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CONNECT@UCSD.EDU

# connect

THE WEEKLY NEWSLETTER OF UCSD CONNECT

## **S.D. CONFIRMED AS A HOTBED FOR VENTURE CAPITAL**

Yet another survey indicates that San Diego is a hotbed of venture capital investment. According to a survey by **Coopers & Lybrand**, venture capital investments in Southern California continue to show the strength of the current economic recovery. According to C&L's national survey of venture capital investments, \$114,395,000 was invested in 35 Southern California companies during the quarter ended September 30, 1995. Total funding for Southern California during the first nine months of 1995 was \$333,285,000, as compared to funding of \$218,000,000 for the entire year of 1994.

Southern California as a geographic area received the second highest amount of financing during the third quarter, trailing only Northern California. This is particularly encouraging because it demonstrates the confidence Venture Capital funds are placing in Southern California's ability to lead the market with innovative and exciting products and services. Also notable is that only 15% of the financing was from California-based venture capital firms.

The clear technology winner, however, is San Diego, as companies in this area raised \$46,139,000, almost the entire investment in high technology industries. Eleven companies were funded including **Desmos, Inc.; Medication Delivery Devices, Inc.; Expersoft;** and **Vista Medical Technologies**. Venture capital during the third quarter in San Diego was nearly double the amount received in the second quarter.

Areas surveyed included Illinois, Georgia, Metro New York, New England, Pennsylvania, Carolinas, Southern California and Northern California.

## **ADV. MFG. ENGINEERS AVAILABLE FOR INTERNSHIPS**

In today's global market, effective and efficient manufacturing design and processes are vital to a company's survival. **UC San Diego's School of Engineering** and **School of International Relations and Pacific Studies** offer a masters of science program in advanced manufacturing. During the program, students perform nine-month, full-time internships at companies. They also receive training in applying advanced technologies such as robotics, artificial intelligence and high-speed networks to manufacturing; and in management theories such as quality assurance, leadership and doing international business in a culturally sensitive manner. Students selected for the program are seasoned engineers with high technology experience.

Companies may take a student for a nine-month internship; or send one of their employees through the training. In the past, students have designed and implemented projects such as: automating specs to reconfigure the manufacturing floor for new products; creating an electronic library of product designs that can be accessed at individual workstations; and suggesting a proposal to reengineer a company's design process from customer request to product fulfillment.

For more information, call **Gary DeSpain**, industry relations representative for the UCSD Program in Advanced Manufacturing, at 534-7988.

## **DPC TEACHES ABOUT PUBLIC PRIVATE PARTNERSHIPS**

CONNECT members learned more about participating in public private partnerships with the San Diego Data Processing Corporation (DPC) at an informal meeting held last Friday. DPC was started in 1979 as a separate non-profit corporation by the city of San Diego in order to provide data processing and telecommunications services. Since then, its customer base has expanded to other cities, counties, and government agencies.

"DPC is seeking to do public-private partnerships in order to reduce the cost of government and provide more services," said T.J. Murray, director of marketing for DPC. "We can't compete with the private sector, but we can facilitate. We want input and dialogue in order to come up with solutions."

Epic Solutions and Science Applications International Corporation already are involved in ventures with DPC.

At the Friday meeting, participants saw demonstrations of several innovative DPC projects including SANNET, DPC's Internet access; the countywide geographical information system which is a client/server environment for state of the art mapping technology; computer aided design and drafting capabilities; and the 3-D multimedia visualization model of the San Diego Convention Center which was produced for the Republican National Committee.

If you are interested in learning more about DPC, you can contact T.J. Murray at 533-5920.

## ANNOUNCEMENTS...

The Computer and Electronics Marketing Association is hosting "Electronic Commerce on the Internet," featuring one of the leaders in the development of the commerce on the Internet, Beverly Parenti, Managing Director of Consumer Marketing for First Virtual Holdings. First Virtual has developed a safe and convenient system of payment for goods and services on the Internet; a payment system created to enable safe global electronic commerce by anyone with access to the Internet. If you believe the Internet might play a role in the future of your business, do not want to miss this informative talk. Make your reservation via e-mail or by phone for the **December 13 CEMA Breakfast**, at the La Jolla Marriott from 7:00 a.m. to 9:00 a.m., to **Bruce W. Gresham**, Events On Line at (619) 481-8553, <http://www.eventsonline.com>.

**UC San Diego School of Engineering** graduate students will display their latest research and industry affiliates will present technical exhibits during a poster session at the school's Annual Research Review, Friday, **February 9, 1996**, at the UCSD Price Center Ballroom. There is no charge for this event, but reservations are requested. For further information call **Kelly Briggs** at (619) 534-2776, email to [kbriggs@soe.ucsd.edu](mailto:kbriggs@soe.ucsd.edu); or register through the www at <http://www-soe.ucsd.edu/>

The advisory committee of the 12th annual UCSD CONNECT Technology Financial Forum is now seeking applications for the **February 21 and 22, 1996**, conference at the Hotel Del Coronado. If you are in the process of or are considering raising capital for your company, we strongly encourage you to submit an application so that your company may be considered to present at next year's Forum. The Forum's goal is to provide Southern California-based companies with an opportunity to present their business plans and financing requirements to approximately 100 venture capitalists, investment bankers, and independent "angel" investors from across the country. Past attendees include virtually every major venture capital group in the U.S. that funds technology-based companies. The Forum is appropriate for non-publicly-traded companies at all stages of development. For further information, or if you are interested in receiving an application, please contact **Dr. Abigail Barrow** at (619) 534-6114, email [abarrow@ucsd.edu](mailto:abarrow@ucsd.edu). The deadline has been extended to December 15, 1995.

**Ambiocom** expects 250 senior level executives, lab managers, and researchers from the pharmaceutical industry, academic institutions, and biotech to attend the second annual conference, "From Genes to Drugs", at the Town and Country Hotel, **April 1-2, 1996**. If you are interested in exhibiting your

## FROM THE DIRECTOR

By William W. Otterson

THE FOLLOWING COMMENTARY IS THE OPINION OF THE WRITER, AND DOES NOT NECESSARILY REFLECT THE OPINION OF UCSD CONNECT AND/OR OUR SPONSORS AND MEMBERS.

### TECHNOLOGY AND THE GLOBAL ECONOMY

At Piatti's the other night, **Linden Blue, COO, GA Technologies** and I were talking about the SuperComputing convention here this week and its emphasis on ultra-high speed communications, via fiber optics, satellite, etc. On the one hand, satellites are permitting the export of both manufacturing and service jobs. For example, working on a recent IPO for an Indonesian telecom Initial Public Offering (the largest IPO ever done in Asia) Baker & McKenzie's **Clark Libenson** used his firm's capabilities all over the world. Clark says, "The sun never sets on a Baker & McKenzie office, and we passed the documentation around the globe, from Jakarta, to Hong Kong, to San Diego, to London and back to Jakarta - by satellite on the firm's secure BakerNet, using the expertise of the offices we needed, and essentially working on the case 24 hours a day!" The efficiencies to the client in time and expense were substantial. In the not-to-distant-future, all kinds of companies will use the Internet to send all kinds of professional and clerical work off-shore.

Depending about how you look at it, the expanding global economy is either a boon or a threat. It is estimated that by the year 2000, populations in the world's ten largest countries will reach almost 4 billion - 8 times the present population of the U.S. and the European Union combined! Consumers in these countries will want the same things you want, better houses, autos, telephones, appliances, better clothes, home computers, VCR's, etc. To satisfy this demand, their businesses will need cash registers, computers, office furniture, copying machines - all the things our businesses need. According to the New York Times, fully half of the new capital equipment investment in American companies today is in Information Technology products - America's strong suit. The same will soon be true around the world. So is the global economy a boon or a threat?

### ENTREPRENEURSHIP AND CONNECT

The award that Mary Walshok, Ph.D., Associate Vice-chancellor for Extended Studies and Public Service, and I received last week from **Pepperdine University** on behalf of CONNECT gave us an opportunity to explain the importance of entrepreneurship in the creation of new jobs and to the economy. George Pepperdine, founder of the school bearing his name, started Western Auto Supply just as automobiles opened up an opportunity for mobility never before enjoyed by man. He saw the need for spare parts for repairing cars, and he created the spare parts industry, creating hundreds of thousands of jobs concurrently.

The George Pepperdine Entrepreneurship Forum reflects its founders propensity for innovation and has attempted to capture his spirit in it's **Three Pillars Award** - his precepts for freedom: belief in God, belief in the U.S. Constitution, and belief in free enterprise. The school's motto, "Freely ye received, freely give," reflects his generosity upon achieving financial success.

As a co-founder of CONNECT, Dean Walshok listed five of her sententious maxims for CONNECT: Knowledge-based industries will be the economic drivers of the future; individual regions must be the basis of economic development; **readiness** is the watchword - you can't predict everything; successful entrepreneurship requires a team approach - not a John Wayne; and Universities are uniquely positioned to play the role of "honest brokers" - bringing both sides together.

### ENTREPRENEURSHIP AND JOBS

The audience was largely made up of Pepperdine grads with an interest and faith in entrepreneurship. We talked about the difference between starting a business to create jobs

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products and services, please contact **Richard Dana** at (619) 945-2321, Fax (619) 724-8171, email [mbcdana@connectnet.com](mailto:mbcdana@connectnet.com).

**William Johnson**, inventor of a sealing technology with unique clear plastic flexible film structures, is looking for a company interested in manufacturing his product for use by the food industry. The technology solves the problem of electrostatic build-up, and it may be a cost effective way of eliminating bags, pouches, trays, and pads. If you are interested in learning more, please contact Mr. Johnson at (408) 655-3969 or (800) 525-2428.

We are pleased to invite you to the December meeting of the **INTERNET SPECIAL INTEREST GROUP** of the **San Diego**

**Software Industry Council**, Tuesday **December 5, 1995**, 5:30 to 7:30 p.m. at the QUALCOMM Auditorium, 6455 Lusk Blvd., San Diego, Tel: 587-1121 (On highway 5 North exit Sorrento Valley Road). The program will consist of three parts: (1) Web Site Analysis - Making Sense Of All The Data; (2) The I/Pro System for Web Measurement; (3) Web measurement and a recent Internet demographic survey. For more information e-mail: [info@bienlogic.com](mailto:info@bienlogic.com); Web: <http://bienlogic.com/internet>. We ask for a \$5 donation per person to cover the expenses of organizing the meeting and using the auditorium.

## NEWS...

Shareholders of **Aramed Inc.** have agreed to be acquired by **Gensia Inc.** The consideration for each Aramed share is \$8 per share cash, 0.64 of a share of Gensia common stock and a contingent value right. Aramed, which becomes a wholly owned subsidiary of Gensia, was in business with Gensia conducting research and development. (SDDT, "Local Scene," 11/28/95)

**Audre Recognition Systems** says **Thomas Casey** is out as CEO. Casey's divorce litigation, which had threatened Audre with a liability of \$11 million, forced Audre to file for reorganization under Chapter 11 bankruptcy. Casey will focus his attention on **Audre Inc.**, the operating entity of Audre, and retain membership on Audre's board. (SDDT, "Local Scene," 11/27/95)

**Biomagnetic Technologies** says it will be granted a U.S. patent relating to design principles in its whole head biomagnetometer. The patented invention covers an approach to sensor geometry.

**Brooktree Corp.** has signed agreements with Taiwan Semiconductor Manufacturing Ltd. to provide Brooktree access to an additional supply of wafers through the year 2000. The payments totaling \$60 million will be used to expand the Taiwan firm's wafer fabrication facility, and will be refunded to Brooktree in the form of discounts on its future wafer purchases. (SDDT, "Local Scene," 11/28/95)

San Diego based **Kelco Inc.** has become part of parent Monsanto's new food ingredients company, called The NutraSweet Kelco Co. The new business entity will merge Kelco, NutraSweet and other phosphate-based food businesses. The new company will be headquartered in San Diego, and be led by current Kelco President **Peter Kovacs**. NutraSweet Kelco has more than 2,000 employees worldwide, 650 of whom are based in San Diego. (SDDT, "Local Scene," 12/5/95)

**Luce Forward Hamilton & Scripps** is now on line...address is [www.luce.com](http://www.luce.com)

**NovaDx International Inc.** issued a corporate update on its lead product, Chondrex™, an *in vitro* blood test to detect YKL-40, an arthritis-related glycoprotein from NovaDx's library of proprietary disease markers. According to the company, Chondrex is ready for manufacture approximately six months ahead of schedule and is seeking corporate partners for product manufacture and commercialization.

Price Manufacturing and Engineering, a

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## ATHENA PROVIDES "SELF DIRECTED" CAREER ADVICE

Athena, CONNECT's networking group for senior level women executives, was hosted by Mary Zoeller, Vice President, Marketing, at Proxima Corporation last week. Mary spoke to the group about Proxima's phenomenal growth and the new products which the company plans to introduce in the next year. Mary joined Proxima in 1990 when the company posted \$30.9 million in sales. For its most recent fiscal year ended March 31, 1995, sales were an impressive \$135 million. Proxima is a leading manufacturer of desktop projection products.

Carleen MacKay, Vice President, Right Associates provided the group with practical advice for managing your career. Specific advice on how to plan and prepare your self-directed career included considering alternatives; incorporating a success profile as a target; restructuring your current job for development; seeking a special assignment for exposure; formally continuing leadership learning; finding a mentor from the "A" Team; and creating a strong public image. Once a "self-direction" is established, Carleen also focussed on such issues as how to seek a board position with a noteworthy volunteer organization; the hiring and development of a leading-edge, "balanced" staff and how to remove marginal contributors; how you know "when to hold them and when to fold them"; how to develop strong and binding relationships with other women. She concluded with the advice to always remember that what lies behind us and what lies before us are tiny matters compared to what lies within us.

## S.D. TECHNOLOGY INCUBATOR OPENS ITS DOORS!

The San Diego Technology Incubator will host an *Open House and Grand Opening* on Friday, **December 8, 1995**, from 10:00 a.m. to 2:00 p.m. For further information call (619) 230-2080.

## EDITOR (CONTINUED)...

and starting one to create wealth. The former doesn't work. The latter won't work unless you create jobs also. The difference is the approach. The lesson: if you want someone to create jobs, aim at creating wealth. You'll most likely get the jobs as a byproduct. On the other hand, if creating wealth for yourself is your only aim, you'll likely not succeed, either. Successful leaders today create businesses because they think they have an innovative idea that needs to see the light of day. They are driven to succeed by this vision, not just by a desire to get rich.

And if they are successful, what do they do with the wealth? Like **Ted Greene**, **Ivor Royston** and **Howard Birndorf**, they most likely give some to charity in appreciation and then start more businesses. (Between them, these co-founders of Hybritech have started 15-20 more companies in San Diego.)

If you want jobs, encourage entrepreneurship.

## ENTREPRENEURSHIP AND TAXES

With the exception of Hybritech, which reached a zenith of 800 employees, all of these companies are small businesses. According to the Small Business Administration, between 1980 and 1982, small business produced a total of 2.65 million new jobs, while large business were cutting their employment by 1.7 million. So, entrepreneurs create jobs faster than big business. To create these businesses and therefore these jobs, entrepreneurs need capital investment - which comes from savings and discretionary income. High tax rates discourage savings.

Rather than arguing that the Republican budget cuts services for the poor to fund tax cuts for the rich, a populist argument that is far too tempting, we should argue that lower taxes encourage investment, and, particularly, in small business, creates jobs.

Because by their very nature they are risky, high-tech start-ups in particular depend upon the investment of wealthy people. In fact, the State of California almost prohibits investment in start-ups by investors with estates of less than \$1 million. This is why entrepreneurs fight so hard for reductions in capital gains taxes, at both the State and the Federal level. They need the extra incentive of lower capital gains taxes to attract sophisticated investors.

## FORTUNE 500 IN SAN DIEGO

In response to a comment last week, **Dr. Monroe Trout**, CONNECT Advisory Board Member, said although Baxter International, Inc., the world's largest hospital supply company, may not have its headquarters here, San Diego at least has one of their Board members here - Trout.

## NEWS (CONTINUED)

manufacturer of signal distribution systems, machine control, and equipment racks for professional video tape duplicators, has contracted with **RCG Management** for Controller/CFO Services.

**Maureen Stapleton**, 43, is leaving her post as assistant city manager of the city of San Diego to become the new general manager of the **San Diego County Water Authority**. She will replace **John Lockwood**, who has been interim general manager since March 27. In her new position, she will oversee an agency with 169 employees, which provides an imported water supply to area residents. The authority is currently involved in a \$740 million capital program to expand and improve the regional delivery system. (*SDDT*, "Local Scene," 11/23/95)

**Terrapin Technologies, Inc.** has raised an additional \$11.7 million in mezzanine financing. Together with earlier funding, this brings the total amount raised to over \$33 million. The lead investors are funds under management by **Hambrecht & Quist Capital Management**, and active support has been received from current investors.

In separate news, **Clifford Orent** has been elected chairman of the board. Orent also serves as Terrapin's president and chief executive officer. He succeeds **Jerrold L. Glick**, chairman since the company's inception, who continues to serve as a board member.

The **Townsend Agency**, a San Diego-based advertising and public relations agency, has been named finalist in the 1995 **MARCOM awards** for their efforts on behalf of **TriTeal Corp.** This year's **MARCOM awards** acknowledge The Townsend Agency in the category of Corporate Image for their successful introduction of TriTeal Corp. to the public.

Four **UCSD** physicians have received a two-year, \$1 million contract from the Center for Disease Control to find new ways of identifying and preventing tuberculosis in children. **Richard Besser**, **Mark Sawyer**, **Bronwyn Anders** and **Antonio Catanzaro** will examine why some children contract the disease and develop new diagnostic techniques. San Diego has one of the highest rates of pediatric tuberculosis in the country, says Besser. (*SDDT*, "Local Scene," 11/30/95)

**Xytronyx Inc.** has raised roughly \$3.5 million in a private common stock and warrants placement. The placement was made up of 35 units sold to "accredited investors" at \$100,000 per unit. Each unit consisted of 80,000 shares of common stock and warrants to buy an additional 100,000 shares. (*SDDT*, "Local Scene," 11/29/95)

## GUEST COMMENTARY

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### CONNECT MEETINGS PROVIDE KEY CONNECTIONS

Rapid expansion and sudden changes in business based on technological discoveries are very familiar scenarios for high-tech companies, especially those in the consumer electronics industry. As a result, many companies in this industry continue to seek creative ways of expanding their resources and alliances to keep up with this frenetic pace — and the **UCSD CONNECT** program has certainly proven its effectiveness in this area, as seen in the following example!

At a recent UCSD CONNECT meeting in June, **Daryl Weiss**, HR Director, **PCSI**, shared information with the group about a "*Cellular Communications Employer's Consortium*" that had been formed recently. Members of this group include companies nationwide that belong specifically to the telecommunications industry. The purpose of forming this consortium is for member companies to save both time and money in their recruiting efforts by pooling resources and jointly sponsoring job fairs to attract candidates specific to the cellular industry. These companies are all looking for similar candidates; instead of having candidates/or recruiters travel all over the U.S. to interview or screen, why not provide an opportunity to preview or interview a large number all at once in one location? It's beneficial both to the candidates and to the companies involved. Yes, there might be some competition among the companies and candidates, but companies and candidates are attracted to each other for many different reasons; there are also plenty of jobs available, and not every candidate will fit the same job in each company.

Daryl mentioned that the consortium was participating in a Telecommunications Job Fair one week later in Dallas — which sparked an idea for **Donna Fremed**, HR Director, **Sony Electronics Inc.** Sony recently entered the wireless telecommunications market and is actively staffing a new wireless division in San Diego. She instantly saw the benefits of the consortium's approach and spoke to Daryl for more information. Following several discussions, Sony was invited to join the consortium and participated at the job fair in Dallas. What a success that proved to be!

Over the course of two days, Sony staff were able to interview 250 candidates and identified strong potentials for several key positions that would have taken months to fill at a greater cost had traditional advertising and recruiting methods been used. We extend a special thanks to UCSD CONNECT for providing an ongoing, innovative forum for the exchange of ideas, and our appreciation to Daryl Weiss, PCSI, for sharing the opportunity with us.

Donna Fremed, Director, Human Resources  
Sony Electronics Inc.

## December 6, 1995

### MOST INNOVATIVE NEW PRODUCTS AWARDS CEREMONY & LUNCHEON

HYATT REGENCY LA JOLLA

LAST CHANCE TO SIGN UP!

You are cordially invited to the eighth annual luncheon honoring the finalists and announcing the winners of the 1995 Most Innovative New Products Awards, on Wednesday, December 6, 1995, at the Hyatt Regency La Jolla from 11 a.m. to 2:00 p.m. Guest emcee this year will be Channel 39's Marty Levin.

Seats are \$40 per person (\$400 per table of ten).

For further information about  
attending this event, call 619-534-6114

A UCSD-CONNECT PROGRAM

# Connect Newsletter Supplement



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*invite you to a special seminar in*

## **International Marketing and Strategy for High-Technology Companies**

**Winter 1996**

**Four Friday morning classes: January 12, 19, 26 and February 2**

**8:00 a.m. - 12:30 p.m.**

Because technology, markets, and financing are becoming increasingly global, new high technology companies are confronted with decisions about their international strategy from the very beginning. What are the unique strategic problems of these companies? Which methods of overseas market penetration are most suitable? How can a small enterprise defend itself from overseas competition? What are the advantages and traps of overseas financing and international "strategic alliances"? Can a growing company simultaneously secure its U.S. market base and establish a critical mass overseas? If so, what are its options, what resources will it require, and how should it prepare?

Offered on the campus of UCSD's Graduate School of International Relations and Pacific Studies, this seminar is open to high-technology and biotech executives. It will cover overseas market analysis, practical market planning, appropriate overseas strategies, the nature and pitfalls of alliances, selecting and qualifying overseas partners, protecting technology, and the art of foreign negotiations. Participants analyze the problems facing existing high-tech companies and compare their solutions with those of the company's executives. Substantial practical resource materials will be included.

**John Norton** is a seasoned international executive who has extensive, first-hand marketing, licensing, and strategic partnering experience in Europe, East-Asia, and many other markets. He has taught case-method courses in overseas marketing and negotiation since 1980. His International Resource Center provides overseas marketing information to corporate clients, such as Rockwell, Gulf & Western, Kelco, NAPP Systems, and Pulse Engineering. He received his education at Yale (BA), Stanford (MBA), MIT, and Harvard, and is fluent in Spanish, Portuguese, Swedish, French, and German.

<b>Course #:</b>	BUSA-40208
<b>Section ID:</b>	004323
<b>Time/Date:</b>	Fridays. 8:00 a.m. - 12:30 p.m., January 12 - February 2, 1996
<b>Location:</b>	Graduate School of International Relations and Pacific Studies, UCSD
<b>Credit:</b>	2 units of graduate credit for IR/PS students
<b>Fee:</b>	\$495

For more information, please call Darlene Hammon, 534-0414.  
To enroll, please call UCSD Extension Student Services, 534-3400.