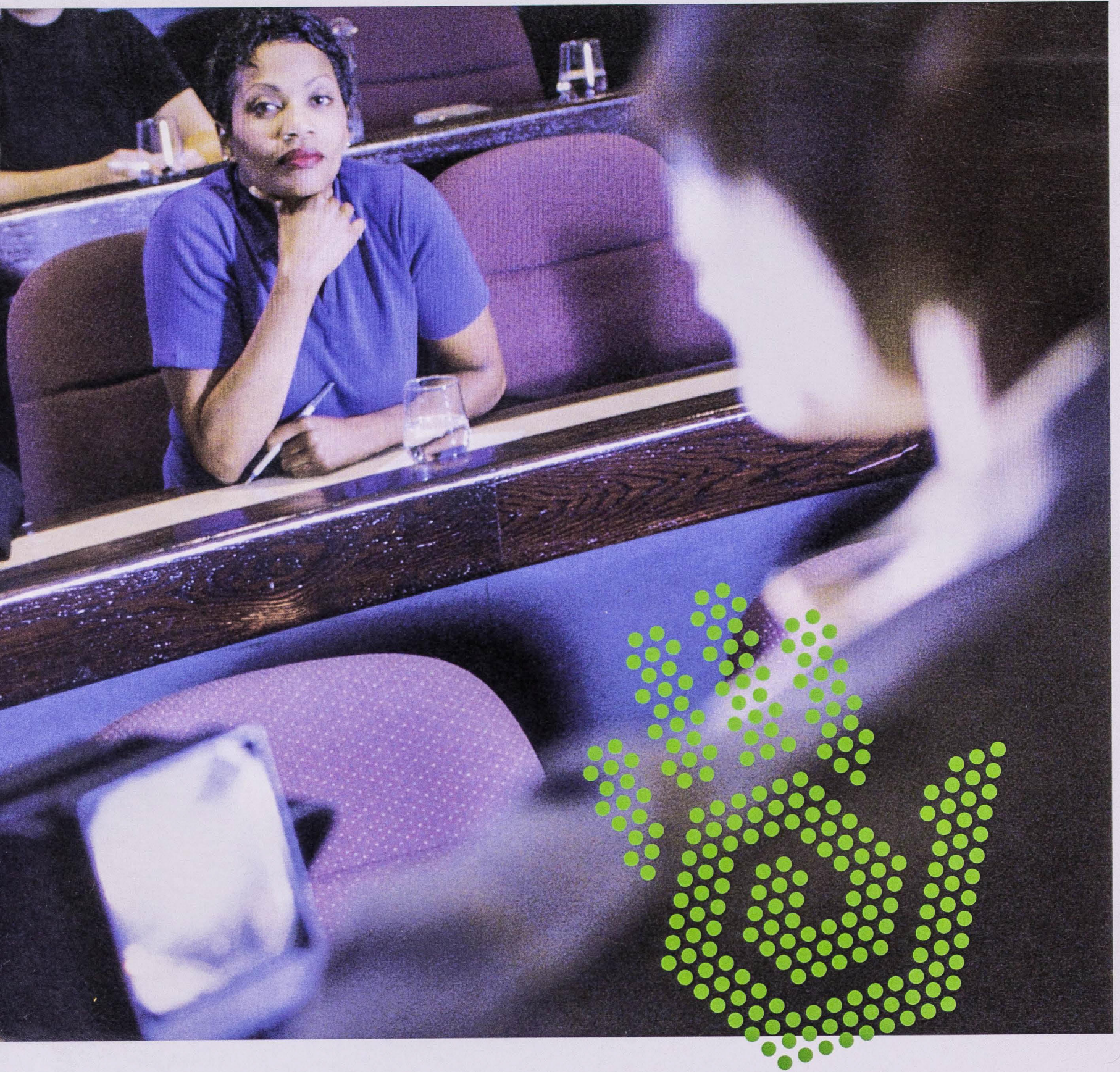
Tyler Orion
Interim President



**Leadership,
by example.**

connected ••••• to success

We applaud *WBT Innovation Marketplace* for inspiring and motivating so many people in our local community. As an active sponsor of personal and professional achievement, we believe in the power of leadership. And we proudly support those organizations that share our vision.



Connect at sdge.com.





San Diego
Regional
Economic
Development
Corporation

October 22, 2013

Dear Conference Attendees:

Welcome to San Diego! As one of the world's leading hubs for technology and innovation, we are honored to host the WBT Innovation Marketplace in what Forbes magazine has dubbed America's Most Inventive City.

Through a collaborative effort, led by visionary Duane Roth, the region's business, government, venture and academic communities have come together to create a new home for the WBT Innovation Marketplace – a home that we believe will serve the conference well. Vibrant life sciences, cleantech, defense, software and telecommunications organizations have converged to help the region showcase and advance the global innovation economy.

Whether your company is looking to license technology, you are an investor, or you are here exploring the event for the first time, we encourage you to take advantage of all the dynamic offerings and opportunities within the walls of the conference, as well as those offered by our city and throughout our region. We are confident that you will agree that our quality of life and innovative business community truly make San Diego “technology's perfect climate.”

On behalf of San Diego Regional Economic Development Corporation, our partners, and sponsors, we are honored to host WBT Innovation Marketplace and look forward to a great conference.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Cafferty', written over a horizontal line.

Mark Cafferty
President and CEO

530 B Street
Seventh Floor
San Diego
CA 92101

Ph: 619.234.8484
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www.sandiegobusiness.org

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LOOKING TO INVEST IN HOT COMPANIES?

CONNECT with us in San Diego!

▶▶▶ SPRINGBOARD

CONNECT's flagship mentoring program

▶ QUICK STATS *(since 1993)*



725
graduates



3,000+
companies
assisted



\$1.3B
money raised



300+
companies
enroll annually

▶ PORTFOLIO COMPANIES *(2005-2012)*



250
active
graduates



1,300+
jobs created



\$980M
money raised

▶▶▶ CAPITAL FORUMS

CAPITAL ROADSHOWS

CONNECT Portfolio Companies travel on a roadshow to leading financial capitals (eg. Bay Area or Boston) and present to interested investors.

DEAL NETWORK

Events held in private residences where selected CONNECT Portfolio Companies present to high net worth investors.

DEMO DAY

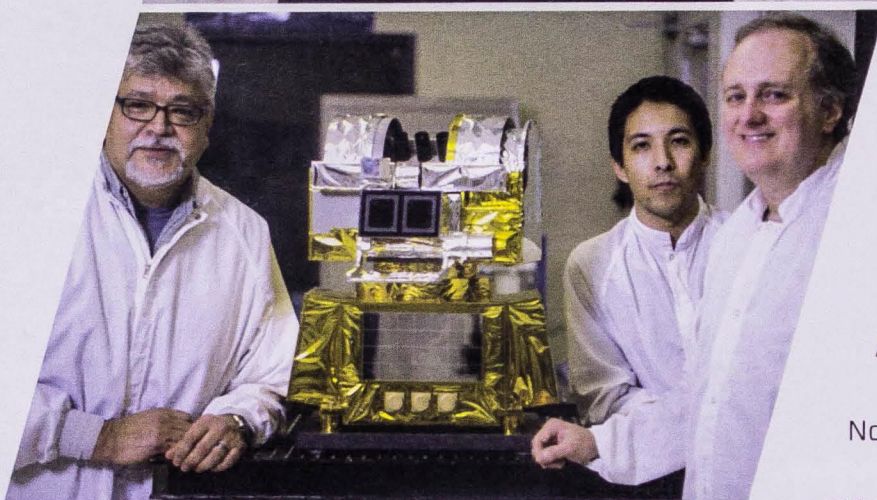
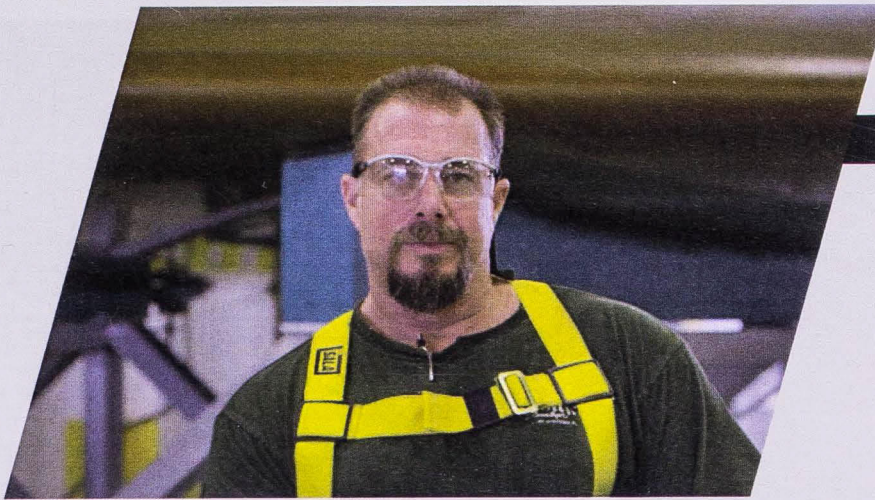
CONNECT and the San Diego Venture Group partner for Day 1 of the Annual Venture Summit where CONNECT presents its top Portfolio Companies.

ROCK STARS of INNOVATION SUMMIT

A premier industry showcase where leading researchers and prominent life sciences and technology entrepreneurs gather with the nation's top venture capitalists and institutional investors.

OPEN ROUND

CONNECT partners with ROTH Capital to mentor and vet innovative Springboard start-ups and provide the link to promising growth companies seeking selection through ROTH's OpenRound investment initiative.



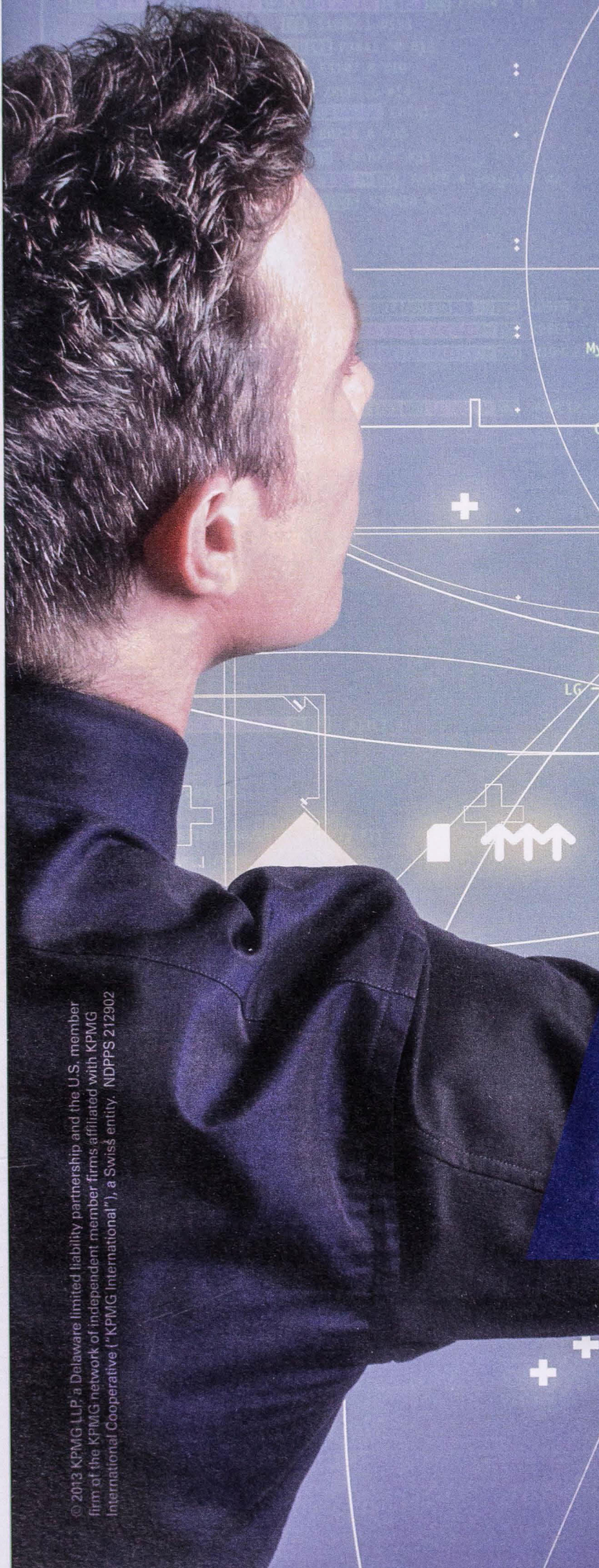
**THE VALUE OF
ADVANCING
INNOVATION
TO SOLVE
TOMORROW'S
PROBLEMS TODAY.**

Northrop Grumman has developed manned aircraft with stealthy signatures, autonomous unmanned aircraft, and space telescopes that look far back in time. Those innovations have defined our most inventive capabilities to defend our nation's freedom and advance human discovery. *That's why we're a leader in providing innovative solutions.*

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN





Take your game changer to the next level.

Bringing an idea to reality is one thing. Bringing it to market is another. That's why you should know about KPMG's VC practice. We share your passion for transforming business and changing the world. At the same time, we can provide sound business advice for turning innovative thinking into real-world value. Because in the end, you want your technology to be disruptive. Not your IPO.



cutting through complexity

Learn more.

Visit kpmg.com/gamechanger

Dean Samsvick, Partner-in-Charge,
Southern California Life Science
Practice, dsamsvick@kpmg.com

Agenda

MONDAY OCTOBER 21, 2013

1:00 PM - 5:30 PM

Strategic Patent Management for Entrepreneurs (SPME) ***Sheraton San Diego Hotel & Marina***

As someone engaged in technology commercialization, you know that patents are vital to your success. But to develop and implement a strong patent strategy, you also must juggle other critical priorities including fund-raising, research, product development, partnering and managing other technologies and patents -- none of which you can afford to drop.

This workshop is designed with you in mind. We'll show you highly effective techniques used by scientists, engineers, startup CEOs and technology managers to take control of their patenting strategy, generate better returns on patenting investments and extract valuable competitive intelligence from patent data.

Even without patenting expertise, you can develop a valuable patent portfolio. This workshop will give you practical skills that you can begin using tomorrow, to help you make better use of your experts and ultimately maximize the value of your company's intellectual assets.

Instructor:

Jeff Carpenter, Director, Bird Dog Innovation Strategies, Development Capital Networks, LLC

2:00 PM - 5:00 PM

Case Study: Winning Negotiations through Practice ***Sheraton San Diego Hotel & Marina***

Presented by Licensing Executives Society (USA and Canada)
and LES San Diego Chapter

Join us for a hands-on opportunity to discuss and negotiate terms on a licensing case study. We'll begin the workshop with an introduction to negotiation principles and a sample term sheet. You will be divided into licensee and licensor teams for an interactive negotiation exercise and provided with both public and confidential information for your role play. At the end of the workshop, teams report their results and how and why they reached them. This workshop will help you recognize and practice elements of a successful negotiation.

For more information visit, [Case Study: Winning Negotiations through Practice](#)

Instructors:

Tali M. Tuchin, Of Counsel, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
Daniel Sachs, Founder & Director of Business Development and Finance, Triton Health and Nutrition

4:00 PM - 6:30 PM

Registration Opens ***Bel Aire Ballroom Foyer - Sheraton San Diego Hotel and Marina - Bay Tower***

Beat the morning rush on Tuesday. If you arrive on Monday the 21st stop by the registration desk from 4:00 PM- 6:30 PM to check in.

Agenda (Continued)

5:30 PM - 7:00 PM

WBT2013 and Global CONNECT Summit Joint Reception
Catalina Ballroom - Sheraton San Diego Hotel and Marina - Bay Tower

Beat the rush, check in early for the WBT and join us for a joint reception with Global CONNECT Summit.

TUESDAY OCTOBER 22, 2013

7:00 AM - 8:00 AM

Continental Breakfast
Bel Aire Ballroom Foyer - Sheraton San Diego Hotel & Marina - Bay Tower

7:00 AM

Registration Opens
Bel Aire Ballroom Foyer - Sheraton San Diego Hotel and Marina - Bay Tower

8:00 AM - 8:45 AM

Welcome and Plenary Session
Bel Aire Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

Join Northrop Grumman for this exciting plenary session as we kick off the WBT 2013.

Speaker:

James Zortman, Sector Vice President, Northrop Grumman Aerospace Systems

9:00 AM - 9:50 AM

Creative Early Stage Financing Structures
Point Loma Ballroom- Sheraton San Diego Hotel & Marina - Bay Tower

With the traditional VC funding model undergoing changes and the economy rebounding slowly, the usual funding routes for early stage companies has shrunk. Entrepreneurs are therefore still struggling to access funding sources and raise the necessary capital they need to grow their innovation companies to the next level. As a result, a need for new and creative approaches to funding early stage companies is called for. Join a panel of experts as they discuss some of the new investment platforms and trends in the early-stage investing marketplace.

Moderator:

Emad Fareed, Senior Manager, Audit, KPMG LLP

Speaker(s):

Ted Roth, President, Roth Capital Partners

J.P. Ditty, Managing Director, KPMG

Melinda Richter, Head of Janssen Labs, Janssen Labs

Industry Partnerships with Federal Labs - Why they work and what's in it for you
Coronado Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

In this session you'll learn about the many assets and opportunities available to you from our network of hundreds of federal laboratories from 18 agencies. You will learn how to harness these opportunities ranging from licensing technologies, patents and technical know-how the labs have developed; Creating and utilizing Cooperative Research & Development agreements (CRADAS); utilize

Agenda (Continued)

unique federal laboratory facilities & capabilities available to you; and partnering with a federal laboratory on SBIR/STTR awards.

Moderator:

Rick Shindell, Program Manager, FLC Far West Region

Speaker(s):

Brian Suh, Director - Technology Transfer Office, SPAWAR Systems Center Pacific

Belinda Snyder, Program Manager, Los Alamos National Laboratory

Brad Chisum, CEO, Lumedyne Technologies

John E. James, Assistant Directate, NASA/Johnson Space Center

10:00 AM - 10:50 AM

Changing Impact of Academic/Industry Partnerships on Innovation

Point Loma Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

The WBT panel will focus on innovation and the different strategies or thinking within companies about the role/value of company/university collaborations in fostering and supporting innovation. For example, what is the view of CEOs of companies on the strategic importance of partnerships? We will explore how the thinking about the importance of collaborations as part of an overall business strategy has changed over the past 10 years. We will also discuss a few case studies where a partnership was particularly impactful from the perspective of High Tech, Big Pharma and the University. And, how uniform is the drive within the company to accomplish this goal; therapeutic areas, external innovation and senior corporate leadership or C-suite.

Moderator:

Teri Melese Ph.D., Asst Vice Chancellor, University of California, San Diego

Speaker(s):

Doug Busch, Retired - Senior Vice President and Chief Operating Officer, Intel-GE Care Innovations

Anthony Marshall, Global CEO Study Program Director & Strategy and Transformation Lead, IBM Global Services

Zafrira Avnur Ph.D., Global Head, Academic Collaborations & Neglected Diseases, Roche

Richard Twogood, CEO, Dirac Solutions Inc.

Alfredo Ramirez, Director and Chief Architect, HALE Systems, Northrop Grumman Aerospace Systems

Discovering Great Deals in Unusual Places - Extraordinary Investment Deal Sourcing for Extraordinary Returns

Coronado Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

Providing deal flow is the first step angel investors take to make great investments. The process of sourcing good deals is fairly well known to most investors. But, sometimes opportunities come investors' way "out of the blue." Learn where, when and how smart investors pay attention to great deals that they stumble onto in unusual places. Panelists will share their stories and other

Agenda (Continued)

attendees will add theirs after which the group will identify lessons learned from them all.

Moderator:

James P. Troxel, Manager, WBTangels

Speaker(s):

Jay Kunin, Angel and Member, Tech Coast Angels

John M Newsam, Member, Chemical Angel Network

Christopher N. Fountas, Partner, Arsenal Venture Partners

Warren Hanselman, Member of the Board of Directors, San Diego Network, Tech Coast Angels Inc.

11:00 AM - 11:50 AM

Hot Markets and Sizzling Sectors

Point Loma Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

The novelties of a few years ago have quickly become mainstream — smart phones, tablets, 4G, cloud computing, electric vehicles, big data, streaming media, mobile games, solid state drives. But several sectors have disappointed — cleantech, nanotech, batteries, biofuels, 3D displays, genomics. Meanwhile, innovation and market opportunities have become more and more global every year. Join us for a discussion of what's hot, and what's not, in the high tech world.

Moderator:

Bill Reichert, Managing Director, Garage Technology Ventures

Speaker(s):

Patrick Sullivan, Chairman & Founder, Oceanit

Gabe A Watson, Vice President, GeoInt, Sensing & Science Space Systems, Northrop Grumman Aerospace Systems

Edgar Auslander, Vice President, Corporate Development and Strategy, Qualcomm

12:00 PM - 1:15 PM

WBT Marketplace Opening Luncheon sponsored by SDG&E

Bel Aire Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

SDG&E invites you to lunch! Join fellow attendees to discuss the morning's content rich sessions and get ready for the afternoon pitch sessions.

1:30 PM - 2:30 PM

Technology Presentations

Point Loma A, Point Loma B, Coronado Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

2:30 PM - 3:30 PM

Networking Hour

Fairbanks Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

Agenda (Continued)

3:45 PM - 4:45 PM

Technology Presentations

Point Loma A, Point Loma B, Coronado Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

05:00 PM - 07:30 PM

Meet the Presenters Reception sponsored by the Canadian Consulate

Fairbanks Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

This is the big one - during this reception network like a pro. Relax, have a drink, and geek out with fellow entrepreneurs, investors, and corporate licensees.

This reception takes place in the exhibit area.

Rady School of Management Student Venture Open Elevator Pitch Competition

Fairbanks Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

During the reception be on the look out for the flash mob style, Rady School of Business Student Venture Open Elevator Pitch Competition.

WEDNESDAY OCTOBER 23, 2013

7:00 AM - 12:30 PM

Registration Open

Bel Aire Ballroom Foyer - Sheraton San Diego Hotel & Marina - Bay Tower

8:00 AM - 8:45 AM

WBT Marketplace Breakfast

Bel Aire Ballroom Foyer - Sheraton San Diego Hotel & Marina - Bay Tower

9:00 AM - 10:00 AM

Technology Presentations

Point Loma A, Point Loma B and Coronado Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

10:15 AM - 11:00 AM

Networking Hour

Fairbanks Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

11:15 AM - 12:00 PM

Technology Presentations

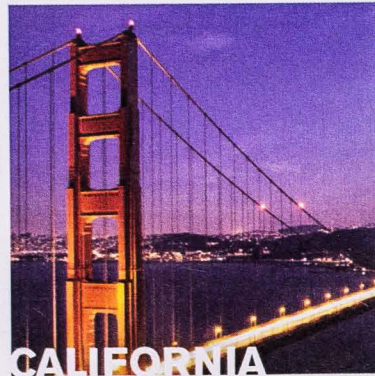
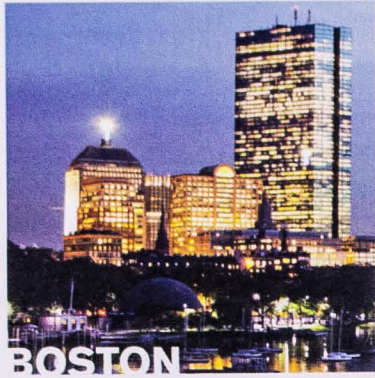
Point Loma A, Point Loma B and Coronado Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

12:00 PM - 1:45 PM

WBT Awards Luncheon

Bel Aire Ballroom - Sheraton San Diego Hotel & Marina - Bay Tower

Continue the networking and join us as we recognize the presenters and the WBT community that makes this annual event such a success. The WBT Awards and The Rady School of Management Student Venture Open winners will be announced, honoring the top technologies and student teams selected by our on-site Judges and participants.

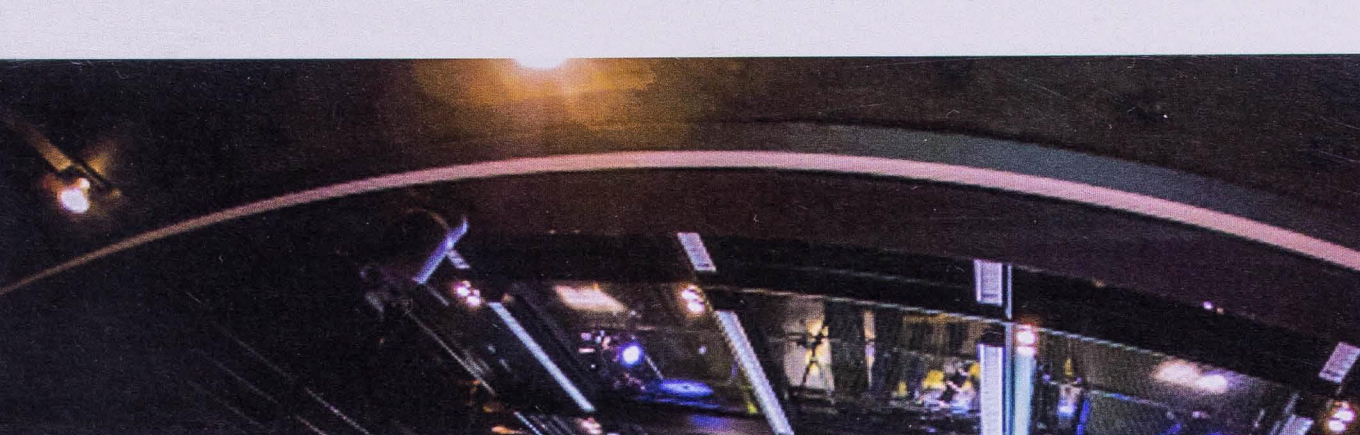


Johnson & Johnson Innovation Centers

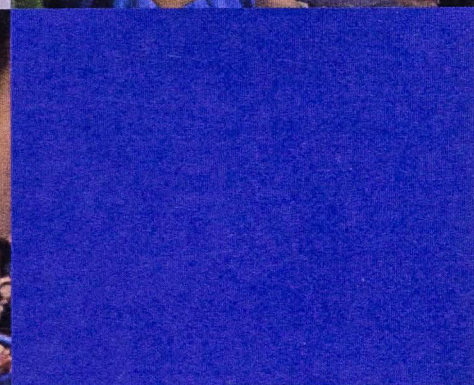
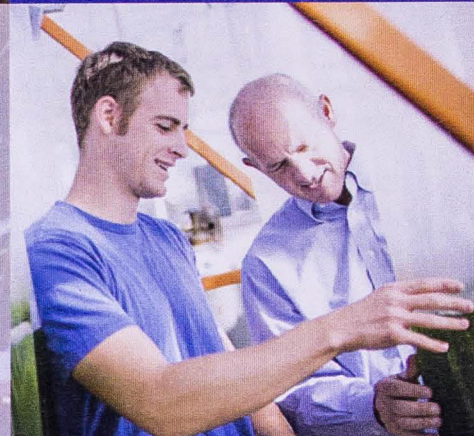
A new approach to advancing early-stage innovation

Johnson & Johnson Innovation is positioned at the heart of the world's most creative science hubs. We contribute to the life sciences ecosystem by being an integral member of regional scientific communities and featuring a new approach to partnering to advance early-stage innovation. Our goal: translate cutting edge ideas into healthcare solutions for patients faster.

Together we can transform patient care. Find out more at www.jnjinnovation.com

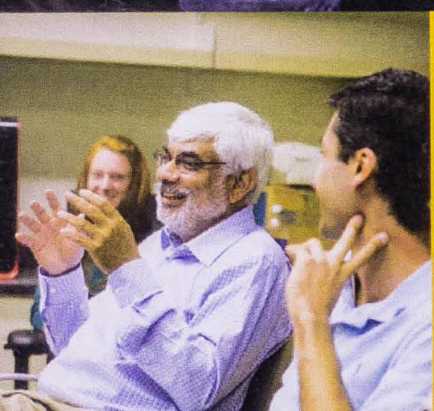
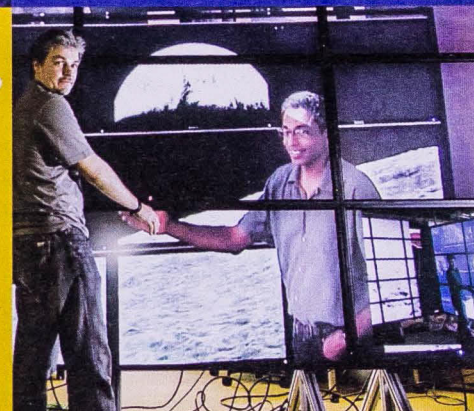


UC SAN DIEGO is an academic powerhouse and economic engine. Innovation is central to who we are and what we do. Our campus is committed to community engagement, public service, and industry partnerships in order to advance the quality of life for our region, state, nation, and the world.



Ways to partner with UCSD...

- » license technology to form new companies or augment existing businesses
- » share knowledge and expertise
- » sponsor new innovation



Visit alliances.ucsd.edu to learn more about creating relationships with the university.



Transferring innovative UCSD technologies around the globe, the TTO works with companies that range from start-ups to multinational groups to bring the next big IDEA to commercial markets. With our partners, we make it happen. Join us in creating a mutually beneficial relationship.

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9500 Gilman Drive, MC 0910 | La Jolla, CA 92093
858.534.5815 | invent@ucsd.edu | <http://invent.ucsd.edu>

Thanks to our 2013 Mentors and

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William Lyman
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Atlanta, GA

Jonathan Masters
Mobile Captions Company
San Diego, CA

Claudia Milz
Bastech LLC
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Jim O'Connell
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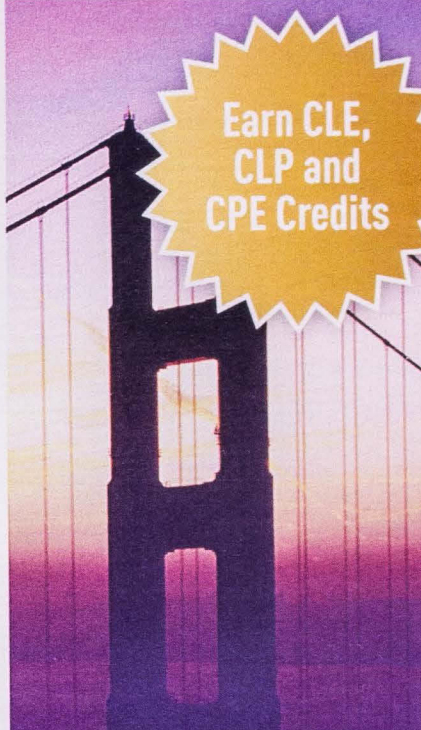


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Teri Melese Ph.D.
Asst Vice Chancellor
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Christopher N. Fountas
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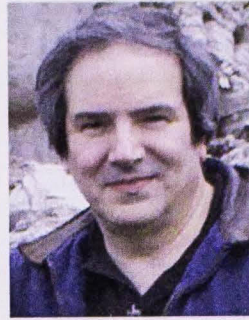


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Northrop Grumman Aerospace
Systems



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Program Manager
FLC Far West Region



Bill Reichert
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Manager
WBTangels

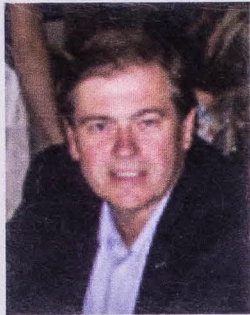
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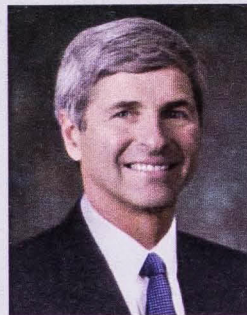
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Mintz, Levin, Cohn, Ferris, Glovsky
and Popeo, P.C.



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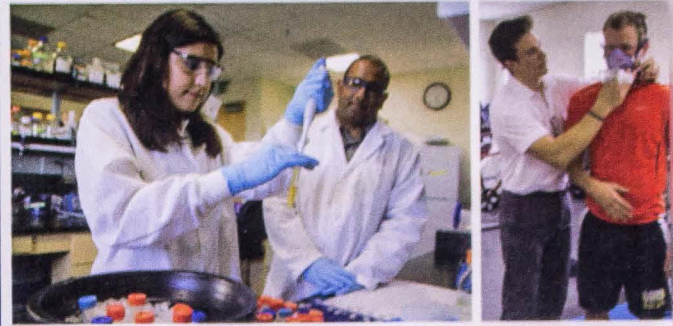
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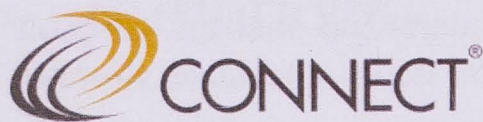
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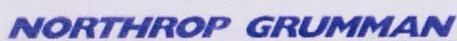


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San Diego Regional EDC implements strategies that set the San Diego region apart from our competitors as a thriving center of technology and entrepreneurship. Fueled by the support of 150 companies deeply committed to regional prosperity, our objective is to strengthen San Diego's diverse economy to compete in the global marketplace, and to position the region as the world's premier business location. Our job-growth strategy leverages the region's highly-skilled workforce, innovation economy, leadership in cutting-edge industries, and outstanding quality of life.

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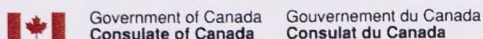


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Supporting Organizations (Continued)



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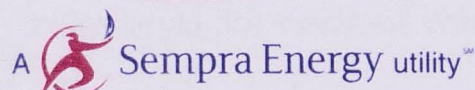
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ROTH is an investment banking firm dedicated to the small-cap public market. Since its inception in 1984, ROTH has been an innovator in this market. Headquartered in Newport Beach, CA, ROTH has regional offices in San Diego, Los Angeles, Seattle and New York. International offices include a Shanghai Representative Office and a Hong Kong Limited Office.



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The San Diego iHub, which encompasses the combined area of San Diego, Southwest Riverside County and Imperial Counties, will build upon the region's existing innovation infrastructure and strong culture of collaboration to create four convergence clusters: mobile health, biofuels, biomimicry, solar energy and energy storage. These clusters will utilize San Diego's wealth of resources to promote new collaborations, create employment opportunities, shorten the commercialization process, and attract funding for technology.

Supporting Organizations (Continued)



Since it was founded in 1897, San Diego State University has grown to offer bachelor's degrees in 84 areas, master's degrees in 76 areas and doctorates in 21 areas. SDSU's approximately 31,000 students participate in an academic curriculum distinguished by direct contact with faculty and an increasing international emphasis that prepares them for a global future.

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ACCT Canada (Alliance for Commercialization of Canadian Technologies) is Canada's pre-eminent membership based organization addressing all matters related to the interface of academic research-industry engagement and research discovery mobilization. ACCT Canada provides a unique nation-wide platform for all proponents in the Canadian innovation ecosystem to collaborate for the purpose of better mobilizing, transferring, translating and diffusing newly discovered knowledge and inventions resulting from both academic Science & Technology (S&T) and private sector Research and Development (R&D) investments.

Supporting Organizations (Continued)



Cimarron Capital Partners has designed, built and managed innovative fund investment programs for over 15 years. Cimarron has the experience needed to provide asset management services for institutional investors, regional investors, family offices and custom accounts. Since 1993, our Managing Directors have launched four funds and advised over 20 states and organizations in fund design and portfolio construction. We work closely with our clients to deliver effective, customized venture capital and private equity portfolios.



The mission of the Cleantech Open is to find, fund and foster entrepreneurs with big ideas that address today's most urgent energy, environmental and economic challenges.

Since our founding in 2006 by Silicon Valley leaders, our organization has established itself as the leading force for accelerating clean technology entrepreneurs. Of the nearly 600 companies we have worked with, 80% remain viable today and they have gone on to raise external capital exceeding \$660 million.

By developing a network of more than 1,500 professional volunteers who are willing to lend time and expertise to entrepreneurs who may otherwise not be able to get their ideas off the ground, we are facilitating the growth of the cleantech industry and all the positive impact that will come from such technologies.



The Federal Laboratory Consortium for Technology Transfer (FLC) is the nationwide network of federal laboratories that provides the forum to develop strategies and opportunities for linking laboratory mission technologies and expertise with the marketplace.



Innovation, America's Journal of Technology Commercialization, is a quarterly magazine published by Technology Ventures Corporation. It reports on new technologies, entrepreneurial activity, topics of interest to investors, activity at DOE and other national laboratories, and issues concerning technology transfer.

Supporting Organizations (Continued)



Licensing Executives Society (U.S.A. and Canada), Inc. Established in 1965, the Licensing Executives Society (U.S.A. and Canada), Inc. (LES) is a professional society comprised of nearly 5,000 members engaged in the transfer, use, development and marketing of intellectual property.



MRUN was established in 2002 as an alliance of university business development professionals dedicated to facilitating growth of technology spinout companies through start-up formation. MRUN is built around the idea that regional cooperation in new business formation can foster commercialization of university research.

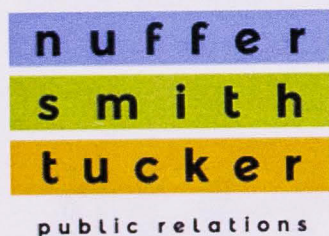


WBTangels is a network of angel funds that work together to invest in entrepreneurial ventures. Each angel fund has the opportunity to leverage a national network of technology, talent, and capital sources provided through the WBT Innovation Marketplace and other partners. Currently WBTangels includes angel funds in the states of North Dakota, Oklahoma and Wyoming.



WITI's mission is to empower women worldwide to achieve unimagined possibilities and transformations through technology, leadership and economic prosperity.

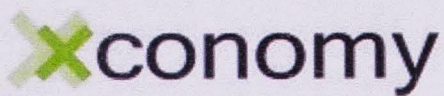
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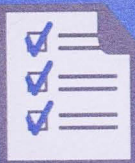
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Artificial Cell Membranes-a technology circumvents the use of cells to provide high-quality membrane proteins (drug targets) in a defined stable polymer membrane

Biotech

Technology Description:

Membrane proteins (MPs) are gatekeepers of cellular function in the body and their function is critical to all aspects of human health. These proteins are involved in physiological processes ranging from vision and odor perception, to sugar metabolism, pain, heart beat and neuro-degeneration. The ability to modulate the function of different MPs, therefore, gives an opportunity to finely control these processes, leading to enhancement of human life. Pharmaceuticals, consumer care, diagnostic products targeting MPs constitute worth of billion dollars annually. Despite their importance, however, MPs remain tremendously underexploited in terms of the fraction of total MP types present in the body. The main reason for this is that MPs are extremely unstable outside of their cellular environment, making it very difficult to study human MPs in industrial/lab settings. Our Artificial Cell Membranes (ACMs) - a proprietary technology is able to provide high-quality functional MPs, in a native-like environment with engineered polymer membranes without the use of cells. This simple yet robust technology provides enormous opportunities to tap underexploited MPs in various applications. For example, novel difficult disease targets can be produced quickly for drug and therapeutic development in a cost-effective manner.

Synopsis of Market Opportunity:

ACM Biolabs will be relevant in the following market segments: drug discovery, consumer care, therapeutic molecules (chemical and antibodies) development and vaccines. ACM Biolabs primary focus is drug discovery market which was valued at over \$12B in 2012, with the market for membrane protein drug discovery, our target market, accounting for at least \$5.1B. The market is set to grow as pharmaceutical companies continue to explore drugs for unexploited membrane protein targets (of which 80% have yet to be exploited). Our focus in the drug discovery will serve as validation for ACM Biolabs and also helps to establish company's acceptance and reputation in the market as a provider/partner for membrane protein targets and customized assays.

Market Analysis:

ACM Biolabs will start focusing on membrane protein drug discovery which was estimated at US\$4.2 billion in 2012, taking into account that GPCR and ion channel protein studies consist of 40% of the drug target class studies. These two membrane proteins make up 50% of the total membrane drug target classes. The membrane protein drug discovery segment is part of the cell-based assay (drug discovery) market which is estimated at US\$10 billion and the larger addressable market of cell-based technology market which is estimated at US\$27 billion. The cell-based technology market comprise of one other segment namely cell biology which is part of basic research and early drug discovery; from target identification to assay screening. The membrane protein drug discovery segment is the secondary target segment to which our customer group segments consist of academic, research institutes and small biotechnology companies.

Competition:

ACM technology patent combines different aspects from materials science to biology. This unique combination is value proposition of ACM Biolabs and none of our competitors have similar IPs. Our competing companies produce membrane protein targets using cell-lines and heterologous overexpression, thereby having IP portfolios significantly different from our own. The approach and business models of our closest competitors are summarized below- 1. Integral Molecular (USA) – VLPs and customized services. Uses cell-based reverse transfection technology and a lipoparticle (VLPs) alternative to cells. 2. Abnova (Taipei, Taiwan) – Materials supply only. Uses cell-free methods to produce membrane proteins in liposomes. 3. Heptares (UK) – Partnership for GPCR structures. Uses an engineered GPCRs (StaR constructs) of the target, produced in cell-lines that can be used for structural work. 4. ConformetRx (USA) – Partnership for GPCR structures, NMR. Uses mutations and antibody fragments to stabilize GPCRs for structural and NMR studies.

Strategic Partnerships:

ACM Biolabs will partner with service providers, Pharma & biotech companies working with GPCRs and ion channels for small molecule and antibody development to generate traction and cash flow. ACM Biolabs will develop internal therapeutic program with building a virtual team of experts to generate promising clinical candidates. ACM Biolabs seeks investment to strengthen its technology portfolio and business development.

Deal Sought:

Funding or Investment

\$ 1 Million USD, Equity Investment (or) Non-dilutive grants

To fund manpower, equipment, strengthen business development, product development and expand R&D

Technology Description:

Mechanochemical attrition is a patented method of utilizing chemistry and the mechanical grinding of bulk materials in order to form chemically tailored nanoparticles. Current methods of manufacturing functionalized nanoparticle are cumbersome, complex and time-consuming. ADVANO's process of mechanical attrition consolidates 4 essential steps in the manufacturing and functionalization of nanoparticle in a single step. It is simple, scalable, efficient and robust platform technology with an impressive array of applications in several high value markets including biotechnology (targeted drug delivery, cellular imaging and labeling, gene therapy), renewable energy (thin-film photovoltaics, solar paint, advanced catalysis and batteries), and electronics (advanced sensors, heat and UV resistant films, superhydrophobic coatings). The technology has the ability to penetrate a very large number of markets due to the ability to process many types of materials (conductors, magnetics, semi-conductors, ect.) into functionalized nanoparticles. This technology is license ready to companies in several industries (advance manufacturing, batteries, biophotonics, etc.) wanting to directly utilize this process.

Synopsis of Market Opportunity:

Mechanochemical attrition has the ability to penetrate a very large number of markets due to the ability to process many types of materials into functionalized nanoparticles. These markets include: biotechnology, renewable energy, industrial, electronics, consumables, cosmetics, environmental remediation, etc. This process can be applied to virtually any market that has applications that will benefit or utilize chemically functionalized nanoparticles. There also exist several opportunities, chiefly: (1) license the process, as is, directly to advanced manufactures and suppliers of industrial processing equipment, or (2) license the process, tailored for specific applications in an specific industry.

Market Analysis:

Highlighting one market, biotechnology is one of the fastest growing industries, surpassing \$320 Billion by 2012 according to Global Industry Analyst Inc. According to BCC Research, the global market for nanoparticles in biomedical technology was valued at \$21.6 billion in 2012. However, this is only a very high level analysis of a single market. Because of the nascence of this technology and nanoparticles in general, there is not much quantifiable data on market size or potential. However, we can qualify that the number of markets with high upsides that can utilize nanoparticles is very much growing. High-level estimates of market sizes for other industries have been in the billions (e.g. thin-film energy - \$5 billion, electronics - \$15 billion, industrial coatings and films - \$15 billion).

Competition:

Regarding process replacement, the most direct competitor is Buhler Group, the global leader and supplier of industrial processing equipment. Yet, they are also the first (and largest) potential client, having favorably validated our process, and shown interest in forming future collaborations. There exist a few other companies that reside in the wet grinding and coatings space, however they have yet to show a fortified presence with regards to nanoparticle manufacturing. There does exist several companies that specialize only in nanoparticle manufacturing, utilizing a wide-array of methods (ranging from chemical synthesis to using high-energy lasers). However, ADVANO features a process that provides many attributes that current process lack, at a fraction of the cost. Also, indirect competitors exist in multiple industries due to the cross-industrial potential of this platform technology, however, these are hard to accurately quantify due to the market potential of this process.

Strategic Partnerships:

Tulane University of Louisiana New Orleans BioInnovation Center Idea Village New Orleans Startup Fund

Deal Sought:

Funding or Investment, License or Strategic Alliance

2000000, Venture Funding

Strategic alliance with firm who has extensive experience with licensing deals, and license opportunities with large industrial companies like Proctor & Gamble, Sigma-Aldrich, Buhler Group, ThermoFischer, J&J, etc.

Seed Funding

Agency for Student Health Research

injureFREE
Software

Charlie Wund
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Technology Description:

injureFREE is a cloud based system, both HIPAA and FERPA compliant, currently used by over 150 high schools and youth sports organizations to reports athletic injuries. Its primary purpose is to allow organizations to report injuries in a paperless system, but the aggregated data also allows for monitor of trends within their populations. These trends help guide decision makers on policy and proگرامing interventions aimed at reducing the number of athletic injuries occurring. Intellectual property has been filed protecting the ability for multiple users to access the same reports and add additional information. These users include parents, coaches, administrators and students. Insurance companies are also able to access the data to provide appropriate rates.

Synopsis of Market Opportunity:

With over 22,000 high schools in the US offering athletics, we are actively pursuing the opportunity to collect a valuable database of athletic injury reports. The data collected is currently being reviewed by insurance companies, research organizations and health systems to better understand the causes of athletic injuries and develop age and gender appropriate interventions. Our go to market strategy utilizes strategic partnership to accelerate adoptions. For example, we have partnered with the largest school insurance excess liability fund, SELF, as they have adopted injureFREE as a loss control tool for their 600 member school districts. We have also partners with an online directory of sports medicine providers, SportsMD.com, to connect doctors to schools looking for services.

Market Analysis:

With over 40 million children participating in youth sports in the US, and roughly 8 million sustaining an injury, safety has become a top priority. An estimated 22,000 high schools in the US offer athletics and only 42% provide an athletic trainer (NATA). With almost 2 million high school athletes injured each year, paper forms and antiquated software systems inhibit a school's ability to monitor injury trends and increase organizational liability. Other software platforms require the information be entered by an athletic trainer, leaving over 10,000 high schools in the US with no other means to report injuries other that paper forms.

Competition:

Traditional research models and antiquated software platforms are the only competition. Organizations looking to gather data from their populations can hire a research team or employ other online platforms, like CSMi Sportsware, however neither allow for comparative analytics or allow for parents to access and enter information on the reports. Parental access is a requirement for FERPA compliance.

Strategic Partnerships:

Schools Excess Liability Fund, SportsMD.com

Deal Sought:

Funding or Investment, License or Strategic Alliance

400000, Equity

Distribution License

We will use the funds primarily to fund a North American sales team, expand our marketing efforts, and continue to upgrade our product.

Technology Description:

Currently in Phase 2 human trials, Zoenasa is the synergistic combination of mesalamine plus a potent anti-inflammatory for the treatment of inflammatory bowel disease. In multiple animal and one human study, the combination has been shown to be 50-100% more effective than standard therapy.

Synopsis of Market Opportunity:

The inflammatory bowel disease market worldwide exceeded \$5.3 billion in 2011. Front-line treatment for patients with ulcerative colitis is mesalamine; making up 88% of UC prescriptions and over \$2.0 billion in 2011. Mesalamine, in its different formulations, is a safe but only mildly effective therapy for mild to moderate active ulcerative colitis and induces clinical and endoscopic remission in only up to about 60 percent of patients after 8 weeks of therapy. However, up to 50 percent of UC patients do not achieve the desired therapeutic response to mesalamine. Zoenasa offers significant improvements in front-line treatment for this difficult disease.

Market Analysis:

The global market for IBD treatments in the seven major pharmaceutical markets exceeded \$5.3 billion in 2011, and is expected to grow at a rate of 4.6% compound annual growth rate (CAGR) through 2018, largely driven by adoption of high cost biological therapies for the most seriously ill patients. The primary treatments for patients with ulcerative colitis are formulations containing mesalamine. More than 88% of all ulcerative colitis patients receive treatment with mesalamine. Mesalamine, in its different formulations, is a safe but only mildly effective therapy for mild to moderate active ulcerative colitis and induces clinical and endoscopic remission in only up to about 60 percent of patients after 8 weeks of therapy. However, up to 50 percent of UC patients do not achieve the desired therapeutic response to mesalamine. As a consequence, pharmacological interventions to control disease activity often necessitate escalation of therapy to include agents such as corticosteroids, immunosuppressant drugs (e.g. azathioprine and 6-mercaptopurine) and biologic agents (e.g. anti-TNF α). In these instances the therapeutic benefits have to be balanced against predictable and unpredictable drug-related side effects, toxicities and health care expenses.

Competition:

Competition in the market for mesalamine products is currently focused on drug delivery technologies to reduce the number of pills patients must take daily to increase compliance and patient acceptability. As one of the current leaders in the market, Shire Pharmaceuticals, states in its annual report, mesalamine and balsalazide (mesalamine pro-drug) products are generally protected by formulation patents only (20). Notable examples of this strategy are Asacol[®] and Lialda[®], which currently hold 39% (>\$700 million) and 20% (>\$350 million) market share in mesalamine products, respectively. While incremental improvements in targeting and delivery have consistently been well rewarded by market share and pricing premiums, none of these mesalamine formulations represent breakthroughs in the core issue of efficacy. By significantly improving the efficacy of mesalamine-based therapies for IBD, Zoenasa offers the prospect of redefining front-line therapy for the IBD market and expanding its market potential.

Strategic Partnerships:

Deal Sought:

Funding or Investment, License or Strategic Alliance
\$15 million, Venture Capital
Multiple options considered
Phase 3 Clinical Trial of Zoenasa Rectal Gel, Phase 2a Clinical Trial of Zoenasa Oral Tablet

ADEL (Ambrose Diaphonic Ear Lens)

Energy

Technology Description:

By ingeniously converting sound to energy a bubble is inflated in the ear canal. Markets include hearing aids, earbuds, and headphones. The bubble provides superior sound quality and hearing protection. The device conserves hearing because listeners can reduce power to 1/10 and have better sound that seems just as loud. These results were confirmed at Vanderbilt University Medical Center in 2013. The pneumatically compliant membrane is an elegantly simple innovation with a low cost and high value that through licensing could be and should be incorporated in all earbuds. Funded by NSF, NIH, Vanderbilt University as research partner. The same principal that inflates the bubble can be used to harvest energy from sound so that sound or noise can now be harnessed and made to do useful work. This device received a pioneer patent in 2012 and transitions the synthetic jet from a curiosity to a device capable of performing useful work.

Synopsis of Market Opportunity:

The global market for earbuds is \$2.5B and 12% of earbuds are priced at over \$100. Initially we are pursuing the premium earbud category reserved for products that support a price point exceeding \$100. Worldwide earbud sales were 125 million units in 2011 with 10 million units in the premium category, The premium category grew 74% or 5 times the rate of growth of earbud sales. Competitors attempt to differentiate themselves with fashion or marketing hype and lack any demonstrable superior performance. (Note: the maximum benefit is applied to earbuds that seal in the ear) The global market for hearing aids was \$6 billion in 2009 and \$7 billion in 2011 with 10 million hearing instruments were sold globally in 2010. Growth rate has been 7% for hearing aids. Our products address 30% of the market. Like earbuds, hearing aids without the Ambrose Diaphonic Ear Lens also cause hearing loss.

Market Analysis:

The Go-to-Market plan will begin on Kick Starter selling earbuds. We were recently selected as one of the Top 25 Startups by the Wall Street Journal. We will use this visibility to drive customers to Kick Starter. The Wall Street Journal chose twenty-five businesses to participate in a unique documentary that will give a glimpse into what being an entrepreneur and creating a startup entails. At this writing, after three rounds and three months of competition, we are one of the Top Ten Startups. Following Kickstarter we will then evolve to website sales driven by remnant "advertorials" in regional editions of national media such as USA Today and Wall Street Journal. We have traction and presales from appearances in Readers Digest, Popular Science and other mainstream publications. Hearing aid revenue will initially come from licensing. We negotiated a two-tier royalty model with a hearing aid component maker.

Competition:

Although the barriers to entry are low, the earbud industry is dominated by Skullcandy and Beats Audio. The global market for earbuds exceeds \$2.5B. Incumbents compete fiercely with hype and fashion appeal. The hearing aids segment has been dominated by a handful of majors selling through audiologists. However new entrants now sell online and bypass the audiologist. The bubble advances these online trends. The ADEL bubble eliminates the need for an audiologist to make a custom mold. According to the Hearing Industries Association (HIA), 2.42 million hearing aid instruments were sold in the US in 2007 and more than 9.5 million hearing instruments were sold throughout the world in 2010.

Strategic Partnerships:

Our first licensing agreement is with Sonion, a Netherlands based component maker. Interest is increasing, "If the technology has matured to a state of viability and more importantly, manufacturability, we'd be interested in further discussion/exploration. Tim Trine, Ph.D., CTO, Starkey Hearing Technologies."

Deal Sought:

Funding or Investment, License or Strategic Alliance

1000000, Convertible note

Licensing

Inventory, advertising and promotion

High dielectric constant materials for single layered ceramic capacitors - An alternative to multi layered capacitance
Advanced Materials

Technology Description:

ANU researchers have developed a new giant dielectric constant material with good thermal stability and low dielectric loss. This novel material has application in electrical energy storage for electric vehicles, renewable energy and power grids, and in the device miniaturisation for high density integration into electronic and electrical systems.

Synopsis of Market Opportunity:

At present high capacitance ceramic capacitors, such as X7R and Y5V even Y5R, are typically used in power supply decoupling, telecommunications, solar inverters, wind turbines, computers and space instrumentation. The ANU materials utilise a single-layer structure, compared to the current multi-layer structure used in X7R, Y5V and Y5R ceramic capacitors. It is expected that use of the new material will result in manufacturing cost savings and improved lifespan. Unlike existing multi-layer ceramic capacitors internal electrodes will not be needed resulting in expected increases in reliability.

Market Analysis:

Forecasts: Ceramic Capacitor Consumption By Type (High Capacitance Versus Low Capacitance): The outlook for consumption of ceramic capacitors by type between 2011 and 2017 is for the high capacitance products above 1 microfarad to grow to \$7,880 million USD in worldwide revenues or 65% of sales by 2017- which is a combined average annual growth rate of 32%. Low capacitance products are expected to grow in value to \$4,240 million USD, which is a CAGR of 18%. Source: Ceramic Dielectric Materials: World Markets, Technologies & Opportunities: 2012-2017 & Paumanok Publication, Inc. The following consists of the overall market segments for Ceramic Dielectric Capacitors:- Wireless Handsets, Smartphone, Standard phones, Wireless Telecom, Other Telecom, Notebook Computer, Tablets, Desktop Servers, Printer, Other Business Machines, LCD//PDP?Plasma/3D/TV, CRT TV, DVD-Recorder, Video Game Console, PMP/MP3 Player, Digital Camera, Other consumer electronics, Automotive, Aerospace, Specialist Instruments, Space Instrumentation.

Competition:

High capacitance ceramic arena with the potential to replace currently existing high capacitance ceramic capacitors, such as X7R and Y5V even Y5R, typically used in power supply decoupling, telecommunications, solar inverters, wind turbines, computers and miscellaneous instrumentation. The biggest advantage of the invented materials is that, for the same specification, the new capacitor uses only a single-layer instead of the current multi-layer structure used in X7R, Y5V and Y5R ceramic capacitors. This would not only significantly reduce the manufacturing cost of these components but also considerably improve their lifetime and reliability as it removes the internal electrodes (leading to electrical fatigue) used in current multi-layer ceramic capacitors (MLCCs). The resultant devices are anticipated to be the new generation of high capacitance ceramic capacitors.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance

A collaboration alliance with an industry partner is preferred to further optimise the material for the energy storage market. We plan to - expand the current material system via targeted cation doping/substitutions to further optimise the property of materials of this type.

Biometric Signature ID

Patented Gesture Biometric for Remote Identity Authentication
Software

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972-436-6862

Technology Description:

Biometric Signature ID (BSI) has created the "Missing Link" - a software only biometric that complies with the new gold standard for identity verification that is required by commercial and government sectors - Multi factor authentication. BSI has patented a software-only biometric, the strongest form of identity verification on the market today with a twist: no additional hardware is required. This software biometric measures the unique way a user moves their mouse, finger or stylus when they log in with a password created with BioSig-ID. Biometrics such as length, speed, direction angle, height of each stroke define your unique pattern and can positively identify you as you log in from any PC, mobile or tablet . These patterns are unique and BSI can distinguish you from all others. Only a user who has successfully authenticated themselves against a previously created enrollment profile can access the device, exam, bank account or health information or other digital asset. Software uses an "out of band" password reset system. The software comes complete with a very robust audit trail that captures all the activity surrounding the authentication event and offers a forensic tool to meet new regulations and compliance. Recently chosen by the White House to participate in pilot to reduce online identity fraud, and combined with two issued patents and "New product innovation of the year in North America " confirm this breakthrough technology. Independent testing by a leading lab have found we exceed federal standards for accuracy by a 3 fold factor.

Synopsis of Market Opportunity:

Cyber security, International IP theft and identity theft costs Americans well over \$300B per year. These losses are due to ineffective security and the reliance on simple pins and passwords to guard our personal and corporate assets. Online or remote access of digital assets are especially vulnerable as we cannot ensure the identity of the physical person who is trying to access these assets. Congress is changing the rules and mandating better security and use of multi-factor authentication in virtually all of its agencies, while the commercial sector is following suit. BSI gesture biometrics provides a disruptive new technology at the right time. Apple's release of device authentication using biometrics is a strong endorsement of the market need for higher security. Congress has enacted six (6) laws to protect individual privacy using multi-factor authentication - Something you have , Something you know, Something you are which is always a biometric.

Market Analysis:

Currently dominating distance education, where colleges and universities have to comply with the new education act requiring student ID verification for online courses. BSI has partnerships with the 7 learning management companies (Blackboard, Pearson, etc...) to access 25M online students. In 2 years we have 50 accounts and experienced explosive growth of 1000% with 12 months trailing revenues over \$1M. New regulations demanding multi-factor authentication be used in healthcare, online banking, gov't services and online gaming/poker are creating a huge market opportunity for biometrics estimated at over \$5B. The key to successful market uptake is accuracy, scalability and positive user experience. BSI scores big on all aspects with a 99.97% accuracy (very low level of false positives) confirmed by third party testing, is highly scalable since No special hardware is required and a 98% positive user experience, where first time users even stated the software was entertaining.

Competition:

Competition consists of traditional hardware based biometrics, RSA type tokens, security questions, keystroke biometrics – all with significant cost, ease of use, or high false positive rates. Keystroke for example tested out as 27X less accurate and did not meet minimum NIST standards. All other competitors require a hardware investment at the user end or do not have the flexibility to have random periodic identity challenges-which is becoming a necessity. Some technology does not allow the users to BYOD and or cannot be activated with Flash and HTML5 - both strong benefits with BSI.

Strategic Partnerships:

NSTIC - White House sponsored initiative: Microsoft, AAMVA, CA, AT&T, VA DEPT OF DMV Distant Education: Pearson eCollege, Blackboard, Moodle, Moodlerooms, Remote Learner, Canvas, Desire to Learn, Online proctoring: ProctorU Healthcare: EPIC Identity and access management companies: PING Online Gambling/Poker: Mohegan Tribe of Indians CT

Deal Sought:

Funding or Investment, License or Strategic Alliance
up to \$10M, Series B Common Stock
Exclusivity in certain market sectors and or regions
Market Growth, and Infrastructure Human Capital Expansion

Hug(TM) - Infant Safety Vest
Medical Device

Mrs. Nancy Paris
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Burnaby, BC V5G 3H2
nparis@bcit.ca
(604) 432-8754

Technology Description:

Hug is a disposable lightweight wearable device for babies and small children that manage intravenous lines and other medical tubing. By containing the lines in a wearable tubing harness, risk of strangulation, stress of dealing with typically entangled lines, and fear of hurting the infant can be reduced. Three main applications for the Hug include: 1) Mitigation of rare but severe risk of infant strangulation in IV lines and monitor cables. 2) Pediatric nurse workflow and time management benefits. 3) Reduction of costs related to IV line infection and mis-connections. The Hug is a 2012 reddot design award winner: <http://www.red-dot.sg/en/online-exhibition/concept/?code=687&y=2012&c=14&a=0>

Synopsis of Market Opportunity:

The synopsis of the market opportunity is as follows: 1) Pediatric nurse workflow and time management benefits, 2) Reduction of costs related to IV line infection and mis-connections and 3) Mitigation of rare but severe risk of infant strangulation in IV lines and monitor cables. HugTM decreases time needed for pediatric nurses in IV line management where standardized approaches to pediatric catheterization are crucial. HugTM can also reduce the costs related to IV line infection and mis-connections through better line management. Lastly HugTM also makes it easier for parents and other caregivers to safely care for an infant with IV lines.

Market Analysis:

1. Mitigation of risk of infant strangulation in IV lines. Severe incident low, but can be fatal or have life long disabilities. 115,000 admissions for inpatient procedures per year for children under 3 in the U.S. (<http://www.ncbi.nlm.nih.gov/pubmed/23076227>). Less severe but serious incidents related to IV management (e.g., accidental removal of IV lines) has been reported every year in the U.S. FDA MDR and MAUDE databases between 1986 to 2013, with at least two deaths in the US and one in Canada. 2. Pediatric nurse workflow and time management benefits. 3. Reduction of costs related to IV line infection and misconnections through better line management. A recent study by the New York State Department of Health estimates the cost of infections at U.S.\$34,000 to \$56,000 per patient, with IV's being the 3rd leading cause of hospital acquired infection (<http://www.acacianeonatal.com/Reduce-Infection-with-ClosedCare-IV-System>). Improved line management can lead to reduction in infection (see e.g., <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3250601/>).

Competition:

Vygon offers a range of neonatal and paediatric intravenous catheters that provide vascular access for all newborns and children. They specialise in vascular access devices made from materials such as polyurethane and silicone, which have been tried and tested over many years. While silicone catheters remain soft and pliable throughout implantation, catheters made of polyurethane have the advantage of providing extra stiffness to aid insertion and then become soft and pliable at body temperature. Each catheter has a unique system for securing to the infant and can be seen at the following web-site: <http://www.vygon.co.uk/products/group/neonatal-and-paediatric-catheters>

Strategic Partnerships:

Children's & Women's Health Centre of British Columbia

Deal Sought:

License or Strategic Alliance

Licensing and/or Company partnership for commercialization and for quantifying work flow benefits and full range of infection control and connection mitigation.

CDR-U Coach

Other

Technology Description:

While \$40 billion is invested annually in leadership development, research over the last decade has consistently shown that 50% to 75% of leaders are still ineffective. This enormous waste is the result of leadership developmental programs that are generic, "one-size fits all" in nature, and frequently try to develop people in skills they are not well suited to perform. Our proprietary tool is a game changer. CDR Assessment Group is known globally for its CDR 3-Dimensional Assessment Suite® for leadership coaching and development. Our scientifically validated instrument takes a deeper, more accurate dive than other available tools into a leader's true talent, risks and motivational needs. The problem is our impact has been limited because the delivery system is high touch and high cost through personalized executive coaching. That is, until now. CDR-U Coach is a new revolutionary tool and solution that provides scalability that previously has been unavailable. CDR-U Coach is a multi-media online tool that provides personalized, accurate and detailed feedback for each leader and employee. Also, the assessment results delivered via CDR-U Coach provide talent management benefits to organizations for systemic impact as the data can be used for applications such as: succession planning, custom training designs, and strategic team development. By design, CDR-U Coach: • shaves up to 2 years off the typical development cycle time • delivers unmatched personalized feedback at a lower cost • offers broad scale implementation reaching hundreds of thousands of employees simultaneously • is available online 24/7 and can be revisited.

Synopsis of Market Opportunity:

The training and development market is over \$120 billion per year, and the leadership development market is \$40 billion and the assessment market is over \$2 billion. The annual average training expenditures per senior leader is \$3,333 and per employee is \$1,228. The American Society of Training & Development survey recently found that "personalized learning" is the number one aspiration for leadership training. Currently, personalized learning is delivered via leadership coaches whose fees range from \$350 to \$500 per hour or an average charge of \$19,000 for six months of coaching. This does not include the cost of any leadership assessment instruments that range from \$300 to \$750 typically part of the leadership coaching experience.

Market Analysis:

The two billion dollars spent annually in the assessment market dwarf in comparison to the nearly 120 billion spent on training and development. Despite natural opportunities for overlap, lack of penetration into the larger pie can mainly be attributed to two main obstacles: 1. Assessment tools are generally weak in accuracy, depth, and candor with little to no expert feedback or debrief. 2. The few high caliber assessments tools that do include personalized, effective coaching come at an expense allowed only for the most senior levels of management. CDR-U Coach will enable delivery of the personalized, unmatched development currently experienced using the CDR 3-D Suite at a price point accessible to much larger population through a multi-media, online tool. This currently non-existent high caliber yet lower-cost solution will undoubtedly shift the dollars wasted on ineffective training and development into the assessment arena with increased success.

Competition:

There is no multi-media coach that begins with individual comprehensive assessment as the starting point. There are online learning systems such as "Thinkbox" but a participant needs to already know what traits, problems or competencies need development. Essentially, these suggest reading, training, and offer developmental tips. Competitive leader assessments that are considered of high quality, not available through multi-media feedback, include the Neo, Hogan, and Five Factor instruments. Other familiar, but not qualitatively competitive, include MBTI, Disc, Birkman, Predictive Index, Caliper, Gallup Strengths Finder, and Firo-B. Competitive leadership development firms who use assessments include PDI, DDI, and Center for Creative Leadership. While competitors in the assessment space may try to replicate the delivery method of CDR-U Coach, the accuracy, comprehensiveness, and scope of algorithms of our coaching feedback are, to date, unmatched.

Strategic Partnerships:

Byers Creative, Jump Technology, CDR Network of Certified Coaches & Instructors, The Alexcel Group, CoachSource, Technology firms proposals being evaluated: Waterfield Technologies and Mobility Automation, Inc.

Deal Sought:

Funding or Investment, License or Strategic Alliance
400000, Capital (or Alliances with Commercialization and/or Technology capability that match with our needs)
Alliances with Technology & Commercialization Company could negate the need for capital.
\$250,000 Technology Completion / \$150,000 Marketing, Sales, Commercialization

Cellgen Diagnostics

Cellgen
Medical Device

www.cellgndx.com
Lavance Lavell Northington
7545 Irvine Center Dr #200
Irvine, CA 92618
lavance@cellgndx.com
949.285.6888

Technology Description:

Cellgen Diagnostics has developed a nucleic acid based, point-of-care (POC) diagnostic platform for the highly sensitive and highly accurate detection of Infectious Diseases in blood and other biological fluids. Cellgen's On-chip detection technology does not require sample amplification and presents great advantages over PCR, Mass Spectrometry and Sequencing for point of care, clinical applications. Instead of using methods that amplify the nucleic acids, our core technology first concentrates the nucleic acids by shrinking the volume of the starting material, effectively driving down the detection limits without introducing noise and bias signals. We achieve "concentration" by using a proprietary surface treatment that gets rid of the solvent/water without heating or damaging the nucleic acid molecules. Lastly, we utilize unlabeled detection of specific nucleic acid targets with a calibrated and fault-proof architecture. Cellgen's innovation focuses on the production of the most accurate results, with the deepest threshold, within the shortest time at lowest possible cost. We have created a single device to produce quantitative test outcomes in less than 30 minutes from sample input to detection results. And, as such, will be the basis for a broad range of diagnostic tests for various infectious agents, including viruses and bacteria. Cellgen's highly sensitive, fast turnaround and cost effective tests will cover the 20 most commonly referred lab tests as well as the top 20 drug resistant genes to avoid ineffective and unnecessary treatment, making it an ideal solution for infectious disease / pathogen detection at the point of care.

Synopsis of Market Opportunity:

The market for Point-of-Care diagnostics used in infectious diseases is expected to exceed US\$1.8 billion by 2017 with year-on-year double-digit growth from 2013 on. Infectious Diseases rank as the #2 cause of death causing 9.3 million or 16.2% of global deaths annually. POC diagnostics for infectious diseases is a wide area of high-growth opportunity for Cellgen. The retail health clinic and urgent care center market is projected to reach \$14 billion by 2016 and is poised for an explosion as the shortage of primary care physicians, crowded emergency rooms and the Patient Protection and Affordable Care Act goes into effect in 2014. Important Statistics • 9,000+ Urgent Care Centers Nationally o 160,056,000 patient visits each year (342 visits per week per center on average) • 1400+ Retail Clinics • 1250 Government funded, Community Health Centers w/8000 Delivery Sites • 25% of physician visits are caused by infectious diseases

Market Analysis:

America's fast-paced society has been searching for fast, convenient, and affordable healthcare. Urgent care centers provide that low cost, fast care alternative this generation desires. More consumers are using retail clinics and urgent care centers as their first point of entry to the healthcare system, and 32 million more will enter in 2014 when the Patient Protection and Affordable Care Act is in effect. Our on-demand society coupled with the upcoming legislative pressures will bring on an industry tipping point. To help meet this demand, Industry leaders plan to expand their menu of services to include clinical pathology laboratory tests. Cellgen's lab-on-a-chip technology will meet this need, increase reimbursement revenue for doctors, lower payors costs, and improve clinical decision making by placing lab quality tests directly at the point of care. It is our goal to be the first CLIA waived, POC diagnostic for infectious diseases on the market.

Competition:

Cellgen's platform has several advantages over traditional infectious disease diagnostic methods like Cultures, PCR, and Lateral Flow Assays. All of them have significant limitations, including high costs, long processing time, and in some cases lack of accuracy which precludes them from being actively used at the point of care. There are some new and emerging POC infectious disease testing technologies that are surfacing however, they simply leverage older existing technologies like PCR, Next Gen Sequencing (NGS) and Mass spectrometry (MS). These technologies show promise in sensitivity, reproducibility and accuracy but they may be limited to the larger reference laboratories until smaller, more affordable bench top options are made available

Strategic Partnerships:

We are currently working with a development partner to develop non proprietary processes to expedite time to market.

Deal Sought:

Funding or Investment, License or Strategic Alliance

\$1,500,000 (pre series A - 12 month timeframe), Equity or convertible note, but we are flexible

Looking for a co marketer and/or distribution partner that has an established infrastructure in the urgent care / retail clinic market or is interested in penetrating that market.

1. Complete Product Development & Build Out 2. Deliver 5 Engineering Developed Systems to high end, opinion leaders to show efficacy 3. Develop 3rd party data to validate a Series A

Cognitive Code

SILVIA
Software

<http://cognitivecode.com>
Ms Mimi Chen
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Sherman Oaks, CA 91403
mimi@cognitivecode.com
(855) 521-0894 Ex. 3

Technology Description:

The SILVIA™ Platform is a state-of-the art system for building smart, conversational applications. Cognitive Code's patented SILVIA technologies provide the most advanced, flexible, and lightweight system on the planet for developing natural language applications. Designed with developers in mind, the SILVIA Platform is optimized for rapid development, and SILVIA applications can be deployed to web servers, desktops, and mobile devices. In fact, the SILVIA Core runs natively on tablets, smartphones, home appliances, and other embedded systems. SILVIA takes in human input through speech, written text, or other input methods. SILVIA can understand the context of that input and respond appropriately with speech and can interact with applications and operating systems on the user's behalf. SILVIA can also access file systems, networks, web content, and more. SILVIA operates in the context of a client application on desktops and mobile devices, as a server-side solution for web-based deployment, and can even run directly in games using the SILVIA for Unity run-time. SILVIA™ - Intelligence on Command

Synopsis of Market Opportunity:

Cognitive Code's SILVIA technology is ideal for a variety of markets, including but not limited to: Intelligent Interfaces for Mobile Devices, Personal Assistant or "Concierge" Applications, Automated Customer Support/CRM, Video Games and Entertainment Systems, Training and Simulation, Automotive, Toys, Appliances, Home Automation, Healthcare, etc. The SILVIA Platform is a powerful, compact, and developer-friendly system for deploying conversational applications. The flexibility and cross-platform nature of SILVIA provides a unique opportunity for licensees to develop and deploy conversationally engaging applications on almost any device, operating system, and in any language. The proven rapid development and deployment of SILVIA applications gives licensees an advantage in shipping intelligent voice enabled applications quickly and at lower development and deployment costs than other solutions, especially when compared to the current breed of "server-only" solutions.

Market Analysis:

The market for applications with voice interaction is growing rapidly. Cognitive Code's SILVIA Platform is uniquely positioned as a commercial conversational intelligence engine and toolset that was designed from the ground up to be employed as a solution for any number of applications, on any number of devices and operating systems, in any number of markets. To date, Cognitive Code has achieved traction in markets such as defense, training, simulation, healthcare, consumer products, mobile, and gaming, but the SILVIA Platform's capabilities are broad enough to easily support deployment of the technology to additional markets such as toys, automotive, CRM, telephony, in-store kiosks, on-line sales and support, home automation, and more.

Competition:

Cognitive Code's competitors include voice technology solutions such as provided by Nuance, Apple's "Siri", Google Voice, and Microsoft's "TellMe". The SILVIA Platform provides significant competitive advantages over other solutions in key areas such as portability, integration with 3rd-party software such as game development systems, automated multi-language and localization support, security, personalization and context, performance and scalability, and robust developer/CMS tools for cost-effective rapid application development. In addition, Cognitive Code provides a high-performance SILVIA Server solution should licensees wish to deploy centralized web or telephony applications in domains similar to those provided by other voice solutions.

Strategic Partnerships:

Northrup Grumman (Licensee of SILVIA Technologies for Defense and Other Government Markets) Channel Mark Ventures (Investment Partner, Branding and Marketing)

Deal Sought:

Funding or Investment, License or Strategic Alliance
\$3M, Series A, institutional and/or private equity
Strategic partnerships in key markets, flexible technology licensing for 3rd parties
Personnel, product development, facilities, sales & marketing, legal/IP portfolio

Colloidal Gen, Inc.

Colloidal Magnetic Ferrite Particles
Biotech

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520-382-3273

Technology Description:

Colloidal Gen's (CGen) nanoparticle technology for bioprocessing is based upon a unique set of patent pending formulations which yield ferrite-rich nanoparticles, composed of a corrosion-resistant blend of metal oxides which are highly responsive to magnetic fields. The patent pending formulations were selected to be biocompatible with DNA processing and key enzyme reactions such as PCR. Magnetic nanoparticles (MNP) can be used as a the solid support for a variety of applications including DNA, RNA and protein purification; in vitro diagnostics; and peptide synthesis. The 100 nm nanoparticles do not require coating with polymers or silica for use as a solid support for bio-processing due to the corrosion resistant properties of MNP. The surface of MNP technology allows it to be modified to coat the surface with molecules for purification of biomolecules. The strong magnetic properties of MNP technology allows it to be used solid support for automated processing based on magnetic separation. The colloidal properties of MNP enhance the efficiency of bio-processing because the particles easily move through solution increasing reaction speed and requiring less sample size. Incorporating MNP technology into Bio-Pharma manufacturing results in improvement of product purity and significantly extends the life of expensive chromatography towers used for purifying proteins for pharmaceutical use. For laboratory customers performing high throughput processing, the enhanced efficiency of MNP technology allows customers to reduce sample size required for analysis, resulting in the use of less chemicals and less chemical waste generated, translating to significant cost savings.

Synopsis of Market Opportunity:

MNP technology can provide access to 33% of DNA samples that are too small for processing with current DNA/RNA test kits, or 1/3 of a \$3B market. The initial focus will be to develop MNP products for companies with existing diagnostic test kits and reagents, as well as an existing customer base, sales force, and distribution systems. We propose that these companies compensate CGen's development of custom particles to enhance their proprietary products, and subsequently incorporate or purchase the custom formulated MNP for incorporation into their product lines. Additionally, the particles can be used by these companies and others in research applications, manufacturing, quality assurance, manufacturing purification and sample preparation markets. Eventually, MNP technology will facilitate point-of-care diagnostics through custom kits.

Market Analysis:

The "Sample Preparation Products (for DNA testing)" market was \$3.6B in 2011 and is expected to grow to \$8.4B by 2016. A third of DNA test samples are too small or dilute to be purified by conventional DNA purification kits. These "small/dilute" samples are processed by highly trained personnel using labor-intensive methods. MNP based DNA purification has been demonstrated to be effective with small samples and enables standardizing small sample processing, including automation. The simplicity of MNP processing is easily adapted to Point of Care applications. This market is estimated to be in excess of \$1B with the expectations to double by 2016. MNP processing can also be used with standard size DNA samples processed by current kit technologies. The MNP technology processing advantage is enhanced performance, improved efficiency, and greater flexibility to the customer for the final purified DNA sample.

Competition:

Current magnetic bead products are manufactured by AgenCourt/ Beckman, Dynal/Life Sciences, Millipore, Pharmacia/GE, Promega, and ThermoFisher. These range in size between 1 to 10 microns in diameter. Competitor magnetic beads are coated with a polymer or silica matrix designed to prevent the corrosion of the embedded ferrite particles. CGen's MNP have no coating, are 1000 times smaller, have 10 times the surface area per volume, and move 10 times faster than particles presently on the market. The corrosion resistance properties and the dimensions of MNP are responsible for improved performance associated with magnetic separation processes utilizing MNP.

Strategic Partnerships:

CGen is located at the Arizona Center for Innovation (AZCI). AZCI provides office space, laboratories and facilities suitable for CGen's product development, testing and manufacturing. CGen has established strong, proprietary working relationships with major diagnostic and equipment companies. These companies have validated MNP technology in their existing processes and products.

Deal Sought:

Funding or Investment

\$500,000 - \$2,000,000, Equity Investment

Hire staff, conduct comparative study with existing products to provide parametric data on advantages, business development

Corvus Energy Ltd.

Energy Storage Solutions
Energy

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(604) 227-0280

Technology Description:

Corvus Energy designs and manufactures the world's most powerful and versatile industrial NMC lithium polymer batteries. Used to replace traditional power systems in heavy industrial applications or to provide energy storage for renewable energy production, they are the only purpose built industrial energy storage solution available today. Using American made cells (the most efficient and highest quality available today), the battery is capable of extreme charge and discharge rates. This allows the battery to fulfill its industrial mission without fear of overheating or premature failure. The patented Battery Management System (BMS) hardware and software manages this extreme power and allows for monitoring of the system at a macro level all the way to performance and health of individual cells in the modules and active cell balancing. This unique approach allows for dramatically increased lifespan (warranty is typically in decades) and the ability to update software or gauge system health from any location in the world at any time. This aggregate data may then be used to enhance system design in the future and advance the use of the technology further. All of this technology is housed in an award winning enclosure and patented internal structure that was designed for use in the most harsh of industrial conditions; the commercial marine engine room. The welded aluminum enclosure is waterproof, impact proof to 50G and rated for an 8G 5-axis continuous vibration. All performance specifications have been independently validated.

Synopsis of Market Opportunity:

The nascent energy storage industry is estimated to have a global potential of more than \$130T in coming years. Uniquely positioned to capture a large portion of this market, Corvus manufactures one product; a rugged 6.5kWh 48V industrial energy storage module that may be configured for use in small industrial equipment or as a multi Megawatt battery for use in grid scale renewable energy production. Corvus is able to provide an energy storage solution for virtually any situation or application. First created for the commercial marine markets, Corvus' solution has proven itself as the most rugged lithium battery built. Establishing itself as the leader this new industry, Corvus Energy is now leveraging this brand reputation to move into other arenas. Corvus is being selected by companies such as Siemens, ABB, Wartsila, GE, PACCAR, Norfolk Southern and major US defense contractors for use in projects far beyond the marine marketplace.

Market Analysis:

Corvus' industrial lithium batteries are suited to many applications; any industrial machine with heavy power needs can be converted to hybrid or full electric, significantly reducing fuel consumption and emissions. This also translates into significant fuel savings for the operators, meaning very rapid, ongoing ROI. In today's hyper-competitive industrial markets, this can mean significant competitive edge. Beyond machine applications, Corvus systems are ideal as a long lasting, high power UPS and can seamlessly switch to full power in milliseconds. All Corvus systems require no maintenance. With remote monitoring and a lifespan measured in decades, they eliminate costly service calls at remote locations. Corvus is currently delivering projects in marine, defense, smart grid, off grid, renewable energy generation, trucking, backup power, material handling and others. We are working with some of the world's biggest names in industrial equipment today.

Competition:

A123, SAFT, EnerSys, Electrovaya to name a few. All are making attempts to penetrate the marine market place, as it is the only market that has seen significant interest in the real use of hybrid technology. Fortunately for Corvus, while these companies do manufacture a reasonably good quality product, they are generally not suitable for use in industrial applications; they are attempting to apply technology designed for use in laptop computers and phones to industrial applications. An engineer at Siemens stated recently that Corvus is 2-3 years ahead of all competition. Corvus will stay ahead through innovation, and market penetration.

Strategic Partnerships:

Dow Kokam. Provides best in class cell technology to Corvus Energy and an exclusive distribution agreement for marine markets. Alpha Technologies. Corvus Energy is the exclusive lithium battery supplier to Alpha partners on Department of Homeland Security contracts. Outback Power. Corvus Energy has partnered with Outback to develop a turnkey hybrid power solution for use in developing nations worldwide.

Deal Sought:

Funding or Investment
7-10 million, Equity

Expansion of joint venture manufacturing and distribution partnerships in strategic geographic locations on 4 continents. Corvus Energy is positioned to capture a significant portion of the global energy storage market with this expansion plan.

Cyternity

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Cellstable Technology
Biotech

Technology Description:

Cyternity technology in live cell preservation at ambient temperature enables cell-based therapy for large patient populations. Cyternity Inc. was formed to capitalize on a breakthrough technology in ambient cell preservation, developed at Biomatrix Inc., where cells maintain their viability and proliferation potential in the dry state.

Synopsis of Market Opportunity:

This technology enables transformational cell-based therapeutic approaches in diverse markets such as diabetes, wound healing, burn treatment, blood product supply, reproductive health and other stem cell-based therapies.

Market Analysis:

Estimations of the addressable markets for Cyternity's Cell Stabilization products for wound healing and β -islet cell therapies are in the multibillions of dollars. Currently, there are no technology platforms that address the cell stabilization problem other than traditional cryopreservation, an approach which has seen only marginal improvement over the last 25 years and requires temperatures below -80°C to maintain the product. In many cases the damage encountered during the freezing and thawing process often renders the cells far less viable in their post-frozen state than before freezing. In the case of islet cell therapy this condition is completely unacceptable. Cyternity is perfectly positioned to deliver robust and durable cell preservation solutions that maintain high viability without cryopreservation.

Competition:

No other technology platform or technology can achieve ambient preservation of eukaryotic cells. The competition is the use of Liquid Nitrogen based cryopreservation.

Strategic Partnerships:

Deal Sought:

Funding or Investment, License or Strategic Alliance
\$10 Million,
Co-development for certain defined fields
Moving product towards clinical development

Diagnostic Biochips, Inc.

In Vivo Aptamer Microsensor (IVAM)

Medical Device

Rob Collins
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410-205-2443

Technology Description:

Technology Overview: Diagnostic Biochips' core technology is based on the integration of short DNA chains called aptamers onto a microfabricated array of tiny sensing sites that can be implanted chronically in a target tissue to monitor continuously and automatically virtually any molecule of interest with unprecedented temporal and spatial resolution. **Summary:** Both medical researchers and practicing physicians struggle to monitor critical cellular-level chemical changes as they occur within the body. Diagnostic Biochips' (DBC) proprietary, biosensor technology addresses this problem by allowing direct and continuous monitoring of medically important chemicals at critical times in research animals and patients. This will accelerate the development of drugs and therapeutics, improve disease detection and clinical treatment, and reduce overall costs to the medical system – all while enabling more personalized patient care. Leading technology today (i.e., point of care testing) has changed how medicine is practiced but still requires a sample to be taken, making the information labor intensive and episodic. DBC's IVAM™ technology eliminates both of these limitations – bringing the next generation of continuous chemical monitoring technology to the market. **Unique features of the DBC IVAM Biosensors includes:**

- Continuously and automatically monitor virtually any molecule of interest (Aptamers are analyte-agnostic)
- Monitor multiple molecules simultaneously.
- Measure concentrations of target molecule(s) at unprecedented spatial resolution (at the cellular level)
- Rapidly detect changes in a molecular concentration, enabling observation of changes as they occur in situ.

Synopsis of Market Opportunity:

DBC is first targeting the large, rapidly-growing market for chemical detection in the pre-clinical animal research market (\$0.75B/year estimated market size) where its IVAM technology offers significant advantages to researchers seeking less invasive, continuous monitoring of multiple, concurrent chemical responses. DBC will next bring our IVAM technology to the human medical market, using data collected in the pre-clinical period to support clinical regulatory requirements. One, representative, clinical example relates to stroke or heart attack: In the case of stroke or heart attack the presence of certain biomarkers indicates a high probability of onset; however, nothing on the market permits practically monitoring an at-risk patient for the sudden appearance of these markers. The current standard of care relies on multiple chemical (troponin) tests in the critical setting - requiring time, human interaction and lab work - but yielding only limited information during the critical care visit and no follow-up information.

Market Analysis:

Researchers and physicians now attempt to monitor critical chemical changes using techniques such as imaging, microdialysis, biopsies, blood and urine tests. Despite the prevalence and cost of these techniques, these measurements are often inadequate – failing to directly determine the concentration of a chemical of interest, or sudden and small changes in concentration, and with accurate information about the location of each measurement. We currently have better information about the moment-to-moment internal state of our automobiles than we do about the human body. DBC's technology changes this by providing direct, timely, in vivo information on the chemistry of interest down to the cellular level. In addition to accelerating drug and therapeutic development this information will significantly improve how specific illnesses are treated.

Competition:

DBC's immediate competition comes primarily from alternative technologies: molecular imaging, microdialysis / point-of-care diagnostics, and enzyme sensors. None of these technologies provide reasonably priced, continuous, in-vivo monitoring. Molecular imaging requires expensive capital equipment and provides only a "macro" view; Microdialysis is slow, physically bulky and labor intensive, which eliminates the ability to monitor chemical interactions in vivo with specificity; and, enzyme sensors detect only a limited number of chemicals. Representative competitors include large players (Medtronic, Siemens, Abbott, Harvard Biosciences) and numerous, niche start-ups.

Strategic Partnerships:

DBC will initially sell and market its IVAM products through a hybrid approach - taking advantage of its existing connections to the neuroscience community to sell directly as well as by partnering with existing players in the neuro space to create distributor/reseller relationships. DBC then expects IVAM clinical sales to be handled through third-party partners and distributors.

Deal Sought:

Funding or Investment, License or Strategic Alliance

\$1,800,000+, Convertible Debt/Equity

R&D Collaboration; License

Technology Development; Animal Validation; Pre-Clinical Market Launch; Building Technology Team

Technology Description:

EZ has developed a printed electrochemical sensor platform that enables the analysis of the chemical constituents of a wearer's perspiration in a real-time, non-invasive fashion. These skin-conformal sensors are fabricated via screen-printing, thereby reducing cost substantially and enabling them to be disposed of following a fitness routine.

Synopsis of Market Opportunity:

Motivated by the insatiable need to improve human performance, the fitness and athletics industries have become increasingly reliant on wearable sensors to quantify the physiological effect of physical activity in a non-intrusive and cost-effective fashion. However, these technologies are limited to measurement of basic physiological or kinesthetic parameters (such as heart rate or steps taken) and thus are unable to ascertain the true metabolic implications of the wearer's fitness routine. Accordingly, a technology is needed that can augment conventional physical measurements with added dimensions of chemical information to shed further insight into the wearer's metabolic response to various physical routines.

Market Analysis:

Tens of millions of athletes and fitness enthusiasts populate the US. Depending upon the fitness goals and competitiveness of these athletes, their willingness to closely monitor physical performance varies. The market can thus be segmented as follows: Professional athletes (18,000): This tier of athlete is comprised of individuals who earn a full-time living from competition. While the numbers of this group are not very substantial, tremendous investment is channeled to these athletes to optimize training for maximum possible athletic performance while minimizing recovery times. Collegiate athletes (420,000): The level of competition at the collegiate level is intense, with many programs investing large amounts of time and resources into their athletes. The competitive level at this tier warrants the use of advanced physiological monitoring technologies. Competitive runners (13,000,000): Recreational runners (37,000,000): This segment makes up approximately 10% of the total US population. Fitness enthusiasts (50,000,000): There were 50 million fitness club/gym memberships sold in the US last year. Due to their desire to maintain a certain level of fitness, many of these individuals would be keen on optimizing their fitness routine for maximum effectiveness. All of these segments consist of potential consumers who would benefit from EZ's product offerings. EZ's cutting edge technology is an ideal candidate to fulfill the demonstrated need in this segment, as it provides the athlete with real-time, physiologically relevant data that is not available from existing technologies. While the information is most useful to competitive athletes, recreational athletes would also be interested in the information it can provide, and the low price point makes this possible.

Competition:

With the growing trend of personal healthcare monitoring, many companies are attempting to position themselves to take advantage of the vast market opportunity surrounding body-worn fitness sensors. With no technology currently commercially available that rivals the capabilities of EZ's sensors, lucrative opportunities exist for EZ to exploit. However, there are technologies in the prototype phase as well as technologies that monitor different physiological parameters than that of the EZ sensors that could potentially compete for market share. The competition is analyzed: Sweat monitoring using ion selective electrodes (ISEs) in a "sodium sensor belt" * A group from Ireland has developed a technique to monitor sweat rate as well as sodium concentration in real time o Uses a fabric "pump" to wick sweat past a sensor for immediate capture to prevent evaporation and thus altered concentration readings * Currently not commercialized; demonstrated in a lab setting; bulky, expensive Smart clothing with embedded textile sensors (Smartex) o Italian startup, which currently is in development of a garment with integrated sensors to measure HR, respiration rate, energy expenditure, etc. * Measures only physical parameters, not chemical information o <http://www.smartex.it/index.php/en/> Portable pH sensors (Skincheck pH tester, Hanna Instruments) o Hand-held device that, upon contact with the skin, will tender a readout of epidermal pH levels on an integrated LCD screen within 3 seconds * 2-point manual calibration required – very cumbersome, but accurate within $\pm 0.2\text{pH}$ o Currently available for \$270 USD o http://www.hannainst.co.uk/product_info.php?products_id=2837

Strategic Partnerships:

Electrozyme is currently in negotiations with several potential strategic partners who are key players in the fitness, sports apparel, and beverage industries.

Deal Sought:

Funding or Investment, License or Strategic Alliance
650000, Convertible note / debt

Strategic alliances formed with key players in the fitness, sports apparel, and beverage industries.

To procure the personnel, equipment, and supplies necessary to engage in technology development

Enginuity Search Media

Enginuity
Software

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9059033266

Technology Description:

Enginuity social search engine is a patent pending system and method for discovering socially relevant content, ranking search results using social network shares, sentiment analysis of the content and social commentary. Global brands, advertising agencies, media organizations, PR firms, schools and technology companies use Enginuity as their day-to-day social search. Enginuity gives them instant, meaningful insights into a wide variety of questions and topics. Everything from content marketing optimization, spotting emerging trends, measurement of public relations effectiveness, further promoting earned media, presenting opportunities to optimizing social media presence and gain business intelligence. Organizations can also use it to analyze long-term trends, understand how markets and conversations have changed over time and provide a secure internet search and collaboration tool for the enterprise with its many integrated features to other platforms.

Synopsis of Market Opportunity:

The rate at which people share information on sites like Facebook, Twitter and YouTube is staggering. 137 million status updates per day appear on Facebook, 230 million tweets are shared per day on Twitter and 72 hours of video are uploaded to YouTube every minute — all numbers which increase daily to form social big data. The Social search market is an extension of the search engine market, providing content discovery for individuals but also organizations for use in branded social media, content marketing, native advertising (3 billion dollar market as of 2012) and business intelligence (13.1 billion dollar market as of 2012).

Market Analysis:

To support a new generation of cost cutting and growth initiatives, corporations are investing heavily to gain near real-time actionable insights (historical and predictive), and from a mix of disparate spreadsheets and myriad of systems. Companies are investing in software platforms to answer 3 critical performance questions: How are we doing? Why? What should we be doing? Enginuity social search engine is a platform that can deliver these answers for digital advertising, content marketing, social media marketing campaigns (1), measurement of public relations effectiveness, product strategy and other business intelligence activities (2). 1) Content Marketing a 44 billion dollar market. <http://www.customcontentcouncil.com/news/nearly-44-billion-new-survey-shows-rise-content-marketing-budget> 2) Business Intelligence market grew 7% to 13.1 billion in 2013 <http://www.gartner.com/newsroom/id/2507915>

Competition:

SAP - Social Media Analytics a solution extension offered by SAP, provides marketers accurate, real-time analytics for understanding their markets through the social web. Topsy - A social search engine and analytics platform for real-time discovery and marketing. TrendSpottr - A predictive analytics service that identifies the most timely and trending information from any big data stream. Curata - Enables you to easily find, organize and share content on specific topics to help you save time in managing your content flow for your organization.

Strategic Partnerships:

HootSuite - A social media management system for businesses to collaboratively execute campaigns across multiple social networks via web-based dashboard. With 4 million users, Enginuity provides a content discovery service to their users. Salesforce.com Chatter - A social network for the enterprise, allowing users to easily share and collaborate on information and social insights via Enginuity to Chatter.

Deal Sought:

Funding or Investment, License or Strategic Alliance
1000000, Equity
Strategic Technology Platform Partnership usage
Business development, market growth, client acquisitions, build a salesforce.

Footfalls and Heartbeat

Footfalls & Heartbeats
Advanced Materials

<http://www.footfallsandheartbeats.com/>

Mr. Brent Ogilvie

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6493779689

Technology Description:

Footfalls and Heartbeats Limited (FHL or the Company) has developed a proprietary process for manufacturing smart textiles proven to measure in real-time compressive force, tensile force and temperature. Footfalls uses nano-scale interactions within the textile to avoid the need for wires or miniature electronics, making the fabric itself the sensor. This enables applications in remote physiological monitoring including wound compression, respiratory rate and skin temperature. Immediate addressable markets include monitoring patient pressure points on wheelchairs and hospital beds and correct fitting of sports compression wear and medical compression bandages where Footfall's US partner expects to launch a product in January 2014. Potential future markets include ambulatory monitoring, athletes, mobile wellness, workers in high-risk environments, first responders and infant monitoring. The technology has the potential to allow healthcare for chronic illnesses to transition from costly, intermittent care to cost-effective, proactive and specifically monitored care.

Synopsis of Market Opportunity:

FHL's technology provides new opportunities for remote intervention to support individual monitoring with the potential to significantly reduce escalating healthcare costs for ageing populations and those with chronic illness and disease. FHL's technology can create uniquely durable, safe and comfortable fabrics that are comfortable and natural to wear, making them ideal for people with health conditions. Information from FHL's sensing textiles has the potential to deliver a wealth of data to improve health and other outcomes. Immediate addressable markets include monitoring patient pressure points on wheelchairs and hospital beds and correct fitting of sports compression wear and medical compression bandages. Potential future markets include ambulatory monitoring, athletes, mobile wellness, workers in high-risk environments, first responders and infant monitoring.

Market Analysis:

The global market for smart textiles and its applications is expected to reach US\$2.6b by 2017. The market for products associated with the 'quantified self' market is estimated to be worth up to US\$10b by 2015. FHL's initial target market, the medical compression market, was valued at US\$2b in 2011, while the US compression sportswear market was valued at US\$1b. These represent large market sizes for FHL's initial market entry plan. Biomedical applications of smart textiles in the US have a projected compound annual growth rate of 39.9% between 2009 and 2017. These include compression bandages to treat diabetes or venous leg ulcers, or diagnosing and remotely monitoring diabetic foot ulcers and respiratory sleep disorders. The drivers for this market are increased rates of obesity, diabetes, COPD, cardiovascular diseases and Cystic Fibrosis. FHL intends to pursue these growing market opportunities.

Competition:

Known competitors use embedded or wearable miniaturised electronics, woven textiles, coated textiles or knitted textiles. Competitors include SmartLife, Zephyr BioHarness™, Vivonoetrics LifeShirt™, Adidas Numetrex™, OM Signal and Maxim Integrated (sudden infant death syndrome). Other forms of competition include watch/ or bracelet monitors such as Nike Lifeband™, Polar, Suunto and Garmin. Each solution has failed to address several core problems, including signal clarity/strength, comfort, washability, durability, weight and wearer compliance. FHL's technology can create durable, safe, knitted and washable fabrics that are comfortable and natural to wear, where the textile itself is the sensor, making them ideal for people with health conditions. The developed textiles are able to be manufactured on current knitting machinery. Information from FHL sensing textiles has the potential to deliver a wealth of data to improve health monitoring and outcomes.

Strategic Partnerships:

FHL has R&D partnerships with Guys and St. Thomas' NHS Trust hospital (UK), AD Instruments (NZ), University of Nottingham (UK), North Carolina State University (US), Auckland University of Technology (NZ), University of Auckland Photon Factory (NZ), Victoria University of Wellington (NZ), AgResearch (NZ), Wireless Research Centre, University of Canterbury (NZ) and the Hong Kong Polytechnic University (HK).

Deal Sought:

Funding or Investment, License or Strategic Alliance

US\$1,000,000, Private/Angel Investment

License

Investor funds will be used primarily for business development activities, which include, employing a business development manager and meeting potential licensors to develop licensed product applications, develop textile/electronics interface through NCSU

Genesis Group Inc.

SEAformatics
Other

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(709)864-2674

Technology Description:

The Seaformatics Pod is a revolutionary new platform for delivering real-time, wide area measurements of ocean parameters. Its patented turbine generates power from ocean currents to charge a battery pack that supplies power to multiple commercially available application-specific sensors. Data is communicated to a surface communications buoy via acoustic modem, then to a shore base or offshore platform. The technology was developed during a \$3.5M R&D project carried out at Memorial University of Newfoundland from 2007 to 2012. A \$1.5M validation and demonstration project is currently underway, and will see the installation of seven units in Placentia Bay, Newfoundland to collect real-time ocean current data and seafloor imagery that will be delivered to a Canadian offshore oil company which is co-funding the project along with government agencies. The technology will reach Technology Readiness Level 9 during the project. Genesis Group, the technology transfer office for Memorial, holds the rights to the technology and has filed a PCT patent application. Genesis has licensed the IP exclusively to Seaformatics Inc., a spin-out company founded by Genesis, the engineering team, and two seasoned marine technology marketers. Beginning in 2014, the company will introduce a range of products aimed at its target markets, including: • Seaformatics Circ, a ocean current profiling system • Seaformatics Sentinel-A, an acoustic detection system • Seaformatics Sentinel-V, a visual monitoring system • Seaformatics Chem, a water quality monitoring system

Synopsis of Market Opportunity:

Historically, most ocean measurement programs have been sponsored by governments and accomplished by scientists and engineers from research institutions and agencies. The UN-sponsored Global Ocean Observation System (GOOS) project is aimed at building a global network of national and regional observing systems, such as the U.S. Integrated Ocean Observing System (IOOS). There have also been a number of specialized measurement programs sponsored and carried-out by the Navies of the world for defense-related purposes. Today, there are a growing number of commercial organizations that recognize the need to collect real-time information about the physical, chemical, biological processes that are occurring in various locations around the world. A study carried out by Duke University researchers indicates that the value of the ocean sensor market was in excess of \$9B in 2010. Key trends in the market include a focus on power efficiency and the integration of multiple sensors on single platforms.

Market Analysis:

The market segments for the Seaformatics Pod are: - Ocean and Coastal Observation - Defense & Security - Offshore Oil & Gas Given the increasing effects of global climate change on aquatic environments, governments around the world are eager to assess, in real-time, the physical, biological and chemical changes that are taking place in their coastal oceans. With the ever increasing concern about security, there is an increasing need for sensor packages for active and passive surveillance of coasts, ports and harbors. Seaformatics offers persistence and real-time data to address these requirements. Oil and gas operators in coastal regions have both regulatory and operational needs for monitoring the environment around their platforms, and contract service providers to deliver data to meet these needs. A market assessment conducted for Genesis included interviews with individuals in all segments, and concluded that there is significant interest in the technology.

Competition:

At present, battery packs are the most common means of powering ocean sensors. Typically, the packs must be replaced periodically, necessitating a field trip to recover and redeploy the system. A comparison of the costs of deploying and maintaining an array of identical sensors – one array powered by batteries and one by Seaformatics – determined that by using the Pod, which will retail for approximately \$45,000, the customer would save approximately \$140,000 over a one year period. Some ocean observation systems, such as Canada's Neptune system, run power and data cabling to each node in the array. While such systems can deliver significant high-bandwidth data, there is a significant capital cost (on the order of millions of dollars), and the cabling is subject to potential damage, e.g. by fishing gear.

Strategic Partnerships:

Memorial University of Newfoundland Husky Energy (2013/14 project sponsor) Newfoundland & Labrador Dept. of Innovation, Business and Rural Development Research and Development Corporation of Newfoundland and Labrador Atlantic Canada Opportunities Agency LOOKNorth Technology Validation Program

Deal Sought:

Funding or Investment
500000, Equity

Start-up operations, brand and market development, building a distribution network.

Technology Description:

TREAT is a web-based patient management and electronic documentation system tailored for use by clinicians treating clients with mental health or addictions issues. The software was designed in cooperation with a large behavioral health teaching and research institution and incorporates a design that is based on the revolutionary recovery model of care. This uniquely designed system provides an integrated approach to care, with best practice assessments linked to a robust care planning module at its core. The TREAT Synthesis Reporting software supports measurement of patient outcomes using objective peer-reviewed systems of measurement, and closely matches the needs of participants in US programs such as Accountable Care Organizations, Meaningful Use participants, or contracted service providers. TREAT supports a variety of provider environments, including outpatient, inpatient, and day program, and offers a unique solution for integrated care delivery and care coordination among multiple providers. TREAT is a modern software system and is provided as a service to our customers over the internet. This trouble free environment reduces capital costs and produces savings or benefits that make it a net positive investment for the customer. It has been architected to allow a low cost, high availability performance. TREAT is a modular system and can be implemented incrementally or with single comprehensive installation. It can be implemented as a white labeled or branded solution and it has been developed by a company with more than 10 years experience in the field. TREAT is the clear choice for an EHR system among behavioral health providers.

Synopsis of Market Opportunity:

HInext is targeting the behavioral health market to capitalize on the recent evolution of Accountable Care Organizations, quality of care and Meaningful Use legislation incentivizing the use of EHR systems, anticipated to significantly accelerate the adoption of EHR technology. Based on data obtained from the US Substance Abuse and Mental Health Services Administration (SAMHSA), only 20% of US behavioral health institutions have automated EHRs. TREAT will be able to fill the needs of the remaining 80% of behavioral health providers who will be racing to implement a highly reliable and clinically accurate solution. There should be a significant opportunity to sell to the 40,000 behavioral health agencies in the United States. Many states in the US and provinces in Canada are encouraging integration of the systems of care to reduce costs, which necessitates integration of systems and care plans. This further incents behavioral health providers to implement electronic record systems.

Market Analysis:

We have estimated the size of the behavioral health market at \$600-\$800M, and the Health Home/Accountable Care Organization (ACO) market at \$300M. The Health Home/ACO market is new and currently in development, thus our estimate is conservative. We expect this market to grow significantly if current trends in US health care continue. Additional trends that are impacting the behavioral health market: • Increased awareness of how the neglect of mental health disorders have an adverse impact on the population at large e.g. Sandy Hook shooting • Mental Health Parity and Addiction Equity Act requires private health insurance plans to provide equal coverage for mental and physical health services • Move toward outcomes measurement and managed care versus fee for service models • Growing recognition of the number of convicts with mental health issues. US correctional system is roughly valued at \$74B per year

Competition:

The US behavioral health market for Healthcare IT (HCIT) products is fragmented with no clear dominant competitor. Major HCIT vendors such as Meditech and McKesson are not focused on this health segment. Cerner has recently acquired Anasazi in order to compete in this market. Only one company on the Healthcare Informatics 100 list of HCIT vendors is focused on the behavioral health sector, NetSmart Technologies. Other vendors are regionally focused including Qualifacts and Credible among others. Most vendors focused on the billing applications first; however billing requirements vary by state, thus making it is difficult for these applications to evolve into full EHR systems in all states. Our competitive advantage is a superior, cost effective proven solution in a fragmented and underserved market.

Strategic Partnerships:

Our Philadelphia, PA partner, GSI Health has integrated our solution in their Health Home dashboard. We have signed agreements with Emdeon (Nashville, TN) to provide the claims management functionality of our software. Further, we have established partnerships with standardized, best-practice assessment developers, including interRAI. We are seeking additional marketing channels and complimentary technical partners.

Deal Sought:

Funding or Investment
1000000, Cash or equity financing
Product development and commercialization

Hoana Medical, Inc.

LifeBed II Medical Vigilance System Medical Device

Mr. Edward Chen
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Honolulu, HI 96813
echen@hoana.com
8085235410

Technology Description:

Intelligent medical vigilance technology that passively (without the use of wires, connections, or leads) monitors and transmits basic vital signs information (heart rate, respiratory rate, and bed exit events) via local network or the Cloud. This unique digital signal-processing asset has been combined with advanced sensing materials to produce Hoana's patented Passive Sensor Array technology capable of accurately monitoring patients in the most extreme of environments such as transport medical helicopters or emergency rooms. Platform technology can be expanded to monitor entire medical/hospital centers or used for individual home care. Cloud driven data can be used to improve patient outcomes and epidemiological research.

Synopsis of Market Opportunity:

Designed for acute care hospitals, the technology can invisibly monitor patients and notify medical personnel of potentially critical events. With new wireless/Bluetooth capabilities and much lower price point than the original, the LifeBed II will also be used in subacute, chronic and home care settings, both in the U.S. healthcare market and abroad. With the ability to service larger health facilities or individuals monitoring loved ones or themselves, LifeBed is able to serve multiple markets simultaneously. Beyond its monitoring capabilities, the medical data gathered by the LifeBed II System can aid pharmaceutical, insurance, and research organizations in "Big Data" analytic studies.

Market Analysis:

In the U.S. alone, possible markets for the LifeBed II System include hospital emergency beds (.2M beds), hospital medical/surgical wards (1M beds), skilled nursing facilities (2.5M beds), home care (12M beds), home users with any of the top 3-5 chronic conditions plaguing Americans (30-35M beds). This doesn't include the elderly, obese, or many of the other conditions and locales that the technology could be used. Recent trends in healthcare such as the Patient Protection and Affordable Care Act (ObamaCare) and continuing development of telehealth/home healthcare systems make an affordable, portable, scalable, and robust technology like the LifeBed II much more attractive. Potential market segments include emergency, acute, subacute, chronic, and home care.

Competition:

Digital healthcare is seeing some interesting innovations with mobile devices. However, when it comes to very inexpensive, highly accurate and invisible, non-compliant (no patient compliance required), Hoana is the market leader when it comes to equipping beds with invisible sensors. In the last few years a few new entrants have shown up with different technologies and approaches, however, Hoana's approach to high-fidelity and noise management with STAP is still the only company that can navigate a wide range of noise and vibration, from a Black Hawk helicopter to the General Care Ward of the acute care hospital. In the subacute, chronic, and home care markets, there are no competitors that provide a similar medical vigilance technology. There are commercial activity monitors such as Nike Fuel and Fitbit that track heart rate and movement but they are not for medical applications.

Strategic Partnerships:

Deal Sought:

Funding or Investment, License or Strategic Alliance
10000000, Equity Investment - Series 1A
Strategic supplier or technology development partnership
Design completion, 501k filing, team formation, inventory buildup, debt servicing

Ibis Networks

Intelisocket™
Energy

Michael Pfeffer
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808-349-3169

Technology Description:

Plug loads account for up to 50% of energy use at the enterprise level and it is the fastest growing segment in energy consumption, but there is no way to monitor or control usage. Our patented Intelisocket™ technology allows organizations to monitor and remotely control energy use for 1000s of socket level devices. Ibis Networks offers the first enterprise level secure, cloud-based, mesh network energy management platform with military grade security. Ibis' solution is simple, secure, scalable and offers comprehensive analytics. Our SaaS model significantly reduces operating costs and saves customers money from day one without a significant up-front investment.

Synopsis of Market Opportunity:

Enterprises cannot measure or control >\$250B in annual energy expenses. Current solutions are provided by major "top-down" energy control companies tackling energy management at the building or meter level, or by companies with IT control solutions. Ibis provides a natural complement to these technologies by providing management, monitoring, and control of energy consumption down to the socket/device level. The US energy management industry is growing at a compound annual growth rate >21%; expected to grow from ~\$960M to over \$5.5B by 2020 (Pike Q4, 2011). Enterprises search for energy expense reductions, increased control over and information on energy consumption. This means pushing energy management further down the supply chain from grid to building to meter and finally, to devices at the socket level. Ibis Networks is poised to take command of socket level device control at the enterprise level to lead the rapid growth in this burgeoning sector.

Market Analysis:

US buildings are responsible for 41% of primary energy use. It's believed that plug-load power accounts for 30-35% of this amount, but studies reveal that plug-load consumes closer to 45%-50% and is the fastest growing end-use in overall building energy consumption. Ibis focuses on six targets with the largest potential and need for energy efficiency programs. Government: An ideal target due to recent initiatives and regulations as well as predictability of routine office schedules. Military: Despite the lengthy procurement process typically associated with military contracts, Ibis' strong, existing relationships makes this an ideal target opportunity. Commercial (Offices): Next largest target market and highest sector for growth. Hospitality: Attractive segment as one sale can lead to hundreds of rooms per building, & potentially thousands of rooms across a franchise. Schools & Universities: Extremely attractive sector due to traditionally limited budgets, which has resulted in antiquated and pervasive campus-wide energy inefficient devices.

Competition:

Enistic out of the UK is our closest competitor, offering a full range of similar socket level devices. Unlike Ibis, they offer a straight sales model--selling socket systems and related software to end users. Ibis Intelisocket™ solutions focus on, and provide, enterprises with superior security, service, and customer support. Designed specifically to address large facilities, our networks are built to military grade standards (128-bit AES encryption) and are designed to operate independently of the customer's primary communication network. Furthermore, because we provide the network hardware to the customer, we are able to provide hardware and software upgrades on a continual basis, augmenting and improving our customers' level of service and quality of product. This also enables Ibis to offer large-scale deployments for relatively modest initial capital or ongoing expense.

Strategic Partnerships:

HECO/Sheraton -Joint partnership for a fast demand response program and the Sheraton Waikiki Siemens Intergraph

Deal Sought:

Funding or Investment
500000, Wire
Development and Production

Lubax, Inc.

Software / App - First diagnostic test in the world for all skin diseases
Software

www.lubax.com
Nelson Scharadin
141 S. Lake Ave, Suite 102
Pasadena, CA 91101
nelsons@lubax.com
626-844-5053

Technology Description:

Lubax is the world's first diagnostic tool for the ALL skin disease, including skin cancer. The smartphone App allows a user to photograph skin lesions with existing cellphone cameras (2 megapixel camera minimum, most are 4+mp). Using image-search that's based on facial recognition technology, instead of conventional text-based search, our app searches the world's largest proprietary skin disease image database and displays the most likely identification/diagnosis. Our enterprise version can be integrated easily into existing mobile patient monitoring platforms. The CE-Mark notified body has confirmed Lubax's B2C version is a consumer product in the E.U., and the FDA confirmed Lubax's B2B version for Physicians is a 510k medical device, not requiring a clinical trial. Physicians use Lubax as a supplementary Dx tool to improve their diagnostic accuracy and ability, and as an instant second opinion using AI (artificial intelligence). Lubax can also be prescribed (Rx) to consumers/patients in the U.S. by their doctor for any skin condition. It is possible for a U.S. consumer version after proven safe by the FDA as a medical device.

Synopsis of Market Opportunity:

Skin disease is the most common medical condition in the world. At any one time 1 in 5 people in the world suffers from a form of skin disease, and it is also the number one reason Americans visit their doctors, accounting for 110 million office visits per year. Mobile health (mHealth or digital health) is a \$27 billion global market where the top 10 mobile health apps account for 300,000 paid downloads daily. Value Proposition: - Physicians in the U.S. receive a 67% INCREASE in REIMBURSEMENT when using Lubax. - Consumers OUS receive instant ID/Diagnosis of skin condition and US Derm quality healthcare.

Market Analysis:

600,000+ U.S. Physicians and 600,000+ E.U. Physicians alone, without Asia/India, plus 5 billion WW cellphones (1B smartphones + 4B regular cellphones). Lubax runs on both smartphones and regular cellphones (ie."feature phones"). Additionally, Managed Care has over 100+ million members in the U.S. where Lubax can be integrated into individual health plans and large health systems to help prevent unnecessary office visits where a patient communicates directly with the physician through images and text via at home tele-medicine (voice, image, and/or cellular video) and mobile patient monitoring through a HIPPA compliant secure platform. OEM manufacturers of enterprise platforms for mobile patient monitoring, care coordination, disease management and diagnostic tests via smartphone and tablets are also another interesting market for easy product integration.

Competition:

Comps: 1. Google Image Search - - Does not want to enter medical device or health app market. Algorithm is not based on facial recognition technologies. Database has millions if not billions of photos which leads to "data drift" - very bad. 2. WebMD / Visual Dx - - Only SEARCH BY TEXT, not by image, and only used as medical reference, NOT a diagnostic tool. 3. Mole Detective / Skin Vision - - No database of images, no image recognition algorithm, only skin mole (skin cancer) "ANALYSIS" by user image. Only one skin disease function - moles. There are 13,000 skin diseases and Lubax can identify all if the database contains images of all of them.

Strategic Partnerships:

None at the moment, but communicating with Cellular Telephone Network Operators (ie., Telefonica), so non-smart phone users can use via texting = added revenue for Network Operators. Looking for other carriers. Medical information providers, OEM mobile patient monitoring platforms, Health Insurance companies, Cosmetic and consumer goods companies.

Deal Sought:

Funding or Investment, License or Strategic Alliance
\$3M Series A, VC

Medical Information providers (ie., WebMD), Mobile Health platforms related to patient monitoring, Cosmetic and consumer goods companies, or Pharma / Medtech (ie. skin disease)

Product Launch Marketing to accompany Q1 2014 launch date, development of the version 2 app, and general corp purposes

Technology Description:

Lack of mechanical biocompatibility is universally recognized as a major bottle neck for current hip replacement implant materials. McGill University has developed a mechanically biocompatible material with minimum micromotion for hip replacement applications. Using theories of biomechanics, materials, and optimization, a methodology has been developed to generate a titanium alloy hip implant with optimized gradients of material properties. Two-dimensional micro-lattices have been manufactured, verified, and tested to assess the performance of the innovation compared to current implants. Compared to a standard titanium implant, the lattice implant improved bone resorption by 70% while reducing shear interface stress by 53%. The implant technology utilizes an advanced graded cellular solid material that more closely meshes the distribution of the actual properties of the femoral bone, in particular the stiffness and strain energy. By diminishing the resorption of bone and reducing interfacial stress, a longer-lasting material for hip-replacement is obtained. The performance of the implant material is significantly improved compared to current technology, while remaining cost-competitive.

Synopsis of Market Opportunity:

The initial market opportunity will be for hip replacements. This market is growing globally due to the rise of osteoarthritis in the population, the increase in obesity, and the desire for people to remain active as they age. The global hip replacement implant market is expected to grow at a compound annual growth rate of 5% from 2010 to reach \$8.6 billion in 2017. The leading region for hip implants is North America, generating over 50% of the global revenue in 2011, and the North American growth rate is predicted to be almost 4% to 2016. There are three distinct segments within the hip implant market: primary hip, partial hip, and revision hip implants. According to Frost & Sullivan data from 2011, the revenue split between the markets was approximately 56% for primary hip implants, 32% for partial hip implants, and 12% for revision procedures.

Market Analysis:

Of the three segments within the hip implant market, growth will be highest for revision implants as the life expectancy of the original hip implant is generally fifteen years and will need to be replaced (during the lifetime of the patient). Revision surgery is complex, as bone resorbs over time and there is less material for the implant to adhere to. These lattice implants offer the greatest benefit to those patients requiring revision surgery. The lattice implants will better adhere to the bone and cause less micromotion. The patient will suffer less pain and be able to resume normal activities more quickly. Such surgeries will speed the recovery process and hospitals will reduce expenditures related to lengthy stays.

Competition:

Competition is dominated by several key players. DePuy (Johnson & Johnson), Zimmer, and Stryker generated almost 70% of the total market revenue in North America in 2011. These companies compete in all segments of the hip implant market. DePuy lost some market share due to a recall in 2010 of one of its hip resurfacing implants. Zimmer is the leader in North America for revision hip procedures due to a commitment to customize their implants for patients. Stryker is known for its competitive pricing. There are also a number of other smaller companies in this market space with niche designs and new materials. The typical channels to market for implants are through both direct and indirect sales to hospitals and orthopaedic practices. According to Frost & Sullivan, minimally invasive surgery is becoming the norm for hip replacements and new implant designs will be required to meet this need.

Strategic Partnerships:

The technology is looking for funding from strategic partners to bring the device to market or for a license to the technology.

Deal Sought:

License or Strategic Alliance
Licensing and funding

Technology Description:

Dentists and hygienists have used the same probes for cariology over many decades: a curette, a periodontal probe, and an explorer. McGill University has developed a new invention to replace these instruments by one single instrument designed specifically for the practice of cariology: the "Exprober". This new dental instrument has the following features: (1) curved extremities to reflect the anatomy of tooth and facilitate placement on the tooth surface; (2) two functional sides (mirror images) to reach the lingual site and buccal site of any tooth; (3) a curette on one end to remove dental tartar and a small sphere on the other end to detect cavities; (4) a reduced probe-end to facilitate general oral manipulations; (5) wing features to clean biofilms/soft-tissue that are responsible for carries and difficult to remove. The new tool provides the following advantages over the current technologies: (1) allows dental visual-tactile exam in the presence of biofilm to optimize patient counselling; (2) prevents infected bacteria transfer from one tooth to another with several different components touching the plaque; (3) prevents enamel and smooth free surface damage by allowing the examiner to use the new design PSR probe tip for detection and depth evaluation; (4) reduces gingival trauma with the new design curette and curved components; (5) brings modern theoretical developments into practice in the clinic; and (6) product design takes into consideration existing European and US standardization for lesion detection.

Synopsis of Market Opportunity:

According to a BCC Research market report from 2012, the global US market for professional dental materials and supplies was \$2,148 million in 2011 and is expected to grow up to \$2,222 million in 2016 with a CAGR of 0.7%. This market is divided into four segments and, according to the same report, the market for dental instruments and tools was \$206 million in 2011 and is expected to reach \$228 million in 2016. This dental materials and supplies segment is most promising with a CAGR of 2.1%, through 2016 (the CAGR of the other segments are: filling materials and related supplies: CAGR 0.2%, endodontic materials and supplies: 1.8%, and finishing materials: 0.1%). Growth is likely to be influenced by the continued increase in the number of dental practices, primarily supported by a growing and aging U.S. population and an increased awareness of dental care and health.

Market Analysis:

The target customers are dentists, hygienists, and dental teachers. According to the Labor Statistics Occupational Outlook Handbook, (2006-07, U.S. Department of Labor), there were 150,000 licensed dentists in the United States. This number is expected to grow to 176,000 by 2016 (9% increase). According to the same source, in 2006 there were 167,000 dental hygienists in the U.S. This number is expected to growth to 217,000 by 2016 (30% increase). Assuming that every year dentists and hygienists need 3 sets of probes each, this would represent over 1 million units in 2016 for the U.S. alone. The actual cost of a dental kit is approximately \$100 (minimum).

Competition:

The dental materials and supplies market is quite competitive, with several distributors in the U.S. The key developers of products in the market are 3M ESPE, Danaher, Dentsply, and Ivoclar Vivadent. According to BCC Research report data from 2012, these four companies are responsible for more than 40% of the annual sales in the segment. Since such instruments have not been upgraded in the past 60 years, this new device (the Exprober) would therefore be an incentive to expand existing markets and could be a strategic signal for other competitors. Intellectual property also provides market exclusivity for several years.

Strategic Partnerships:

The technology is looking for a partner for further funding or a license agreement.

Deal Sought:

License or Strategic Alliance
License and funding

MesoCoat Inc.

CermaClad
Manufacturing Innovation

Mr. Anupam M Ghildyal
24112 Rockwell Drive
Euclid, OH 44117
anupamghildyal@gmail.com
(216) 453-0866, Ext 158

Technology Description:

CermaClad™ technology utilizes a high-intensity arc-lamp to rapidly fuse protective, proprietary corrosion- and wear-resistant materials on steel pipes and tubes (both internal and external surfaces), plates, sheets, and bars. If you have ever burnt a paper or a bug using a magnifying glass using sun rays, you already know how this technology works. The CermaClad lamp or magnifying glass can heat a spot up to 1 million degrees celsius and can basically melt, fuse, and metallurgically (inseparable) bond any corrosion- and wear-resistant metal, alloy, or ceramic known to man to metal substrates to extend its life by 3-80X. Imagine bridges that require no maintenance and repair for 200 years; imagine pipelines that never corrode and leak; imagine cars that do not rust; imagine metals that can easily last longer than us – this is what CermaClad enables in a cost-effective manner.

Synopsis of Market Opportunity:

Imagine the possibilities if you can use a magic wand to convert every single carbon steel structure or component that is relatively inexpensive, to a structure or component made of stainless steel or expensive alloys at a fraction of the cost of components of solid alloys. Imagine replacing epoxies and polymers used to protect metal which do not provide long life for components, with metal coatings at a comparable cost which today is not possible - this is what we are set out to do. We serve a very large market, with our niche currently being in the \$4 billion metal cladding, and the \$8 billion metal coatings market. Our goal is to ensure metal asset integrity for life, that is the pipes, pumps, pressure vessels, reactors last for 100+ years and do not need periodic replacement.

Market Analysis:

Infield Systems Deepwater and Ultra-deepwater Market Report states that the largest proportion of deepwater investment (\$1.2+ trillion) to be directed towards pipeline installations; comprising 39% of total global deepwater expenditure - and clad pipes would constitute a healthy share of this offshore pipeline investment. The current market for clad pipes is \$2+ billion, which is expected to double in size over the next 3 years spearheaded by development of oil and gas reserves in challenging environments, where the International Energy Agency estimates that more than 70% of remaining oil and gas reserves are highly corrosive. We are first targeting the oil and gas market due to an urgent need, but we have applications anywhere steel is used like automobiles or ships, or even infrastructure like rebar and bridges.

Competition:

Currently used cladding methods have several major issues: mechanically-lined clad pipes with bonding, inspection, reeling and installation, and metallurgically bonded plate-to-pipe with large weld area (point of failure) and limited availability. Additionally, the use of thick-walled and large-diameter pipes, common in the Gulf of Mexico and Asia-Pacific respectively, exacerbate the concerns associated with these traditional cladding methods. About a few years ago, the average requirement for clad pipes was for 3-5 kilometers whereas the largest requirement was 20-30 kilometers for each project. Today, we are seeing the average requirement being in the tens of kilometers and the higher end to be hundreds of kilometers for single projects. The clad pipe market is growing at a rapid pace and the current solutions have several limitations; CermaClad™ clad pipes provide a compelling solution that addresses all the concerns associated with the current solutions that is not only cost-effective but highly scalable.

Strategic Partnerships:

We are working cohesively with most of the leading Oil and Gas majors, National Oil and Gas companies, Seamless pipe manufacturers, and other coating companies. Petrobras, Caterpillar are a few we can name since they have invested in technology development and we are bound under NDA to not name the rest.

Deal Sought:

Funding or Investment, License or Strategic Alliance
20000000, Equity, private placement
Joint Venture
Production expansion, global expansion

MiRXES

Dr Lihan Zhou
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Serving an Unmet Need in Blood Based Detection of Diseases: a Novel Diagnostic Platform using microRNA for Early Detection of Cancers.

Biotech

Technology Description:

MiRXES microRNA qPCR Platform enables - Robust, highly sensitive and specific detection of blood borne circulating microRNAs - Well controlled, high-throughput discovery of microRNA signatures from minute amount of clinical samples (200 µl serum / plasma) - Quantitative measurements of microRNA allowing accurate data integration and reliable batch-to-batch comparison.

Synopsis of Market Opportunity:

Patient prognosis is significantly better when cancers are diagnosed at early stages. Current cancer screening/diagnostic methods are either highly invasive (endoscopy, biopsy) or carry high risk of over-diagnosis (Mammography, PSA), resulting in a critical unmet need for more accurate blood based tests. MiRXES develops non-invasive, actionable early diagnostics to identify early stage cancer patients by measuring microRNA (a novel class of cancer driver genes) in blood. These individuals could subsequently undergo more invasive tests and seek early treatment to improve disease prognosis. Currently, more than 140 microRNA clinical trials (biomarker and therapeutics) are on-going for cancers and other diseases.

Market Analysis:

MicroRNA Research Market & Global MDx Market - Global MDx market to reach USD 11B by 2015, qPCR remains as key driver (Genomeweb). - Exponentially growing interest in microRNA research (25% CAGR, >2100 publications in Q1 2013) - Recent market report identifies Monitoring and Diagnostics as key growth areas in healthcare, especially in Asia. (Frost & Sullivan, Asia Pacific Healthcare Outlook 2012-2015) - Key Opinion Leaders unanimously agreed that qPCR technology but not microarray or sequencing will likely succeed in the clinical setting for microRNA analysis (Clinical Chemistry 59:2 343-347, 2013).

Competition:

MicroRNA Product Suppliers: LifeTech, Exiqon, Qiagen and Rosetta Genomics

Strategic Partnerships:

Singapore Agency of Science, Technology And Research (A*STAR), National University of Singapore, National University Hospital, Singapore General Hospital, University of Pittsburgh Medical Center

Deal Sought:

License or Strategic Alliance

Co-development of blood based microRNA tests for early disease diagnosis, prognosis and drug response

Mobiletech

Whatever Web
Software

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ce@whateverweb.com
2022882947

Technology Description:

Whatever Web (WeW) is a one-web optimization tool that significantly improves web performance in a multi device environment. WeW accomplishes this through optimizing image delivery to tailored devices and providing extended media quires (tailored capabilities) to tablets, mobile and connected TV's.

Synopsis of Market Opportunity:

Mobile grows at unprecedented rates, but less than a third of the world's population have smartphones. As smartphones become the norm, soon most of the world's population will be connected to the internet. Network congestion is already a major problem. Billions of new users consuming and producing content will make performance worse. The mobile acceleration market aims at accelerating and optimizing the web, content, network and mobile applications, in order to improve the user quality experience. The WhateverWeb tools reduce the amount of data transferred from a website with up to 80%, resulting in faster sites and higher conversion rates.

Market Analysis:

Customer online behavior is totally shifting from online desktop to mobile/tablet. At the same time, websites are growing bigger. Average landing pages has grown from 300KB in 2008 to 1,4 MB in 2013, and 80% of the page load is images. Brands can build beautiful native apps for mobile, but still there is a significant need to be searchable and the search result must be accessible on any device any time – even on slow internet connections. Slow loading affects business goals. 1 second delay equals 2,8% drop in revenue/loss of sale. By serving images locally and tailored to the device Brands can reduce a significant load (50 – 70 %) of their websites.

Competition:

There are a number of tools available and many ways to increase performance on a site. WhateverWeb's combination of client side detection and server side heavy lifting is still pretty unique compared to anything we've come across, making it a powerful RESS-tool (Responsive design with Server-Side components).

Strategic Partnerships:

Scientia Mobile ScientiaMobile is the company behind the popular WURFL (Wireless Universal Resource File) Open-Source project. WURFL is a recognized de-facto standard in the area of DDR (Device Description Repositories). www.scientiamobile.com

Deal Sought:

Funding or Investment
2 million dollars, Equity
US Market Entry

Molecular Assembly

Synthetic DNA or DNA Synthesis
Biotech

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(619)316-4662

Technology Description:

Molecular Assembly is developing a biologically / enzymatically based DNA synthesis technology that will replace the classical chemical method developed and commercialized almost 30 years ago and still universally employed today. While the classical method has proven the workhorse in enabling the technologies that have evolved to analyze, understand and "read" the genome, the relatively short and moderate quality DNA produced by this method is unable to meet the needs of a new emerging era of biotechnology that is more focused on employing what has been learned to "write" new genomes. The Molecular Assembly next generation enzymatically based approach will produce up to 30x longer DNAs, at three magnitudes less cost, eliminate the tons of toxic waste produced globally by the chemical method, greatly reduce turnaround times and most importantly, accelerate the pace of research in the field of synthetic biology and related disciplines. The technology is based on a fairly well characterized enzyme that is able to extend single stranded DNA and will proceed through a process much like "sequencing by synthesis" that is presently performed in hundreds if not thousands of labs worldwide.

Synopsis of Market Opportunity:

The market for synthetic DNA is \$500+Million and is growing at 20% per year. Most of that growth comes from what we refer to as the synthetic biology market. This market, was \$173M in 2012 and is growing at 40 % per year, to \$930M by 2018 (see BCC Research "Synthetic Biology: Emerging Global Markets", 2011). Additionally, DNA has remarkable physical and electrical properties which are intriguing scientists in numerous disciplines. Today we can analyze and learn about Neanderthals from the DNA they left behind 40,000 years ago. What are the implications to new data storage systems as today's reach their theoretical limit? From nanomachine design, materials property development, optics and even computing, DNA is considered a potential next generation technological advancement. Certainly a widely available new generation of synthetic DNA will enable overwhelming scientific breakthroughs just as the first generation did in so many ways a quarter century ago.

Market Analysis:

The total available market for synthetic DNA is \$500M and can be segmented into the classical market consisting of probes, primers and linkers that are used in DNA sequencing, PCR and QPCR, cloning and other methodologies primarily to study, and "read" the genome. The current process of synthesizing DNA is amenable for these applications as they require short sequences of moderate purity; although cost is an issue and a primary competitive driver. This market demonstrates single digit growth and is provided for by a handful of international service providers and a few local lifestyle companies. Those same service providers have sought and struggled to supply the new biotechnology applications which endeavor to "write" new genomes, such as synthetic biology, with the same short sequences of moderate quality. These new applications are more complex and the high costs, moderate quality and turnaround times have been huge bottle necks to these markets.

Competition:

Synthetic DNA today is provided by a handful of international providers and some local lifestyle companies. The services they provide can be categorized into 3 levels. First are companies such as IDT and Sigma-Aldrich which provide, short, moderate quality oligos at the lowest prices. Molecular Assembly has only moderate or long term interest in this market segment. Second, some of these companies and new entrants such as GeneArt have found process intensive ways to string these short DNAs into longer ones and perform high throughput purification to better address the needs of the emerging synthetic biology market. But the costs and turnaround times are still prohibitive and so a third wave of company is emerging to synthesize the DNA on a nanoscale to drive down costs... But none of these competitors are solving the fundamental problem of the chemical method, but instead are trying to circumvent those problems.

Strategic Partnerships:

We have preliminarily been accepted into the Connect Springboard Program. We are very pleased to be contracted with Brown And Rudnick in Boston for our IP work. Tom Meyers, our attorney has much experience in the specific area of the use of DNA modifying enzymes and nucleotide analogs. Procopio is our corporate counsel.

Deal Sought:

Funding or Investment, License or Strategic Alliance

\$1 million initially - \$550k 9 months later - \$5M 6 months later, Equity or future licensing

First round 90% R&D will reduce most of the technology risk. Second round 80% R&D and should eliminate technical risk.

Third round for instrument development and commercial planning.

Technology Description:

NETL has developed an environmentally friendly adhesive that works exceptionally well with glass and metals, uses CO₂ as a starting material, and can be created using simple, non-toxic chemistry. The created material is applicable for high performance polyurethane-based adhesives, surface coatings, sealants, binders, hydrogels, and resins. Inexpensive CO₂ is used as a starting material. The epoxy-like material can be cured both by heat and light, has no isocyanate chemistry, is more environmentally friendly than current epoxies, has excellent adhesive properties, is solvent free, is made from the off the shelf commercially available components, should cost less to make, and is a more flexible material than existing epoxies.

Synopsis of Market Opportunity:

Problems with existing epoxies are as follows: • They create volatile emissions that are toxic • They require poisonous chemistries • They require environmentally toxic chemistries • They typically require a specific type of curing (toughening/hardening in material creation process): either heat or light • They tend to be made from petrochemicals NETL's adhesive offers a solution to these issues. The global adhesives market was estimated to be worth \$21,527.0 million in 2010 and is expected to reach \$28,659 million by 2016. The specialty adhesives market is valued at \$2.4 billion. Buyers in the market include the aerospace (Boeing) industry, automotive manufacturers (GM, Ford, Toyota), recreational sporting goods producers, and the military.

Market Analysis:

Industries in the adhesive market are as follows: Construction (35%) Aircraft manufacturers (20%) Automotive manufacturers (17%) Medical products (10%) Aircraft manufactures (21%) Office supplies and packaging industries (12%) Other (6%) Construction is the largest market in the adhesive industry, taking 35% of the adhesive market (Major Market Segmentation of 2012 US Adhesive Industry, Amari 2012). Using this environmentally friendly "green" adhesive could allow contractors to gain LEED certification points or appliance manufacturers to earn Energy Star points. Since the adhesive has demonstrated capability in metal-to-metal binding and glass binding, initial products related to this invention could be an HVAC adhesive, a flooring adhesive, and sealant.

Competition:

Competition includes all existing epoxies, resins, and binders that are not as environmentally friendly at this adhesive technology, as well as adhesives that claim to be environmentally friendly. Adhesive products that are currently on the market and are marketed as being environmentally friendly would be direct competition with this new adhesive.

Strategic Partnerships:

Deal Sought:

Funding or Investment, License or Strategic Alliance
License or CRADA
License Agreement

National Energy Technology Laboratory (URS Corporation)

Cerium Oxide Diffusion Coating for Metallic Alloys
Advanced Materials

www.netl.doe.gov
Katie Klos
Albany, OR 97330
kathryn.klos@contr.netl.doe.gov
5419184423

Technology Description:

A coating for metal alloys that can be applied by dipping, spraying, or brushing. Once heated, the coating diffuses into the metal component, providing increased (3 to 5 times more) oxidation resistance in high temperature environments, and ultimately extending the useful life of components. Several processing technologies exist to achieve this, but NETL's patented method is simpler, more cost effective, and is easily incorporated into component manufacturing plans. Potential markets include: aerospace, agrichemical, chemical processing, energy, industrial heating, land based gas turbines, oil and gas, pharmaceuticals, pollution control, waste management, among others. US Patent No. 7,553,517, issued June 30, 2009.

Synopsis of Market Opportunity:

This surface treatment reduces the oxidation rate of most metals in high temperature environments. Over 75 alloys have been tested and showed improvement of 2-3x or more. This invention is easily incorporated into unit manufacturing processes and has a cost advantage over competing technologies, making it the logical choice. Customers would include energy intensive industries such as heat treating, energy production and other manufacturing. Traditional alloying techniques such as pack cementation, ion implementation, and melt addition cost \$12.74-\$15.02 per square foot, ~\$1,200 per square foot, and \$.46-\$2.88 per square foot, respectively. Using a vapor deposition coating process, such as chemical vapor deposition, physical vapor deposition, directed vapor deposition, or electron beam evaporation deposition costs around ~\$1,200 per square foot. The NETL process of brushing, spraying, or dipping costs between \$0.63-\$1.23 per square foot.

Market Analysis:

There are many, many applications for this technology. One example: heat exchangers. In 2004, an estimated \$300 billion was invested in energy efficiency, of which \$75 billion was in the industrial sector. If heat exchangers represent only 0.1% of the industrial sector's investment, this would be an investment of \$750 million annually. Since this surface treatment technology can extend a unit life cycle, minimize down time, and is easily incorporated into a unit manufacturing process, this technology could have a significant impact on the heat exchanger market. Energy efficiency and reduced costs are key to cost competitiveness in a global market, and the cost advantage over competing technologies makes this technology the logical choice.

Competition:

Traditional alloying techniques such as pack cementation, ion implementation, and melt addition cost \$12.74-\$15.02 per square foot, ~\$1,200 per square foot, and \$.46-\$2.88 per square foot, respectively. Using a vapor deposition coating process, such as chemical vapor deposition, physical vapor deposition, directed vapor deposition, or electron beam evaporation deposition costs around ~\$1,200 per square foot. The NETL process of brushing, spraying, or dipping costs between \$0.63-\$1.23 per square foot. Applying slurry by brushing, spraying, or dipping of alloy parts is much cheaper than the vapor deposition methods. This, coupled with the limited equipment requirements (only a furnace) and low consumption of raw materials makes the NETL process the winner. Likewise, since the spraying or brushing applications can be made on the shop floor or lab bench (as opposed to a vacuum chamber) these techniques lend themselves to ease of inspectability, thus ensuring a high quality coating.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance
License

High Temperature Optical Gas Sensors
Energy

Technology Description:

NETL's optical based gas and temperature sensors minimize electrical wires, contacts, and complex electronics, allowing for a safer, more cost-efficient, reliable sensor device. The sensors are enabled by advanced sensing materials for embedded sensing of temperature, gas composition, or magnetic fields in extreme high temperature environments. The sensors have simple designs, are stable at high temperatures, and offer dual gas and temperature sensing capabilities. No comparable commercial sensor currently exists on the market. There are no commercial solutions for embedded gas and temperature sensing at temperatures above 500 degrees C, and there are no commercial magnetic sensors rated for temperatures exceeding 175 degrees C.

Synopsis of Market Opportunity:

Traditional electrical sensors are prohibitively costly and intrusive, require stable wiring, insulation, and electronic components. Complex optical sensors are expensive and have inherent temperature instability issues. NETL's advanced sensing materials can allow for harsh environment sensing in energy applications such as gas composition in gasification, oxy-fuel combustion, natural gas processing, fuel cells, gas turbines, and other energy conversion systems. They can also allow for sensing in environments with similar temperatures and harsh conditions relevant to defense, space science, or industrial manufacturing process monitoring and control. Regulations relating to energy efficiency, reduced emissions, and safety, along with the global trends of increased complexity of systems and processes in areas such as power generation, manufacturing, and transmission and distribution, can serve as market drivers for advanced sensors.

Market Analysis:

Better sensors and controls will lead to greater efficiencies in power generation systems. For example, a 1% improvement in efficiency from an existing coal fired power plant would lead to ~\$390,000 of annual savings in fuel. Better sensors and controls also have the potential to provide a 1% reduction in greenhouse gases and solid wastes. In addition to fossil energy generation, sensors and controls are also critically important for improving energy efficiency in a wide range of manufacturing industries. The sensor could be applied to several markets. In the temperature sensor market, the Asia-Pacific market represents the fastest growing region with compound annual growth rates exceeding an 9%. The estimated global market for temperature sensors is projected to reach \$4.5 Billion by 2018. In the magnetic field sensor market, compound annual growth rates of 8-10% are predicted. Global revenues in 2012 were estimated to be at \$1.5 billion.

Competition:

Competition would include sensors such as chemi-resistive sensors, a well-established technology able to be embedded easily at various locations, with the ability to measure temperature or chemical species. However, these sensors are incompatible with remote sensing, require wiring and interconnects that are stable in harsh environments, have a limited selectivity to particular chemical species, and a strong temperature dependence of gas sensing response. The surface-acoustic wave (SAW) sensor is compatible with passive remote sensing and able to measure multiple relevant parameters. However, it requires metallization layers that are stable in harsh environments, has a limited selectivity to particular chemical species, and needs to simultaneously monitor temperature with a second SAW device to normal for accurate gas sensing response.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance

License

**High Throughput Row-to-Row Scanning Laser Interference
Patterning (R2R SLIP)
Manufacturing Innovation**

Technology Description:

Nanotechnology offers great potential in producing highly efficient, highly functional devices and systems. A successful technology requires not only the design and production of novel materials in laboratory environment, but also manufacturing processes that can be taken to real factories to produce these high-performance devices and systems in high volume. NEEM's R2R-SLIP platform offers unparalleled advantages in nano-manufacturing. It is highly adaptable to existing industrial infrastructure, fast and high throughput operation in ambient conditions. The platform enables fully automated batch production using less environmentally harmful chemicals. It also offers great tunability and control over the shape, size, and periodicity of the nano-features.

Synopsis of Market Opportunity:

Scalable, high-throughput nano-manufacturing has great potential in a broad range of applications. NEEM's R2R-SLIP nano-manufacturing platform creates great performance, environmental, and financial values in solar cell manufacturing, hydrogen production, NW-LED fabrication, health care, and environmental monitoring. For instance it can improve solar module efficiency by 15%, or eliminate LED efficiency droop at high driving current, or produce hydrogen with zero carbon emission. Each application listed above presents a market opportunity of over \$1 billion by conservative estimation. We also anticipate further development will unlock other applications. For example, the platform can practically produce sensor arrays that can be used to sense "touch" or "smell", enabling interesting applications that do not exist today.

Market Analysis:

PV Solar Cell Market R2R-SLIP is applicable to solar cell manufacturing to make transparent electrodes in lieu of the traditional silver electrodes. This requires very small change in current manufacturing infrastructure, but can increase active area and reduce costly silver consumption. Approximately 10 GW of incremental manufacturing capacity is required every year to support PV growth trajectory. R2R-SLIP generates \$0.10/W_{DC} of value, or \$1 billion per year if it is only adopted in new capacity build-out. Clean Hydrogen Production R2R-SLIP can make devices for Hydrogen (H₂) production via water-splitting into H₂ through photo-electrochemical (PEC) process, where the energy comes directly from solar radiation, and the feedstock is water. The global H₂ production market was over \$90 billion in 2012, with 30% growth into a \$118 billion market in 2016. Based on the studies from the US DOE, Capex for H₂ production \$2 billion annually, offering opportunities for R2R-SLIP based PEC.

Competition:

Competitive technology includes e-beam lithography, nano-imprinting lithography, and extreme UV lithography. These technologies are either limited by their throughput, or by the prohibit cost associated with their processes. NEEM's R2R-SLIP technology offers a practical solution for continuous, low cost, high speed/throughput, scalable nanomanufacturing of nanostructures, devices and systems. It is mask-less which is fully computer controlled allowing the tunability of the feature sizes and periodicity, and much faster and cheaper compared to R2R-NIL method. Another competing factor is that the proposed R2R-SLIP nano-manufacturing platform target the equipment market and therefore is susceptible to the cyclical behavior and depreciation schedule of the capital expenditure from the manufactures. Companies already made investment in the latest equipment are less interested in new equipment they do not need. With this consideration, we focus on fast-growing market and only included the new equipment capacity needed to sustain the projected market growth.

Strategic Partnerships:

Deal Sought:

Funding or Investment

We seek \$750,000 first-round for 12-month IP and market development, One-time injection of funds in exchange for equity shares
Develop platform prototype and IP portfolio, engage with potential customers

Technology Description:

Because the 2013 estimated production price for algae bio-fuel ranges from \$140 - \$900 per barrel, processing costs must be brought to near parity with petroleum (circa \$100/bbl) in order to be considered a competitive energy alternative. However, with a compound annual growth rate estimated at over 40% and a realization of \$2.6 billion by 2015, algal bio-fuels are still an attractive technology investment. The current rate-limiting step and energy input in the mass production of algae for commercial use is the capacity to separate the algal cells from their growth medium (mostly water). The technology presented here for licensing encompasses a methodology of cultivation and harvesting that eliminates the de-watering step. Membrane cultivation over a nutrient bed matrix is followed by a "squeegee" harvesting method that can be fully scaled- up and automated. This method is predicted to reduce significantly the energy and cost deficit of algal bio-fuel production, providing a viable method to bring algae bio-fuel production costs in line with the benchmark set by the petroleum industry. Other markets that can benefit from a reduced cost of algae cultivation include the nutritional/nutraceutical market for feed supplements and anti-oxidants such as beta carotene and astaxanthin. This market represents an estimated \$900 million by 2015.

Synopsis of Market Opportunity:

The global market for carotenoids from algae was \$766 million in 2007, with a CAGR of 2.3%, equaling \$919 million by 2015. The average US company in the Aquaculture industry generates sales revenue of roughly \$1.1 million. The National Research Council report of 2012 states that large scale production of algae biofuels is currently untenable with existing technology due to the water required and energy required for de-watering. MOMECCA technology can reverse this equation. MOMECCA technology provides a competitive advantage over existing technology, addressing and unmet need in commercial algal cultivation. MOMECCA is a ground floor opportunity in emerging market.

Market Analysis:

This technology is positioned to supply several emerging markets. This technology can be segmented into the biofuels, nutraceuticals (carotenoids), and cosmetics. The aquaculture and more specifically the algal culture industry has suffered severe dips in recent years but the market remains relatively strong. With the advancement in technology and increased consumer demand for biofuels, this industry is expected to grow moderately well with increases up to 3% in coming years. The global market for algal carotenoids was \$766 million in 2007. This is expected to increase to \$919 million by 2015, a CAGR of 2.3%. Beta carotene has the largest share of the market. Valued at \$247 million in 2007, this segment is expected to be worth \$285 million by 2015, a CAGR of 1.8%.

Competition:

The current competition is 1) the established petroleum market, represented as the commodity price of product at circa \$100/ barrel and 2) the use of commercial ponds and photo-bioreactors for the cultivation of algae for bio-fuel. These methods cannot produce cost - competitive products. However, there is still a growing demand for ecologically friendlier, renewable, and non-petroleum sources of fuel. Multiple reports have expressed the major hurdle to be overcome in the biofuels industry is energy balance - that the product produces significantly more energy than it consumes during manufacture. This technology is a disruptive methodology of algae cultivation and collection that will provide a competitive edge over current methods of production.

Strategic Partnerships:

NAU Innovations is seeking qualified strategic partners as licensees in industry-exclusive market segments.

Deal Sought:

License or Strategic Alliance

NAU Innovations is seeking qualified strategic partners to fund the scale up this process. Alternatively, we are seeking industry-exclusive licensing partners interested in using this technology.

Technology Description:

A structural supercapacitor is a new technology that combines electrical power storage and structural load-bearing properties. In general, supercapacitors (sometimes called ultracapacitors) are electrostatic, not electrochemical devices. Unlike batteries, they can be fully discharged for transport and maintenance. Their behavior is more predictable and they are more tolerant of faults and damage. The technology presented here is based on the current technology of an electric double-layer capacitor (EDLC), but structural supercapacitors are built in such a way that they become load-bearing – that is, it will allow the construction (for example) of a solar panel that stores its generated energy in the panel housing itself. This will substantially reduce or eliminate the need for batteries for solar power storage. This technology is layered into polymers/fiberglass, and can have applications in virtually any molded structure. It will significantly reduce the weight of an electric vehicle by becoming part of the structure (e.g. door panels) while storing electrical power. Because the battery requirements will be significantly reduced, this translates into a lighter vehicle, thereby increasing its efficiency. The structural supercapacitor has the characteristic benefit of a capacitor as a “pulse discharge” device, as well as the longer-term discharge characteristics of a battery. This makes it ideally suited to power grid or electric vehicle use. As a solid state unit, it is environmentally superior to a lead-acid battery, and does not have the detrimental and damaging discharge characteristics of a lithium-ion battery.

Synopsis of Market Opportunity:

A market segment that will realize immediate benefit from the use of structural supercapacitors is the solar power photovoltaic (PV) market. According to the Solar Energy Industries Association, utility-scale PV installations in the U.S. grew 670% over the course of just two years from 2010 to 2012. In 2012 alone, 1,769 MW of utility PV was connected to the grid – 59% more than the cumulative total in all prior years. In the first quarter of 2013, there was a 33% increase in deployment over the first quarter of 2012. The residential market grew 53% over Q1 2012 and 11% over Q4 2012, continuing its strong performance of consistent incremental quarterly growth. The grid storage market will reach \$6.1 billion by 2018 making energy storage one of the fastest growing opportunities in the smart grid industry. Supercapacitors will become integral to grid storage, as costs go down and capacities increase.

Market Analysis:

According to <http://www.marketresearchreports.biz>, supercapacitors are the devices having electrical characteristics between capacitors and batteries. Supercapacitors are the energy storage devices that can charge quickly and store electrical energy in a small package. Capacitors were initially used for faster operating speeds rather than durability; however, most companies and manufacturers are now focusing on developing the capacitors that can match batteries in both areas. The supercapacitors market is rapidly booming and the sales of these devices is forecasted to reach the value of \$3 billion by the year 2016 due to their increasing use in mobile phones, electric vehicles, energy harvesting, and aerospace. The market for the innovation of structural supercapacitors is anticipated to be parallel to, and take market share from non-structural supercapacitors as a disruptive technology.

Competition:

The default option for grid storage today is lead-acid batteries, accounting for more than 55% of revenues from grid batteries currently. By 2018, this share will decline to around 30% as new grid battery technologies become commercialized. The lead-acid battery will itself get an upgrade; carbon electrodes, promising a 4x performance improvement. In addition, the ultrabattery, with combination lead/carbon electrodes will compete for grid-storage markets and present competition to supercapacitors. In 2018, lead-carbon batteries/ultrabatteries will generate around \$300 million in revenues. Although lithium-ion batteries are receiving considerable attention, it is immature and high cost and its current growth relies on government subsidies. When subsidies disappear, sodium-sulfur and Zebra batteries will be a better deal for power companies and large end users than lithium-ion. Structural supercapacitors can side-step some of this competition into a new niche because of the structural component as a moldable material.

Strategic Partnerships:

Northern Arizona University is seeking licensing and/or development partners for exclusive agreements in multiple market segments.

Deal Sought:

License or Strategic Alliance

Exclusive or non-exclusive licensee or license option purchase, equity ownership in start-up; other options negotiable

The Nutcracker, The Multipurpose Pitch that boosts the stadium potential.

Other

Technology Description:

Nutcracker Solutions have developed and patented a fully automated pitch changeover system for stadiums. With a push of a button the stadium can be converted from a grass covered floor into a multipurpose floor. This enables the stadium to maximize its potential by constantly switch between sport, concerts and events.

Synopsis of Market Opportunity:

Nutcracker Solutions targets large stadiums that want to facilitate sport, concerts and other events. These stadiums have already taken 90% of the investment needed to become a fully functional multipurpose stadium. A large stadium can easily earn over 1,5 million USD on a single concert, and will after an installation have 320 bookable dates to offer to concert and event organizers. Market: Existing stadiums, 1500 stadiums with more than 15 000 seats. New stadiums, over 100 stadiums with more than 15 000 seats under planning or construction. Aftermarket, Revenue from service and maintenance will vary with the number of installations.

Market Analysis:

There are over 12 000 stadiums in the world, but Nutcracker Solutions AS primarily targets 15.000+ stadiums within the sports: American football, soccer, baseball, cricket, rugby and athletics. We divide the market into 3 segments. Existing stadiums Today's market consists of 1500 venues with more than 15 000 seats. We estimate that 5 - 20% (75 - 300 stadiums) of these stadiums will install a multipurpose pitch over the next 10 years. Based on an average price of 12,5 million USD per unit, we estimate the segment's cumulative sales over the next 10 years will be between 1 - 4 billion USD. There are over hundred 15 000+ sport stadiums under construction or planning. We are fully confident, that in the future it will be unthinkable to build a large stadium without a multipurpose pitch. In the same way, as today's venues are always built with large VIP facilities. We estimate the annual turnover in this segment to be 100 million USD. This estimate is based on: 1) an average price of 12,5 million USD per unit, 2) that 10 new venues are completed every year and 3) 80 % (8 of 10 stadiums) of these will be built with a multipurpose pitch.

Competition:

The alternative stadium flooring change-over methods: Method 1 Plastic or metal plates laid on artificial or natural grass • Roughly 95% of all stadiums use plastic or metal plates. • Price - 500 000 – 1 200 000 USD. • Changeover time and cost will vary greatly, depending on how damaged the floor tiles are. The timely and expensive changeover process, combined with the floor's lacking ability to protect the grass and the vulnerability of the floor tiles, makes it almost impossible for a stadium to combine sports, concerts and events activities. Method 2 Artificial grass removed in pieces or strips. The problem with this method is the timely changeover process and the poor grass quality. Therefore it not used in any of the European professional soccer leagues. The solution will also require a large storage area where the turf can be stored during the concerts. Method 3 Natural grass removed in pieces Natural grass removed in pieces has mainly been used for the opening ceremony at the Olympics. The changeover process is extremely time consuming and is very costly to conduct. The solution requires an area of 10 000 m2 outside the stadium where the grass can be stored during concert and events. Method 4 Automated sliding pitch with storage outside the stadium. There are five stadiums with a sliding pitch in the world, and one of them is in USA, Phoenix Stadium: "The multipurpose nature of the Phoenix Stadium facility has allowed it to host 91 events representing 110 event days between the dates of August 4, 2006 to January 8, 2007. The Nutcracker Multipurpose Pitch gives the stadium all the same benefits as the slide pitch, but The Nutcracker has none of the installation requirements of the sliding pitch.

Strategic Partnerships:

Connect Norge: CONNECT is an international independent non-profit organization servicing entrepreneurs with resources that they need for success. Nutcracker Solutions AS has gone through Connects Springboard program, with Nils Skarsgaard as our advisor. Innovation Norway: Innovation Norway is the Norwegian Government's most important instrument for innovation and development of Norwegian enterprises and industry. The company won a start-up grant in fall 2012. Protector IP Consultants. Our Patent strategy is developed together with Protector IP Consultants. Hydro Aluminium ASA: Hydro is a global supplier of aluminium with activities throughout the value chain, from bauxite extraction to the production of rolled and extruded aluminium products and building systems.

Deal Sought:

Funding or Investment

We are seeking an investment of 1 000 000 USD. The investment can be divided into smaller payments in 2013 and 2014, Venture Capital

The investment will be used for funding the completion the company's on-going processes in 2013-2014.

OMsignal

Bio-Sensing Apparel
Other Lifescience

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514-294-1234

Technology Description:

OMsignal garments are designed for everyday wear, with integrated sensors . Physiological signals acquired from body are filtered and interpreted to deliver information and actionable insights to consumers and medical practitioners. The information include ECG, activity and respiration rhythms as well as a measure of tension level or "emotive" states. OMsignal apparel are knitted, seamless and breathable. They are slightly compressive but can be worn all day, every day. Their material is light, moisture wicking (absorbs sweat and dries quick) and antibacterial (prevents odours). Recorded data can be seen live on a mobile app that allows users to monitor their heartrate, breathing, activity and stress level.

Synopsis of Market Opportunity:

OMsignal brings "Technology Woven Into Life" to the world. Like Gore-Tex, the OMsignal platform is to be used by partners with distribution and domain expertise in a variety of verticals: - to enable sports performance, personal wellness and active lifestyle applications for the consumer market. - to enable medical applications of a large variety, including the detection of Atrial Fibrillation, of sleep apnea or the prediction of medical events such as for epileptic. OMsignal is "datafying health" - to enable through passive health and wellness monitoring for lifestyle, a variety of new possibilities and various human related fields of research.

Market Analysis:

The wearable computing market is exploding. It is a breakthrough category estimated by some to reach \$50B within a few years. " The main takeaway: wearable tech is already a \$3- to \$5 billion market today. In the next two to three years, it could skyrocket to \$30- to \$50 billion. That means more smartwatches, fitness monitors, shoes, and headsets. (...) The health and fitness market is about \$2- to \$3 billion." source: <http://finance.yahoo.com/news/wearable-technology-market-explode-130942363.html> " Wearable technology has the potential to enhance our surroundings, improve our health, and change the way we interact with each other. " Source: <http://www.businessinsider.com/future-of-wearable-technology-2013-5?op=1#ixzz2f5yO5kPS> .

Competition:

There is no known direct competitor in terms of bio-sensing apparel platform. Other wearable products are available on the market such as bracelets, watches, headbands and other accessories (Jawbone, Fitbit, Pebble, etc.) but none that offers a thorough bio-sensing, live recording of data via a shirt specially designed for everyday wear.

Strategic Partnerships:

Deal Sought:

Funding or Investment, License or Strategic Alliance
\$12M, Funding
Strategic Alliance
Scaling OMsignal - Distribution

Technology Description:

OneStory is a video storytelling app that empowers ordinary people to capture high quality interviews about love, war, beating cancer, and any life topic. A guided interview process collects individual clips, assembles them into a beautiful compilation video making it easy to share online.

Synopsis of Market Opportunity:

Online video currently falls into one of two categories: single continuous unedited video clip, or highly edited produced video. There currently is not an easy way to interview someone and assemble the collected clips together into a single shareable video on the mobile device. There is a real opportunity to streamline this process, reducing the barrier of entry to collect and share rich video content. The power of OneStory lies in the ability to compile answers from a set of questions on a specific topic, as well as collect stories from a particular location.

Market Analysis:

There are currently 10.5 million smartphone users in Canada and 115.8 million in the United States. In Canada, iPhones are the dominant mobile phone with Android coming in a close second. Within these parameters, our early market research is demonstrating that our targets are: -Women aged 25-44 in Canada with an interest in storytelling, business and charity -Men aged 25-44 in Canada with an interest in citizen journalism and early adoption of technology We are focusing our 2013 marketing on Canada while also introducing the app to the United States and international audiences. Our 2014 focus will be to deepen our penetration into the United States and international markets. 2015 and beyond will be into the most appropriate international audiences, as indicated by download rates, social media and smartphone trends.

Competition:

There are a few companies currently working in the storytelling space, however these organizations each have their own weaknesses that provide us an opportunity. There is also potential to leverage some of their strengths to our advantage. YouTube - video sharing platform Strengths - large user base; excellent SEO; available on multiple platforms; official Google product Weaknesses - no interview process; wide range of genres; no geographic search; video only Response - guided interview process; specific genres;; automatic editing; geographic search options; share videos on YouTube HistoryPin - geographical photo sharing platform Strengths - geographic search; tours; good design; mobile app; a lot of content Weaknesses - no video, photo focus; history-based rather than life story; Response - option to show HistoryPin as a layer. StoryTree - private photo and video sharing Strengths - photo book printing; Video and photo; Great tagline; Mobile app; Easy to use Weaknesses - required registration to use; no obvious community; private content Response - option to push to Story Tree Cowbird - visual / audio storytelling platform Strengths - nice design; large community; responsive site Weaknesses - no video; no mobile app; Response - video content Directr - personal movie maker Strengths - mobile app; nice design Weaknesses - no pre-defined set of interviews or questions Response - guided interview; geo-targeted interviews, watermarked videos

Strategic Partnerships:

Corporate clients will have the ability to create custom story campaigns will provide corporate clients the means to collect rich stories from their consumers creating a new level of engagement for their brand. Nonprofit organizations can benefit from the platform to collect and share stories with their community, bringing awareness and support for their cause. Individuals can publish their own story campaigns to extend the reach of the platform to address personal issues, allowing the average person to connect with a wide audience.

Deal Sought:

Funding or Investment
500000,
Expand Development Team

OvaPal

Fertility Tracking, Reinvented
Medical Device

Giovanna Scheidler
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giovanna.prout@gmail.com
858-397-8018

Technology Description:

OvaPal is reinventing fertility tracking for the most effective and convenient way to achieve pregnancy. The OvaPal system includes a wearable patch worn on a woman's body that tracks physiological parameters at the perfect times each day. These many data points are wirelessly transmitted to a mobile device application where reproductive science and prediction algorithms create a comprehensive view of a woman's fertility to indicate optimal timing for the best chance at conception.

Synopsis of Market Opportunity:

There are over 4 million couples each year in the US that are trying to achieve pregnancy. For about 1 million of them, it takes longer than 1 year to achieve. Other methods on the market are antiquated and possibly humiliating (urinating on a stick each day!) and put much of the burden just on the woman. In addition, IVF treatments can cost anywhere from \$10-100K. A simple, precise, cost effective device to help determine the optimal fertility window can eliminate these pain points and help couples get pregnant without resorting to expensive IVF treatments.

Market Analysis:

The infertility market is estimated at \$3.5B with growth up to \$5B in 2017. Additionally, the trend of women's age for first born is increasing making it harder to achieve pregnancy. Smart, mobile devices are becoming commonplace where most of our market likely has access to one with Bluetooth LE capabilities. 4 million women in the US each year trying to achieve pregnancy, for about half of them, it takes 6 months to a year to achieve.

Competition:

Primary competition is the Duo Fertility product which has a high initial cost (~\$800) plus a monthly fee for the service. They have two devices: the temperature logger plus data logger which then plugs into a computer, not fully integrated. Ovulation Urine Sticks. Traditional Basal Temperature Method - waking at the same time each morning, not moving, not talking and recording temperature.

Strategic Partnerships:

Deal Sought:

Funding or Investment
100,000,

Initial prototypes of the device, including electrical design, firmware, software, and preliminary industrial design.

Perfect Point

James Legge
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7148923400

E-Drill

Manufacturing Innovation

Technology Description:

Handheld EDM technology used in aerospace maintenance and manufacturing.

Synopsis of Market Opportunity:

We estimate the available market for our E-drill to be approximately \$2.2 billion (annually). Number of aircraft to which our technology applies is 98,157. Estimated that 400-700 million fasteners are removed per year in aircraft repair.

Market Analysis:

Aerospace Maintenance is a \$100 billion market globally (commercial and military), with the fastener removal and hole drilling operations accounting for \$2.2 billion

Competition:

No direct competitors, indirect competition involves using a mechanical drill to remove fasteners on aircraft. 5-10X faster removal process for E-Drill vs. conventional drill

Strategic Partnerships:

N/A

Deal Sought:

Funding or Investment

\$5,000,000.00 (allow 5% commission – Net \$4,750,000), Equity

Operations \$738,888; R&D \$679,166; Sales & Mkt'g \$1,279,162; Patents & IP \$667,600; Working Capital \$887,384; Cap Equipment \$497,800; Total \$4,750,000

Procurify

Procurify
Software

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604-370-4778

Technology Description:

In today's world of technology we should no longer be using outdated paper processes to accomplish tasks such as requisitions, reports, approvals, and purchase orders. In comes PROCURIFY, a fully featured cloud based procurement and spend management solution. The focus of PROCURIFY's core value is providing a great user experience, while achieving significant time savings and the clear visibility of your company's spending. Procurify is a cloud-based, lean, fully-featured procurement and spend management solution that handles purchase requisitions, approvals, travel & expense, receiving, department budgets, and analytical reports creation on a simple-to-use interface. Procurify provides full visibility for your company's spending.

Synopsis of Market Opportunity:

Since we are built on the cloud, our software also helps your organization save money with zero IT maintenance cost and we can integrate with your existing ERP system. Procurify costs an average of \$10-20 dollars user including implementation/training, in comparison, traditional systems like Microsoft Dynamics costs anywhere between \$200-\$500 dollars per user without implementation/training. Procurify can integrate with MS Dynamics, or other ERP systems seamlessly as well. Additionally, Procurify implements into your company within a day and can be learned within an hour. The focus of Procurify's core value is providing a great user experience, while achieving significant time savings and increasing your company's profits. Procurify is looking to disrupt a multi billion dollar industry.

Market Analysis:

In the next six years, Small to Medium enterprises will be spending 100 billion dollars on cloud services as organizations are rapidly migrating to the cloud. SaaS companies are the leading edge in this category. In this multi billion dollar industry, traditional systems are bloated, outdated, and give major pain to the user. This is where Procurify enters the arena, along with other next generation SaaS companies that are disrupting the entire industry. We can create a better user experience while still providing the same value as legacy systems. Our clients range from small companies with 20 employees to 1000 employee organizations.

Competition:

Competitors: Coupa.com, Concur, Ariba, TradeShift Key Differentiators - Scalability to cost ratio: Whether if a company consists of 10 users or 1000 users, we provide a per user pricing model that services both companies in a cost effective manner compared to other companies. - Ease of Implementation: we have emphasized our cloud-based software to be clean, user-friendly, and smooth. We wanted to add sexiness to purchasing orders and evolve traditional methods. Simultaneously, we want to increase efficiency and use less company resources. - Product fit: Given our pricing model, we can cater to small to medium businesses that cannot afford a costly erp system or large enterprises that would want a superior system that is more efficient and use less resources. - Interface: Our GUI is simpler, less cluttered, and easier to use than our competitors. We eliminated the non-value added features that our competitors have on their platform.

Strategic Partnerships:

Working with Sage for a partnership, Staples Partnership, Mark Cuban Company

Deal Sought:

License or Strategic Alliance
Looking for Strategic Alliances to implement our software

Technology Description:

Prophylix Pharma AS aims at developing a plasma-derived, first-in-class prophylaxis for the prevention of certain disabling or life-threatening intracranial bleedings in fetuses and newborns. Employing a safe and clinically validated intervention principle and an established manufacturing process, this low-risk development project achieves proof-of-concept in 2015 and marketing authorizations in 2018/19.

Synopsis of Market Opportunity:

The prophylaxis is developed to prevent FNAIT in fetuses/neonates of the at-risk women who are HPA-1a negative (2.1%), HLA-DRB3*01:01 positive (32%) and carry an HPA-1a positive child (86%). A total of 14,000 (EU) and 11,000 (US) women are anticipated to receive up to 3 doses, two antenatal and one after birth. The projected peak sales is 60,000 doses in 2025 which translates into a peak sales in the order of €40 million. Treatment of women with miscarries and women who get an abortion is an additional possibility which is not included.

Market Analysis:

The prophylaxis will be costly and it is Prophylix' anticipation that only the high-GDP countries in Europe will implement HPA-1 typing and FNAIT prophylaxis. Italy and Spain are considered uncertain markets and are given a 50% probability of adopting HPA-1 typing and FNAIT prophylaxis. Furthermore, it is assumed that: • 91% of the population in the targeted markets receive prenatal care (estimated by plasma fractionator) • 2.1% of women are HPA-1a negative • 14% of women are not treated because the fetus is also HPA-1a negative • 32% HLA DRB3*01:01 positive women are treated; HLA DRB3*01:01 negative women are not. In total, up to 25,000 women in US and EU are treated each year and each will receive between 1 and 3 doses.

Competition:

No satisfactory preventive measures or treatment exist and no new competition is expected in the project's lifetime. Current management of FNAIT: * Intravenous immunoglobulin (IVIG, \$100,000 per case) * Early elective Caesarean section and transfusion of platelets

Strategic Partnerships:

Plasma collection and fractionation will take place in the US will be performed in collaboration with a US partner. Discussions are ongoing with two candidate partners. When marketing authorization is granted, a commercial partner will be responsible for sales and marketing. In Europe, 10 industrial and academic partners are participating in the Prophylix-led PROFNAIT project (www.profnait.eu)

Deal Sought:

Funding or Investment

Two investments of \$1 M each in 2014 and 2016., Trade sales

Collection and fractionation of US plasma for manufacture of investigational medicinal product

Proteins Easy Corp

DryPhission™ Production of Purified Proteins
Pharmaceutical

www.ProteinsEasy.com AND
<http://www.med.uottawa.ca/bmi/eng/altosaar.html>

Dr Illimar Altosaar
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858-922-4916

Technology Description:

Proteins R Us - The Proteins Easy team started producing human pharmaceutical proteins in plants in 1991. Aqueous based methods for extracting target proteins from plant biomass are too expensive, so we developed puroindoline technology to tether recombinant proteins onto starch granules in seeds, 'in planta'. Now, our new disruptive technology, DryPhission™, cost-effectively purifies recombinant proteins from 'loaded' starch granules in a completely anhydrous (dry) manner, requiring no aqueous buffer reagents, thus protecting the valuable biologics against proteolysis and degradation while increasing yields. Valuable commodities such as pharmaceutical polypeptides are not only free of viral contamination but more importantly enjoy improved recovery economics when produced in a plant background. We produce proteins cheaply, safely and at large-scale in dry seed compartments.

Synopsis of Market Opportunity:

A major challenge in the production of biologics is the downstream processing and their purification. The starting point is often a crude mixture of proteins and cell debris in hundred liter volumes that is subsequently subjected to various large scale filtration and chromatographic techniques as well as biochemical and precipitation techniques until the product is pure. The process is long and cumbersome and is a major component of the biologics cost structure. Our DryPhission™ technology exploits "dry" purification of biologics resulting in faster production times at significantly lower cost. This translates to significantly increased profit margins and lower end-user prices. The real high value is to produce bulk antibodies more cheaply. As biologics continue to come to market, this will drive healthcare costs higher. Typical costs for Remicade (Infliximab) are \$15k to \$25k per patient-year. Newer biologics are costing more than twice that. Proteins Easy provides significant gains in efficiency.

Market Analysis:

Biologics are the largest segment of the pharmaceutical industry with a US\$120 billion market value. With thousands of recombinant proteins having therapeutic value, and demands for these therapeutics increasing annually, this market segment will only grow. For example, recombinant insulin, a protein used for diabetes treatment, had a value of US\$12.4 billion in 2011 and is expected to reach US\$32 billion by 2018 having a compound annual growth rate of 12%. Health and biosecurity applications trend towards biologics for most indications: their novel mechanisms of action and specificity are superior to first-generation chemical compound pharmaceuticals. But these protein biologics are much more costly to produce. Rising targets include Defense or Homeland security that also relies on stockpiling and rapid processing of relevant protein antidotes. Bioremediation of pipeline or oil sand spills also require specific enzymes in bulk flours. So the real high value of DryPhission is in producing ready-to-use proteins.

Competition:

PEC's competitors are BigPharma and other molecular pharming companies e.g. Genzyme (now Sanofi), Roche, Sigma, R&D Systems for BigPharma; Ventria Biosciences, Medicago and Protalix as potential molecular pharming competitors. BigPharma are companies using traditional microbial or mammalian based platforms to produce recombinant proteins. Although these processes are established, BigPharma is dramatically shifting towards molecular pharming as an alternative. Examples include but are not limited to: Pfizer partnering with Protalix (carrot cell platform) for production of taligluciferase for Gaucher's Disease, and the recent majority \$375M takeover of Medicago (transgenic alfalfa platform) by Mitsubishi Tanabe Pharma in July 2013. Competing molecular pharming companies still encounter the bottleneck of water-dependent downstream purification. DryPhission™ technology can provide every protein supplier with a "dry" purification process with minimal environmental impact.

Strategic Partnerships:

To supply bulk Epidermal growth factor (EGF) to SIF Cosmetics-Reykjavik (Einar Mantyla), growth hormone to Regeron, Inc.-Chuncheon (Dahlkyun Oh), insulin and insulin-like growth factor (IGF) to Aurogen Inc-Colorado State (Doug Ishii, for the \$6 billion Alzheimer's disease drugs market). Strategic partners also include Sevita International, local cosmeceutical company Farmal (CASCO), veterinary products company Udder Comfort (antimicrobial proteins against mastitis).

Deal Sought:

Funding or Investment, License or Strategic Alliance

\$5,000,000 for 3 years, Initial and milestone payments

Joint venture with cosmetic or nutraceutical industry corporation that needs to add 'loaded' and functionalized starch into its consumer products; Biodefence partners needing functionalized starch granules as antidote deployment powders.

Purchase of Capital equipment and supplies, GMP plant manufacturing, factory rent, patent applications, salaries of commercial and operational staff.

**Provincial Health Services Authority/BC Cancer
Agency**

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Ergonomic Syringe Adapter
Medical Device

Technology Description:

Administration of chemotherapy drugs by nurses via syringe results in injury to the hand/fingers, wrist, forearm, and elbow. Injury is due to prolonged hand-grip force combined with awkward postures. To reduce the risk for injury, an ergonomic syringe adapter has been designed that eliminates awkward postures and reduces hand-grip force.

Synopsis of Market Opportunity:

There is a significant opportunity for a low cost safety product to be incorporated into standard routines for intravenous delivery of chemotherapy drugs. The ergonomic syringe adapter is a low cost multiuse adapter suitable for clinical use. Based on extrapolation from the BC Cancer Agency's experience of approximately 30 thousand chemotherapy visits for 20 thousand patients in a population base of 4.4 million, we estimate 2 million annual chemotherapy visits in the USA.

Market Analysis:

There is a significant opportunity for a low cost safety product to be incorporated into standard routines for intravenous delivery of chemotherapy drugs. The ergonomic syringe adapter is a low cost multiuse adapter suitable for clinical use. Based on extrapolation from the BC Cancer Agencies experience of approximately 30 thousand chemotherapy visits for 20 thousand patients in a population base of 4.4 million, we estimate 2 million annual chemotherapy visits in the USA. The European market would be approximately equivalent to the US market in size. Health care worker safety is an emerging trend as demonstrated by the uptake of safety needles.

Competition:

There is limited competition in this space. Automated syringe pumps do not provide the same degree of control as manual delivery and are not used for this procedure

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance
Exclusive license

Technology Description:

reelyActive hardware infrastructure provides indoor location capability and ambient connectivity for the low-power wireless devices of the Internet of Things. A proprietary design developed from over 20 years of experience in active RFID and real-time locations systems, our novel "reel" architecture simultaneously supports heterogeneous radio standards with plug-and-play extensibility. The hardware infrastructure is suitable for both permanent and temporary deployments and can relay the identity, location and sensor data of nearby wireless devices to either a local server or the cloud. Our active RFID tags are an original design and may be used to identify and locate both people and objects in almost any environment. Additionally, Bluetooth Low Energy technology extends this functionality to compatible mobile devices and third-party wireless sensors and beacons. Systems integrators can leverage this platform to deliver a wide range of consumer and industrial applications. We ourselves extend this platform, aggregating the identity of all wireless devices in a space, and mapping each to its corresponding metadata. This provides hyperlocal context: a digital representation of the people and things at points of interest. Our Log in to Life web experience is a visualization hyperlocal context which enables the discovery of nearby people, places and things on any device.

Synopsis of Market Opportunity:

The market opportunity is threefold. First, there are traditional real-time location and logistics applications, specifically in the commercial and industrial sectors, for which our platform provides competitive value and minimal recurring costs. Second, there is an urgent need for indoor location solutions especially in the retail sector. Our technology represents a disruptive means to locate mobile devices, enabling unique, interactive, opt-in experiences for consumers. Third, the emerging Internet of Things requires new infrastructure to provide connectivity to inexpensive, low-power devices. Our hardware is well-positioned to provide this ambient connectivity especially through crowdsourced deployments, and is among the simplest, most cost-effective and most versatile offerings on the market today.

Market Analysis:

The real-time location systems market is valued at \$293 million in 2012 and is expected to grow to \$4 billion by 2022 (Global Information inc.). The indoor location market is expected to reach \$5 billion by 2018 (ABI Research). The Internet of Things is a potential market opportunity valued in the tens of trillions of dollars by Cisco and General Electric. Major players are forging alliances or making acquisitions to exploit these markets. For instance, Nokia and Samsung founded the In-Location Alliance of 22 companies, and Amazon and GE are collaborating in the Internet of Things space. The Internet of Things saw \$752 million of VC investment last year (CB Insights).

Competition:

There are many competitors in the active RFID and real-time location systems spaces, including 9Solutions, Zebra Technologies and GuardRFID. Competitors in indoor location include the major mobile players such as Google and Apple, as well as new entries such as Estimote and Nearbuy. Similarly there are many emerging competitors in the Internet of Things space, including Cosm, Evrythng and SmartThings. There are also countless mobile apps which connect people to each other or remotely control devices. Our Log in to Life experience is nonetheless unique in combining elements from each of these spaces and uses fixed, crowdsourced infrastructure which provides more consistent location accuracy, vendor-agnostic identification and the ability to be enjoyed on any device.

Strategic Partnerships:**Deal Sought:**

Funding or Investment, License or Strategic Alliance
\$750k, Equity
Alliance with key industry player(s)
Scale to meet demand. Key hires. Ongoing R&D

Technology Description:

STMS is a fully automated and remote monitoring management system for septic tanks and their associated distribution field. The on-site monitoring is supported by a comprehensive Web based management system for collection, interpretation and reporting of information to stakeholders including predictive analysis tools for undertaking preventative maintenance. It will monitor the use of the system over time and enable early detection of changes in system performance resulting from such things as increased/decreased load, the age and design of the system or other environmental factors. The monitoring devices consist of pressure and level sensors communicating via wireless technology to a local control panel. From the on-site control panel data is transferred to the central data repository using the telemetry network. Similarly data can be pulled from the site monitoring apparatuses and local settings modified from time to time to suit changed conditions or additional data requirements.

Synopsis of Market Opportunity:

Poorly maintained septic tanks are a risk to environmental and public health. Failing systems pollute waterways causing detriment to animal life and native vegetation. Regulatory authorities have not monitored septic tank system performance "post" installation or managed owner compliance with permit operating conditions. There are an estimated 80M+ septic tank systems operating in the western world with in excess of 20M in the USA alone. The opportunity to monitor performance and compliance provides a "leading practice" solution for managing risk and will generate increased business in for on-site septic tank maintenance and system replacement, data management and associated product sales

Market Analysis:

The size of the market is estimated at around 80M units with in excess of 20M in the US. Market penetration will be influenced by the regulatory framework and future commitment of governments to improve on-site wastewater management and minimize risk to public and environmental health. The preferred route to market (recognizing that the vast part of the market is retrofitting to existing installed septic tank systems is to provide a "turn-key solution" (service based contract for supply, installation, monitoring and maintenance required reporting and global data management). Local government or similar relevant organization would collect the service fees from owners and make contract payments to the STMS provider whether it be at a local County or State level

Competition:

The known alternatives to our remote monitoring solution are: - Do nothing; or - Costly and ineffective point in time physical site inspections which can only give a "go" or "no go" result at that particular time. We are not aware of any organisations on a National, State or Local level that: - use similar technology or on the scale we propose; - has the data collection and reporting capability that our central data repository would provide; - has a more technically feasible or commercially viable solution in place; or - would offer similar new business and employment opportunities within this area of interest Access to our technology could provide financial benefit to: - Governments and agencies charged with environmental compliance - Water supply organisations - Telco's - Householders - Septic tank designers, manufacturers & installers - Waste Contractors - Maintenance businesses - Urban Land developers managing sensitive non-sewered areas

Strategic Partnerships:

Relevant Government Agencies, Waste Cartage Contractors, Septic Tank installers and maintainers and product manufactures

Deal Sought:

License or Strategic Alliance
Exclusive License for agreed geographic areas

Scalpel Innovation, Inc.

Slide-Scalpel
Medical Device

Ryan Kanigan Dipl.T., B.A., M.B.A.
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6048316352

Technology Description:

Scalpel Innovation, Inc. has developed the Slide-Scalpel™ reusable safety-scalpel handle to meet the requirements of surgeons and perioperative nurses for traditional surgical function, traditional handle shape, and increased surgical team safety. Slide-Scalpel™ maintains the look, feel, function and reusability of a traditional scalpel. The Slide-Scalpel™ provides a workplace regulation-compliant scalpel handle, with a simple one-handed activation safety-engineered mechanism for pre and after-use protection. When used with a blunt tipped blade, the Slide-Scalpel™ provides a means of before, during and post use protection in a preferred traditional stainless steel configuration. The Slide-Scalpel™ benefits end-users in the following ways: 1) Hospital and surgical center purchasing – provides a solution to OH&S regulations for purchasing safety-engineered scalpels with higher potential for surgeon acceptance, lowering potential for injury rates, for competitive cost per use to traditional operating room quality handles and lower cost per use compared with disposable safety scalpels; 2) Surgeons – provides the product form they require, as well as before and after use-protection; during use protection if blunt tipped scalpel blade is used; 3) Perioperative nurses – provides before and after use-protection, with preferred blade changing, and during use protection if blunt tipped scalpel blade is used; 4) OR Technicians – increased post-operative safety; 5) Risk Management: OSHA fine reduction, greater use of safety products.

Synopsis of Market Opportunity:

Fifty-one million in-patient procedures and 35 million outpatient procedures using a scalpel were performed in 2010 in the U.S. Approximately 7% of injuries involving a medical sharp occur with a scalpel. Injury data: • 18 % of sharps injuries in the OR occur with scalpels; ~21,600 per year or 4.3 per hospital. • 11% of scalpel injuries classified as “severe” requiring surgical intervention and rehab, which can cost U.S. \$50,000 to \$100,000 for treatment. A serious infection can cost \$1 million in testing, follow-up, lost time and disability payments. Lack of adoption of safety sharps in the OR is leading to hospitals being fined by OSHA for non-compliance with workplace regulations; fines range from \$5,000 to \$70,000 per hospital for non-compliance. Other costs: • Increase in per accident workers compensation insurance deductible • Increased health insurance co-payments. • Increase in hospital insurance premiums. • Increased litigation costs for severe injuries.

Market Analysis:

Reusable Instrument Market Our initial focus is on the U.S. hospital operating room market for high quality reusable stainless steel instruments. The market will be reached through established distributors and through direct promotion to GPOs. U.S. hospital OR Market for reusable scalpel handles: • American Hospital Association registered hospitals (2011) = 5,724 • Approximate number of annual in-patient surgeries = 51,000,000 • Approximate surgical set inventory = 1 per 10 surgeries [1000 sets per 10,000 surgeries] • Number of trays needed to support surgeries = 5,100,000 trays • Minimum one #3 regular scalpel handle per tray = 5,100,000 handles One Slide-Scalpel™ per OR procedure tray in the U.S. is an achievable market of 5,100,000 individual handles. Disposable Plastic Market Outside of the OR, plastic disposable products are used in outpatient procedures (stand-alone and bundled with disposable trays). Approximately 35 million outpatient procedures were performed in the US in 2010.

Competition:

Major competitors include: 1. SAF Handle (<http://razormed.com>); stainless steel handle with safe blade-changing function, but does not have after-use cover protection. 2. BD Protected Surgical Handle (Aspen Surgical); metal handle, disposable cartridge system. 3. Sandel Change-a-Blade; plastic weighted (<http://www.sandelmedical.com/products.asp?id=713>). 4. Futura Safety Scalpel (Merit Medical); retractable spring-loaded system in disposable handle. 5. Use of traditional stainless steel non-safety-engineered handles (with risk of fines to hospitals).

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance

IP license of the disposable product configuration of the Slide-Scalpel. Funding for commercialization of reusable handle.

Technology Description:

FINALLY. TOTAL WATER MANAGEMENT. Water Smart technology has been promising and chasing a "Total Water Management Solution" for decades. For the first time, the SecoSys Smart Water Metering and Control Platform affordably and seamlessly fulfills this promise. After thirty years of developing application specific solutions for other industries, we've designed a scalable platform specifically tailored to the needs of the vast water management market. We've designed cutting-edge hardware that measures water use in real time with unmatched precision, featuring auto alerts, messaging, and on/off controls. Our ability to measure any flow of water allows for advanced notification of hidden and costly leaks, and minimizes expense associated with catastrophic water damage. Our technology incorporates geo-mapping and communicates with providers of weather based irrigation information and water agency budgets. This allows end users at any level to compare daily water use against budgets to conserve and manage their water cost. SecoSys hardware is easily installed, has solar power options, and offers wireless web-connectivity for access in even the most remote areas. We've designed an open platform so that other manufacturers' equipment can easily interact with our system. We provide customers a subscription-based cloud-hosted "dashboard" that communicates with our hardware. Users gain a powerful window into their "water-use world." From their online dashboard, individuals or service providers can remotely measure, monitor, budget, and control all water use from any web-connected device. SecoSys' technology is the platform on which the next generation of Water Smart technology will be built.

Synopsis of Market Opportunity:

Demand for water conservation & cost control has created multi-billion dollar opportunities for service companies: landscape/irrigation, plumbing/leak, property management & agriculture. No platform exists to cost effectively achieve their business goals. Current methods of water management are costly, labor intensive, inaccurate and slow. SecoSys' Platform strengthens their ability to create new business & improve customer service. Platform features reduce labor costs, improve efficiency, response time & uncover service opportunities. American Leak Detection: "We're in homes every day, fixing leaks...It's a perfect application for us to say to homeowners, 'We do have a device to help save your property.'" Online company-branded subscription "dashboards" allow monitoring, control and proactive response to problems. Customers can subscribe for self-monitoring & conservation. Partners gain a 360° view of cumulative customer data, from addresses to valve status. Vintage Associates: "We wanted to...control water use and...do it remotely... initial installation [and] monthly operation is cost effective."

Market Analysis:

Our open platform means unlimited commercialization. It can be used for sub-metering, leak detection and prevention, agricultural irrigation, and institutional or commercial applications, i.e. military bases or hotels. Data we can collect and repackage offers further opportunity. Go-to-Market Strategy: We've established (and will continue to secure) large B-to-B customers within the service sectors of Landscape and Indoor Plumbing/Leak (\$2 billion). Revenues will grow in parallel as they become our distribution channel: selling and installing hardware and subscriptions, and servicing our platform for their customers.

Competition:

Numerous companies make "water widgets" for homes, or expensive systems targeting municipal water supplier's metering and billing needs. Obvius Solutions and Johnson Controls are attempting to operate in this space. AquaManagement and HydroPoint Data Systems are claiming a 360° approach, but their focus is mainly on their irrigation controllers. Our ability to collect and repackage water-use data, provide a subscription business model, address global conservation demands and remotely manage and control all aspects of water use makes the SecoSys Platform the "Holy Grail" of current water management technology. Our open platform redefines competition. For example, Johnson Controls is not only a competitor, but also a potential customer because of what we can bring to their SMART City initiatives. Working with key industry alliances creates great sustainable advantage by providing invaluable insight into our next generation of products. We are far ahead of the curve, and expect to stay there.

Strategic Partnerships:

American Leak Detection: 351 franchises/110,000 customers annually. Vintage Associates: One of the largest landscape companies in the Palm Springs/Coachella Valley area. Badger Meter: Every time we sell our HydraMeter, they sell their water meter. Toro Company: HOA test site partner. The SecoSys/Vintage/Toro test HOA community yielded: - 40% savings on their water bill - Water District Rebate of \$3,725

Deal Sought:

Funding or Investment, License or Strategic Alliance
650000, Stock Sale to Angel Investor or VC. We would entertain other forms of funding such as dividend agreements, or loans.
A systems integration partner within the irrigation industry such as Toro. Potential licensing of specific SecoSys components.
Final tooling for manufacturing, first production build, patent applications, web development, marketing.

Seegrid

Vision Based Navigation
Manufacturing Innovation

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412-379-4500

Technology Description:

Seegrid Corporation is the pioneer and leading provider of applied robotic systems for navigation, sensing and control. Using sophisticated technologies such as stereo vision, probabilistic control, and artificial intelligence the company has developed a practical and efficient line of self-driving material handling vehicles, vehicle controllers, and sensing and control components.

Synopsis of Market Opportunity:

Seegrid's technology can be adapted to automotive use for obstacle detection, lane guidance, intelligent cruise control, and navigation. The technology can be "embedded" into the vehicle with no impact on esthetic design. Seegrid's technology can be added to U.S. Military vehicles to provide capabilities such as mapping, target detection and location, and autonomous navigation. Seegrid's technology can be used where stealth is required. Stereo ranging and mapping capabilities are also well suited to passive security tasks. They can be used for surveillance, threat detection, access control and, when combined with vehicles, perimeter monitoring for sensitive facilities such as ports.

Market Analysis:

Seegrid's line of RIT's include automated pallet trucks, tuggers and lift trucks. They are used for moving loads of up to 10,000 pounds in distribution and manufacturing operations. The world-wide market for manually driven trucks is over \$30B. The annual cost of operating industrial trucks manually is over \$120B. Seegrid's technology directly addresses the operating costs of the trucks, and reduces it by 90%. The average cost of operating a manually driven truck is \$30/hr, the 95% of forklift buyers buy a brand they already own. The top 2 OE truck manufacturers control over 35% of the world market. Seegrid has relationships with both: Toyota Material Handling, and Kion Group. In 2013, Toyota will begin shipments of its Raymond- brand trucks employing Seegrid's technology. This will provide Seegrid technology to a large installed base without the need to develop a large sales and service organization. Seegrid has developed a product called an S-Kit which packages the Seegrid technology into hardware components that can be implemented by OEM's using their normal manufacturing, sales and service channels. The OEM gains access to a higher value segment of the market, and Seegrid greatly increases its access to the global market, while maintaining high margins. Cost of operating a Seegrid Robotic Truck over its lifetime is only \$3/hr. Seegrid also sees the potential for the technology to be used in the automotive industry that would allow for automated parking and retrieval as well as automated driving. Over 75 million cars are sold each year and this could equate to more than a \$10B/year market. Other than the industrial robotic vehicle market, Seegrid sees a potential for stereo perception for parts handling which could lead to a more than \$100 million/year market. Also a potential for home robots, automated home functions and stereo cameras. The market is nearly unlimited. Seegrid's current manufacturing capacity allows it to build up to 10,000 kits per year at an ASP of \$35,000 each. Over 100 units have been delivered to date, and sales in 2013 are expected to exceed 2012 by approximately 380%, as sales to date already exceed all of 2012. We can provide more detail during our presentation on the market analysis.

Competition:

Automated Guided Vehicles

Strategic Partnerships:

Toyota Material Handling and Kion Group

Deal Sought:

Funding or Investment
\$2M-\$5M, Equity or Pre-paid licenses
Expansion to new verticals/markets

Reconcillio - Automated Consensus Contouring for Medical Image Segmentation Software

Technology Description:

Segasist Reconcillio is a revolutionary approach to the auto-contouring of medical images and is capable of "Contouring Like You Would" for each user. It can generate multiple contours, reflecting the individual differences; a consensus contour can be built and offered to each individual user to assess his/her own accuracy.

Synopsis of Market Opportunity:

Contouring, or segmentation of images, is a critical part of imaging analysis in many medical applications (e.g. oncology). The estimated global addressable market is approximately \$3.4 Billion, and the image analytics market is expected to see a cumulative annual growth rate of over 14% to 2015. However, quality control via consensus contouring is a new market that goes beyond these numbers.

Market Analysis:

It is well documented that healthcare costs have risen significantly in recent years. With an aging population and the proliferation of chronic diseases, this trend is expected to create added pressure for ways to manage and control healthcare spending. For example, it is expected that 20% of GDP in the US will be spent on healthcare by 2017. In Canada, these costs are expected to grow from under 8% in 2010 to 13% by 2050. Similar trends exist for most developed countries, as well as for emerging markets. The need to manage costs and deliver effective, quality patient care has given rise to numerous government initiatives, as well as increased investments in research and development for better technologies. Image analytics is one area where significant resources have been directed.

Competition:

Image analytics software can be categorized into four major groups: • Advanced Visualization Software: diagnostic radiology • Treatment Planning Software: Surgery, radiation oncology • Interventional Software: biopsy, radiology, treatment • Tissue Analysis Software: diagnostics, oncology, histopathology, research Any company that offers a software package with "contouring" capabilities may be a potential competitor. *Major competing products Sector Products (Companies) Descriptions Diagnostic Radiology CAD Vitrea (Vital Images), Quantiva (Thom-ographix), xxxLook series (iCAD), xxxCARE series (Neusoft) Emphasize 3D visualization without explicit contouring Treatment Planning (surgery, radiation oncology) Pinnacle (Philips), Eclipse (Varian), AB-AS/CMS (Elekta) MIMvista (MIM Software), VelocityAI (Velocity), MultiPlan (Accuray), RayStation (RaySearch) Large OEMs are generally focused on dose calculation and delivery. Clinicians perceive the contouring capabilities of large packages as deficient and resort back to manual contouring. This leaves a gap for smaller companies to compete for better contouring solutions.

Deal Sought:

Funding or Investment, License or Strategic Alliance

4000000,

Equity investment or acquisition

Hire sales & business positions to enter market, Expand R&D team for product roadmap, Clinical validation & regulatory approvals,

Launch of Segasist Cloud Services

SqueePlay

SqueeDogs
Software

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6178790690

Technology Description:

SqueePlay is going to be one of the first casual game developers to bring console quality graphics and fully 3D worlds and characters to the casual gaming market on Facebook. Our patent pending Squee Editor allows us to customize and create characters like no other game on the market. While most games only offer cookie cutter content customization and creation, SqueePlay offers our users true creative freedom when customizing their game characters and worlds. No two creations are exactly the same. This ability to customize and create is the hook that attracts users to our games. Once we have them playing, our unique gameplay and unmatched game exploration keep them coming back. Our first game, SqueeDogs, puts this technology to use by letting our users customize a doggy character and go on adventures in a fully 3D virtual world.

Synopsis of Market Opportunity:

The casual gaming market is over \$3 billion and on Facebook alone there are 200 million gamers. Major companies such as Zynga have been struggling to maintain their dominance and SqueePlay's unique games put us in a position to grab a piece of the market. In the past, hit games can make over \$600,000 per day. Even moderately successful games that are well monetized can make millions of dollars a year. It is hard to catch a user's attention with so many games being released. Being one of the first fully 3D casual games gives SqueePlay an advantage in attracting users over the competition. Casual gaming leaders are just starting to embrace 3D in-browser graphics and SqueePlay wants to be out in front, leading the transition to fully 3D gaming on Facebook.

Market Analysis:

The casual gaming market is a \$3 billion industry that is forecast to continue growing. There are over 200 million gamers on Facebook alone. In-browser 3D technology is just starting to gain traction and a few recent developments, such as Unity's partnership with Facebook and increased computing power, have made it possible for casual gamers to gain access to graphics and gameplay once strictly reserved for console gamers. The industry is slowly shifting from old 2D games to new 3D graphics and SqueePlay is poised to be a frontrunner using this incredible new technology. The major players in the casual gaming space (Zynga, EA, Disney) are busy acquire all the promising new game start ups they can get their hands on and SqueePlay is positioning itself as a juicy target.

Competition:

Our competitors are all other casual game developers. The 800 pound gorilla is Zynga, though they have been having trouble recently due to the "staleness" of their blockbuster "Ville" games. Others include Disney, wooga and EA. The game industry is moving towards mobile and social and everyone is trying to get a piece of the pie. Besides Zynga, most companies are just starting to pivot and invest heavily in this sector.

Strategic Partnerships:

SqueePlay is looking to add more partners to our network. We are currently partnered with groups like the Lee County Board of Tourism and the MSPCA. We push out their messages through our games while they push out our games to their constituencies. We offer customized game content to our partners and in-game advertising.

Deal Sought:

Funding or Investment, License or Strategic Alliance

1000000, Preferred Stock

Strategic partnership for advertising

Update and improve our first game, SqueeDogs. Make key new hires in marketing and monetization. Start work on 2 additional games. Marketing and PR pushes for SqueePlay products. iOS and Android Tablet versions of our games.

Star Motor Engine Energy

Technology Description:

The Star Motor Company is developing and commercializing the Star Motor engine, a highly fuel-efficient, fuel agnostic engine based on the Brayton thermodynamic cycle, the same cycle employed in jet engines. The Brayton thermodynamic cycle is based on four main components: the compressor rotor, the heat exchanger, the combustor, and the expander rotor. While the Brayton thermodynamic cycle offers a novel use for vehicles engines, it is the patent protected gerotor (generated rotor) technology, which produces substantial improvements over traditional engines. First, the Star Motor engine processes large volumes of gas in a compact size. The Star Motor engine design allows it to operate at more moderate speeds (2,000 to 10,000 rpm) than turbines, and is efficient over a wider range of speeds and air densities. Second, the gerotor is equipped with inner and outer rotors used in the compression and expansion of gases. This design allows the outer rotor to have one more gear than the inner rotor, thus creating space for air to enter and be compressed by the rotating inner rotor. This design offers a variety of benefits: 1. Higher efficiency 5. Variable compression/expander ratio 2. More compact size 6. Reduced noise 3. Low vibration 7. High-single stage compression/expansion ratio 4. High turn-down ratio

Synopsis of Market Opportunity:

The sales of diesel engines for Class 8 heavy-duty trucks increased by 65% over 2010 sales, totaling 254,727 in 2011. This increase indicates the market opportunity for the Star Motor engine to be over \$7 billion. Three key factors indicate a strong market opportunity in the years ahead. First, trucking accounts for nearly 70% of tonnage carried by all modes of domestic freight transportation and estimates suggest that total freight tonnage is expected to grow by 20% by 2024. Second, the Environmental Protection Agency and the National Highway Traffic Safety Administration developed rules requiring advances to engines for both fuel efficiency and emissions. This has encouraged innovation for the next generation of engines that meet EPA emissions mandates and provide better fuel economy. Third, Class 8 heavy-duty trucks represent only 4% of the on-road vehicles in America, but are responsible for over 20 percent of the country's on-road fuel consumption.

Market Analysis:

With gas prices at an all-time high, surpassing 2008 fuel prices, it is estimated that the trucking industry spent over \$115B on fuel in 2011, an alarming 35% of total operating costs. Government mandated emissions laws and ever-tightening greenhouse gas (GHG) regulations are also driving up operating costs for both transportation companies as well as engine manufacturers through the cost to develop compliant engines and tractors. A PACCAR spokesperson states, "In the last decade, Class 8 trucks have added \$20,000+ to the cost of trucks in order to produce emissions compliant tractors." Leaders in the transportation industry struggle to find the best tradeoff between fuel efficiency, performance and emissions. Current engine technologies produce an average of only 6 to 7 MPG for Class 8 trucks, with almost 60% of all energy loss attributed to the engine. Significant advancements in engine technology must occur in order to solve this difficult problem.

Competition:

Currently, customers looking for fuel efficient, EPA compliant heavy-duty engines have limited possibilities. The heavy-duty diesel engine market is mostly comprised of five manufacturers who maintain over 90% of the market. Detroit Diesel (DDC) and Cummins (CMI) dominate the market with over 63% of the total market share. Navistar, Volvo, and, Mack comprise 12.9%, 9%, and 6.3% respectively.

Strategic Partnerships:

Deal Sought:

Funding or Investment

High power solar cell
Semiconductor

Technology Description:

This technology improves the efficiency and mechanical durability of multi-junction solar cells. The technology aims to make portable electronic devices independent of grid electricity, or increase battery life. The spatiospectrally modulating multi-junction solar cell is the most powerful solar cell ever designed, projected to reach 50% efficiency under 1 Sun on Earth, about double the power of space grade cells on earth and 3-4 times what current solar chargers achieve. Extreme efficiencies are produced by entrapping photons of correct energy in multi-junction layers that have high quantum efficiency at that energy. The improved filtering of the photon population based on their energy to correct layers of the cell enhances photoelectric conversion at the band gap. It also inhibits phonon creation by lower energy than band gap energy photons, as these photons are transported to the subsequent layer, where they may indeed be entrapped and photoelectrically absorbed. The inventive solar cell has also improved efficiency indoors due to increased sensitivity to indoor lighting. Additionally, space grade solar cells for vacuum environment are fragile, and not applicable for terrestrial microelectronic applications where e.g. fingers touch them or devices can be dropped. In comparison, the filter structure of this technology is believed to enhance the mechanical durability of the multi-junction structure, making these cells last the required few years in consumer electronics, or decade(s) required in mobile base station power systems or other applications that benefit from off-the-grid power. The Technology is patented in US8198530B2, EP2261996B1, continuations and international counterparts.

Synopsis of Market Opportunity:

An underserved need for these solar cells exists today in portable microelectronics devices and outdoor electronic devices such as LED street lights. It is projected that these devices will be outfitted with Solar Cascade high power solar cells that will keep these devices charged all the time. Market opportunity spans from first providing iPods and mobile phones and other microelectronic applications with these solar cells, then vehicles, then residences and ultimately when the production cost scales, utility. Calculators, wrist watches etc. have too small power budgets that can be satisfied by alkaline batteries, conventional silicon solar cells, or piezoelectric crystals or springs. Further, Solar Cascade cells are not yet useful in the utility sector, because of the greater cost. Between these extremes lies a target market for microelectronic power production chipsets, which can be captured by making devices grid independent without altering the physical size of the device.

Market Analysis:

Portable microelectronics alone is a trillion dollar market, where power source solution market is many billions USD in size. We project the chipset can cost about 10-50 USD per a portable electronic device, bringing the market to about 10-50 billion USD annually. Large buyers dominate this market, and the competition is tight between the leading manufacturers. As a consequence, if an Android device is made that has increased time between charges or does not require a grid charger, it will inevitably outsell all other smartphones in the market. This pressures all manufacturers to buy the Solar Cascade chips. The microelectronics market can make Solar Cascade a multibillion-dollar company in five years. After having achieved this objective, Solar Cascade can expand to other markets as production costs go down.

Competition:

Closest competition comes from silicon based solar cell chargers or casings to mobile phones. These solar cell diodes have less than 15% efficiency. Solar Cascade aims to achieve efficiencies of 50% under 1 Sun and beyond. Many smartphone manufacturers are trying to make their phones less charging dependent, as battery life and charging interruptions are major concerns. These in-house development efforts do not address the physical efficiency of the cell. Efficiency is important as these devices are comparable in size to the human hand and are not in the sun all the time. Multi-junction solar cells from space contractors provide high efficiencies in space. These cells are built for the vacuum of space and are too fragile for terrestrial conditions. Further, space contractors appear to be unable to sell to microelectronics manufacturers. The competition is addressed by providing & selling both efficient and mechanically durable solar cells for microelectronics manufacturers.

Strategic Partnerships:

Suinno Oy has funded Solar Cascade. Suinno Oy is a Helsinki based patent & licensing law firm, with reciprocal law offices around the world. Suinno manages the patent portfolio of Solar Cascade. www.suinno.com Semiconductor fabrication consultancy: Smalltech Ltd. www.Smalltech.co.uk. Power electronics and mechanical design expertise: Jussin Automaatio Oy, Varkaus, Finland. <http://www.nic.fi/~jussina/index.htm>

Deal Sought:

Funding or Investment, License or Strategic Alliance
1 million USD of which 130,000USD raised at present from founders, equity or convertible bond
geographically /sector /time duration -restricted exclusive license or a discount on future licenses shipments
prototyping different versions to come up with a product design

Modernizing traditional medicine by enriching its constituents

Other Lifescience

Technology Description:

Tait Laboratories Inc. (TLI) offers a unique approach to developing innovative natural health products by modernizing traditional medicines, which can be used as both stand-alone dietary supplements as well as functional food/beverage ingredients. This is a platform to develop novel products by using an innovative combination of methods that mimic natural processes where the goal is to enhance and enrich the composition of active ingredients of traditional medicinal plant extracts. The products are coupled with stringent quality control at the chemical and genetic levels to produce medicines of superior quality, and tested using procedures similar to pharmaceuticals. Inspired by its roots in Traditional Chinese Medicine, the competitive foundation on which the first product, MS+™ (Mandarin Skin Plus), is built, is its patent-pending extraction technology, whereby accelerating the aging of the raw material is known to enhance its therapeutic properties. Patent: US Provisional Patent Application No. 61/846,995 Title: Method for extraction of polyphenols and flavonoids from orange peels and their use in the treatment of various diseases.

Synopsis of Market Opportunity:

With the high costs and toxic side effects of many conventional pharmaceuticals, there is renewed focus on the nutrition and natural supplement industry, the latter currently valued in excess of \$2 billion. The first product on offer by TLI will complement probiotic supplements through its beneficial effects on the gut environment – keeping the digestive system stable via reduction of inflammation and oxidative stress in addition to restoring the equilibrium within the gut microflora. This approach finds application in conditions such as IBS and Crohn's disease, together affecting approximately 16% of the global population. The technology, when combined with other emerging technologies, would afford products that could also be used in neurological health, thus creating a potential paradigm shift in understanding the relationship between digestive and brain health.

Market Analysis:

Digestive health is an unmet global need (~\$2.2B for IBS by 2020) with 60-70 million diagnoses annually in the US alone (NDDIC). The current standard of care is symptomatic and palliative, incurring significant costs and side effects. The gastrointestinal health supplement category consumer sales were valued at \$1.4 billion in 2011, growing 14% over 2010 sales levels (NBJ). In the US, 73% of households include adults experienced some form of digestive health issue at least a few times per month (Catalina Marketing). The same study found that 85% of consumers believe diet to be the best way to manage digestive health instead of drugs; and 56% of those with digestive issues purchase specific food products to help maintain digestive health. Interviews with natural health practitioners in BC clearly revealed their willingness to buy premium high quality products provided that they were engaged and educated with supporting data about said products.

Competition:

1. Competitors could potentially offer less-expensive products derived from inferior extraction procedures, but these products will not be as effective due to our unique extraction process and overall approach, which enhances the therapeutic potential of MS+™ while keeping it natural. MS+™ will also enjoy first-to-market advantage and will be "Made in Canada", which raises positive brand perception, as discovered by recent surveys. 2. Intent to position MS+™ as a "probio-protector", a potential new category which complements and enhances probiotic action. Competitive differentiators: • Natural—richer in polyphenols and flavonoids, free from pesticides, heavy metals, solvents, dairy and GMO • Cost effective & efficient—novel extraction method developed by TLI and is patent pending • Safe—mandarin peel used in traditional medicine for centuries and culturally valued • Trust & integrity—high quality analytical data at multiple levels, Health Canada approval (NPN-80040015) • Through MS+™, TLI supports the growing shift towards knowledge-based disease management

Strategic Partnerships:

TLI is exploring collaboration opportunities with potential competitors in both the nutritional and pharmaceutical segments with the spirit of converting competition to cooperation. Discussions are taking place with Nestle, Switzerland for research and commercialization partnerships through one of our collaborators who used to work in the global business division in Nestle.

Deal Sought:

Funding or Investment, License or Strategic Alliance

\$ 2.5 million

Equity/convertible notes, Commercial manufacturing, sales, R&D, & clinical trials

Open to discussion

**OHDEL Nanoparticles for Cancer
Therapy**
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614-292-4172**Technology Description:**

Oligonucleotides, including antisense oligos, aptamers, siRNAs, miR mimics, and antimiRs, can be used to modulate expression of specific target genes and have great potential as therapeutic agents for diseases such as cancer. Their clinical application, however, is limited by the lack of an efficient delivery system. Investigators at the OSU's Nanoscale Science and Engineering Center (NSEC) have developed the OHDEL(TM) nanoparticle technology for delivery of oligonucleotide agents and validated several candidates for their gene-targeting efficiency and therapeutic efficacy in murine models of human cancer. The OHDEL delivery technology can greatly enhance the efficacy of antisense oligos, which so far have had only modest success in the clinic, and become an enabling technology for development of siRNA and miR-based therapeutics. OHDEL nanoparticles can be customized for specific types of oligonucleotide chemistry and be targeted to specific tissues. The -NSF-supported nanotechnology center (NSEC) at OSU has state-of-the-art facilities and sophisticated technical capabilities for nanoparticle design, synthesis, and characterization. In addition, OSU's Comprehensive Cancer Center (CCC) and Center for Clinical and Translational Sciences (CCTS) provides support for preclinical studies, PK/PD studies, cGMP production, IND filing and clinical trial. The OHDEL technology is covered by several patent applications and is currently available for licensing or to support a faculty start-up company.

Synopsis of Market Opportunity:

Synthetic RNA-targeted oligonucleotides have great potentials as therapeutic agents against human diseases, such as cancer and chronic inflammatory diseases. These disease indications represent an overall market size of over 100 billion. Nanoparticle-based delivery is an enabling technology critical to their clinical translation. The technology OSU is a proprietary OHDEL(TM) platform for developing new drug products based on the IP on delivery and available for partnering with companies developing the oligonucleotide drugs. The OSU approach has the advantage of integrated expertise of nanoparticle design and synthesis. The technology can potentially serve as a basis for NewCo formation, licensing, and industry-academia partnerships for clinical drug development. It is worth noting that there is recently renewed interest in the oligonucleotide field and a great deal of excitement over the development of miRNA (miR)-based therapy since miRs have now been shown to play a crucial role in a variety of human diseases.

Market Analysis:

The therapeutic focus of RNA-targeted therapies is oncology, an attractive, growing market with low price sensitivity. The global cancer market represents the most far-reaching pharmaceutical market in the world. There has yet to be any oligonucleotides approved for cancer therapy although there have been quite a few in clinical trials at this time. With the recent approval of Kynamro (ISIS) for homozygous familial hypercholesterolemia, there is renewed enthusiasm for clinical development of antisense agents. The lack of greater clinical success for oligonucleotides is large due to the lack of an efficient delivery system. While this is widely recognized in the siRNA field, it is also true of antisense agents. With the OHDEL technology providing a solution to this critical problem, it is anticipated that oligonucleotide anticancer drug will rapidly move through the developmental pipeline and occupy a growing market in the oncology field.

Competition:

"Oligo-therapeutics" has tremendous market potential, the size of which will be dependent on successful clinical translation. It has been generally accepted that developing the delivery system is the key feature of all forms of oligonucleotide therapeutic strategies. Companies in this space include Alnylam, Tekmira, Dicerna, Silence Therapeutics, Marina Biotech, Santaris Pharma, Arrowhead Res., Rxi Pharma, Gradalis, as well as R&D divisions within big pharma companies. Each of these companies has a proprietary oligo delivery platform. Their common weakness is that they are already committed to a specific technological direction and cannot provide for a flexible, customized, approach needed for effective product engineering. OHDEL incorporates both novel composition and innovative synthetic methods based on microfluidic hydrodynamic focusing and can be combined with any existing oligo therapeutics for clinical translation and is a potent enabling technology.

Strategic Partnerships:

OSU is a potential partner for clinical translation. OSU has outstanding infrastructure for R&D and has substantial strength at the College of Pharmacy, Nanoscale Science and Engineering Center (NSEC), Comprehensive Cancer Center (CCC), Center for Clinical and Translational Sciences (CCTS), Center for Regenerative Medicine, the Drug Development Institute (DDI), and the Technology Commercialization Office (TCO).

Deal Sought:

Funding or Investment, License or Strategic Alliance

\$3M, Formation of a NewCo to develop new drug products based on the OHDEL technology.

Funding for startup of a NewCo based on the OHDEL technology platform, the technical knowhow and the IP developed at OSU.

Generate proof-of-concept data on two lead products, carry out preclinical development, and conduct Phase I clinical trial in AML and/or NSCLC patients. In addition, the further validation of the OHDEL technologies will generate corporate partnership opp

TheraBracelet

TheraBracelet
Medical Device

Kacie Neutz
Forcht Center for Entrepreneurship
Louisville, KY 40292
krneut01@louisville.edu
502-407-0230

Technology Description:

TheraBracelet is a battery powered wrist band device that acts to increase sensitivity, movement, reaction time, and general motor skills in the hands.

Synopsis of Market Opportunity:

TheraBracelet has the ability to help patients suffering from neuropathic disorders, including stroke, diabetic neuropathy, and the majority of America's aging population. Currently, many Americans suffering from neuropathic disorders are either left untreated or undergo rehabilitation. TheraBracelet is designed not only to work in conjunction with physical therapy practices during treatment, but also to increase quality of life through home use.

Market Analysis:

Market Scope: Approximately 37.4 million Americans with no prior history of stroke are over the age of 65, and these individuals have decreased sensation and movement ability in both hands. This elderly population is expected to double in the United States within the next 25 years. Approximately 6.5 million Americans are currently diagnosed with Diabetic Neuropathy, which adversely affects sensation and movement ability in both hands. In addition, diabetes diagnosis increased by 50% (or more) in 42 states between 1995-2010. Finally, 5.6 million American stroke survivors are suffering from the debilitating effects hemiparesis (i.e. a muscular weakness caused by nerve damage), which can severely limit sensation in one hand or both hands. The number of stroke survivors are increasing at a marked rate, as a new stroke occurs every 40 seconds in the United States. **Current Issues and Impending Need:** Most patients suffering from neuropathy undergo rehabilitation or are prescribed medication; however, the vast majority of sufferers are left untreated because few treatment options currently exist. An overwhelming need exists to help millions of Americans suffering from a broad range of neuropathic disorders. Many of these Americans are unable to complete common daily tasks due to neuropathy. There is currently no device on the market that is capable of increasing hand movement while simultaneously improving touch sensitivity without impeding the hands.

Competition:

TheraBracelet's current competition includes a product developed by BrownMed called Intellinetix, which is priced at \$149.99 and slated for release in late September 2013. Intellinetix is a cotton glove that fits over the hand which utilizes small, vibrating motors positioned at the fingertips and joints. The device is activated by pressing a small button located on the glove. BrownMed claims that Intellinetix improves blood circulation & mobility, and relieves joint pain. Its targeted uses include revealing Arthritis, reducing hand swelling & pain, and relieving joint discomfort. The Intellinetix glove completely covers the patient's hands, which inhibits hand motion and can cause discomfort. In contrast, TheraBracelet is a small device that can be worn around the wrist; thus, providing no inhibition to the hands. Intellinetix's vibrations can be felt by the patient; in contrast, TheraBracelet's vibrations are sub-threshold and cannot be detected by the user. TheraBracelet's battery life enables a minimum 8-hour usage; whereas Intellinetix only provides 20 minutes of use from a fully charged battery. Intellinetix is not meant for all day use and is recommended for 20-minute therapeutic sessions (similar to massage therapy.) Oppositely, TheraBracelet is intended for all day use, and can be worn for assistance completing everyday activities. TheraBracelet is the only technology with the ability to improve hand movement and touch sensitivity without requiring direct stimulation to the fingertips. The technology is protected by a provisional patent, creating substantial barriers of entry for competitors. BrownMed's Intellinetix product line is FDA approved, and has laid the groundwork as a predicate device to assist TheraBracelet in expediting FDA approval.

Strategic Partnerships:

Deal Sought:

Funding or Investment

TheraBracelet is seeking \$500K in Series A funding in exchange for 28.57% equity in mid-2014. TheraBracelet will seek an additional \$3.75M in Series B funding in exchange for 53.57% equity in mid-2015., Angel Investment, Venture Capital
The Series A funding round will enable TheraBracelet to begin the Class I 510(k) FDA approval process, and work to ensure Medicare reimbursement for consumers. The Series B funding round will be used to to complete FDA approval and launch awareness initi

TheTalkList Inc.

TheTalkList
Software

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Technology Description:

TheTalkList.com: Your social e-Learning Network. TheTalkList is an online platform offering a network of low cost American English tutors to any English learner in the world. Like Amazon, we allow anyone to come in and qualify themselves to open up their own tutoring practice. The platform allows a learner to select the tutor of choice at the price they can afford and uses a proprietary Video learning environment. Our distinction is that we will be the first to market a free enterprise matching system with a social networking component. Eventually we will be known as 'Amazon of conversational language learning'.

Synopsis of Market Opportunity:

Peer to peer video communications are paving the way for an explosion in the e-Learning industry. We have our eye on the largest English market: college students in China, South Korea, Taiwan, and Japan. Every student in these countries must prove English proficiency in order to get into college, get a job, or get a promotion. They need English and they pay for English. Each student spends \$2,000/year in their English education. An independent study by Ambient Insight says that the CAGR for digital English learning is 5%. The TAM for East Asia is \$10bil and SAM is \$500mil. Thereafter, our target market scales to any one of the 2 billion people in the world trying to learn to speak English.

Market Analysis:

English is the universal language of business, science, and technology, and fluency in American English creates opportunities to get them closer to the American way of life. Despite learning English from the first grade, conversational fluency escapes them because they don't have access to native conversation partners. Through our Peer to Peer video communications we can give them that access anytime they need this service. Despite our poll that says that ESL learners would pay twice as much to learn from an American tutor, American tutors are a minority compared to Filipinos. • China has an exploding middle class, 200 million of them have broadband access, 300 million are enrolled in ESL classes. • South Korea's largest industry is the learning of English. English proficiency tests are given in most corporate annual reviews. • Japan has forecasted that it will spend US\$9.8 billion on language learning in 2012.

Competition:

Our competition is relegated to companies in resident countries that have taught English in bricks and mortar schools. Online classes are now being created by those countries and are populated mainly by Filipino tutors. These services are sold as annual agreements to their classes. Learning English is a primary market, but our platform is built to use our free enterprise system for conversational sessions in any language. The primary companies in our space are: Rosetta Stone, 51Talk, EnglishTown. Comparing them to us: We offer 1:1 sessions not group classes We offer American tutors not Filipinos, Canadians, British. We offer price per session not annual subscriptions We offer a social networking transaction not a business transaction. Everyone else teaches Reading, Writing, Listening, and Speaking. We know that our nut Speaking which is the English learner's weakest area.

Strategic Partnerships:

Taobao Alipay for China currency ecommerce Paypal for American ecommerce Amazon Web Services for global scalable web platform

Deal Sought:

Funding or Investment

500000, Convertible note

Web marketing to establish our conversion funnel in China and then to scale our platform to a global level.

Technology Description:

Based on 30 more years mathematical research, this cutting edge and advanced cryptography has been developed. It has epoch-making characters, 10 times faster than AES, stronger than Diffie-Hellman and usable in mobile environment. "QP-DYN – Stream Cipher" is a new class of algorithms, based on advanced and innovative mathematical ideas and capable of exceptional performance even on mobile devices. Capable of encrypting any type of "stream data": ranging from messaging systems to video transmission without introducing delay or redundancies. The advanced mathematical ideas used to obtain these algorithms make it possible to balance high encryption speeds with very little memory capacity or computing capacity required. It is also a very agile algorithm, highly scalable and with fast key exchange routines. "QP-KEX – Public Key Exchange" is an innovative method for the creation of SSKs (Secret Shared Keys) between two subjects via the sharing of publicly exchanged information and of secret information that they keep personally, it is thus an asymmetric algorithm. Currently there are several cryptographic methods for Key Exchange, however, all of them are based on extremely rigid sets of mathematical structures and have almost no flexibility. However the QP-KEX class of algorithms is extremely flexible, and is notably stronger than current solutions. The QP-KEX structure is much different from the existing public key agreement algorithms.

Synopsis of Market Opportunity:

The implementation tests of the QP-DYN have been successful and shown very good performances and efficiencies with all kinds of data: files, multimedia, audio and video. So that possible uses of the QP-DYN encryption module are the encryption of video communications and in general of IP video feeds, encrypted data transmissions, data encryption and encrypted content sharing. The QP-KEX can create Session Keys at very high speeds starting from very few given parameters. Its advantages are speed, highly customizable, easiness of the creation and exchange of session keys. The QP-KEX can be paired with the QP-DYN, resulting in a hybrid algorithm highly suited for the rapid exchange of data.

Market Analysis:

This advanced cryptography algorithms have been successfully designed and prototyped for software such as file cipher, E-mail protect, SMS protect and mobile payments both on iOS and Android based devices. Since the algorithms are very flexible on CPU speed, memory and interface, it enables to cover from big data on cloud server to small data in mobile environment. Because this is based on software solutions, installation costs and running costs can be much lower, and only this algorithm can be implemented in small devices such as smart phones and tablets. For the future, diversity of data and information becomes wider and wider, so that this algorithm will be one of the best solution to protect privacy in all environments.

Competition:

This algorithm is 10 times faster and enables to provide much stronger security. And its initial and running costs can be much lower than existing technologies. We believe that all exiting cryptography can be replaceable by this algorithm in the near future. Therefore this algorithm has strong competitiveness with existing technologies.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance
License or collaborative research

Gate-level Information Flow Tracking (GLIFT)
Security

Technology Description:

Tortuga Logic, Inc. has developed a hardware security tool called GLIFT. Our tool can be used to test that both confidentiality and integrity are being enforced on any given part of a hardware design. Examples include: Confidentiality – The secrecy of a cryptographic key in a system is often the core of security. Ensuring that this key is kept confidential from less trusted parts of the chip is an important area of concern. Rather than speculate about where the secret key can travel in a design, our tool can prove it can never flow to any part of a design that is designated as “untrusted”. This means that, regardless of what software is running on the system, the key is provably safe from being leaked even through variations in timing behavior caused by hardware-specific optimizations. Integrity – For many applications, computers are responsible for the operation of both critical and non-critical components. For instance, in new automotive vehicles, the same system may be responsible for the operation of the brake system as well as the satellite radio. We, of course, never want you to stall the braking system because you wanted to change the radio station. Our tool can test for different properties such as non-interference to prove that one part of the system will never have an effect on another part, whether it’s through explicit changes in values or through differences in response time.

Synopsis of Market Opportunity:

Many system designers attempt to enforce security properties at higher levels of abstraction, such as through secure software design or through support from the operating system. These techniques fail to detect hardware specific vulnerabilities. However, by using our tool, these properties will be enforced at the lowest level of abstraction: the underlying hardware. This provably ensures that attempts to exploit these vulnerabilities are fully mitigated, at any layer of the hardware/software stack. Our goal is to bring hardware security to the forefront of the design lifecycle, rather than an afterthought, and we have made this possible with our hardware security tools. Companies such as Intel, Cisco, Microsoft, Qualcomm, Northrup Grumman, Apple, BAE, Green Hills, Windriver, and Boeing are just a few names of many potential customers. Even automobile OEMs will require secure systems, now that all new vehicles are controlled by dozens of embedded microcontrollers.

Market Analysis:

Based on over 100 different customer interviews over the past two months through our participation in the National Science Foundation Innovation Corps program, we have discovered that our potential customers are hardware design companies with inherent security concerns. Specifically, we have found a set of companies who have expressed interest in potential early adoption. Within these larger corporations, we have identified the value propositions for each individual player. We have discovered that we should focus on two distinct customer segments within these companies each of which find slightly different value in our technology: Hardware design engineers (Users) and VP level Engineers (Decision Makers) We will develop our tool with a user interface and lease the rights to use it to hardware design companies. There is already a large market for hardware design tools and we plan to have our tool used in the same fashion for security assessment.

Competition:

GLIFT allows traditional assertion-based verification techniques to be applied, for the first time, to security metadata. Competing approaches concentrate exclusively on the software layers, ignoring the many complex and nuanced ways in which the underlying hardware plays a role both in enforcing policies and in leaking data unintentionally. As hardware grows in complexity, we must escape the "patch-and-pray" cycle of security, and our technology provides a powerful new weapon in this fight. Our tool is the only one of its kind that we are aware of in the industry.

Strategic Partnerships:

Deal Sought:

Funding or Investment, License or Strategic Alliance
500000, Grant

We are looking for early adopters to help us develop our technology.

The primary purpose of these funds will be to pay the salaries of engineers to further develop our product and add the features outlined in the "Product/Service Concept" Section

TransMedImage

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**TransMedImage Cloud Based Medical Image Network: A Pathway
to Telemedicine and Global Humanitarian Healthcare**
Other Lifescience

Technology Description:

The objective of the company is to become the definitive and inclusive "Medical Image Network" for all participants in the medical environment -- ordering physicians, physician radiologists, physician pathologists, hospitals, patients, insurance carriers, imaging centers, veterinarians, dentists, chiropractors, insurance exchanges, accountable care organizations (ACOs), teleradiology companies, and government entities.

Synopsis of Market Opportunity:

Trans Med Image recognizes the current trend toward EMR/EHR (electronic medical records/healthcare records). This is consistent among healthcare providers, insurers, and government regulatory agencies (e.g. HITECT Act), and the company has positioned itself to become a major resource in this market, filling the void for providing comprehensive medical images in a cohesive, accessible, and portable environment. The Trans Med Image suite of functionality and enhanced services differentiates it from other systems available today, and the company will provide solutions to the marketplace through its cost-effective and profitable business model as well as through its aggressive sales and marketing strategies.

Competition:

The revenue potential for our proposed services is very large, and, as such, invites for competition. However, the complexities and requirements associated with entering the market on a scale and expertise required that is proposed by our company presents many obstacles to others. The primary competitor in the Company's market niche is LifeImage (Boston, MA), which utilizes a substantially different model. The system is installed at the user's facility, does not interact with DICOM devices (e.g. PACS), and is used primarily for uploading radiology studies which exist on the conventional CDs. A secondary competitor is MIM Software (Cleveland, OH), an organization that provides advanced imaging tools for oncologists and radiologists. Specifically, they offer an interface for connecting PACS within an institution (specific imaging center or hospital). TransMedImage LLC. full-complement of services differentiates it from its competitors. These differentiating factors include the acquisition of studies, archiving, interpretations (primary and secondary), accessibility, referrals, EMR integration provisions, carrier adjudication access, portability and patient centric control. Specifically it is our focus on the imaging expert radiologist physicians and the ordering physicians centered about the patient that sets us apart as we embark into a new "Blue Ocean" strategy.

We will stay fully engaged in the medical imaging health care arena to anticipate the exponentially changing business environment. Our success will of course be multifactorial but a primary component will be that we will strive to keep all capital overhead streamlined. This will allow TMI to competitively compensate and therefore attract and retain the very best subspecialty radiologists, helping to garner the lion's share of this limited resource.

Strategic Partnerships:

Desert Medical Imaging has agreed to work with TransMedImage LLC beta version upon the initial roll-out phase to ensure software currently developed works seamlessly with the secure HIPAA compliant server site that would be established with veteran providers such as Iron Mountain. Specifically Desert Medical Imaging has previously and currently provides beta support and advisory positions for Phillips, Hitachi, DR Systems, and Invivo for medical imaging devices and software applications on numerous projects over the past decade.

Deal Sought:

Funding or Investment

\$2.5 million US dollars, 500K installments based upon turn key metric demonstration of project roll-out.

Funds are to roll-out developed TransMedImage software nationally via server site expansion, marketing, sales force, server center, & 24/7/365 technologist backup.

TrendyMED Inc.

The MobileIV™ Infusion Device Medical Device

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Technology Description:

The MobileIV™ is a medical device that delivers IV Infusion liquids to Human and Animal patients without gravity, electricity or batteries, increasing patients' quality of life and saving Billions of dollars for the healthcare system. The MobileIV™ offers the user an easier and safer alternative to receive IV infusion than any other device today in the market. By a click of a single button the IV bag is pulled up (see chart below) through a continuous and steady force generated by a proprietary mechanism until the last drop is expelled. The device does not determine the flow rate nor does it change the existing user workflow.

Synopsis of Market Opportunity:

Targeting the global markets with the North American being the first primary target, the MobileIV™ will first address key market segments such as Military and Emergency Medical & Rescue Services, followed by Hospitals, Home Care and Veterinary services. The the total addressable market worldwide for TrendyMED is over \$3.5B. Only in the US, which accounts for about 50% of the global market, Billions of \$ are spent in the IV market and the average Compound Annual Growth Rate is around 7%, hence the global market is very large. Other opportunities may be in developing countries in Africa, Asia and South America where electric pumps are hardly used as they are very costly, and gravity poles do not provide the needed mobility, accessibility and easiness of use, this is the reason why a cost effective solution is a priority.

Market Analysis:

The global IV infusion growth has been based on changing healthcare environment including increased pressure on hospitals to control costs and an upsurge in outpatient and home healthcare. Other factors influencing the trend of migrating from hospitals to outpatient facilities are the growth in critical care therapies generated by the aging population, an increase in the number of chronic patients, expanding global markets, and new technological advancements. This trend is driven by three main factors: 1. A shortage of hospital resources such as beds. 2. A need to reduce costs by shortening hospitalization periods pertaining IV infusion treatments. 3. Growing demand for small and light weight technologies that patients can easily use at home. While the most common method of IV infusion delivery is dominated by traditional IV poles based on gravity, newer infusion technologies are gaining increased market share and are expected to double in the next five years.

Competition:

The MobileIV™ is the only product of its kind that offers ultimate mobility for the patient, allowing use Anywhere, Anytime and virtually in Any Position. It offers unmatched value compared to the various competing devices in use today such as gravity poles and pressure sleeves which do not offer the needed mobility and convenience and are very costly, especially when considering additional costs such as maintenance, storage and daily disposable parts. The MobileIV™ is a light weight, environmentally friendly and easy to operate Class I medical device that allows patients to maintain their mobility safely thus helping in reducing recovery time, improving quality of life and minimizing expenses to both the patients and healthcare providers by at least 50% while increasing patient throughput by more than 10 times.

Strategic Partnerships:

One of the best ways to accelerate the go to market process is through engaging with the top 5 IV equipment manufacturers, forming multi-national licensing agreements with one or more depending on their segment specific expertise. TrendyMED may also explore engagement with leading distributors in key market segments like the US military and DoD to speed up market penetration.

Deal Sought:

Funding or Investment, License or Strategic Alliance
From \$700K to \$2.5M, Equity, Convertible Debentures
Multi-national or national licensing based on royalties with one or more of the Top 5 global IV OEMs
Product validation with key market segments/customers, Commercialization, Market Launch

Trenergi Corp

Combined Heat and Power Technology based on High Temperature PEM Fuel Cell Energy

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508-497-2355

Technology Description:

Trenergi has developed a breakthrough high temperature PEM technology, which provides the basis for an entirely new set of efficient, clean energy microCHP devices. Our products are designed to operate on a variety of clean fuels, ranging from natural gas/propane to kerosene, even military logistic fuel (JP-8).

Synopsis of Market Opportunity:

We estimate that our target markets exceed \$1 billion and that annual growth rates of 20% are readily achievable. Sales and marketing would be orchestrated through selected strategic partners. In the military segment, we already have one major defense contractor for whom we have built a prototype unit. In the commercial segment, we are seeking similar strategic partners and are in active negotiations with several entities.

Market Analysis:

The US military alone currently has over 120,000 field tactical quiet generators (TQG), most of which operate using reciprocating diesel engines. The current program with Raytheon is focused on replacing a significant percentage of these units with fuel cell based generators operating on JP-8. Recent announcements by DoD indicate that the government intends to begin replacing these units in 2015, the targeted year for first mass production of our 3kW TQG product. With regard to the residential market, opportunities are equally significant. Our analysis has revealed that a serviceable market segmentation can be developed based on unit size:

- 1kW – Targeting developing world markets, where the Trenergi unit represents an operating and economic alternative to extension of existing power grids
- 3kW – Targeting developed world markets in high population density areas (e.g., Urban areas in Europe and Japan), where there is a conscious effort to avoid the high economic and environmental costs of extending power grids
- 5kW – Targeting the North American market, both as a source of either primary or backup power for both homes and businesses

Competition:

Trenergi's high-temperature PEM technology competes primarily against internal combustion (IC) engines and three other fuel cell technologies, solid oxide fuel cells (SOFC), Low Temperature PEM cells, and other High Temperature PEM Cell companies. In each instance, the Company's high-temperature fuel cell technology offers significant advantages over the competition. In particular, it has a much high efficiency, lower noise levels, and lower fuel costs than internal combustion engines; and has lower costs, better performance and greater longevity than other fuel cells.

Strategic Partnerships:

In the military segment, we already have one major defense contractor for whom we have built a prototype unit. In the commercial segment, we are seeking similar strategic partners and are in active negotiations with several entities.

Deal Sought:

Funding or Investment

\$ 500K to \$1 million, Convertible Preferred Stock

Continued product development, targeting marketable military and residential product rollout by 2015

TruTag Technologies, Inc.

TruTag Authentication and Product Verification Solution
Advanced Materials

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Technology Description:

TruTag's product authentication and verification solution comprises nano-porous silica micro-particles that are encoded to produce a vast library of unique spectral patterns that are read with TruTag's proprietary reader to interrogate, authenticate and decode into an identification label, effectively allowing these micro-particles to serve as covert, "edible bar codes." The TruTag microtags are made of high-purity silicon dioxide and are approximately 50-100 microns. Silicon dioxide (or silica) has been affirmed as GRAS (generally recognized as safe) by the FDA and has been an ingredient in food and medicine for decades. TruTags can be easily mixed into a tablet coating mix and applied to the surface of a pill via standard pan coaters, allowing the pills to be field readable. Silica has a melting point well in excess of 1000 degrees C, making these microtags very durable and able to withstand harsh environments. As a result, TruTags also can be applied to high-value items like electronic components, industrial parts and consumer goods.

Synopsis of Market Opportunity:

The TruTag authentication solution helps address the enormous global counterfeit problem with its unique microtag technology that can directly verify high volume, high value items, not merely product packaging. TruTag microtags can be applied on or into life-critical items, such as pharmaceuticals, food, medical devices, electronic components and industrial parts and serve as "covert, edible bar codes." The International Chamber of Commerce reports that the global economic impact of counterfeiting and piracy will reach \$1.7 trillion by 2015 and but 2.5 million legitimate jobs at risk. The global anti-counterfeiting packaging market is expected to reach over \$82 billion by 2015.

Market Analysis:

The counterfeit problem is huge and growing, and the International Chamber of Commerce reports that the global economic impact of counterfeiting and piracy will reach \$1.7 trillion by 2015 and but 2.5 million legitimate jobs at risk. The counterfeit drug problem alone is estimated to exceed \$80 billion, and while specific information can be difficult to obtain, product security professionals contend that counterfeiters are becoming far more organized and sophisticated, with credible counterfeits of packaging-based security measures hitting the market within 6 months after release of new security features. Brand owners and manufacturers spend tens of billions of dollars on anti-counterfeiting and security measures (primarily packaging-based) to protect their products and brands, yet the problem continues to grow and such security measures are regularly defeated. Further, authentication of packaging does not guarantee whether the product inside is real.

Competition:

TruTag is pioneering the on-dose authentication market for drug anti-counterfeiting. Other on-dose/on-item solutions include non-serializable microtags, plant-based DNA, and immune-assay markers. None of these solutions are serializable, FDA-approved and non-destructive. Chemical analysis in a laboratory or field kit, or via RAMAN-based equipment can be used to check chemical profiles of drug product but is not serializable and cannot protect against diversion of legitimate product. Most other product security solutions are packaging-based, such as holograms, UV and NIR inks, RFID, 2D barcoding and symbology, and upconverters, which can check authenticity of the package but not of the product itself.

Strategic Partnerships:

Decline to disclose

Deal Sought:

Funding or Investment, License or Strategic Alliance

\$10 - 15 million, Preferred Stock financing

We are seeking strategic partners who can assist TruTag with technology adoption of the TruTag solution in a particular industry vertical. This assistance could be in the form of technology integration/co-development, access to direct product manufacturer customers, co-marketing, or manufacturing scale-up development.

Market Development, manufacturing commercialization scale up, hardware development and advancement, and commercial manufacturing, general working capital.

POSTING BY VOICE AND LISTENING TO POSTS ON A SOCIAL NETWORKING SERVICE

Software

Technology Description:

The present invention relates to a method of interacting on a social networking service by making posts using voice and listening to posts.

Synopsis of Market Opportunity:

We are targeting both the local (Singapore) and United States market. Demographic we are looking at are youth between 18 - 25 years old who are actively engaging social media.

Market Analysis:

Market Segment 1: Singapore TweetOutLoud will first launch the mobile application and begin its marketing campaigns in the local market; Singapore. Accordingly to a report published by RockPublicity.com, Singapore is estimated to have around 2.5 million active twitter users (close to 50% of Singapore population), with 60% of these users accessing Twitter via their mobile. On average the Singapore users spend around 40 hours on Twitter per month. Market Segment 2: United States The next targeted market segment that TweetOutLoud will work on after Singapore is the United States. From the earlier statistics, 50% of Twitter users are still from its domestic market. It is thus crucial for TweetOutLoud to penetrate the United States market because it is the biggest market of Twitter users and there could be a higher

Competition:

Bubble Motion Among the current mobile application the market, Bubble Motion would be consider our closest potential competitor. Although Bubble Motion also works on building a social media network using voice technology, there are still fundamental difference between this application and TweetOutLoud. Here are some of the key differences: 1. TweetOutLoud is an application built on top of the Twitter platform; any of the 500 million users can use TweetOutLoud. Whereas Bubble Motion mobile application is a social network by itself. 2. TweetOutLoud convert voice into tweets and tweets into voice (two way conversion); as such even if a another user does not use TweetOutLoud, the application are still able to "put a voice to that tweet" when the receiver is using our platform. While Bubble Motion simply only sending of recording voice over the network. Audio Feed Apps There are well-known audio feeds apps such as "Voice Brief" which read out user's Facebook and Twitter feeds. However, these apps are less interactive and usually only enabling the users to consume information and not participate in information creation (e.g. update Facebook status or Tweeting). These apps might attempt to add such information creation features or even voice command technology to their applications, thus it is important for TweetOutLoud to build the application fast so as to enjoy the first mover advantage. Mobile Apps built for Social Networking Sites Other potential competitors are the mobile applications build for the social networking sites, one example would be "TweetDeck". However, none of these mobile applications have integrated voice command technology into their mobile applications. Again it is important for TweetOutLoud to build the application fast so as to enjoy the first mover advantage.

Strategic Partnerships:

Deal Sought:

Funding or Investment
1000000,
Product Refinement & Marketing

Injectable pharmaceutical formulation comprised of disulfiram and a cyclodextrin that requires monthly administration for treating alcohol dependence.

Pharmaceutical

Technology Description:

Alcoholism is a chronic, progressive disease that manifests itself with symptoms that affect one physically, mentally, emotionally, spiritually and socially. One of the main problems in treating alcohol dependants is the low adherence to treatment, for it requires their will to take a daily pill or not to rip off a pellet. The University of Concepción developed a new inclusion complex formed by disulfiram and cyclodextrins, formulated as an injectable, which allows maintaining stable therapeutic plasma levels of this drug from the beginning of the administration, with a proven clinical efficacy for 30 days, with minimal irritation in the administration area. A comparative study (tested against oral disulfiram) performed on 48 patients during 6 months of treatment evidenced that this new injectable formulation: facilitates treatment, requires less supervision (monthly vs. daily), increases bonding in patient/physician relation, has an adherence to the treatment 41,4% higher than oral disulfiram, increases abstinence (10.6% higher than oral disulfiram) and requires a minor drug intake per month (1.5 gr. Injectable vs. 15 gr. oral) which is a key factor for preventing hepatotoxicity. From a clinical point of view this new complex is a pharmacological tool that further supports the biopsychosocial treatment of alcohol dependence, increasing the level of adherence to treatment and reducing the relapse after treatment.

Synopsis of Market Opportunity:

Alcohol dependence is a major public health problem, with almost 8 million affected people in the United States and 15 million affected people in Europe, where less than 25% of diagnosed people receive any treatment in the US and less than 10% in Europe. Substance abuse therapeutics market is in the top seven markets and was valued at \$8.8 billion in 2011, increasing at a CAGR of 4.9% during 2004–2011. The market is projected to witness moderate growth of 5.3% during the 2011–2018 forecast period to reach \$12.7 billion. The moderate growth of the market can be attributed to the presence of generics in the market, low compliance with therapy due to the nature of addiction and the lack of innovative products in the pipeline. However, indications such as cocaine addiction, which currently have no approved products, are expected to see entries to the market.

Market Analysis:

There are currently three medications approved by the FDA for the treatment of alcohol dependence, which are disulfiram, naltrexone and acamprosate. Disulfiram has been used to treat alcohol dependence for more than 40 years, mainly by oral administration. The main limitation is treatment dropout and self-deception regarding the intake. Pellets of disulfiram are an alternative, but this formulation has not proven to achieve stable therapeutic blood levels and effectiveness. The parenteral preparation of microgranules of disulfiram due to lack of solubility causes pain and inflammation that requires the use of lidocaine administration. According to the psychiatrists surveyed by Decision Resources, the greatest unmet need in the current alcohol addiction market is for more-efficacious treatments, particularly better anti-craving medications. Given this large unmet need and the small drug-treated population, this market is primed for competitive entry.

Competition:

There are technologies involving pharmaceuticals and/ or methods for treating alcohol dependence. Some of the medications include disulfiram, naltrexone and acamprosate. The main treatments available on the market are: -CAMPRAL® (acamprosate calcium) sold by Forest Laboratories -ANTABUSE® (disulfiram) sold by Odyssey -SELINCRO®(nalmefene) sold by Biotie Therapies -VIVITROL (naltrexone) sold by Alkermes, Inc. There are no companies commercializing injectable solutions of disulfiram. On the other hand, Vivitrol a new injectable formulation of naltrexone, has been on the market for alcoholism since 2006 and for opiate addiction since 2010. While naltrexone, a generic, has an insurance copay averaging US\$11 a month, Vivitrol costs about US\$1,100 a month.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance

UdeC is seeking for a licensee with the capabilities of performing clinical trials in a larger number of patients, developing the final product and bring it to the market.

Novel family of TRPV-1 antagonists for developing a drug for chronic pain treatment.

Pharmaceutical

Technology Description:

Chronic pain is a debilitating and complex clinical state usually associated with diabetic neuropathy, postherpetic neuralgia, low back pathology, fibromyalgia, and neurological disorders. Standard pain drugs, even narcotic opioid analgesic agents, often provide unsatisfactory pain relief while causing important side-effects such as sedation, tolerance, dependence, respiratory depression and increase of core body temperature. Furthermore, the effective management of chronic pain needs a multidisciplinary management approach and still represents one of the most urgent unmet medical need. Recently, preclinical research has uncovered new molecular mechanisms underlying the generation and transduction of pain, such as Transient Receptor Potential (TRP) Vanilloid Type 1 (TRPV1) channel which represent a new target for innovative pharmacological interventions for treating chronic pain. This invention details preparation, identification, and in vitro studies of novel thiadiazol and chalcone derivative antagonists for treatment of chronic pain in diseases in which the TRPV-1 receptor is overactivated. These new derivatives are potent, have a distinct binding site, and have an IC50 in the nanomolar range that exceeds or is comparable to other potent antagonists and vanilloid derivatives currently undergoing testing.

Synopsis of Market Opportunity:

In 2010, sales of pharmacological therapies for the treatment of chronic pain exceeded \$20 billion in the seven major pharmaceutical markets. Between 2010 and 2020 the overall market for chronic pain therapies will remain stable at approximately \$20 billion, with treatments for back pain and arthritis predicted to be the most lucrative. Although the chronic pain market is largely saturated with reformulations of well-established molecules, developers continue to pursue products that have potential to fulfill the remaining unmet clinical need for safer and better tolerated analgesics. Furthermore, the outcomes of several regulatory decisions are expected to significantly affect the chronic pain market over the next ten years—and these decisions will ultimately determine the commercial fates of several emerging reformulations and novel pain therapies.

Market Analysis:

The existing market landscape remains competitive, because the treatment of chronic pain relies on established, older therapies like non-steroidal anti-inflammatory drugs (NSAIDs), opioids, and cyclooxygenase-2 (COX-2) inhibitors. The market scenario will change after the launch of new disease-modifying therapies such as NGF binders, TRPV antagonists, calcium channel blockers, non-peptide neurotoxins, alpha adrenergic receptors, p38 kinase inhibitors, fatty acid amides hydrolase inhibitors, alpha-2 delta ligands, bradykinin (B2) receptor, N-Methyl-D-aspartate (NMDA) antagonists, sigma 1 agonists and so on. Opioids are wrought with adverse effects and have significant addiction potential, but poorly appreciated is that even over-the-counter pain medicines like acetaminophen and ibuprofen are linked with liver damage, kidney damage, and even heart attack. NSAIDs in general also carry an increased risk of developing heart disease. The exception is aspirin, which is often used as a preventative treatment among people with existing heart disease or are at risk of developing heart disease.

Competition:

Key market players are Pfizer Inc. (Celecoxib), Eli Lilly (Cymbalta), Purdue, Grunenthal GmbH, Cephalon Inc., SantoSolve AS, Transdel Pharmaceuticals, WEX Pharmaceuticals, Avanir Pharmaceuticals, Janssen Pharmaceuticals (Nucynta ER), Elite Pharmaceuticals, Horizon Therapeutics, King Pharmaceuticals, Insys Therapeutics and Endo Pharmaceuticals. Other competitors are NeurogenX, GlaxoSmithKline, Merck-Neurogen, Amgen and AstraZeneca, among others, which have antagonists of TRPV-1 receptor currently being tested in clinical trials for chronic pain treatment.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance

UdeC is seeking for a commercial partner for further testing and enhancing the potential value of these compounds, or a licensee with the capabilities of further developing the product.

Metal roller reinforced with polymer and carbon nanotubes for applications where high wear resistance and high load bearing capacity are required.

Advanced Materials

Technology Description:

Currently the problem of roller wear is confronted by high cost thermal treatments, being a temporary solution since with the passage of time and wear of the same, they must be machined. This changes the geometric dimensions of the rollers, which affects the efficiency of the production line and the quality of the final product. Plastic coatings have been developed to reduce wear in industrial applications, principally for the paper industry where rollers are subjected to high temperatures and cyclic loading wear conditions. While some technologies have contributed to solving this problem, there is still the need to develop new more efficient alternatives for demanding conditions where these solutions do not meet the mechanical needs. Researchers at UdeC have developed a reinforced metal roller useful for the manufacture of high temperature steel, comprising a steel core covered with a polymer reinforced with fiber and carbon nanotubes. It is between 20% -40% lighter, 30% less expensive, do not require thermal treatment and is self-lubricating which may possibly eliminate lubrication systems in production lines, allowing improvement of efficiency in production processes. Although oriented to the roll-forming industry, it is adaptable to other uses such as bearings, dies, rollers and other machine components and devices requiring reliable and optimal mechanical properties and low weight.

Synopsis of Market Opportunity:

International trade metalworking products exceeds 4,000 billion, accounting for over 30% of the world total. The World Steel Association has already revised downward its outlook for 2012, targeting a 3.6% growth in the steel sector. The industry's (roll forming) revenue for the year 2012 was approximately \$ 8.7 billion USD, With an Estimated gross profit of 20% approx. The size of the engineering sector has grown in recent years and today is 4 times larger than the textile and apparel. The installed capacity utilization exceeds 72.8 percent, industry exports have increased. The largest recipient of metal products is the United States followed by Venezuela. Furthermore, the problem of insecurity in the sector has fallen sharply.

Market Analysis:

The custom roll forming industry manufactures metals into complex shapes, rings, trim, channels, and structural components using precision equipment. Large market segments include HVAC and construction, as well as many other large-volume manufacturers. Roll forming enables manufacturers to produce parts at high volumes with better quality and durability. The industry allows manufacturers to consolidate production and finishing stages into one operation, thereby cutting costs and accelerating speeds. International trade metalworking products exceeds 4,000 billion, accounting for over 30% of the world total. Within this industry, almost 40% corresponds to the capital goods sector, 20% to the automotive industry and other sectors both electronic components and appliances, completing the rest other metalworking sectors. The major exporting economies are the European Union countries (Germany, France, Italy), China, the U.S., Japan and Southeast Asian countries (mainly South Korea).

Competition:

Currently plastic coatings have been developed to reduce wear in industrial applications, principally for the paper industry. While technologies such as Sika[®] Metaline[®] or contributed to solving this problem, there is still the need to develop new more efficient alternatives for demanding conditions where these solutions do not meet the mechanical conditions. Coated rollers are currently used in high-performance industrial applications, such as in mills in the paper industry where they are subjected to high temperatures, and cyclic loading conditions desgate. No specific applications found for the metalworking industry, for example, in the rolling process the rollers are subjected to high loads and wear conditions above those given in the paper industry. Currently, the problem of roll wear is confronted by thermal treatments of high cost, being a temporary solution since with the passage of time and wear of the same, they must be machined.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance

UdeC is seeking for a commercial partner for further testing or a licensee with the capabilities of further developing the product and bring it to the market.

Technology for optimizing the efficiency in fuel consumption and emissions reductions for application in furnaces and boilers.

Energy

Technology Description:

Demand for industry of boilers products will be boosted by overall growth in downstream markets like food production, heavy industrial facilities construction and machinery manufacturing. The University of Concepción developed a technology for optimizing the efficiency in fuel consumption and emissions reductions for application in furnaces and boilers. It's an image processing tool that analyses the spectral radiation of the flame to interpret the quality of combustion and sends the appropriate signals to the actuators to modify the relevant air/fuel ratio. The system has been developed to a commercial prototype stage and is fully operative in boilers and furnaces that use natural gas and petroleum as a fuel. During 2006 and 2007 the Optiflamma technology was tested in industrial plants: - Furnace of 11.000 kW, using fuel gas. The performance evidenced a 10,3% of fuel consumption reduction. - Boiler of 16.000 kW, using petroleum #6. The performance evidenced a 4,1% of fuel consumption reduction. Technology has also been tested in situ in equipment that works with gas and petroleum. Given the technical characteristics of the system, it is possible to adapt it for a wide range of fuels, besides the ones that have been tested, such as coal, biomass and others. This requires new tests to be performed in order to adjust parameters and calibrate the optimization software for each of these fuels.

Synopsis of Market Opportunity:

The primary market for this product would be owners of boilers and furnaces. There are two distinct segments to consider in this market: new boiler manufacturers and the retrofit market to upgrade and improve the efficiency of existing boilers already in the field, many of which have been in production for decades. Estimates are that there are approximately 163,000 industrial and commercial boilers in the United States (Source: EEA), and potential market of 43,000 industrial boilers that could incorporate this technology. The industry's revenue for the year 2012 was reported at \$6.0 billion USD, with an estimated gross profit of 27.65%. Import was valued at \$1.5 billion USD from 70 countries. The industry also exported \$1.9 billion USD worth of merchandise to 142 countries. Adding import value to and subtracting export value from the industry's shipment value, the total domestic demand for the industry in 2012 was \$5.6 billion USD.

Market Analysis:

The current solutions in the market for optimization of fuel consumption in industrial applications depend on the following relevant variables: - Chemical vs. optical analysis - Type of fuel burned solid (biomass, coal) vs. gaseous and liquid (other fossil fuels) - Single burner vs. multi-burner combustion. The traditional solution is chemical analysis, which is done through measuring with sensors in ppm of O₂, CO, CO₂ and NO_x. The measurement is obtained mainly in the outflow shaft of the boiler or the furnace. With this solution, it is not possible to know what happens inside the combustion process. This is particularly true with multi-burner applications where the average of the output might be correct but the monitoring of the burners performance individually cannot be made, and where efficiency in general still can be improved. The variability of the type of fuel burned is an important classification to characterize the optimization solutions.

Competition:

Traditional solution is chemical analysis, which depend on the following relevant variables: - Chemical vs. optical analysis - Type of fuel burned solid (biomass, coal) vs. gaseous and liquid (other fossil fuels) - Single burner vs. multi-burner combustion. Regarding commercial products the closest competitor solutions available would be: - Durag: All-in-one device that controls combustion adjusting amount of fuel based in the flame strength, with no emphasis in optimization. - Zolo Technologies: Laser-based tunable diode laser absorption spectroscopy (TDLAS) technology. - Flame Doctor. monitors status of all burners, utilizing signals from existing optical flame scanners. Designed only for utility and industrial coal burners. - Spectra Tune. Combustion diagnosis and optimization system based on the analysis of spectral frequency. Its design is limited to applications in power stations that use pulverized coal and does not allow total automatization for burner control.

Strategic Partnerships:

Exclusive license granted to Optiflamma S.A., a spin off company, for production and provision of services related to the technology in Chile.

Deal Sought:

License or Strategic Alliance

Sublicense, excluding CHILE as a market.

Technology Description:

The increase in cosmetic dental procedures worldwide for the correction of all dental imperfections, including the smile correction treatment is estimated in approximately 300 million people. Dental crown extension or lengthening is an osseous remodeling used in restorative dentistry to recreate the biologic width and/or to correct the proportions of teeth and gums. Although effective, current procedures have not been embraced widely by the dental community, since they require extensive gingival flap elevation associated to postoperative discomfort and high risk of complications. This invention consists of an ultrasonic tip designed for clinical crown lengthening, which includes a proximal end, which is adapted for mechanical coupling to piezoelectric device, designed to determine the precise bone removal depth without needing extra measurements nor detach (create a flap of) gingival tissue, making it minimally invasive. Furthermore, the surgical device avoids sutures and the postoperative convalescence period, enabling the patient to continue normally after surgery. It also prevents tooth damage and acts selectively on the bone tissue removal.

Synopsis of Market Opportunity:

The dental devices market is expected to grow at a compound annual growth rate (CAGR) of 7% and reach \$13.3 billion in 2017, from \$8.4 billion in 2010. Demand for dental products and services is expected to grow in the long run driven among others by the increase in the number of people opting for cosmetic treatment, and introduction of new products that reduce patient discomfort. The shift of patient's choice to better aesthetics is considered to drive the demand for cosmetic dentistry, which has seen an increase in demand in the past few years. The factors driving the demand are technological advances, thereby facilitating procedures such as smile makeovers to be performed in convenient manner for patients and also lead to shorter recovery time. New products are aimed at reducing patient discomfort, shorten healing time and provide improved functioning.

Market Analysis:

There has been an increase in cosmetic dental procedures worldwide for the correction of all dental imperfections, including the smile correction treatment. A study conducted by the American Academy of Cosmetic Dentistry estimates that revenues for cosmetic treatments among its members (more than 6,000 surgeons in 70 countries) were about 2.25 billion dollars in 2011. On the other hand the application of this innovation depends on the use of piezoelectric equipment for dental surgeries. A study on the piezoelectric equipment market developed by iRAP (Innovative Research and Products Inc.) estimates the market for piezo applications in about US\$6.6 billion, in which medical science applications are estimated to have an average growth of 18.7% annually through 2014.

Competition:

Typically, the conventional procedure for dental crown extension involves a scalloped incision to recreate the proposed gingival height, a gingival flap and approximately 2 millimeters of bone remodeling, measured from the new gingival margin to preserve the biological width. Bone removal can be carried out with a sharp manual instrument, with a conventional rotating drill or an electric piezosurgery unit. This procedure is by nature, invasive and complex to execute, since rotating drills or piezoelectric tips act indistinctively on both bone and teeth, making it possible to damage the delicate structures of the teeth; repositioning of the gingival flap requires the ability to maintain the planned proposed gingival margin when suturing it to the palate gum; and measurements are difficult and inaccurate since the gingival margin is loose and reference points are mobile. Key competitors are manufacturers of piezoelectric equipment and parts for maxillofacial surgery.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance

UdeC is seeking for a licensee with the capabilities of performing clinical trials in a larger number of patients, developing the final product and release it to the market.

Technology Description:

The subject technology is a system to emulate the environment of an arthroscopic knee surgery for the professional training of medical students and residents in the specialty. The system integrates tactile feedback through the Phantom haptic system with a 3D scene of the human knee based on volumetric models, providing the user with a real surgery environment. The system will allow the user to set specific parameters to emulate different clinical environments. The Arthroscopic Knee Surgery Simulator has among its main features: - Graphic modeling of anatomical structures present in the knee, based on techniques of volume rendering and iso-surfaces, among others, applied to magnetic resonance images taken from a real knee. This gives a complete and representative model of the anatomy of the knee that allows the users to navigate in a 3D virtual environment. - Collision detection and modeling deformation of soft tissues. This allows the user to emulate the different components of the knee and get real tactile feedback through the haptic devices. In this way, the user has a tangible feel that reproduces the contact with human tissues (cartilage, bones and skin). - Use of haptic elements that provide six degrees of freedom for navigation in the virtual scene of the knee, and three degrees of freedom for the force feedback from the 3D volume.

Synopsis of Market Opportunity:

Although the market seems to be somewhat substantial for virtual reality simulators in medical training (e.g., the journal of the AANA1 approaches 6,000 subscribers and their quarterly courses draw approximately 500 trainees on average), major players addressing the market are few and far between. Several of the products encountered are under development or in testing phase. This may be an indication that the market is immature and the systems available have not fully met customer expectations. This is a good sign for the subject technology, which is said to improve the current state-of-the-art. Five companies are identified as the primary players in providing a system for training in arthroscopic surgery of the knee and employing virtual reality. A cursory search of the marketplace indicates that these five are indeed a reflection of current products addressing this application area.

Market Analysis:

Market is focused on global training centers of surgeons specialized in arthroscopic knee surgery. This includes hospitals, universities, research centers, and also companies that produce medical supplies and equipment for these types of trainings. Only ISAKOS (International Society of Arthroscopy, Knee Surgery and Orthopaedics Sports Medicine) has more than 2800 members from 87 countries and has a list of 163 approved teaching centers in 43 countries. Hospitals, universities and centers teaching through the use of cadavers, which main drawback is that it can only be used once or at most twice and then it has to be discarded, plus there are 2 or 3 surgeons working per cadaver because they are not easy to achieve (Each one costs about US\$ 5.000). Considering a course where participate 30 surgeons, they will require at least 10 cadavers, so the hospital, university or teaching center would have to spend US\$ 50.000 per course.

Competition:

The main competition is the Spanish company GMV, who ventured into this industry 26 years ago. Their product is the insightARTHRO VR ® and cost about US\$90.000 per equipment. For navigation, the training simulator is at the same level as the insightARTHRO VR ®, however, the main difference is the haptic feedback and the soft tissue deformation, so the technology created in this project is better than the GMV equipment. Recently insightARTHRO VR was bought by Simbionix. In 2013 GMV was purchased by Simbionix, Alternative to this technology is what teaching centers are currently using to teach arthroscopic knee surgery: cadavers. Disadvantages are they have a limited use, are not easy nor cheap to get, there are 2 or 3 surgeons working per cadaver, so they can not play all the conditions, and are forbidden in some countries where its use for educational and scientific purposes is prohibited by law.

Strategic Partnerships:

Deal Sought:

License or Strategic Alliance

UdeC is seeking for a licensee with the capabilities of performing specialists validation in a larger number of traumatologists, developing the final product and bring it to the market.

Technology Description:

University of Waterloo Technology proposed and demonstrated a computer vision and artificial intelligence aided winter road condition monitoring system. Our system allows the use of inexpensive hardware to collect, process and transmit road condition data in real time. The system can provide objective assessment and better spatial and temporal coverage.

Synopsis of Market Opportunity:

This system is an innovative system that uses machine vision and artificial intelligence algorithms to monitor road surface conditions for winter maintenance. This will help government agencies and associated contractors to control the salt usage and protect our environment.

Market Analysis:

The primary market for our winter road condition monitoring system is the winter road maintenance sector. Winter maintenance activities provide direct benefits to the public in the form of fewer accidents, improved mobility, and reduced travel costs. Their indirect benefits include, but are not limited to, sustained economic productivity, reduction in accident claims (legal liability for the public transportation sector), and continued emergency services. While essential for maintaining highway mobility and safety, winter road maintenance activities are also costly with an average annual expenditure of over \$3 billion in North America and a similar amount in Europe. In addition, millions of tons of salts are applied for snow and ice control, which has become a significant public concern due to their detrimental effect on the environment, the infrastructure and the vehicles. In order to reduce these costs, while increasing the benefits, road maintenance authorities and contractors have been constantly seeking for solutions that can help improve their snow and ice control operations. One of such solutions for achieving this goal is timely and reliable monitoring of road weather and surface conditions during and after winter storms.

Competition:

Most provinces and municipalities across Canada have invested millions of dollars in the deployment of Road Weather Information Systems (RWIS). Campbell Scientific, Vaisala and Luft are some of the leading RWIS manufacturers. Depending on the type of sensors, RWIS installations can be very costly between \$15,000 to \$100,000 or more.

Strategic Partnerships:

Deal Sought:

Funding or Investment, License or Strategic Alliance
\$500K to \$2M, Angel, Corporate venture or VC investment
IP Licensing
Product development and customer engagement

Virtual Process

Virtual Process
Software

www.virtual-process.com
Rick Weber
Montreal, QC
rweber@virtual-process.com
312-235-2374

Technology Description:

Virtual Process is a cloud-based software application that helps manufacturing companies reduce production costs and increase profits. The software application can be up and running within one day and allows companies to create and track any operational procedure from anywhere and in real time. With Virtual Process, clients increase worker productivity by over 15% and decrease defects by as much as 90%. Virtual Process currently has several paying and satisfied clients, and was selected in 2012 by Microsoft as only 1 of 32 companies worldwide out of 50,000 to its BizSpark One program. Virtual Process is not vertical specific, but it is well suited to small to medium sized manufacturing companies that manufacture products with medium to high complexity.

Synopsis of Market Opportunity:

Virtual Process allows any company the ability to customize and automate any manufacturing process or task. Managers can create a process in one location and have it used by employees in another location seconds later. Unlike other applications or custom development, processes are simple to build; anyone within the company can do so using the proprietary icons that are already pre-programmed with various tasks. Creating proper set of procedures can take hours or even minutes, whereas other solutions require custom programming and take months or years. Virtual Process is applicable to any manufacturing company, but is currently best poised to capture the small to medium sized market. In the US alone, there are approximately 58,000 manufacturing companies with employees numbering between 20 and 500. While North America is currently the primary focus, Virtual Process has clients in Mexico, China, and other places and is not limited by borders.

Market Analysis:

The Virtual Process software has over 10 years' worth of development and has been in use by several paying clients for the past three years. Virtual Process, once installed, becomes an integral part of the client's manufacturing processes and is "sticky". The estimated LVC is \$420,000+. Virtual Process uses a SaaS model with a simple pricing model of \$100 per user per month. This price is all inclusive of training, support, maintenance, and cloud storage. In addition to the licensing fees and the existing revenue model, Virtual Process has potential growth in other industries such: as ISO, Test & Measurement, financial services, and other verticals that require stringent recordkeeping. Also, while the software does not require a programmer, there is potential opportunity for consulting revenue by helping companies build and streamline operations and procedures.

Competition:

The manufacturing industry currently supports over 17,000 ERP software companies. Virtual Process is a compliment to ERP systems and fills the void left by these systems. Specifically, Virtual Process manages the activity at any given manufacturing workstation. Virtual Process tracks all production level activity in real-time and can feed that information to any ERP system through an API and customized reports. In short, Virtual Process starts where ERP systems end. Virtual Process has carved out a niche within the manufacturing software industry. While other software applications can manage resources, they do not possess the functionality that Virtual Process has in both enforcing the specific actions of the production level employees or the traceability features. The alternative to Virtual Process is to have processes custom-built by a team of programmers or simply do nothing. Custom applications are very time consuming and expensive, and doing nothing causes massive inefficiencies and lost profits.

Strategic Partnerships:

Virtual Process is unique to the marketplace and has been working to align itself with small to large consulting firms as well as with certain ERP and MRP software companies. Virtual Process is also seeking to establish technology partnerships with electronic component resellers as well as with Test and Measurement manufacturers and distributors as their clients are good candidates.

Deal Sought:

Funding or Investment, License or Strategic Alliance

\$750,000 to \$1M, TBD

Accelerated Growth. Approx 70% allocated to sales and marketing and 30% allocated to expanded development and features

VoiceLever, Inc.

Victory Human Terminal System Security

Mr Stephen Albert Rondel
7349 148th Ave NE
Redmond, WA 98052
srondel#voicelever.com
425 864 7676

Technology Description:

Wearable PC operates by touch and conversational speech to run Windows, hands and eyes free, collaborate with others with full visual, voice, presence and vitals sharing. Designed for Situational Awareness/knowledge networking. Goes beyond "handheld," desktops, laptops. New perimeter for Windows apps to lower total cost of ownership/eliminate costly application development.

Synopsis of Market Opportunity:

Easier/faster option for buyers of annual of 1.5B (in total) of PCs, Smart Phones, and Tablets. For Defense, Security, field operations, enterprise, inspection, police, fire, border patrol, medical. Combines mobile and PC market: PCs - 300M (unit declining); ultraportables- 20m (doubling); Tablets- 200M (up 70%); Mobile Phones - 1.8B (up 4.5%) - 950M Smart Phones (up 14%). Viable new alternative and option for buyers of annual purchases of 1.5B (in total) of PCs, Smart Phones, and Tablets.

Market Analysis:

Viable new alternative and option for buyers of annual purchases of 1.5B (in total) of PCs, Smart Phones, and Tablets. The Victory system (not the commercial system name) will speed information capture, productivity, and knowledge collaboration between mobile workers and PC systems

Competition:

Desktop and Laptop computers. Netbooks. Smart Phones.

Strategic Partnerships:

L3, Harris, Glenair.

Deal Sought:

Funding or Investment

\$5M, passive equity investment

Working capital – production expansion, inventory, expand sales and marketing

Technology Description:

OptiSale enables retailers to deliver real-time sale prices (through automatically generated coupons) and implement price differentiation based on consumer characteristics and time-varying supply, demand & external parameters. The customer uses smartphone app to access the OptiSale while sellers interact with OptiSale's admin interface using software-as-a-service. A typical workflow starts with consumer scanning the barcode of product in a store which triggers various calculations involving demand models, price & cross-product elasticity estimations, and supply-chain & inventory projections. Based on applicable strategy (specified by store or product manager), the system generates a discount coupon and sends it to customer's smartphone. The system also suggests discounts on related items in the store (e.g. complements like coffee and milk; substitutes like jeans and pants). The admin interface facing retail/ store manager or product/ brand manger shows real-time control panels enabling them to track customer responses, change promotion parameters and monitor their impacts. It also allows them to plan various pricing regimes, see customer economic profiles (e.g. willingness to pay and preferences over product categories & brands), product relationships (e.g. income, price & cross-product elasticities) and run simulations for planned strategies. Our in-built statistical & mathematical model can predict likelihood of someone purchasing a given product at a given time & amount of discount that would induce him to buy a product he would not buy in absence of the discount. OptiSale technology tracks the acceptance of offered discount as feedback to train the error-correction mechanisms of the models.

Synopsis of Market Opportunity:

Retail sale events and pricing are not real-time. Selection of products on sale, sale prices, coupon delivery etc. need to be pre-planned. There is no way to adjust sale events based on customer response. We take a percentage of total revenue generated through our application (2% to 5% depending on the discount that was already offered to the customer). In addition, there is another channel. Retailers are provided to run various pricing strategies (e.g. clear unwanted inventory or launch store brand) that result in automatic generation of coupons. When these coupons are used, we can track how successful it was in generating additional revenue. Our pricing scheme is based on number of coupons displayed (different tiers based on expected volume range) and on dollar value of coupons used or a mix of these two (e.g. coupon volume based pricing for scanned products and coupon value based pricing for suggested products).

Market Analysis:

The numbers below are based on data from various reports from organizations like National Retail Federation and projections by Deloitte, PwC & KPMG. In 2012, US retails sales were \$3.8 trillion & despite all the focus on online shopping, 92% (i.e. \$3.2 trillion) were still in-store. In 2012, 305 billion coupons were distributed and only 2.9 billion were redeemed (conversion rate of less than 1%). Our market segment is smartphone owners (in US 50% penetration) and our target audience is young or price conscious consumers. We hope to reach at least 5% of those (5 million consumers): an addressable market of \$65 million per year in US. With more people predicted to move towards smartphones in coming years, OptiSale technology has potential to capture in-store retail sales in many countries in addition to US. The product, UPC code & feature database as well as economic models are configurable and adaptable.

Competition:

We are creating almost a new vertically integrated field offering end-to-end plug and play technology layers. There are various companies operating in subfields. But they operate either in online shopping space or just offer existing coupons & promotions through smartphones. Pricing Strategies: Competitor - Runa. OptiSale offers richer strategies based on product features (perishable/seasonal/ durable), inventory and supply-chains. Self-Checkout: Competitor - ReVision. OptiSale offers many additional functionalities and can integrate with any front-end app. Suggested Products: Competitor - Amazon. Suggestions seem to be based on past purchases rather than product features and substitution & price elasticity. Store Coupons: Competitor - ShopKick. They provide same paper coupons on mobile. But unlike OptiSale, no real-time changes or price differentiation possible.

Strategic Partnerships:**Deal Sought:**

Funding or Investment

200000, Open to various funding models (equity, debt).

Hiring Developers, Expanding Features Database and Marketing Team.

Yactraq Online Inc.

Speech2Topics
Software

Jehangir Daruvala
Surrey, BC
jeh@yactraq.com
604 341 6217

Technology Description:

Patent pending technology uses speech recognition/NLP to index audiovisual content. Provides relevancy and other proprietary analytics used in areas of content discoverability to attract viewers and advertisers. The product can run flexibly either in the cloud or at a customer's premise depending on the customer's needs.

Synopsis of Market Opportunity:

Video is the fastest-growing type of online content consumption and represents 50% of all online traffic as of Jan 2012. Based on data from Youtube Stats and ComScore, we expect more than 2 billion hours of video content will have been uploaded within 5 years, generating an annual metadata market above \$ 2 billion by 2018.

Market Analysis:

Video is the fastest-growing type of online content consumption and represents 50% of all online traffic as of Jan 2012. Based on data from Youtube Stats and ComScore, we expect more than 2 billion hours of video content will have been uploaded within 5 years, generating an annual metadata market above \$ 2 billion by 2018.

Competition:

Rovi and Gracenote use manual approaches to metadata generation. They could become customers. Ramp.com and Playence have end-to-end software more suitable to video publishers. Yactraq focuses on Speech2Topics as an ingredient technology and serves video platforms and ad tech players on more of an OEM basis.

Strategic Partnerships:

Deal Sought:

Funding or Investment, License or Strategic Alliance

We are seeking \$1.5 million funding,

No preferred method

To develop our second generation product and hire a sales and marketing team.

Advanced Materials - Formulation of controlled biodegradable containers for forestry use

Controlled biodegradable container to forest species that allows an adequate plant nursery and growing. Also, can be transplanted to land together with the plant.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Advanced Materials - Functional Intelligent Textile

Footfalls & Heartbeats has developed a revolutionary and proprietary process for manufacturing smart fabrics that act as sensors.

Footfalls and Heartbeats Ltd - Brent Ogilvie – 649.377.9689 - brent@footfallsandheartbeats.com

<http://www.footfallsandheartbeats.com/>

Advanced Materials - Material for Enhanced Bonding between Metals and Polymers

A material and method that creates a strong chemical bond between alloys and polymers for dental prostheses.

McGill University - Mark Weber – 514.398.8949 - mark.weber2@mcgill.ca - www.mcgill.ca

Advanced Materials - Non-Noble Catalyst for Fuel Cells

This graphene nanoflake technology provides a cost-effective means to replace the platinum catalyst in a polymer electrolyte membrane (PEM) fuel cell.

McGill University - Mark Weber – 514.398.8949 - mark.weber2@mcgill.ca - www.mcgill.ca

Advanced Materials - Structural Supercapacitors

This technology provides electrical charge storage and load-bearing structural capability. It consists of a carbon fiber composite material and a solid polymer electrolyte.

Northern Arizona University - Timothy L. Vail – 928.523.5311 - Timothy.Vail@nau.edu

<http://www.nau.edu/nauinnovations>

Advanced Materials - Wood-Plastic pellets suitable for injection and extrusion of diverse products.

Process for obtaining pellets of wood-plastic oriented to the injection of composite materials and structural quality extrusions as a substitute for diverse products.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Advanced Materials - CO2-Based Adhesive

An environmentally friendly adhesive that works exceptionally well with glass and metals, uses CO2 as a starting material, and can be created using simple, non-toxic chemistry.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov

www.netl.doe.gov

Advanced Materials - Fiber Supported Ionic Liquid Sorbents

A process to transform ionic liquids into fiber material that can filter out impurities like CO2, sulfur, and water from gas mixtures.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov

www.netl.doe.gov

Advanced Materials - Method of Applying a Cerium Diffusion Coating to a Metallic Alloy

A surface treatment for metal alloys that prevents oxidation at high temperatures.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov

www.netl.doe.gov

Advanced Materials, Biotech, Chemical, Life Science, Nanotech, Pharmaceutical - Imaging probes for cancer and heart disease

Bradykinin B1 Receptor binding imaging probes/tracers for cancer/heart disease.

British Columbia Cancer Agency - Dr Patrick Rebstein - 604.675.8000 ex 7718

prebstein@bccancer.bc.ca

Advanced Materials/ Chemicals - Method for Synthesizing Smart Materials Capable of Programmed Shape Change (2010-007)

Patent-pending nanoparticles with a range of applications including phase-change triggered drug delivery, morphology-controlled pharmacokinetics, phase-change activated MRI contrast agents, and biotemplating of materials for nanoelectronics.

UCSD TTO - Skip Cynar – 858.822.2672 - scynar@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/20952.html>

Biotech - A New Bacterial Metastructure and Methods of Use (2010-138)

The invention integrates multiple genome-scale measurements on the basis of genetic information flow to identify the organizational elements and map them onto the genome sequence.

UCSD TTO - Bill Decker – 858.822.5128 - wjdecker@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/20553.html>

Biotech - Automated Maze for Behavioral Assessment in Rodents (2011-367)

Automated manual T-maze behavioral test increases efficiency and facilitates screening of neuro-active compounds in drug discovery. Computer software records data, controls automatic doors and sensors.

UCSD TTO - Don Kakuda – 858.534.7546 - dkakuda@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/22204.html>

Biotech - Biomarker for Non-Alcoholic Fatty Liver Disease (2012-326)

Proteins identified as potential blood biomarkers (and therapeutic targets) for NASH, a severe form of liver disease, assessed in two mouse models and in vitro

UCSD TTO - Don Kakuda – 858.534.7546 - dkakuda@ucsd.edu - <http://invent.ucsd.edu>

Biotech - Biomarkers for obesity associated disease including diabetes (2012-325)

Protein biomarkers in blood for diagnosing obesity associated disease including pre-diabetes and diabetes by assessing adipocyte health.

UCSD TTO - Don Kakuda – 858.534.7546 - dkakuda@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/22884.html>

Biotech - EUCACHIP: Genomic selection tool for second generation biofuels industry.

SNP discovery as a predictive tool for tree genetic improvement to select (eucalyptus/tree) genotypes for second generation biofuels production.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Biotech - Novel Peptide Therapeutic for Treating Hypertension (2011-388)

Novel retro-inversion antihypertensive peptide with enhanced potency and stability compared to wild-type with efficacy in two animal models of human hypertension

UCSD TTO - Don Kakuda – 858.534.7546 - dkakuda@ucsd.edu - <http://invent.ucsd.edu>

Biotech - Platform Strains for Metabolic Engineering of Bioactive Compounds (2011-034)

A deletion mutant of a bacterium intended to facilitate the design and creation of new compounds with anti-bacterial, anti-fungal, anti-cancer, or other bioactive properties.

UCSD TTO - Bill Decker – 858.822.5128 - wjdecker@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/21245.html>

Biotech - Probiotic functional food for treating the side effects in patients undergoing chemotherapy and radiotherapy.

Probiotic functional food that favors weight increase and counteracts side effects (mucositis, mouth dryness and lesions in digestive tract) in patients undergoing chemotherapy and radiotherapy.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Biotech - Reversible Chemoenzymatic Protein Labeling (2013-030)

A mild and reversible method to remove and exchange covalently linked probes and labels from proteins.

UCSD TTO - Eric Gosink – 858.822.1858 - egosink@ucd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/23288.html>

Biotech - Spike-Ins: A System for Next-Generation Sequencing Sample Tracking and Cross-Contamination Control

A Cost effective and efficient method for sample identification and cross- contamination monitoring.

Track Next-Generation Sequencing samples from acquisition to sequence analysis.

British Columbia Cancer Agency - Dr Patrick Rebstein - 604.675.8000 ex 7718

prebstein@bccancer.bc.ca

Biotech - System for drug screening by detecting rhythmic head movements in mice (2012-148)

User-friendly, objective device capable of automation for assessing the Head Twitch Response (HTR) in rodents, suitable for screening drugs to treat schizophrenia, depression and insomnia.

UCSD TTO - Don Kakuda – 858.534.7546 - dkakuda@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/22993.html>

Biotech, Pharmaceutical - Small molecules for targeting epigenetic dysregulation for cancer treatment

Small molecules directed against novel targets for targeting epigenetic dysregulation for cancer treatment.

British Columbia Cancer Agency - Dr Patrick Rebstein - 604.675.8000 ex 7718

prebstein@bccancer.bc.ca

Biotech, Pharmaceutical - Small molecules for treating influenza

Small molecules for treating influenza.

British Columbia Cancer Agency - Dr Patrick Rebstein – 604.675.8000 ex 7718

prebstein@bccancer.bc.ca

Biotech/Life Science/Medical Device - A Novel Method for the Early Detection of Gastric and Pancreatic Cancer (2010-331)

Using ingestible polymer-coated nano/micro-particles that are capable of binding and protecting DNA to obtain pancreatic cancer DNA in vivo for in vitro analysis.

UCSD TTO - Wendy Shih – 858.822.2595 - wendyshih@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/21840.html>

Biotech/Life Science/Pharma - Novel Gamma-Secretase Modulators for the Treatment of Alzheimer's Disease (2010-246)

Compositions of a new class of soluble Gamma Secretase Modulators exhibiting improved pharmacokinetic and pharmacodynamic properties and enhanced aqueous solubilities to treat Alzheimers Disease.

UCSD TTO - Denise Lew – 858.822.5279 - dlew@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/21149.html>

Biotech/Life Science/Pharma - RNA-based therapy for hypertension and the metabolic syndrome

Antagomir for treating hypertension

UCSD TTO - Denise Lew – 858.822.5279 - dlew@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/21660.html>

BioTech/NanoTech - Paramagnetic Nanoparticles

Magnetic nanoparticles used for DNA/RNA extraction, protein extraction, bio-pharma manufacturing
Colloidal Gen, Inc. - Joseph Hayden – 520.275.7876 - josephchayden@msn.com

Biotechnology - Tools for Life Science Research - DNA Synthesis

A next generation enzymatically based DNA synthesis technology will accelerate the pace of synthetic biology experimentation one thousand fold over the current 30 year old technology.

Molecular Assembly - Curt Becker - 619.316.4662 - curt@molecularassemblies.com

www.molecularassemblies.com

Chemical - Distributed Optical Sensor for CO2 Leak Detection

A device that makes measurements of elemental content and chemical composition in gases, liquids, and on solids, and possible CO2 leaks within the environments of interest.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov

www.netl.doe.gov

Chemical - Obtention of polyphenols from radiata pine bark.

Selective extraction process of phenolic compounds from pine bark with organic solvents. This technology is oriented to the manufacture of resins for use in boards.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Chemical - Process for obtaining tall oil from a sodium sesquisulfate solution.

Process for replacing sulphuric acid in a tall oil plant with a sodium sesquisulphate solution, obtaining tall oil suitable for use as a fuel.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Chemical - Spheroid-Encapsulated Ionic Liquids for Gas Separation

A method to encapsulate ionic liquids (ILs), taking advantage of the gas-absorbing properties and cost-effectiveness of ILs, while circumventing known IL viscosity issues.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov

www.netl.doe.gov

Chemical - Visible Light Photoreduction of CO2 Using Heterostructured Catalysts

A photocatalyst that uses sunlight to transform CO2 into chemicals sold in the industrial petrochemical industry, such as methanol and methane, in a carbon friendly manner.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Chemical - Method Of Synthesizing Tetrazines (2012-252)

A simple and highly efficient catalytic method to synthesize nitrogen-rich tetrazines which are valuable intermediates with biochemical and material science applications.

UCSD TTO - Eric Gosink – 858.822.1858 - egosink@ucd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/22813.html>

Chemical, Medical Device, Nanotech, Security - Raman Spectroscopy Device for Gas Sample Analysis

A new high sensitivity design Raman Spectroscopy Device for gas sample analysis.

British Columbia Cancer Agency - Dr Patrick Rebstein – 604.675.8000 ex 7718
prebstein@bccancer.bc.ca

Communication - Fast and Secure Cryptography for All Environments

The cutting edge and advanced cryptography that is 10 times faster than AES, stronger than Diffie-Hellman and usable in mobile devices.

Tokyo University of Science - Tamotsu Niki - +81 3.5876.1534 - niki_tamotsu@admin.tus.ac.jp
<http://www.tus.ac.jp/en/>

Communications - Active RFID tag

Transceiver device capable of uniquely identifying a person or object at a range of tens of metres.

reelyActive - Jeffrey Dungen – 514.264.6924 - info@reelyactive.com - reelyactive.com

Communications - Ambrose Diaphonic Ear Lens - Earbud

Device converts earbud sound to energy to power a pump and inflate a bubble in the ear. Comfortably couples a high fidelity sound to ear.

Asius Technologies - Steve Lebischak – 722.409.8807 - steve.lebischak@asiustechnologies.com
www.asiustechnologies.com

Communications - Completely wireless 4G/Wi-fi base station without a power chord or backhaul communication cable

solar powered base station solar cells with free space laser backhaul for both cellular and wifi. The base station can be installed to use in 30 seconds. US patent application 13/457,852 achieved allowable subject matter, European patent application 1116

Suinno Oy - Mikko Väänänen - phone +35.840.822.7704 - mikko.vaananen@suinno.com
www.suinno.com

Communications - Efficient Architectures for Polar Codes

Novel hardware architectures for practical implementation of high throughput, low complexity and small area implementation of Polar Codes

McGill University - Derrick Wong – 514.398.5858 - derrick.wong@mcgill.ca - www.mcgill.ca

Communications - Reel

Protocol for the bidirectional transmission of serial data and transfer of power over distances of up to hundreds of metres using standard Cat5e cables.

reelyActive - Jeffrey Dungen – 514.264.6924 - info@reelyactive.com - reelyactive.com

Communications - Reelceiver

Transceiver device capable of identifying and locating nearby devices of a given wireless standard. Interconnectable to support multiple standards or increase coverage and/or location resolution.

reelyActive - Jeffrey Dungen – 514.264.6924 - info@reelyactive.com - reelyactive.com

Communications - Roaming management

The 3GPP compliant roaming management solution. +400million cellular subscribers licensed.

EP0885532B1, US6345089

Suinno Oy - Mikko Väänänen - phone +35.840.822.7704 - mikko.vaananen@suinno.com

www.suinno.com

Communications - Ultra-High Rates in Multi-Antenna Data Transmission Systems

A multi-dimensional signal detection technique that allows scalable, low-complexity and high rate retrieval of information from multi-antenna signals without a computational barrier.

McGill University - Derrick Wong – 514.398.5858 - derrick.wong@mcgill.ca - www.mcgill.ca

Communications - weather resistant free space laserlink solving the last mile problem

Wireless laserlink replacing optical fiber in any weather. Solves the last mile problem. EP2107701 and EP1476968 and US 10/504,418 application.

Suinno Oy - Mikko Väänänen - phone +358408227704 - mikko.vaananen@suinno.com

www.suinno.com

Communications/Security - Inspirus PKM

Novel camera/laser aiming device intended to replace gimbal-based systems. Fast, accurate, reliable. Applications in small unmanned vehicles, laser scanning, free space optical communications.

Investment opportunity.

Memorial University - Genesis Group Inc. - Brian Terry - 709.864.2674 - bterry@genesis.mun.ca

www.genesis.mun.ca

Diagnostic / CNS - Longitudinal Registration of Anatomy (2008-059)

Fast, robust MRI-based method for accurately quantifying cerebral structural changes as a diagnostic for mild cognitive impairment or AD

UCSD TTO - Grai Andreason – 858.822.5138 - gandreason@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/19737.html>

Energy - Ambrise Diaphonic Pump

Device harvests energy from sound. Noise can be converted to energy sound can perform useful work.

Asius Technologies - Steve Lebischak – 721.409.8807 - steve.lebischak@asiustechnologies.com

www.asiustechnologies.com

Energy - Capacitance Probe for Detection of Anomalies in Nonmetallic Plastic Pipe

Probe that offers the only known technique to identify flaws and defects in nonmetallic or plastic pipelines installed prior to the mid-1980s.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Carbon Dioxide Capture Process with Regenerable Sorbents

A dry scrubbing or chemical absorption/adsorption process, in conjunction with a sorbent, that removes carbon dioxide from a gas stream.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Energy Storage

Corvus' innovative energy storage module allows very high Voltage energy storage and extreme discharge rates in large capacity arrays. This is achieved through a proprietary and patented BMS, a patented internal structure, and patented thermal management

Corvus Energy - Silvie Votrubova or Grant Brown - 604.227.1935 or 604.227-0283 - svotrubova@corvus-energy.com
gbrown@corvus-energy.com - <http://corvus-energy.com>

Energy - High Temperature Optical Gas Sensing

Harsh environment gas sensors for energy applications such as gas composition in gasification, oxy-fuel combustion, natural

gas processing, fuel cells, gas turbines, etc.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Improved Martensitic Steel for High Temperature Applications

A stainless steel composition and heat treatment process for a high-temperature alloy exhibiting improved creep strength and oxidation resistance at temperatures up to 650 °C.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Laser spark plug ignition system

An alternative to spark plugs in reciprocating engines that can eliminate spark plug electrode erosion and associated maintenance, improve efficiencies, and lower Nox emission.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Maximizing Drilling Efficiency

Method to reduce the cost and improve the efficiency and safety of drilling through rock

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - MOMECCA- Moist Membranes for the Cultivation and Collection of Algae

This technology uses porous inert membranes for the cultivation and harvesting of algae for bio-fuels. Elimination of the harvesting de-watering step is critical to profitability.

Northern Arizona University - Timothy L. Vail – 928.523.5311 - Timothy.Vail@nau.edu
<http://www.nau.edu/nauinnovations>

Energy - Optibar

Intercell bar that allows a controlled current flow in processes of electrorefining and electroextraction of metals, reducing electricity consumption and CO2 emissions.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Energy - Pyrochlore-Based Catalysts for Syngas-Derived Alcohol Synthesis

A catalyst that improves the conversion of syngas from natural gas, coal, or biomass.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Rapid Gas Hydrate Formation Process

Method to form gas hydrates, making the use of gas hydrates a favorable option for natural gas storage and transportation.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - The BIAS (Basic Immobilized Amine Sorbent) Process

A process for the energy efficient and economical removal of carbon dioxide (CO2) from flue gas streams produced by fossil fuel combustion.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Thief Process for the Removal of Mercury from Flue Gas

Removes mercury from a power plant flue gas stream in a cheaper yet still effective way as current methods for mercury removal.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Transpiration Purging Access Probe for Particulate Laden or Hazardous Environments

An optical probe device that allows for continued monitoring of the inside of an industrial vessel subject to dirty, hazardous, or combustion environments.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov
www.netl.doe.gov

Energy - Wood torrefaction and pelletizing.

Biomass densification process based on torrefaction and pelletizing that improves the calorific value (20% higher), reduces the moisture content and provides hydrophobic properties.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Laboratory Instrumentation - Humidity Control with Unprecedented Precision (2012-382)

Method for achieving accurate and continuous control of the relative humidity environment of a sample in a chamber used for scientific studies, e.g. x-ray diffraction, imaging, etc). Accuracy is 10-100X better than current methodology.

UCSD TTO - Skip Cynar – 858.822.2672 - scynar@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/22597.html>

Lasers - Telecommunications - Thresholdless nanoscale coaxial lasers (2012-351)

Small telecom nanolaser demonstrating true thresholdless lasing from a broadband gain medium. Range of optical applications from on-chip optical communication to imaging, spectroscopy, sensing, and lithography.

UCSD TTO - Skip Cynar – 858.822.2672 - scynar@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/20000.html>

Life Science - Accuprost: blood based prostate cancer screening test.

A blood based tests that, in conjunction with PSA testing, can determine whether a biopsy or further intervention is required in men at risk for prostate cancer.

British Columbia Cancer Agency - Dr Patrick Rebstein – 604.675.8000 ex 7718
prebstein@bccancer.bc.ca -

Life Science - Biomarker panel for evaluating metastatic risk of tumors

enables a determination of the risk that a tumor is at high risk for becoming metastatic or requiring aggressive treatment.

British Columbia Cancer Agency - Dr Patrick Rebstein – 604.675.8000 ex 7718
prebstein@bccancer.bc.ca -

Life Science - Crosslinking Strategy for Catheter Delivery of Injectable Hydrogels

New approach for making hydrogels suitable for use with catheters. This approach uses Oxime chemistry for in situ crosslinking of materials under mild conditions.

UCSD TTO - Rose Murphy – 858.534.7125 - rmmurphy@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/23281.html>

Life Science - Dual reflectance-fluorescence guided surgical system.

Surgical imaging system that offers simultaneous viewing of reflected and fluorescent images, with complete channel separation and minimal time lags.

UCSD TTO - Rose Murphy – 858.534.7125 - rmmurphy@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/23523.html>

Life Science - Hippo Pathway Components for Disease Treatment (2012-296)

Hippo dysregulation contributes to tumorigenesis. Extracellular diffusible signals that modulate Hippo activity are identified and establishes Hippo as an important downstream signalling branch of GPCRs.

UCSD TTO - Rose Murphy – 858.534.7125 - rmmurphy@ucsd.edu - <http://invent.ucsd.edu>

Life Science - Improved Labeling of Nerves

A fast, targeted approach to fluorescent nerve labeling that is specific for neuronal tissue, eliminates dye accumulation in adjacent structures, and provides visualization within a short time frame.

UCSD TTO - Rose Murphy – 858.534.7125 - rmmurphy@ucsd.edu
<http://invent.ucsd.edu/technology/cases/2009/SD2009-220b.shtml>

Life Science - Nanoparticle For Target Delivery Of siRNA

A new non-viral drug delivery system using customizable nanoparticles to target specific cells/tissues for applications such as cancer therapy.

McGill University - Olivia Novac – 514.398.5887 - olivia.novac@mcgill.ca - www.mcgill.ca

Life Science - New HIV Target (2010-092)

Prevents the final formation of new viiral particles within the cell; novel drugs may be developed that target viral proteins not previously exploited.

UCSD TTO - Rose Murphy – 858.534.7125 - rmmurphy@ucsd.edu - <http://invent.ucsd.edu>

Life Science - Rapid Malaria Detection

An automated system for detecting malaria infection with rapid sampling time, simplicity, low cost and increased sensitivity.

McGill University - Derrick Wong – 514.398.5858 - derrick.wong@mcgill.ca - www.mcgill.ca

Life Science - SeeTCL cutaneous T-cell lymphoma diagnostic

Biomarker for diagnosis of cutaneous T-cell lymphoma.

British Columbia Cancer Agency - Dr Patrick Rebstein – 604.675.8000 ex 7718
prebstein@bccancer.bc.ca

Life Science - Self Healing Gels (2010-092)

Smart, self-healing hydrogels with far-reaching applications including medial sutures, targeted drug delivery, industrial sealants and self-healing plastics.

UCSD TTO - Rose Murphy – 858.534.7125 - rmmurphy@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/22743.html>

Life Science - Therapeutic Viral Microparticles for Promoting Stent Biofunctionality and Wound Healing

Viral microparticles comprising genetically-engineered baculovirus embedded in a polymeric matrix for the local delivery of therapeutic molecules with or without using medical implants.

McGill University - Olivia Novac – 514.398.5887 - olivia.novac@mcgill.ca - www.mcgill.ca

Life Science - Use of Catestatin to Mobilize Fat from Adipose Tissue by Regulating Adrenergic and Leptin Signaling (2012-314)

The anti-hypertensive peptide, Catestatin (CST), is derived from endogenous Chromogranin A proprotein. Catestatin reduces adipose tissue weight by stimulating lipolysis and disposing of the released fatty acids by oxidation in both liver and adipose tissue

UCSD TTO - Dominic Montisano – 858.822.3833 - dfmontisano@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/22551.html>

Life Science - Use of Pleiotrophin for Epithelial Tissue Repair, Regeneration and Bioengineering (2001-205)

Method of propagating ureteric bud (UB) cells in culture under conditions that induce the UB to undergo branching morphogenesis in order to generate a population of UB comprising tubular branches, subdividing and the UB population.

UCSD TTO - Dominic Montisano – 858.822.3833 - dfmontisano@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/19692.html>

Life Science, Software - Lung Nodule Malignancy Risk Calculator

Lung Nodule Malignancy Risk Calculator on first CT Screening enables evaluation of the significance of any detected nodules.

British Columbia Cancer Agency - Dr Patrick Rebstein – 604.675.8000 ex 7718
prebstein@bccancer.bc.ca

Life Science/software - Fast, Iterative Image Reconstruction for CT, CBCT, DTS, PET, SPECT, and MRI (2011-254)

Reduces the radiation exposure for the patients while achieving equivalent image quality, applicable to routine clinical use in medicine, dentistry, radiology, and radiation oncology.

UCSD TTO - Wendy Shih – 858.822.2595 - wendyshih@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/22226.html>

Life Science/Software - Low Energy Wireless Body-Area Networks for Remote Telemonitoring of Physiological Signals Such as Fetal ECG and EEG (2012-327)

Compressed telemonitoring algorithm to reconstruct both sparse and non-sparse signals, and advance the design of inexpensive wireless devices to tele-monitor physiological signals with ultra-low energy consumption.

UCSD TTO - Skip Cynar – 858.822.2672 - scynar@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/22688.html>

Life Sciences - Biocidal screening process using reverse genomics identifies and isolates novel genes for new antimicrobial peptides and proteins.

US Patent application 20060068397 Sept 24, 2004, High throughput screening method for identifying molecules having biocidal function involves use of proprietary viability staining assay.

Proteins Easy Corp. and Vitagen LLC (Urbana-Champaign, Ill.) - Dr. Illimar Altosaar, CEO – 858.922.4916 cell, 858.784.1000 43116 lab/voicemail - ProteinsEasy@gmail.com

www.med.uottawa.ca/bmi/eng/altosaar.html

Manufacturing - Computationally Optimized Homogenization Heat Treatment of Metal Alloys

A approach to optimize the homogenization heat treatment of metal alloys in an efficient, cost-effective manner. Conventional homogenization processes require much experimentation.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov

www.netl.doe.gov

Manufacturing - Control of Slag Chemistry for the Reduction of Viscosity and Refractory Corrosion

A method to minimize refractory brick corrosion caused by carbon feedstocks containing petcoke

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov

www.netl.doe.gov

Manufacturing Innovation - Process for the removal of arsenic, antimony and bismuth content in copper smelter dusts.

Pyrometallurgical process which allows the removal of arsenic, antimony and bismuth present in the dust generated in the smelting and converting stages of copper concentrate.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otluddec.cl

Manufacturing Innovation - Remote Milk Vat Monitoring

Innovation Patent Application No. 2011101433 Improved Logistics

Samaran International Pty Ltd - Neil Dunbar - 61 411.04.0032 - neil@samaran.com.au

www.samaran.com.au

Manufacturing Innovation - Reproduction of images with a high level of spectral or colorimetric quality.

Method for determining spectral characteristics of optical channels and number of optical channels necessary for optimal colorimetric or spectral characterization/reproduction, in any spectral band.
Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Manufacturing Innovation - Sedirack

Instrument for determining initial speed of sedimentation at various concentrations, providing the solid flux density function and unit area of a thickener in real time.
Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Manufacturing Innovation - Trade Waste Maintenance Tracking System

Innovation Patent Application No. 2011101434 A Data Collection System
Samaran International Pty Ltd - Neil Dunbar - 61 411.04.0032 - neil@samaran.com.au
www.samaran.com.au

Manufacturing Innovation - Vision based navigation

Seegrid has been issued or allowed 26 patents in 6 different jurisdictions and has an additional 32 applied for or in process. Much of the IP is protected by trade secret law, copyrights and confidentiality agreements.
Seegrid - Mitchell Weiss – 412.379.4500 x511 - mweiss@seegrid.com - www.seegrid.com

Medical Device - Acoustically Triggered Nano/Microscale Propulsion Devices (2012-202)

Ultrasound-triggered micro projectiles have the propulsive power to penetrate tissue and cellular barriers. Applications include drug delivery, immune response stimulation, artery cleaning and tissue sampling.
UCSD TTO - Victoria Cajipe – 858.822.2304 - vcajipe@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/22680.html>

Medical Device - Ambrose Diaphonic Ear Lens - Hearing Aid

Device converts hearing aid sound to energy to power a pump and inflate a bubble in the ear. Comfortably couples high fidelity sound to ear.
Asius Technologies - Steve Lebischak – 720.409.8807 - steve.lebischak@asiustechnologies.com
www.asiustechnologies.com

Medical Device - CAVUS

Medical ultrasound image processing system for automated measurement of critical care parameters. Imagery is transmitted ultrasound to tablet and processed to compute measurements in real-time.
Memorial University - Genesis Group Inc. - Brian Terry - 709.864.2674 - bterry@genesis.mun.ca
www.genesis.mun.ca

Medical Device - Device for assessing peripheral neuropathy - diabetes (2013-304)

Handheld, non-invasive, simple and accurate quantifiable device for assessing peripheral neuropathy associated with diabetes by measuring an applied force to a patient's skin.
UCSD TTO - Don Kakuda – 858.534.7546 - dkakuda@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/23408.html>

Medical Device - Heart Arrhythmia Prediction (2012-140)

Predictive software utilizing EKG signals to identify the onset of heart arrhythmia minutes before physical symptoms. Advance detection allows mitigating steps and improved outcomes.

UCSD TTO - Dave Gibbons – 858.534.0175 - dgibbons@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/22682.html>

Medical Device - High Speed Particle Image Velocimetry

Simultaneously tracks

the motion of high numbers of object images under extreme, high concentration conditions. Applications: chemical processing, energy conversion, pharmaceutical processing, and biomedical applications.

National Energy Technology Laboratory - Katie Klos – 541.918.4423 - kathryn.klos@contr.netl.doe.gov

www.netl.doe.gov

Medical Device - Microarray for High Throughput Detection of Enzymatic Activities (2007-252)

A microarray to detect proteolytic activity in clinical samples for in-home use on a broad variety of auto-digestive processes in human diseases.

UCSD TTO - Dominic Montisano – 858.822.3833 - dfmontisano@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/19804.html>

Medical Device - Novel Biomaterial for Tissue Engineering, Repair and Regeneration

A hydrogel biomaterial, based on naturally-derived collagen and polypeptide particles from silk fibers, for use in bone regeneration and grafts.

McGill University - Mark Weber – 514.398.8949 - mark.weber2@mcgill.ca - www.mcgill.ca

Medical Device - Smart Conserver for Oxygen Therapy (2010-344)

Adaptive Oxygen conserver for COPD patients utilizing novel feedback to modulate O2 supply on a breath-by-breath basis, enabling greater patient mobility and quality of life.

UCSD TTO - Dave Gibbons – 858.534.0175 - dgibbons@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/21030.html>

Medical Device - Wirelessly Powered and Controlled Electrical Signal Generator for Lab-on-a-Chip Devices (2011-085 and 2011-113)

Lab-on-a-chip devices operate with wireless power and signal generation and control, simplifying their use in point-of-care settings while offering additional functionalities.

UCSD TTO - Victoria Cajipe – 858.822.2304 - vcajipe@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/21902.html>

Medical Device/Drug Delivery - Chemically Amplified Response Strategies for Medical Sciences

New light-sensitive degradable polymer containing a quinone-methide, self-immolative moiety, can be triggered to degrade through multiple light-sensitive groups; nanoparticles formulated from this polymer are capable of releasing their molecule payload up

UCSD TTO - Victoria Cajipe – 858.822.2304 - vcajipe@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/19815.html>

Medical Diagnostic/Nanobio - Methods of Using Porous Silicon Nano/Micro-Particles for Time-Gated Fluorescence Imaging (2011-306)

Time gating the emission of porous silicon nanoparticles (pSiNP) enable higher fidelity imaging by eliminating background signals; pSiNP quickly degrade into renally cleared components and can also carry drugs, smaller nanoparticles, fluorescence sensiti

UCSD TTO - Victoria Cajipe – 858.822.2304 - vcajipe@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/22212.html>

Medical Imaging - MR Imaging of Bone and Musculoskeletal Tissues Via Multi-Component Analysis (2010-352)

Proprietary algorithms, methods, and software give clinicians a non-invasive, quantitative tool for the direct measurement of the health of bones and joints

UCSD TTO - Grai Andreason – 858.822.5138 - gandreason@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/20984.html>

Nanotech - Method of forming stable functionalized nanoparticles

A facile, efficient and novel one-step process for the formation of stable, functionalized nanoparticles. Any material of interest may be used.

ADVANO - Alexander Girau - 5042027558 - alexander.girau@advanotech.com - www.advanotech.com

Other - ARC

Electroacoustic musical instrument for composers/performers, DJs and hobbyists. Highly-intuitive tactile performance interface. Patented design. Investment opportunity.

Arc Instruments Inc. - Scott Stevenson - 709.746.4060 - scottsetevenson88@gmail.com
www.arcinstruments.ca

Pharmaceutical - Firmocidin, A New Small-Molecule Antibiotic to Treat MRSA, Staph, and Streptococcus Infections (2011-030)

Firmocidin, a new small molecule isolated from bacteria, suppresses growth of methicillin-resistant S. aureus, group A Streptococcus, group B Streptococcus and Staphylococcus aureus (S. aureus).

UCSD TTO - Denise Lew – 858.822.5279 - dlew@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/21439.html>

Pharmaceutical - Method for identification of protein structures in membranes associated to neurodegenerative diseases.

Electrophysiology technique which allows evaluating potential pharmacologic capacities of candidate molecules to prevent/treat/cure neurodegenerative diseases and neurotoxic capacity of protein structures which cause them.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Pharmaceutical - OHDEL Nanoparticles for Cancer Therapy

OHDEL(TM) nanoparticles for therapeutic delivery of nucleic acid, including antisense/siRNA/miR/anti-miR; designed for systemic administration in the clinic.

The Ohio State University - Robert Lee – 614.292.4172 - lee.1339@osu.edu
http://pharmacy.osu.edu/facstaff/facstaff_directory/profile.cfm?osu=lee.1339

Pharmaceutical - Pharmscan Transporter

Technical platform for accelerating drug discovery and design against therapeutic target applied to protein transporters involved in high impact human diseases.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Pharmaceutical - Potent Peptide Adjuvant for Vaccines and Immunotherapies (2011-014)

A peptide adjuvant acting directly on myeloid dendritic cells to potentiate both cellular and humoral immune responses to protein antigen in vivo.

UCSD TTO - Wendy Shih - 858-822-2595 - wendyshih@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/21443.html>

Pharmaceutical - Process for producing human biologic protein drug, recombinant Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) cytokine in bulk for leukemia and surgery applications.

US Patent 7,214,862 issued May 8, 2007 "Production of GM-CSF (Human Granulocyte Macrophage-Colony Stimulating Factor) in Plants" functionalized rice flour for marrow transplants, flesh sutures.

Proteins Easy Corp. - Dr. Illimar Altosaar, CEO - Cell:858.922.4916 Lab/voicemail: 858.784.1000 x 43116

ProteinsEasy@gmail.com - www.med.uottawa.ca/bmi/eng/altosaar.html

Pharmaceutical - Sedative pharmaceutical formulation based on a neurosteroid and a derivative phenothiazine for use in mammals.

Sedative veterinary pharmaceutical formulation based on a neurosteroid that potentiates phenothiazine derivative allowing a safer handling of patients at high risk or with cardiovascular problems.

Universidad de Concepción - Sandra Araya - (56) 41.220.4509 - sarayat@udec.cl - www.otludec.cl

Pharmaceutical - Small molecule therapeutics for treating hypertension (2012-400)

Small molecules potentially treating hypertension based on a 3D pharmacophore hypothesis that mimics action of catestatin using the NMR structure and amino acid scanning mutagenesis.

UCSD TTO - Don Kakuda - 858.534.7546 - dkakuda@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/23427.html>

Pharmaceutical - Therapeutic Approach Targeting Malignant Reprogramming in CML Stem Cells (2012-037)

Modulation of RNA-editing is used to prevent or treat CML by targeting the cancer stem cell

UCSD TTO - Grai Andreason - 858.822.5138 - gandreason@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/22540.html>

Pharmaceutical / Cancer - Isolation, biological activity and synthesis of cyanobacterial-derived proteasome inhibitors (2011-354)

NCEs derived from marine natural products and methods of use for cancer therapeutics

UCSD TTO - Grai Andreason - 858.822.5138 - gandreason@ucsd.edu

<http://invent.ucsd.edu/technology/cases/2011/SD2011-354.shtml>

Pharmaceutical / Dermatology - New Anti-inflammatory and quorum sensing inhibition compounds from a marine cyanobacteria (2010-329)

First-in-class NCEs validated in vivo for dermatologic indications

UCSD TTO - Grai Andreason - 858.822.5138 - gandreason@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/21372.html>

Pharmaceutical/ Gastrointestinal or Inflammation - A method to treat sporadic colon cancer (2011-183)

Activation of TRPV1 in intestinal epithelial cells inhibits proliferation, migration and tumor formation
UCSD TTO - Grai Andreason – 858.822.5138 - gandreason@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/21359.html>

Security - Detecting pathogens by peptide fingerprinting and mass spectrometry proteomics

U.S. Provisional Patent Appl. No. 61/552,258, Methods and Compositions for Detecting Plant Exposure to Plant Pathogens. Inventor, I. Altosaar. Assigned to Intellectual Ventures, Vancouver, filed October 27, 2011, Patent Agent Dr. Rebecca Hays, Foley & Lar
Intellectual Ventures and University of Ottawa - Prof. Illimar Altosaar – 858.922.4916 cell, 858.784.1000 43116 lab/voicemail - altosaar@uOttawa.ca - www.med.uottawa.ca/bmi/eng/altosaar.html

Security - Functionalized flours as antidotes for biological weapons: Puroindolines as Fusion-Protein Carriers in Molecular Pharming, producing scFv antibodies with ease.

Canada Patent Application 2,555,137 Filed August 7, 2006 under examination. Puroindolines as Fusion-Protein Carriers in Molecular Pharming. Inventor: Illimar Altosaar. Bulk powders for biosecurity measures.

Proteins Easy Corp. - Dr. Illimar Altosaar, CEO – 858.922.4916 cell, 858.784.1000 43116 lab/voicemail
ProteinsEasy@gmail.com - www.med.uottawa.ca/bmi/eng/altosaar.html

Security - Method for Identifying Timing Channels in a Hardware Design

This technology presents a way for identifying security-vulnerable timing-based side channels in a hardware design. These side channels can violate integrity or confidentiality policies.
UCSD - David Gibbons - 858.534.5815 - dgibbons@ucsd.edu - <http://invent.ucsd.edu/>

Semiconductor - High power solar cell

A multijunction solar cell uses light entrapment into junctions to increase efficiency. Makes portable microelectronics grid independent. US8198530, EP Patent 2261996B1, and international counterparts
Suinno Oy - Mikko Väänänen - phone +358408227704 - mikko.vaananen@suinno.com
www.suinno.com

Semiconductors - Magnetic Cooling in Semiconductors

Our innovation permits direct refrigeration 'on-chip' for high-performance cryogenic electronic devices, such as quantum-based devices and detector arrays.
McGill University - Derrick Wong – 514.398.5858 - derrick.wong@mcgill.ca - www.mcgill.ca

Semiconductors - Novel Material For Non-volatile Phase Change Memory Devices

Current phase change memory devices are based on chalcogenide alloys; our patented technology proposes using a (Zr-Cu) alloy, an amorphous metal material for these devices.
McGill University - Derrick Wong – 514.398.5858 - derrick.wong@mcgill.ca - www.mcgill.ca

Semiconductors - Tunneling Transistor Based on III-V Compound Semiconductors (2006-163)

Patented very-low power transistor operated from a 0.3v or lower power supply without large leakage currents in the OFF state.
UCSD TTO - Skip Cynar – 858.822.2672 - scynar@ucsd.edu
<http://techtransfer.universityofcalifornia.edu/NCD/22947.html>

Sensors & Instrumentation - Wavelength Modulation Spectroscopy Based Optical Sensing (2006-255)

Patented wavelength modulation spectroscopy system to monitor gas media at ppm level (e.g. CH₄, H₂O, CO, CO₂, NH₃, small hydrocarbons).

UCSD TTO - Skip Cynar - 858-822-2672 - scynar@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/20585.html>

Software - Nonlinear Analog Quantum Computation (2013-253)

Patent-pending algorithm to locate a particular item within an unsorted pile of data and provide a quantum information-theoretic lower bound on the number of particles needed for this approximation.

UCSD TTO - Skip Cynar - 858.822.2672 - scynar@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/23526.html>

Software - CBlue

Curriculum Blueprinting System. Designed for professional, accredited schools (Medicine/Business/Pharmacy/Engineering) that require extensive mapping to professional competencies. Currently deployed at Memorial U. Medical School. Investment opportunity. Memorial University - Genesis Group Inc. - Brian Terry - 709.864.2674 - bterry@genesis.mun.ca
www.genesis.mun.ca

Software - injureFREE

Cloud-based athletic injury reporting system, allows for multiple users to access single report and update symptoms & treatments. HIPAA & FERPA compliant.

Agency for Student Health Research - Charlie Wund - 858.997.5045 - charlie@a4shr.com

injureFREE.com

Software - Location based search alert method and time sensitive search index

Mobile phone searches the internet in the pocket of the consumer and rings when the search result is close. US8527483 and continuations and counterparts.

Suinno Oy - Mikko Väänänen - phone +358408227704 - mikko.vaananen@suinno.com

www.suinno.com

Software - Log in to Life

Software capable of rendering an interactive webpage listing all of the identifiable people and objects in a space, including associated metadata.

reelyActive - Jeffrey Dungen - 514.264.6924 - info@reelyactive.com - reelyactive.com

Software - Method and Apparatus for Reducing Cabling Complexity in Large-Scale Networks (2009-133)

Patent-pending scalable switching infrastructure design for reducing cabling complexities in large networks. Minimize cable crossover and reduces cables by a factor of 500 and adds less than 300 nanoseconds of latency.

UCSD TTO - Skip Cynar - 858.822.2672 - scynar@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/19992.html>

Software - SILVIA

Patented Cross-Platform System for Conversationally Intelligent Applications
Cognitive Code - Mimi Chen - 855.521.0894 Ex. 3 - mimi@cognitivecode.com
<http://cognitivecode.com>

Software - Squee Editor

A 3D video game character editor that allows the user to customize an avatar like no other browser-based game.

SqueePlay - Pirate Epstein – 617.306.3514 - epepstein@gmail.com - <http://SqueePlay.com>

Software/Acoustics - Spatialization Algorithm Using Virtual Phantom Speakers - System and Method for Sound Generation (2007-028)

Patented method for the spatial processing of sounds, with an application to reproducing spatially-significant sounds within a concert hall without specialized speaker placement.

UCSD TTO - Skip Cynar – 858.822.2672 - scynar@ucsd.edu

<http://techtransfer.universityofcalifornia.edu/NCD/20000.html>

