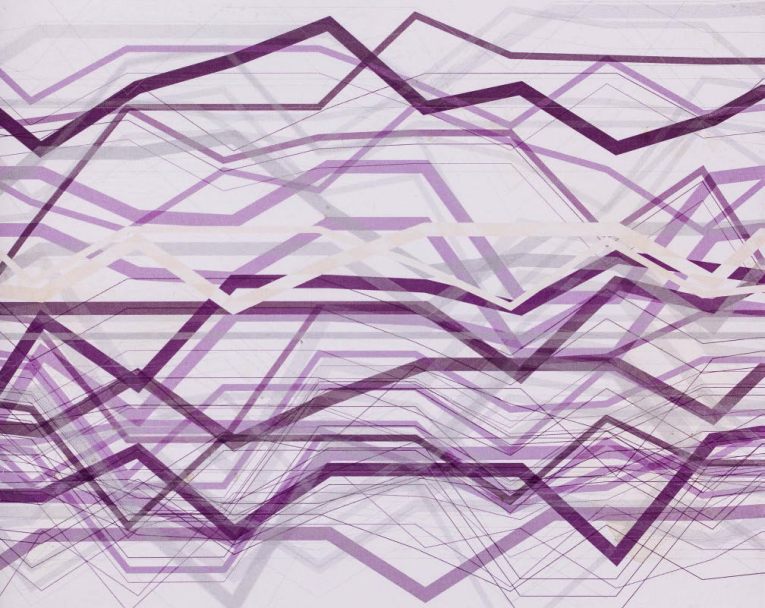


# CONNECT INNOVATION REPORT

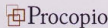
FULL REPORT  
FOURTH QUARTER 2011  
AND FULL YEAR 2011 SUMMARY



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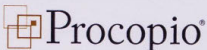


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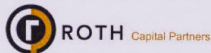


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## INTRODUCTION

The CONNECT Innovation Report (CIR) is commissioned and published by CONNECT, San Diego's technology and life sciences accelerator. The Report is issued on a quarterly basis providing an economic indicator of the strength and impact of the innovation economy, and includes:

The CONNECT Innovation Report tracks the health of the San Diego innovation economy by comparing data year-to-year and quarter-to-quarter, providing a comparison across tech industry clusters to selected regions and monitoring availability of various types of capital. The data helps policymakers and trade organizations plan and advocate effectively for our innovation economy including availability of visas and workforce training for talent in high growth clusters, building an attractive environment for capital investment, allocation of grant funding, reform of the patent system, and zoning. The Report also highlights San Diego as a world leader in innovation with world class research, leadership and management talent.

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FOR IMMEDIATE RELEASE

April 27, 2012  
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## Innovation Economy Stepped Up in 2011 Tech start-ups, M&A and patents show big increases

CONNECT's latest Innovation Report shows that the San Diego's innovation economy is starting to kick into high gear. During 2011, the number of new technology companies increased, patent activity hit an all-time high and mergers and acquisitions doubled. In addition, venture capital investment increased by 25 percent in the fourth quarter over the previous quarter.

In 2011, 312 new tech companies were established in San Diego, including 75 in the fourth quarter. The annual total is a 13 percent increase over 2010 and approaches the 319 new companies created in 2009 – the highest since before the recession. By specialty, there were 109 new companies in software, 67 in life sciences, 54 in communications, 21 in computers and electronics and 42 in clean tech. Nearly 700 new jobs were created by new innovation companies in the fourth quarter alone—almost 1,200 for the year.

“Job growth at the end of the year is no surprise,” said Gary Moss, labor market specialist at the San Diego Workforce Partnership. “We have seen relatively steady growth since July of 2010. This is very encouraging.”

Venture capital funding dipped slightly in 2011 to \$829 million, though it did surge in the fourth quarter. Investment trended towards later stage companies, which received a 94 percent increase in funding in the fourth quarter to \$131 million. Start-ups received \$5 million in the fourth quarter, far exceeding the previous quarter's totals.

M&A activity thrived in 2011, nearly doubling to \$6.6 billion. M&A deals involving San Diego companies totaled \$1.2 billion in the fourth quarter. Two San Diego companies went public in 2011, generating \$729 million.

San Diego hit a record for patents in the fourth quarter, with 1,215 being granted, compared to 940 in the fourth quarter of 2010. In addition, there were 1,702 patent applications in the fourth quarter, approaching the record of 1,725 set in the second quarter.

The region also set new highs for federal grant funding in 2011, receiving \$1.14 billion from the National Institutes of Health, National Science Foundation, National Aeronautics and Space Administration and National Oceanic and Atmospheric Administration.

In the fourth quarter of 2011, NIH funding for San Diego research institutions and innovation companies dropped to \$67.5 million. This dramatic drop from previous quarters was due to the agency operating under a Continuous Resolution (CR) signed by President Obama on November 19, 2011, essentially operating without an approved budget.

Spending cuts will further impact NIH funding as the government's efforts at deficit reduction are projected to bite deep into research grant awards.

FOR IMMEDIATE RELEASE

April 27, 2012

The Executive Summary and Full Report, including all data, are available at <http://www.connect.org/programs/connect-track/>

### About the CONNECT Innovation Report

The CONNECT Innovation Report (CIR) is commissioned by CONNECT on a quarterly basis and provides an economic indicator of the strength and impact of the innovation economy. The CONNECT Innovation Report tracks the health of the San Diego innovation economy by comparing data year-on-year and quarter-to-quarter, providing a comparison across tech industry clusters to selected regions and monitoring availability of various types of capital. The data helps policymakers and trade organizations plan and advocate effectively for our innovation economy including availability of visas and workforce training for talent in high growth clusters, building an attractive environment for capital investment, allocation of grant funding, reform of the patent system, and zoning. The Report also highlights San Diego as a world leader in innovation with world-class research, leadership and management talent.

### About CONNECT

CONNECT has assisted in the formation and development of more than 3,000 companies in the San Diego region and is widely regarded as one of the world's most successful organizations linking inventors and entrepreneurs with the resources they need for commercialization of innovative products in high tech and life sciences. The program has been modeled in more than 50 regions around the world. Key to our success has been the unique "culture of collaboration" between research organizations, capital sources, professional service providers and the established industries. CONNECT has been recognized by TIME, Inc. and Entrepreneur magazines and last year received the 2010 Innovation in Economic Development Award from the U.S. Department of Commerce for creation of Regional Innovation Clusters. CONNECT manages the San Diego Innovation Hub (iHub) designated by the state of California Governor's Office of Economic Development in 2010.

For more information, please visit [connect.org](http://connect.org)

## Highlights of the CONNECT Innovation Report Fourth Quarter 2011 and 2011 Year Summary

- Number of San Diego tech start-ups up 14% over 2010
- 312 new tech companies in 2011, leading to 1,100 new tech jobs in San Diego
- Overall tech employment figures show slight improvement in 2011
- Number of patents granted and applications published hit new highs in 2011
- Venture capital (VC) investment up almost 25% in Q4 2011 over previous quarter
- Merger and acquisition (M&A) activity in San Diego doubled in 2011 from \$3.8 billion to \$6.6 billion in 2010
- 29 California companies went public during 2011 – two of them based in San Diego – raising almost \$6 billion in total
- More than 13 San Diego companies raised \$1.7 billion in additional public equity offerings during 2011
- Federal grant awards to San Diego from NIH, NSF, NASA and NOAA totaled more than \$1.1 billion in 2011
- San Diego leads California in NIH funding per capita, but NIH grant funding falls off sharply in fourth quarter
- Post-American Reinvestment and Recovery Act (ARRA), federal research grant funding levels are likely to be substantially lower going forward
- San Diego continues to lead California in the private research institute employment

New Tech Start-ups/Tech Employment &Wages/Economic Indicators/VC Investment/M&A Activity/Patent &Research Grants Activity/Research Jobs & Wages

## More Than 300 San Diego New Tech Companies Established In 2011; More Than 1,100 New Tech Jobs Created

CONNECT's Innovation Report shows that more than 300 new innovation companies were established in San Diego in 2011.

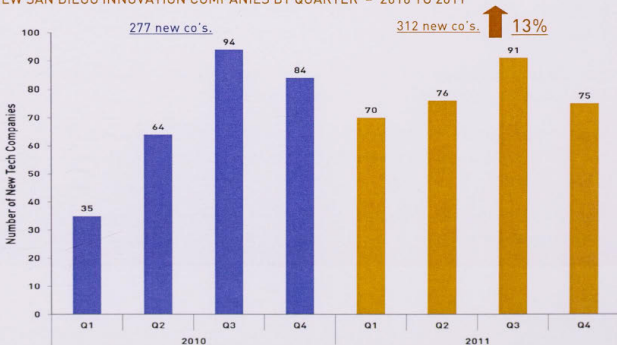
- 312 new technology companies in 2011
- More than 1,100 new tech jobs created
- 75 tech start-ups in the fourth quarter;
- New tech jobs in San Diego surged in the fourth quarter to nearly 700
- Majority of new jobs in fourth quarter were in defense & transportation and life sciences sectors
- The software sector showed the biggest gains in 2011 with almost 110 new companies started, up almost 40 percent from 2010; there were about 27 new software companies started in each quarter of 2011



## NEW TECH COMPANIES & JOB CREATION

### New San Diego Tech Companies Up 13 Percent in 2011

#### NEW SAN DIEGO INNOVATION COMPANIES BY QUARTER – 2010 TO 2011



Source: National University System Institute for Policy Research, commissioned by CONNECT

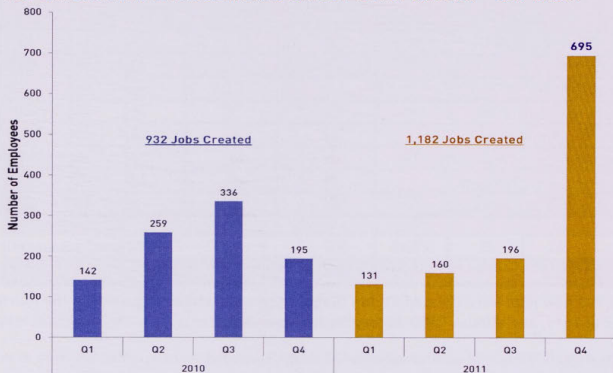


## CONNECT INNOVATION REPORT (CONT'D)

## NEW TECH COMPANIES &amp; JOB CREATION

## New Tech Jobs Jump 27 Percent in 2011

## NEW SAN DIEGO INNOVATION COMPANIES' EMPLOYMENT BY QUARTER - 2010 TO 2011



### Traditional Tech Sectors (Software, Communications, Computers & Electronics) Led Start-Up Creation in 2011; Environmental Tech Start-Ups Doubled

- Software, Communications and Computer & Electronics sectors accounted for 60 percent of all tech start-ups in 2011
- Software was again the largest tech start-up sector in 2011 with almost 110 new companies
- The number of environmental technology (cleantech) start-ups more than doubled during 2011 compared to 2010
- Almost 70 new life sciences companies were started in 2011, down slightly (6 percent) from 2010
- The number of computer and electronics start-ups were down 33 percent in 2011 compared to 2010

## CONNECT INNOVATION REPORT (CONT'D)

## NEW TECH COMPANIES &amp; JOB CREATION

## NEW SAN DIEGO INNOVATION COMPANIES BY QUARTER AND 2010 – 2011 COMPARISON

Industry Sector	2011				Annual		Annual Change
	Q1	Q2	Q3	Q4	2010	2011	
TOTAL TECH SECTOR	70	76	91	75	277	312	13%
Software	27	27	27	28	80	109	36%
Communications	17	12	17	8	48	54	13%
Computer & Electronics	2	8	7	7	36	24	-33%
Pharma/Bio/Medical	11	13	22	21	71	67	-6%
Recreational Goods Manufacturing	7	9	6	3	23	25	9%
Environmental Technology	2	6	6	7	10	21	110%
Defense and Transportation	4	1	6	1	9	12	33%

Source: National University System Institute of Policy Research, commissioned by CONNECT

## Surge in New Tech Company Jobs in Fourth Quarter 2011

Almost 700 new jobs were created by San Diego's new innovation companies in the fourth quarter of 2011, and almost 1,200 during the full year 2011

- The establishment of several subsidiaries in San Diego led to an surge in new jobs in the tech sector in the fourth quarter of 2011
- One newly established subsidiary in the defense and transportation sector added 250 jobs in the fourth quarter
- A newly established medical device company subsidiary accounted for 90 new jobs in the life sciences sector in the fourth quarter
- Two software company established subsidiaries with almost 60 employees each in San Diego in the fourth quarter
- A new fitness equipment company added almost 20 new jobs in the recreational goods sector in the fourth quarter

## CONNECT INNOVATION (CONT'D)

## NEW TECH COMPANIES &amp; JOB CREATION

NEW SAN DIEGO TECH COMPANIES' EMPLOYMENT - 4<sup>TH</sup> QUARTER 2011 and FULL YEAR 2011.

Tech Industry Sector	Q3 2011 # of Employees	Q4 2011 # of Employees	Quarter Change Q3 to Q4 2011	Full Year 2010 # of Employees	Full Year 2011 # of Employees	Annual Change 2010 to 2011
Software	61	183	200%	243	358	47%
Environmental Technology	36	28	-22%	64	96	50%
Computer and Electronics	14	19	36%	150	63	-58%
Communications	25	10	-60%	118	92	-22%
Pharma/Bio/Medical	49	185	278%	303	269	-11%
Recreational Goods	6	20	233%	29	43	48%
Defense and Transportation	5	250	4900%	25	261	944%
<b>TOTAL</b>	<b>196</b>	<b>695</b>	<b>255%</b>	<b>932</b>	<b>1,182</b>	<b>27%</b>

Source: National University System Institute for Policy Research; commissioned by CONNECT

## Almost 2,500 California New Innovation Companies Created in 2011

- Software start-ups accounted for most of the increase in California's tech start-ups. New "Apps" companies may be partially spurring the surge of new software companies
- Traditional tech sectors (software, communications, computer & electronics) accounted for almost 70 percent of California's new tech companies in 2011
- Overall, the number of California tech start-ups in 2011 was up slightly compared to 2010
- Although the life sciences sector showed a slight gain in new companies established in the fourth quarter compared to the third quarter, the sector was down 14 percent for the full year 2011

## NEW CALIFORNIA INNOVATION COMPANIES BY QUARTER AND 2010 - 2011 COMPARISON

	2011				Annual		Annual Change
	Q1	Q2	Q3	Q4	2010	2011	
<b>TOTAL TECH SECTOR</b>	597	675	592	616	2,350	2,480	6%
Software	228	229	192	238	723	887	23%
Communications	123	145	107	80	414	455	10%
Computer & Electronics	43	94	104	90	327	331	1%
Pharma/Bio/Medical	93	110	115	121	508	439	-14%
Defense and Transportation	30	32	27	34	108	123	14%
Environmental Technology	35	33	27	38	156	133	-15%
Recreational Goods Manufacturing	45	32	20	15	114	112	-2%

Source: National University System Institute of Policy Research; commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## NEW TECH COMPANIES &amp; JOB CREATION

## Almost 9,000 California New Jobs Created in 2011

- Almost 3,700 new jobs were created by California's new innovation companies in the fourth quarter of 2011, and almost 9,000 during the full year 2011 – up 23 percent from 2010
- The increase was primarily driven by the defense and transportation section, which saw a 14 percent increase in new companies in 2011, but a dramatic increase in employment compared to 2010
- Employment among recreational goods manufacturing companies was up almost 85 percent in 2011 compared to 2010 with more than 450 new jobs
- Software employment was up 71 percent in the fourth quarter compared to the third quarter of 2011, and up 27 percent in 2011 compared to the previous year
- Statewide, jobs created by new life sciences companies was up almost 200 percent in the fourth quarter compared to the previous quarter, but down more than 25 percent in 2011 compared to 2010

## NEW CALIFORNIA TECH COMPANIES' EMPLOYMENT – QUARTERLY AND YEARLY COMPARISON

Tech Industry Sector	Q3 2011 # of Employees	Q4 2011 # of Employees	Quarter Change Q3 to Q4 2011	Full Year 2011 # of Employees	Full Year 2010 # of Employees	Annual Change 2010 to 2011
Software	541	924	71%	2,277	2,902	27%
Computer & Electronics	414	487	18%	1,156	1,379	19%
Communications	265	324	22%	927	1,082	17%
Defense and Transportation	37	905	2346%	195	1,241	536%
Pharma/Bio/Medical	301	866	188%	2,111	1,543	-27%
Recreational Goods	23	57	148%	247	454	84%
Environmental Technology	113	115	2%	422	395	-6%
<b>TOTAL</b>	<b>1,694</b>	<b>3,678</b>	<b>117%</b>	<b>7,335</b>	<b>8,996</b>	<b>23%</b>

## San Diego Tech Sector Employment Remained Stable During 2011

- The overall number of tech sector companies was stable in 2011 compared to the previous year
- Tech employment was also stable during 2011 showing slight improvement toward the end of the year
- 6,000 innovation companies in San Diego employed 138,000+ employees representing \$3.3 billion total payroll in the fourth quarter
- Tech innovation companies represented:
  - Only 6% of all San Diego County employers
  - 11% of all jobs
  - More than 20% of all County payroll
- The life sciences sector has shown consistent overall employment growth
- Employment in the communications equipment sector stabilized in 2011 after a period of decline

## CONNECT INNOVATION REPORT (CONT'D)

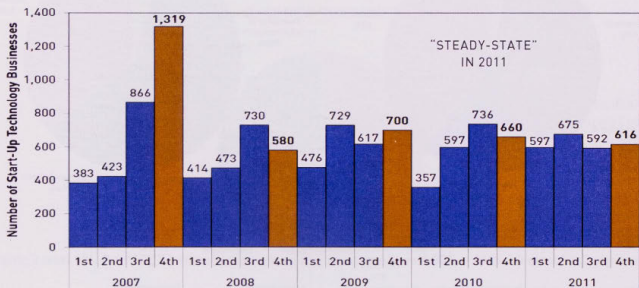
## NEW TECH COMPANIES &amp; JOB CREATION

CALIFORNIA INNOVATION START-UPS BY INDUSTRY SECTOR – 4<sup>TH</sup> QUARTER 2011

Overall, California showed a slight increase of 4 percent in new innovation company creation in the fourth quarter of 2011 with 616 new technology companies established, compared to 592 in the previous quarter.

In 2011, almost 2,500 new tech companies were established in California – up slightly (6 percent) from 2,350 established in 2010

## CALIFORNIA NEW INNOVATION COMPANIES BY QUARTER



## California Start-Up Highlights . . . . Fourth Quarter and Full Year 2011

- Software start-ups accounted for most of the increase in California's tech start-ups. New "Apps" companies may be partially spurring the surge of new software companies
- 238 software start-ups in the fourth quarter of 2011, and 887 software companies formed in 2011
- 80 communications sector start-ups in the fourth quarter, and 455 for the full year 2011
- 121 new life sciences sector in the fourth quarter with companies, and 439 for the full year 2011
- 90 computer and electronics start-ups in the fourth quarter, and 331 for the full year 2011
- Biggest Surge In New Tech Company Jobs: Almost 3,700 new jobs were created by California's new innovation companies in the fourth quarter of 2011, and almost 9,000 during the full year 2011

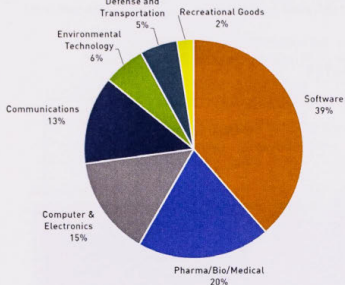
## CONNECT INNOVATION REPORT (CONT'D)

## NEW TECH COMPANIES &amp; JOB CREATION

Almost 2,500 California New Innovation Companies Created in 2011; ~9,000 New Jobs

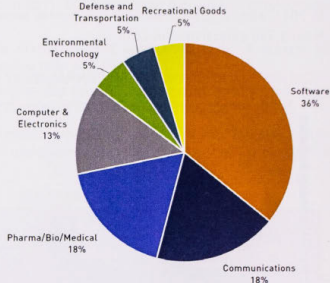
## CALIFORNIA INNOVATION START-UPS

Q4 2011 – 616 New Companies

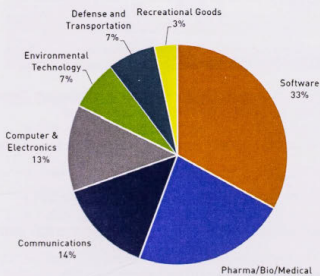


## CALIFORNIA INNOVATION START-UPS

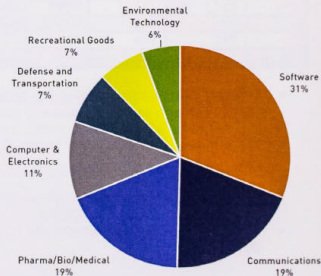
FULL YEAR 2011 – 2,480 New Companies



## Southern California Q4 2011 – 300 New Companies



## Southern California FY 2011 – 1,296 New Companies



source: regional University System Institute of Policy Research; commissioned by CONNECT

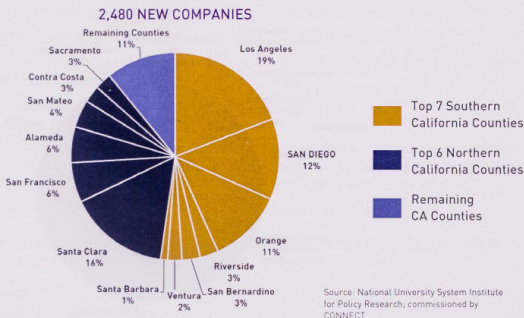
## CONNECT INNOVATION REPORT (CONT'D)

## NEW TECH COMPANIES &amp; JOB CREATION

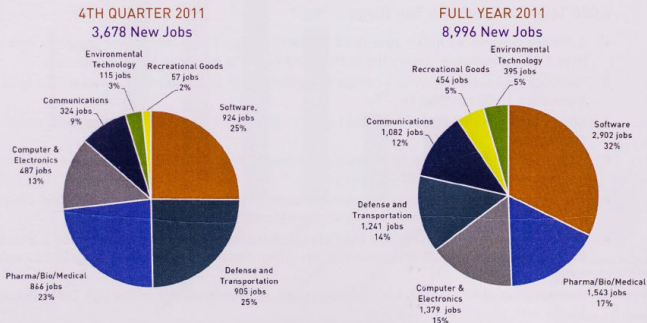
In California, the top 13 counties accounted for almost 90 percent of 2,480 new tech companies started during the full year 2011

- Southern California represented more than half of the tech start-ups with almost 1,296 technology companies established
- The Silicon Valley/Sacramento region accounted for 37 percent of the start-ups with more than 940 new technology companies
- The remaining counties in the state accounted for more than 240 new technology companies

## CALIFORNIA INNOVATION START-UPS BY COUNTY – FULL YEAR 2011



## CALIFORNIA TECH START-UPS: NEW EMPLOYMENT SURGE IN 2011



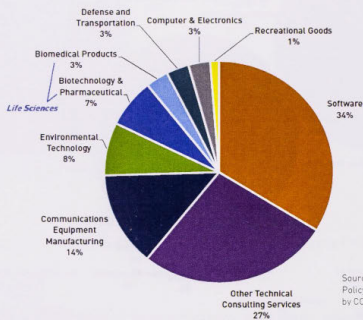
## CONNECT INNOVATION REPORT (CONT'D)

## TECH SECTOR EMPLOYMENT &amp; WAGES

## TOTAL EMPLOYER AND EMPLOYMENT DATA FOR SAN DIEGO'S INNOVATION ECONOMY

- There were almost 6,000 innovation companies in San Diego employing more than 138,000 employees and representing more than \$3.3 billion total payroll for the quarter
- Tech innovation companies represent only 6 percent of all San Diego County employers, but technology sector employment represents 11 percent of all jobs and more than 20 percent of all payrolls for the quarter

TOTAL NUMBER OF SAN DIEGO INNOVATION ECONOMY COMPANIES  
BY INDUSTRY SECTOR  
5,978 COMPANIES



Source: National University System Institute for Policy Research, EDD Q1 2011 Data, commissioned by CONNECT

## 6,000 Tech Companies in San Diego

- Software companies make up a third of the total San Diego innovation economy with more than 2,000 companies, according to the most recently available EDD census data
- Technical consulting services companies account for more than a quarter of the total with more than 1,600 companies
- Communications (includes wireless) sector represents almost 15 percent with almost 825 companies
- Life sciences companies (pharma/biotech/biomedical products) companies make up 10 percent with more than 600 companies
- The growing environmental technology sector, which includes many of the cleantech industry companies, was comprised of more than 450 companies
- The computer & electronics and the defense & transportation sectors made up 6 percent of the total number of tech companies in San Diego County with approximately 200 companies each
- Recreational good manufacturing firms made up the remainder of the San Diego innovation sector with almost 75 companies

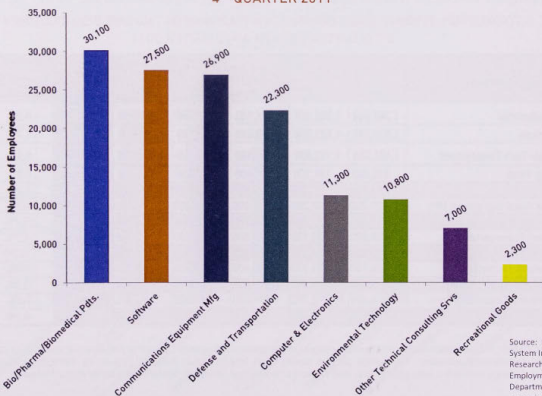


## CONNECT INNOVATION REPORT (CONT'D)

## TECH SECTOR EMPLOYMENT &amp; WAGES

## 138,000 Tech Jobs in San Diego

- In the fourth quarter of 2011, four industry sectors employed more than 75 percent of San Diego's innovation economy workforce
- San Diego's tech sector accounted for an estimated 138,200 jobs according to research CONNECT commissioned from the National University System Institute for Policy Research
- The life sciences sector, which includes biotech, pharma and biomedical device companies, was the largest sector with an estimated 30,100 jobs in the third quarter
- Software ranked second in the fourth quarter of 2011 with an estimated 27,500 jobs
- Communications equipment manufacturing was the third largest sector with 26,900 jobs
- The defense and transportation sector employed almost 22,300 workers
- The computer and electronics sector represented more than 8 percent of San Diego's tech employment with an estimated 11,300 jobs
- Environmental technology companies employed an estimated 10,800 workers and represented 8 percent of tech jobs
- Technical consulting services companies employed 7,000 workers. Although this sector was the second largest in terms of the number of companies in San Diego's innovation economy, these firms are generally smaller companies employing about four people
- Recreational goods manufacturing companies employed about 2,300 workers

SAN DIEGO COUNTY ESTIMATED INNOVATION ECONOMY EMPLOYMENT BY INDUSTRY CLUSTER  
4<sup>TH</sup> QUARTER 2011

Source: National University System Institute for Policy Research; California Employment Development Department (EDD); commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

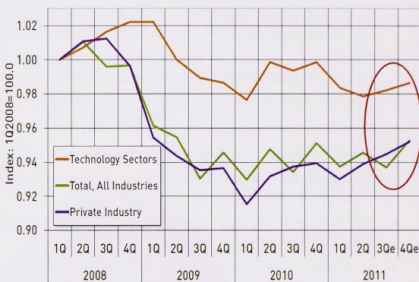
## TECH SECTOR EMPLOYMENT &amp; WAGES

## Employment Trends:

Kelly Cunningham, Economist and Senior Fellow at the National University System Institute for Policy Research commented last November in the NUSIPR's outlook for San Diego's economy in 2012 saying, "San Diego will continue to see challenges in the kinds of jobs being created and the wages that San Diegans receive. Middle-skilled jobs that once formed the broad-base of the middle class are disappearing.

Most jobs being created are relatively low-skilled (and low-paid) that cannot be replaced by machines or easily sent overseas—such as home nursing and landscape gardening. Jobs are also being created for the highly skilled, notably in science, engineering and management. This is particularly true for high-cost areas of California, such as San Diego, where job growth prospects are also limited by the state's onerous taxes and draconian regulatory environment."

EMPLOYMENT TRENDS IN SAN DIEGO:  
TECHNOLOGY SECTOR BY CLUSTER VERSUS ALL INDUSTRIES  
1<sup>ST</sup> QUARTER 2008 TO 4<sup>TH</sup> QUARTER 2011



e indicates estimate

TOTAL EMPLOYMENT AND TECH SECTOR EMPLOYMENT IN SAN DIEGO COUNTY  
4<sup>TH</sup> QUARTER 2009 TO 4<sup>TH</sup> QUARTER 2011

Employment	Actual				Estimate		% Change Q4 2009 to Q4 2011	% Change Q3 2011 to Q4 2011
	Q4 2009	Q4 2010	Q1 2011	Q1 2011	Q3 2011	Q4 2011		
<b>Total All Industries</b>	1,245,044	1,252,309	1,234,100	1,245,000	1,233,500	1,254,600	0.8%	1.7%
<b>Total Private</b>	1,020,492	1,023,598	1,013,400	1,023,100	1,029,400	1,037,400	1.7%	0.8%
<b>Total Non-Tech Employment</b>	1,106,844	1,112,409	1,096,300	1,107,900	1,095,900	1,116,400	0.9%	1.9%
<b>Technology Total</b>	138,200	139,900	137,800	137,100	137,600	138,200	0.0%	0.4%
Software	26,900	27,300	26,900	26,900	27,000	27,500	2.2%	1.9%
Communications Equipment Mfg	29,200	28,200	26,800	26,800	26,900	26,900	-7.9%	0.0%
Biotechnology & Pharmaceutical	19,800	21,200	22,700	22,800	23,000	22,900	15.7%	-0.4%
Defense and Transportation	24,300	23,700	23,500	22,300	22,400	22,300	-8.2%	-0.4%
Computer & Electronics	12,600	12,300	11,200	11,300	11,300	11,300	-10.3%	0.0%
Environmental Technology	10,100	11,200	10,600	10,700	10,800	10,800	6.9%	0.0%
Biomedical Products	6,400	6,900	7,200	7,200	7,100	7,200	12.5%	1.4%
Other Technical Consulting Svcs	6,400	6,700	6,400	6,800	6,800	7,900	9.4%	2.9%
Recreational Goods	2,500	2,400	2,500	2,300	2,300	2,300	-8.0%	0.0%

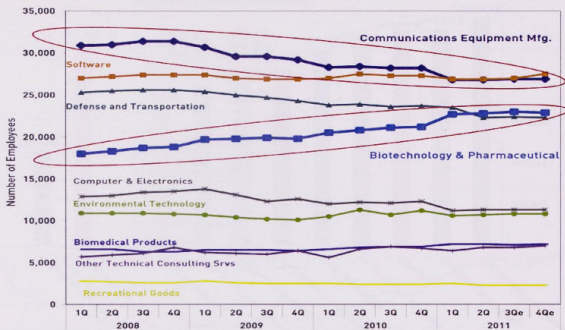
Derived from CONNECT from California Employment Development Department's *Quarterly Census of Employment and Wages (QCEW)* program, and monthly employment estimates. Technology sectors based upon NAICS codes defined, in part, by SANDAG Cluster Analysis and CONNECT technology definitions, with adjustments and estimates by National University System Institute for Policy Research.

CONNECT INNOVATION REPORT (CONT'D)

TECH SECTOR EMPLOYMENT & WAGES

Communications Sector Shows Slight Downward Employment Trend; Life Sciences Sector Shows Gradual Increase; Other Tech Sectors Show Stable Employment

SAN DIEGO TECH SECTOR EMPLOYMENT TRENDS – 2008 to 2011

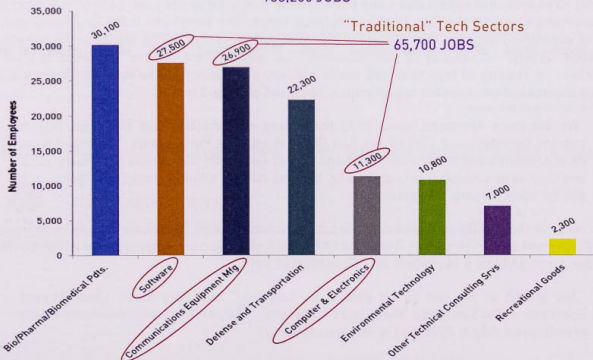


Source: National University System Institute for Policy Research; California Employment Development Department (EDD), commissioned by CONNECT

“Traditional” Tech Sectors Account for Half of San Diego’s Tech Economy Employment

SAN DIEGO COUNTY ESTIMATED INNOVATION ECONOMY EMPLOYMENT - 4<sup>TH</sup> QUARTER 2011

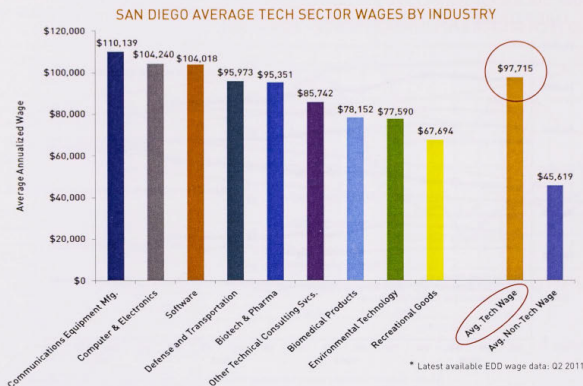
138,200 JOBS



## CONNECT INNOVATION REPORT (CONT'D)

## TECH SECTOR EMPLOYMENT &amp; WAGES

San Diego Average Annual Tech Sector Wage Almost \$98,000 Compared To \$46,000 for Non-Tech Sector Jobs



Source: National University System Institute for Policy Research, California Employment Development Department (EDD), commissioned by CONNECT

### As Economy Slowly Improves, Workforce Outlook Continues Steady Trend Upward

Measures of the local economy crept up and consumer confidence roared in the latter part of 2011. Seasonal hires exceeded expectations and the economy continued to add jobs. Each of these factors led to a continuing climb for the San Diego Workforce Index. The Workforce Index is a compilation of a range of economic indicators that provide a month-to-month record of the status of the workforce in San Diego County. A reading of 100 indicates "full employment" where the labor market is in equilibrium. A reading of less than 100 would indicate a slowdown in the local economy and might reflect a shortage of employment opportunities (see chart on page 21).

"We are more optimistic about 2012 than many economists," said Nathaniel Buggs, Interim President and CEO of the San Diego Workforce Partnership. "We heard from local economists at the Annual San Diego County Economic Roundtable in January 2012, and they were somewhat less optimistic. But, the current situation looks stronger than it has for several years," Buggs added.

The increase in the San Diego Workforce Index from November's 86.70 (adjusted) to 86.96 in December was a 0.3 percent gain in hires, but, it was the fifth month of consecutive improvement in the job market. The index is currently up 5.34 percent over December of 2011.

"Job growth at the end of the year is no surprise," said Gary Moss, Labor Market Specialist at the San Diego Workforce Partnership. "But, we have seen relatively steady growth since July of 2010; this is very encouraging."

## CONNECT INNOVATION REPORT (CONT'D)

## TECH SECTOR EMPLOYMENT &amp; WAGES

## SAN DIEGO COUNTY WORKFORCE INDEX



Source: San Diego Workforce Partnership

To read more about the San Diego regional labor market, <http://workforce.org/workforce-index>

- a member of CONNECT

SAN DIEGO  
 WORKFORCE  
 PARTNERSHIP

## CONNECT INNOVATION REPORT (CONT'D)

**The Da Vinci Index: The First Metric for Biomimicry****The Economic Impact of Biomimicry**

Biomimicry is one of the most promising scientific fields that could transform the ways goods and services are designed, produced, transported, and distributed. It could represent a major "game changer" in the 21st Century by forging a bridge between environmental and business interests.

In 15 years, biomimicry could represent \$300 billion annually of U.S. gross domestic product (GDP) in 2010 dollars. It could provide another \$50 billion in terms of mitigating the depletion of various natural resources and reducing CO<sub>2</sub> pollution. Biomimicry could account for 1.6 million U.S. jobs by 2025. Globally, biomimicry could represent about \$1.0 trillion of GDP in 15 years.

These are the exciting results of an economic impact study commissioned by San Diego Zoo Global in 2010. The study, conducted by the Fermanian Business and Economic Institute at Point Loma Nazarene University, predicts that in the coming years biomimicry will be an economic game changer. This promising study shows the reality of biomimicry as a means of creating both environmentally sustainable and economically viable products

Executive Summary [http://www.sandiegozoo.org/images/uploads/EIS\\_ExecSummary.pdf](http://www.sandiegozoo.org/images/uploads/EIS_ExecSummary.pdf)

Full Report <http://www.sandiegozoo.org/images/uploads/BiomimicryEconomicImpactStudy.pdf>

In order to increase awareness among business leaders, government policymakers, investors, and the media, the Da Vinci Index has been designed to measure activity occurring over the past decade and going forward in the field relating to biomimicry and bioinspiration.

The Da Vinci Index is designed to provide a tangible metric or barometer of progress in the field. It would join other tracking indices, such as the Case-Shiller Home Price Index, the Index of Leading Economic Indicators, the S&P 500 Stock Price Index, and many others.

The Da Vinci Index is comprised of four sub-components:

- ***Number of Scholarly Articles***  
Because much of the work being done in biomimicry has roots in academia, monitoring the publications in various journals in the field is viewed as an important element.
- ***Number of Patents***  
Patent awards are often one of the first steps in the commercialization of bio-inspired concepts and are therefore included.
- ***Number of Grants***  
National Science Foundation (NSF) and National Institutes of Health (NIH) grants are incorporated in the Index to capture the extent of government support for the field, with the prospect for further development as research is translated from concept to implementation. While other agencies also issue grants, NSF and NIH appear to capture the bulk of activity.
- ***Dollar Value of Grants***  
To incorporate not only the scale but also the scope and magnitude of the grants involved, the dollar value of each award is also included as one of the sub-components.

## CONNECT INNOVATION REPORT (CONT'D)

## The Da Vinci INDEX: THE FIRST METRIC FOR BIOMIMICRY (CONT'D)

## Da Vinci Index: 2011 Concludes with a Record High

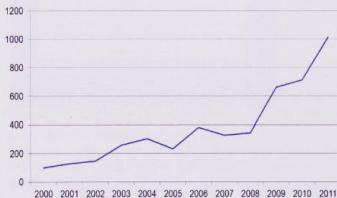
The overall Da Vinci Index soared to a record high in 2011 as interest and awareness of the potential of biomimicry continued to expand. Since the year 2000, the measure of bio-inspiration has increased by more than tenfold. The Da Vinci Index measures activity in the field of biomimicry or potential commercial applications inspired by solutions found in nature.

The Index is compiled based on the number of patents issued, scholarly articles published, the number of grants issued by the National Science Foundation (NSF) and National Institutes of Health (NIH), and the value of those grants for any given period. Biomimicry has experienced explosive growth during the past decade. While annual changes have been volatile, the overall trend during the past decade has been strongly upward.

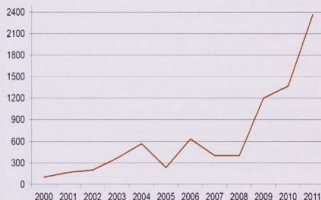
## The Results

The composite Da Vinci Index posted a seven-fold rise between 2000 and 2010, climbing from 100 to 713. This represents a 22 percent compound annual rate of growth. The Index has advanced further in 2011 to a level of 1,013. This represents a 42 percent surge over the value recorded for 2010. This surge was led by the issuance of patents in the field of biomimicry, which jumped by more than 70 percent to 71 in 2011.

**Composite Da Vinci Index Expands 10-Fold**  
Index, 2000=100



**U.S. Patent Counts Soar**  
Index, 2000=100



## CONNECT INNOVATION REPORT (CONT'D)

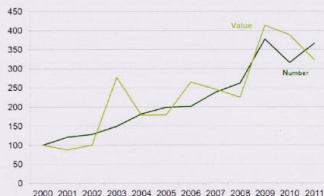
## The Da Vinci INDEX: THE FIRST METRIC FOR BIOMIMICRY (CONT'D)

The number of scholarly articles rose from 285 in 2000 to 1,590 in 2011, representing more than a five-fold increase.

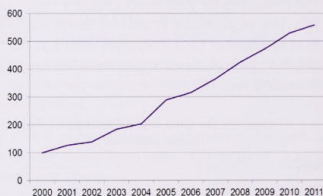
The number of grants increased from 71 in 2000 to 260 in 2011 representing nearly a four-fold rise. While the number of grants rose last year, the dollar value of these grants declined from \$93 million in 2010 to \$77 million in 2011. Overall this represents a three-fold rise in dollar value from \$24 million in 2000 to \$77 million in 2011.

The NSF recorded decreases in both metrics, representing a second year of decline from the 2009 peak. In contrast, the NIH saw gains in both the number and dollar value of grants with both numbers reaching new all-time highs. Budget cuts may be weighing more heavily on NSF funding than that of the NIH because of the focus on health care.

**Federal Grants Momentum Rises in 2011**  
Index, 2000=100



**Scholarly Articles Climb Six-Fold**  
Index, 2000=100



The 2011 totals for the Da Vinci Index underscore the potential for bio-inspiration to provide businesses throughout the world with more efficient and sustainable solutions to enable the achievement of both growth and environmental goals.

The above information was provided by:



**POINT LOMA** - a member of CONNECT  
NAZARENE UNIVERSITY



## CONNECT INNOVATION REPORT (CONT'D)

## CEO CONFIDENCE INDEX

Economic Optimism Sparks Surge in CEO Confidence According to the 4<sup>th</sup> Quarter 2011 Vistage CEO Confidence Index

## Vistage CEO Confidence Index Highlights

**41% of CEOs** recognized improved economic conditions over the previous 12 months, up from just 18% in the Q3 survey.

**Only 12% of CEOs** thought the economy had recently worsened.

**73% of CEOs** expected revenue growth.

**55% of CEOs** said they plan to increase the number of their employees over the next 12 months, compared with 46% in the Q3 survey.

**43% of CEOs** said that the European debt crisis impacts their business.

**24% of CEOs** are finding it easier to obtain credit for their business today compared to 6 months ago.

**49% of CEOs** believe Mitt Romney will emerge as the Republican Presidential Nominee for 2012, while 29% believe it will be Newt Gingrich.



The Vistage CEO Confidence Index was 98.8 in the Q4 2011 survey, up from 83.5 in Q3 and 92.9 in Q2.

The quarterly Vistage CEO Confidence Index is the nation's largest and most comprehensive report of the opinions and projections of over 2,000 small-to-medium sized business CEOs about the U.S. economy.

## HIGHLIGHTS

## Economic Growth Rebounds

More than twice as many CEOs thought that the economy had improved in the latest survey compared with the third quarter of 2011. Improved economic conditions were cited by 41 percent in the fourth quarter, up from just 18 percent in the third quarter. Just 12 percent thought the economy had recently worsened. When asked about prospects for the year ahead, additional economic gains were expected by 40 percent, twice the 20 percent recorded in the third quarter. While CEOs were still less optimistic than they were in the closing quarter of 2010, the data signal a stronger fourth quarter GDP and modest positive growth in the year ahead.

## Majority Plan New Hires

Net increases in employment were planned by 55 percent of all firms in the fourth quarter of 2011. Although only barely above last year's 54 percent, it was the highest percent that planned job additions since 2007. Just 6 percent planned net declines in the number of their employees during 2012, scarcely above the all-time low of 5 percent. CEOs were nearly evenly split on whether the recent sharp decline in unemployment represented the start of a sustained trend or just a temporary blip. When asked what Congress should do to create more jobs, 33 percent of the CEOs said "make the current tax cuts permanent," followed by, "provide employers with hiring incentives," at 17 percent and "increase spending on infrastructure" at 14 percent.

## Revenue Prospects Improve

Revenue growth was expected by 73 percent of all firms in the fourth quarter survey, up from 62 percent in the prior quarter, and much closer to the year ago level of 77 percent. Revenue expectations were twice as favorable as at the recession low, when just 36 percent expected higher revenues in the closing quarter of 2008. This recent improvement came despite the expectation by six-in-ten firms that the prices that they would receive for their goods or services would remain unchanged or fall during the year ahead.

## Profit Outlook Edges Higher

Increasing profits were anticipated by 55 percent of all firms in the fourth quarter of 2011, between last quarter's 47 percent and last year's 63 percent. While the worst impact of the recession on profits is clearly over (just 9 percent anticipated declining profits, down from a peak of 36 percent three years ago), the expectation of higher profits is still well below the peak of 74 percent in the fourth quarter of 2003.

## Investment Strengthens

Planned investments in new plant and equipment were reported by 42 percent of all firms in the fourth quarter of 2011, the highest level since 48 percent was recorded at the start of 2011. Just one-in-eight firms reported that they would reduce their fixed investments during 2012. While the number of firms that plan to increase investment spending is well above the low of 18 percent recorded at the close of 2008, it is still below its peak level of 57 percent set at the closing quarter of 2005. This commitment of investment funds to secure future revenues underscores these CEOs' expectations of a modestly stronger recovery in 2012.

## CONNECT INNOVATION REPORT (CONT'D)

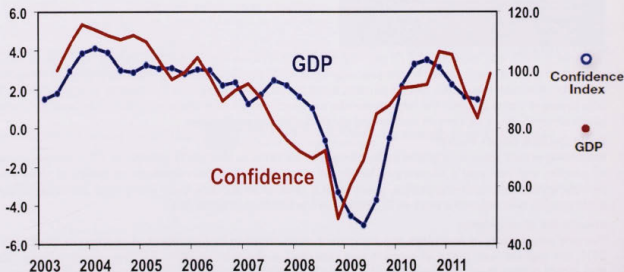
## CEO CONFIDENCE INDEX (CONT'D)

After sharp declines in the past three quarters, CEO confidence bounced back at year's end with the largest quarterly gain since the start of the recovery in 2009. The fourth quarter 2011 Vistage CEO Confidence Index, which reflects responses from 1,641 US small business CEOs (surveyed between December 12-22, 2011), was 98.8, up from 83.5 in the third quarter, and reaching the highest level since 105.2 recorded at the start of 2011.

Every component of the confidence index improved. Expected gains prompted CEOs to plan increases in employment and fixed investments, as they anticipate higher revenues and profits during the year ahead. Persistent economic and political uncertainty remains a top concern, mentioned by nearly half of all CEOs, fueled by the debt crisis in Europe and the failure of Congress to address the national debt, with two-thirds saying that the national debt had negatively affected their business plans. A 20 percent decline over the past two quarters brought the Confidence Index to its lowest level in two years. The largest declines were in evaluations of the economy and, since the majority expects a stagnant economy during the year ahead, CEOs plan to trim their fixed investments and will likely curtail hiring plans. Revenues and profits are also expected to shrink. Along with pointing to a host of added regulatory burdens and expected increases in healthcare costs, the most important factor cited by CEOs for their decreased confidence was inadequate demand for their products or services.

The recent surge in confidence may have longer-term implications, as 49 percent of the CEOs surveyed believe that in three years, the U.S. will be the most improved economy in the world with China posting 17 percent and South America at 14 percent. According to Vistage Chairman of the Board and CEO Rafael Pastor, the three-year outlook is very telling and good news for our economy: "This is not the opinion of pundits or economists; these are the CEOs who are leading our economic recovery and will be responsible for improving the business and employment picture in the U.S. over the next three years. This is a good sign of better days ahead. Basically, these CEOs are saying that, despite the stalemates in Washington, and the volatility around the world, they and their enterprises will innovate, grow, and hire in the ways the rest of the world can't." Fifty percent of the Vistage CEOs blamed the President, the Congress, Democrats and Republicans—collectively—for a lack of leadership in Washington. Thirty-three percent blamed the President and the Administration alone, while seven percent blamed Congress alone.

VISTAGE CEO CONFIDENCE INDEX  
COMPARED TO YEAR-TO-YEAR CHANGES IN GDP



Source: Vistage International

## CONNECT INNOVATION REPORT (CONT'D)

## CONNECT PUBLIC POLICY BRIEF

## Progress Seen in D.C. on CONNECT's Innovation Policy Ideas in 2011 and Early 2012

In September 2011, CONNECT identified seven ready-to-go ideas that can promptly pass Congress and be signed by the President. These seven innovation policy ideas will provide a quick injection of capital and talent into the innovation ecosystem allowing emerging companies to thrive and create jobs while also increasing federal revenue towards deficit reduction. For more details on CONNECT's Seven Innovation Policy Ideas, [click here](#).

**Seven Innovation Policy Ideas to Spark an American Recovery** ✓ indicates legislation passed

- ✓ 1. Increase the monetary cap on direct public offerings by small companies to allow new opportunities for emerging companies to raise capital (Reg A)
2. Incentivize the investment of foreign earnings into emerging technology research and commercialization
3. Encourage more Angel investment into start-up and emerging companies
- ✓ 4. Reauthorize the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grant programs
5. Retain top-level talent from American universities
6. Facilitate the growth of start-up companies by immigrant entrepreneurs
7. Solidify recently passed provisions in the Small Business Jobs Act of 2010 to provide long-term certainty to small businesses and their investors

Two of these policy ideas were passed by the House and the Senate (see ✓ above), and others continue to move through the legislative process. They deserve continued focus because of their significant job-creation potential. Many of them are common-sense changes that have already garnered bi-partisan support. Prompt action on these ideas will demonstrate to the American people that our leaders can find common solutions that make a substantial impact toward economic recovery.

**JOBS Act to Increase Startup Access to Capital Pass Congress, Signed into Law by President**

Majority Leader Eric Cantor (Virginia) was the representative who unveiled a package of six bills that have been rolled up into H.R. 3606—the JOBS (Jumpstart Our Business Startups) Act. The JOBS Act is the latest effort by House leaders to keep Congress focused on pro-innovation, pro-growth and job-creating legislation.

The six-bill package includes four bills the House already passed individually but which appear to be stalled in the Senate. Two new bills were added to the package after they passed the House Financial Services Committee with overwhelmingly bipartisan support. In announcing the package, Cantor pointed out:

“These bipartisan measures will increase capital formation, spur the growth of startups and small businesses, and pave the way for more small-scale businesses to go public and create more jobs.”

The JOBS Acts was signed into law by President Obama on April 5, 2012.

## CONNECT INNOVATION REPORT (CONT'D)

In November 2011, CONNECT brought two San Diego start-up CEOs, Lonna Williams of Ridge Diagnostics and Tsvi Goldenberg of EemRa, to Capitol Hill to testify before Chairman Issa's House Oversight and Government Reform Committee hearing as the House was starting to shape those concepts into bills. In both written and oral testimony, Williams and Goldenberg expressed support for several of the capital formation ideas that eventually became bills in the JOBS Act. Since that time, CONNECT's D.C. Office has actively been involved in staff interactions and coalition efforts to advance the bills as they traversed through the legislative process.

### The two new bills in the JOBS Act include:

**Reopening American Capital Markets to Emerging Growth Companies Act:** This bill, also known as the "on ramp" bill, reduces the costs of going public by providing companies with a temporary reprieve from SEC regulations by phasing in certain regulations over a five-year period allowing smaller companies to go public sooner.

**Private Company Flexibility and Growth Act:** The bill simply increases the current shareholder cap under SEC regulations from 500 to 1,000, allowing privately held companies to raise capital without being forced to go public.

### The other four bills in the JOBS Act include:

**H.R. 1070—the Small Company Capital Formation Act:** The bill will raise the Regulation A exemption for mini-IPOs from \$5M to \$50M. Raising the offering threshold helps small companies gain access to capital markets without the costs and delays associated with the full-scale SEC securities registration process.

**H.R. 2030—Entrepreneur Access to Capital Act:** The bill will legalize the popular internet practice of crowdfunding by removing current SEC restrictions against the practice so entrepreneurs can raise equity capital from a large pool of small investors. Crowdfunding companies could pool up to \$1 million from investors with individual investor contributions limited to whichever is less of \$10,000 or 10 percent of the investor's annual income.

**H.R. 2940—Access To Capital for Job Creators Act:** The bill eliminates the ban on general solicitation or advertising as long as the purchasers are "accredited investors." The legislation would allow companies greater access to accredited investors and new sources of capital to grow and create jobs, without putting less sophisticated investors at risk.

**Capital Expansion Act:** The bill increases the number of shareholders permitted to invest in a community bank from 500 to 2,000 enabling local banks to better deploy their capital to make loans to start-ups and small businesses without unwarranted SEC compliance costs.

Tardibono concluded, "...with the recent success of Congress passing and the President signing SBIR Reauthorization, the JOBS Act passage marks the second of our Seven Innovation Policy Ideas to become law."

## CONNECT INNOVATION REPORT (CONT'D)

### Repatriation of Foreign Earnings into Emerging Technology Research Legislation Advances with Bipartisan Senate Bill in 2011

Senator Kay Hagan (North Carolina) and Senator John McCain (Arizona) introduced the Foreign Earnings Reinvestment Act signaling the latest bipartisan effort to advance tax reform through a temporary reduction of the repatriation tax. Currently, American companies with overseas operations have to pay a total tax of 35% on any foreign earnings they return, or repatriate, back to the U.S. As the repatriation issue has built momentum on Capitol Hill, studies have shown that as much as \$1.5 trillion in foreign earnings is trapped overseas because the high tax rates serves as a deterrent to American companies returning the earnings to the U.S.

The Hagan-McCain bill would temporarily reduce the repatriation tax to 8.75%. However, the 8.75% rate could be reduced to as low as 5.25% if U.S. companies expand their payroll by 10%. The bill discourages layoffs after repatriation by penalizing American companies \$75,000 per employee laid off.

CONNECT's Public Policy Department endorsed repatriation generally but specifically endorsed a more innovation-targeted repatriation bill, H.R. 1036. The whitepaper notes that the current 35% rate results in foreign countries, creating incentives for U.S. companies to spend those earnings in foreign countries for R&D and manufacturing thus strengthening the competitiveness of America's global competitors.

Instead H.R. 1036 focuses repatriated earnings toward early-stage innovation by cutting the tax rate to 0% for foreign earnings returning to the U.S. to fund research and development including sponsored, purchased or collaborative R&D, funding proof of concept centers, early-stage venture investments, expansion of facilities, or to create/expand U.S. manufacturing including contract manufacturing. The bill allows the return of foreign earnings at a 5.25% rate otherwise. Bringing the earnings back to the U.S. to further catalyze innovation will create jobs while strengthening America's edge in global innovation.

Repatriation continues to face resistance from Congressional leaders and the Obama Administration which favors repatriation being addressed as a component of broader, comprehensive tax reform. CONNECT's Washington D.C. Office is involved in efforts to advance the repatriation issue and will continue to encourage incentives for such earnings to be directed to pro-innovation purposes. To learn more about the Hagan-McCain bill, go to <http://bit.ly/oPauEU>.

### Small Business Administration Developing Regulations to Implement SBIR Reauthorization

In its effort to increase outreach to the small business community, the Small Business Administration (SBA) has recently provided insight into their internal process of how SBIR Reauthorization implementation is progressing. Sean Greene, the SBA's Associate Administrator for Investment and the Special Advisor for Innovation, announced that the innovation community should look for specific regulatory language to be released in late April 2012 regarding involvement of venture backed companies in the SBIR/STTR programs. Once SBA publishes proposed regulations, the public will have a 60-day comment period. SBA will then review the comments and make modifications to the regulatory language before the final regulations are published and an effective date set.

Follow CONNECT's Public Policy Efforts

Website: [www.connect.org/programs/policy](http://www.connect.org/programs/policy) – Twitter: @CONNECTPolicy <http://bit.ly/AgDouc> – Facebook: [Connect-Public-Policy](#) Sign-up for Policy eNewsletter: <http://www.connect.org/programs/policy/enews-archive/>

## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

## San Diego Venture Capital (VC) Investment Trend: Funding Dollars Shift Toward Later Stage Deals in 4th Quarter 2011

## Overall San Diego VC funding totaled \$829M in 2011 - down 5 percent from 2010

- In San Diego, the fourth quarter saw a 94 percent increase of VC investment dollars to later stage companies - from \$37 million in third quarter to \$131 million in fourth quarter, representing 49 percent of the total VC funding received in the fourth quarter
- Start-ups accounted for 2 percent of the total \$269 million in VC funding, up by 1 percent from the previous quarter, receiving \$5 million in the fourth quarter compared to slightly less than \$1 million received in third quarter of 2011
- Early stage companies accounted for 30 percent of the total VC funding while expansion stage companies received \$53 million in the fourth quarter, down substantially from almost \$93 million in the previous quarter

San Diego Life Science Sector Soars in VC Funding in 4<sup>th</sup> Quarter 2011

Overall, venture capitalists invested \$269 million in 23 deals in the San Diego region during the fourth quarter of 2011—up almost 25 percent from \$202 million invested in 21 deals in the third quarter. Venture investment in the fourth quarter of 2011 was also much higher compared to the amount invested by VCs in the same quarter last year when 30 local companies received \$221 million, according to the PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ quarterly report. San Diego ranked 6<sup>th</sup> in the nation in the fourth quarter of 2011, up from 10<sup>th</sup> in the third quarter of 2011.

## VC INVESTMENT HIGHLIGHTS

- VC funding to San Diego companies up almost 25 percent in fourth quarter 2011 totaling \$269 million. San Diego VC funding totaled almost \$830 million across 104 deals for the year in 2011
- The life science sector (pharma/bio/medical devices) re-attained the top position in VC funding in the fourth quarter of 2011, after falling down to third position in third quarter, with 17 deals receiving \$193 million or 72 percent of the total VC funds invested in San Diego
- AnaptysBio, Inc. received \$34 million, while Elevation and Rempex Pharmaceuticals, Inc. received \$30 million and \$25 million, respectively
- Elevation Pharmaceuticals had also received \$9.6 million in the third quarter of 2011. In medical devices, BeneChill and Ophthonix, Inc. received \$15 million and \$14 million respectively
- Biotech deals accounted for 52.8 percent of the total VC funding received in the fourth quarter of 2011, and medical devices accounted for 19 percent, up from 11.2 percent and 1.7 percent respectively compared to the total funds received in third quarter of 2011

## CONNECT INNOVATION REPORT (CONT'D)

## VC INVESTMENT HIGHLIGHTS

- The media and entertainment sector received the second largest investment with \$50 million invested in one deal, Razer USA, Ltd., representing 18.6 percent of total funds invested in the fourth quarter of 2011. This represents an 88 percent increase in dollar amount compared to \$6 million invested in one deal in third quarter of 2011.
- Computers and Peripherals sector received the third largest VC investment during the fourth quarter of 2011 with \$19 million invested in one deal, Legend3D, Inc., representing 7 percent of total funds invested in the fourth quarter.
- Software sector dropped down from top position in the third quarter when six deals received \$98 million representing 48 percent of the total funds invested, to sixth position in the fourth quarter of 2011 with only one deal receiving close to \$2 million representing only 0.7 percent of the total investment.
- Software fell slightly short behind telecommunications and semiconductor which came in fourth and fifth place respectively.

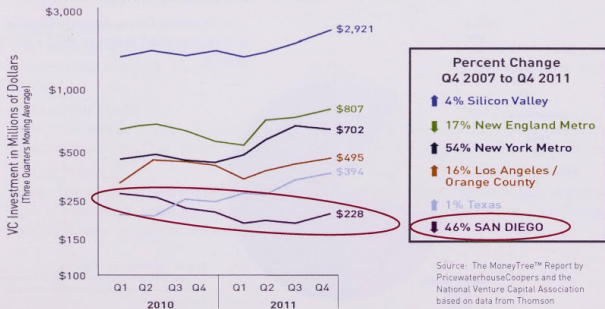
## San Diego VC Investment Still Down Compared To Other Regions in 2011

When using a moving average of three quarters' data, San Diego continues to show a more substantial decline in venture investment relative to the other top five regions over the past three years. [A moving average can smooth quarter-to-quarter fluctuations to enable trend analysis.]

The San Diego fourth quarter 2011 VC investment moving average was down 46 percent from the fourth quarter of 2007, compared to 55 percent down in the third quarter of 2011, while Silicon Valley's moving average was up 4 percent.

LA/Orange County VC investment went up to 16 percent, exceeding pre-recession levels while average VC investment in the New York Metro region was up 54 percent in the fourth quarter of 2011 compared to the start of the recession in the fourth quarter of 2007.

## VC INVESTMENT MOVING AVERAGE BY REGION - 2010 to 2011

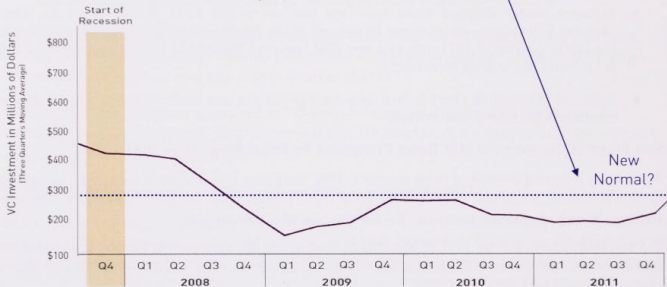


## CONNECT INNOVATION REPORT (CONT'D)

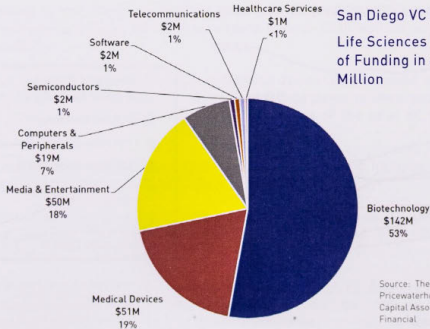
## VENTURE CAPITAL INVESTMENT

Steve Hoey, CONNECT's director of business creation and development explains that "on the eve of the recession, venture capital in San Diego spiked higher than in other cities and as a result has a much steeper path to climb back. Last year, venture capital was approaching the level of where it was in 2005 and 2006, which might be close to the level where San Diego should be. What we likely are seeing in San Diego is a renormalization, or return to pre-2007 average investment levels."

## SAN DIEGO VC INVESTMENT MOVING AVERAGE - Pre-Recession to 2011



Source: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial

 SAN DIEGO VC INVESTMENTS BY INDUSTRY - 4<sup>TH</sup> QUARTER 2011  
 \$269 MILLION


San Diego VC Investment Trend:  
 Life Sciences Deals Attract Majority  
 of Funding in 4<sup>TH</sup> Quarter 2011 - \$193  
 Million

Source: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial



## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

THE TOP 10 VC INVESTMENTS IN SAN DIEGO COMPANIES – 4<sup>TH</sup> QUARTER 2011

The three largest investments the fourth quarter of 2011 accounted for 42 percent of the total VC funding in San Diego, with the top 10 deals accounting for 86 percent of total funding.

Razer USA, Ltd	\$50.0 million	Anaphore, Inc.	\$15.0 million
AnaptysBio, Inc.	\$33.9 million	Super Green Biofuels, Inc.	\$15.0 million
Elevation Pharmaceuticals, Inc.	\$30.0 million	BeneChill, Inc.	\$14.8 million
Rempex Pharmaceuticals, Inc.	\$25.0 million	CoDa Therapeutics, Inc.	\$14.5 million
Legend3D, Inc.	\$19.0 million	Ophthonix, Inc	\$14.0 million

SOURCE: The MoneyTree™ Report by Pricewaterhousecoopers and the National Venture Capital Association based on data from Thomson Financial

VC FUNDING BY STAGE OF COMPANY DEVELOPMENT – 4<sup>TH</sup> QUARTER 2011

The **STAGE OF DEVELOPMENT** classifications used in the PwC/NVCA MoneyTree™ Report are as follows:

**START-UP STAGE**

The initial stage. The company has a concept or product under development, but is probably not fully operational. Usually in existence less than 18 months.

**EARLY STAGE**

The company has a product or service in testing or pilot production. In some cases, the product may be commercially available. May or may not be generating revenues. Usually in business less than three years.

**EXPANSION STAGE**

Product or service is in production and commercially available. The company demonstrates significant revenue growth, but may or may not be showing a profit. Usually in business more than three years.

**LATER STAGE**

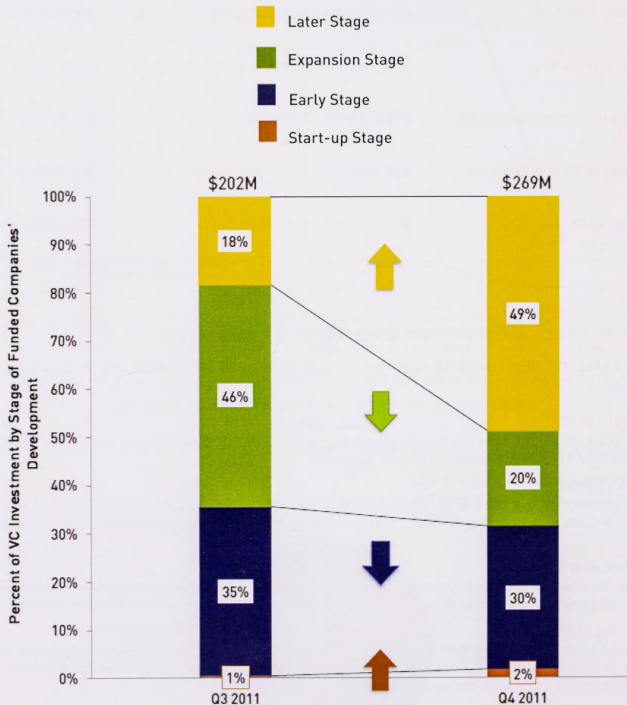
Product or service is widely available. Company is generating on-going revenue; probably positive cash flow. Is more likely to be, but not necessarily profitable. May include spin-offs of operating divisions of existing private companies and established private companies.

## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

SAN DIEGO VC INVESTMENT TREND: VC Funding Dollars Shift To Later Stage Deals in the 4<sup>th</sup> Quarter of 2011

VC INVESTMENT IN SAN DIEGO COMPANIES BY STAGE OF DEVELOPMENT – Q3 2011 and Q4 2011



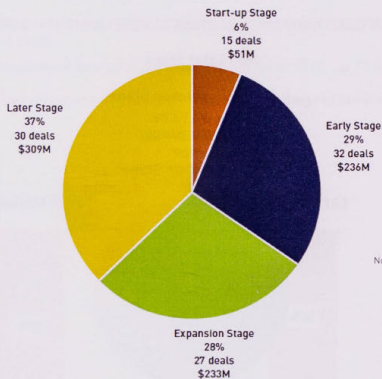
Source: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial

## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

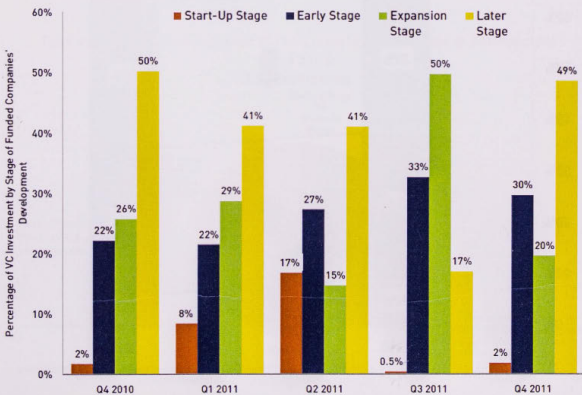
## SAN DIEGO VC INVESTMENTS BY STAGE OF DEVELOPMENT - 2011

\$829 million - 104 companies



Note: Percentages refer to the \$ value of investment

## VC INVESTMENT IN SAN DIEGO COMPANIES BY STAGE OF DEVELOPMENT BY QUARTER



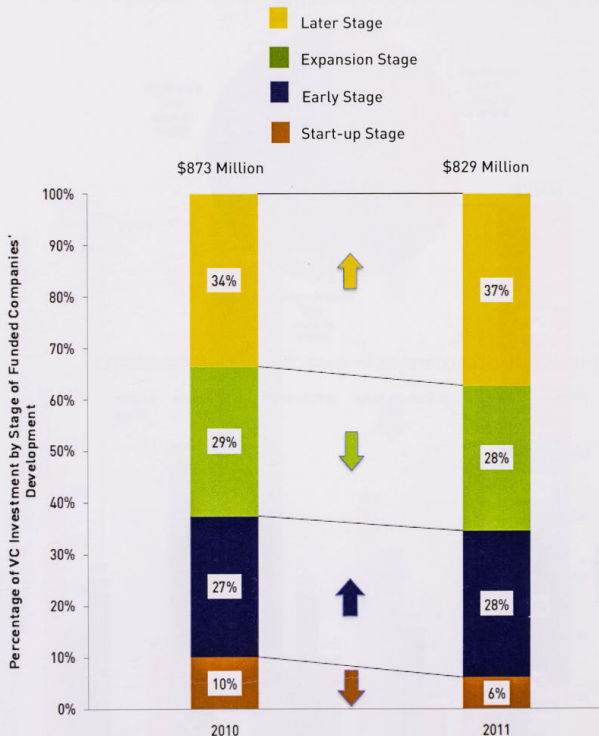
Source: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association

## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

VC Investment across San Diego Company Development Stages Was Consistent Between 2010 And 2011

## VC INVESTMENT IN SAN DIEGO COMPANIES BY STAGE OF DEVELOPMENT - 2010 and 2011



Source: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial

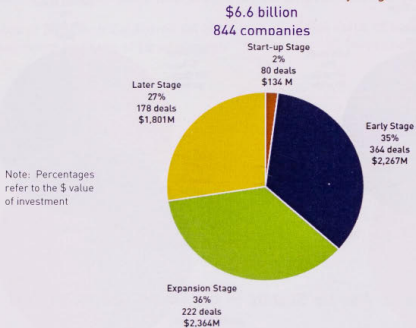
## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

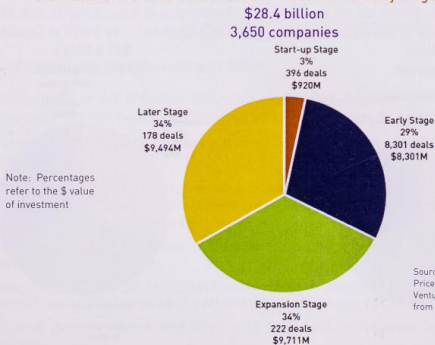
Nationally, the Amount of VC Investment Going To Start-Ups Decreased By 25 Percent During the Fourth Quarter Of 2011 Compared To The Previous Quarter

- Overall, VC investment was down 4 percent in the fourth quarter totaling \$6.6 billion invested in 844 deals
- National VC investment totaled more than \$28 billion in 2011, up 22 percent over 2010

## Total Value of National Q4 2011 VC Investments by Stage of Development



## Total Value of National Full Year 2011 VC Investments by Stage of Development



Source: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial

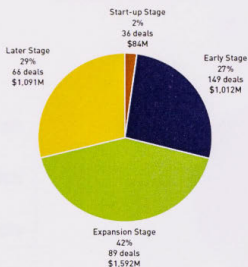
## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

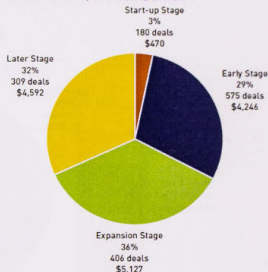
California Accounted for \$3.8 Billion, or 58 Percent, of the Total U.S. Venture Investment in the Fourth Quarter of 2011

- California VC investment totaled \$14.4 billion, up 23 percent over 2010

**Total Value of California Q4 2011  
VC Investments by Stage of Development**  
\$3.8 billion  
340 companies



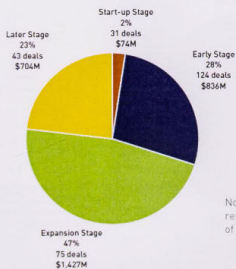
**Total Value of California Full Year 2011  
VC Investments by Stage of Development**  
\$14.4 billion  
1,470 companies



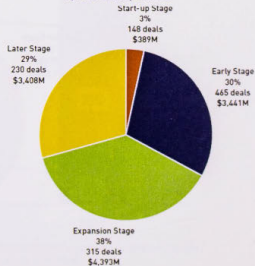
In Silicon Valley, Investment Was Up Slightly in the Fourth Quarter of 2011 over the Previous Quarter

- Total investment to Silicon Valley companies totaled \$11.6 billion in 1,158 deals

**Total Value of Silicon Valley Q4 2011  
VC Investments by Stage of Development**  
\$3.0 billion  
273 companies



**Total Value of Silicon Valley Full Year 2011  
VC Investments by Stage of Development**  
\$11.6 billion  
1,158 companies



Note: Percentages refer to the \$ value of investment

## CONNECT INNOVATION REPORT (CONT'D)

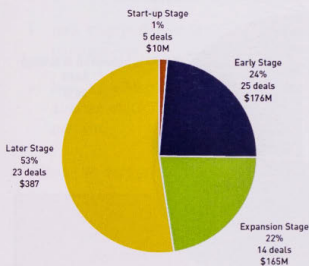
## VENTURE CAPITAL INVESTMENT

Southern California VC Investment Up 18 Percent in 4<sup>th</sup> Quarter and 11 Percent in 2011

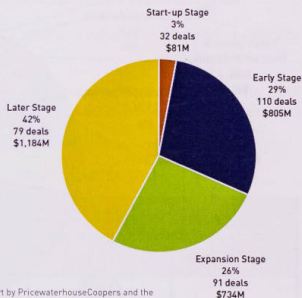
In the fourth quarter of 2011, 67 Southern California companies received \$738 million in VC investment, up 18 percent from the previous quarter. Overall, more than 310 Southern California companies received almost \$3 billion in VC investment in 2011, up 11 percent over 2010.

- Investment in later stage companies increased by 65 percent during the fourth quarter totaling \$387 million compared to \$134 million in the third quarter
- Start-up and early stage deals represented a third of all deals

**Total Value of Southern California Q4 2011  
VC Investments by Stage of Development**  
\$738 million  
67 companies



**Total Value of Southern California Full Year 2011  
VC Investments by Stage of Development**  
\$2.8 billion  
312 companies



Source: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association

## Southern California VC Investment Up in 2011

Venture investment in the Southern California region (Los Angeles, Orange County and San Diego) totaled almost \$2.77 billion in full year 2011, up by 11 percent from \$2.49 billion in 2010.

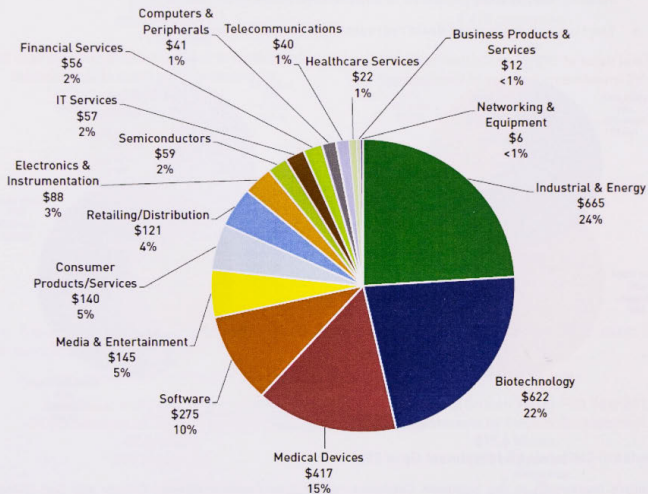
- Southern California companies received \$737 million in 67 deals in the fourth quarter of 2011
- Los Angeles/Orange County saw a 14.5 percent increase in VC investment during the fourth quarter of 2011 to \$469 million invested in 44 companies compared to \$401 million invested in 51 deals in the third quarter
- This was significantly lower compared to second quarter of 2011 when \$616 million was invested in 60 companies
- Industrial & energy (cleantech) and biotech sectors received the largest share of investment in 2011 with \$665 million and \$622 million, respectively
- Medical devices sector was third with \$417 million followed by software receiving \$275 million

## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

Southern California VC Investment Trend: Cleantech and Life Sciences Deals Attract Majority of Funding in 2011 - \$193 Million

SOUTHERN CALIFORNIA VC INVESTMENTS BY INDUSTRY  
FULL YEAR 2011  
\$2,766 MILLION



SOURCE: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial



## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

4<sup>th</sup> Quarter 2011 Regional VC Ranking: San Diego Ranking Improves From 10<sup>th</sup> to 6<sup>th</sup> in Nation, Southern California Ranks as 3<sup>rd</sup> Largest Region

San Diego's regional ranking rose from tenth to sixth in the nation during the fourth quarter of 2011.

- Southern California (San Diego and LA/Orange Counties) ranked third nationally with VC investments of \$738 million for the fourth quarter, up 18 percent from the \$602 million in the third quarter of 2011.
- LA/Orange County ranked fourth nationally with VC investments of \$469 million for the third quarter, up 14.5 percent from the \$401 million in the third quarter of 2011
- Silicon Valley led the nation with more than \$3.0 billion in VC investment in the fourth quarter, up more than 12 percent from the investment level of the previous quarter
- New England climbed to second rank with \$777 million – up nearly 25 percent over the third quarter
- New York Metro region ranked third with \$545 million down 39 percent from the third quarter while Texas region moved down to fifth rank with \$306 million down by nearly 49 percent.

REGIONAL VC INVESTMENT LEVELS – 3<sup>RD</sup> QUARTER 2011 VS. 4<sup>TH</sup> QUARTER 2011

Region	Q3 2011 Rank	Q4 2011 Rank	Q3 2011 VC Investment (in \$M)	Q4 2011 VC Investment (in \$M)	Percent Change
Silicon Valley	1	1	\$2,813	\$3,041	8%
New England	3	2	\$690	\$777	13%
New York Metro	2	3	\$909	\$545	-40%
LA/Orange County	5	4	\$436	\$469	8%
Texas	4	5	\$601	\$306	-49%
<b>SAN DIEGO</b>	<b>10</b>	<b>6</b>	<b>\$217</b>	<b>\$269</b>	<b>24%</b>
Midwest	7	7	\$291	\$201	-31%
Wash. DC/Metroplex	9	8	\$238	\$179	-25%
Southeast	8	9	\$241	\$177	-27%
Colorado	11	10	\$161	\$166	3%
Top 10 Regions			\$6,597	\$6,130	-7%
UNITED STATES			\$7,286	\$6,565	-10%

Source: CONNECT; The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial.

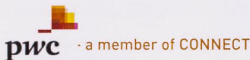
## CONNECT INNOVATION REPORT (CONT'D)

## VENTURE CAPITAL INVESTMENT

## SUMMARY OF NATIONAL AND REGIONAL VC INVESTMENTS

Region		Annual Comparison				Quarter Comparison		
		2008	2009	2010	2011	2010 Q4	2011 Q3	2011 Q4
United States	Total (in Billions)	\$30.5	\$19.7	\$23.3	\$28.4	\$5.5	\$7.3	\$6.6
	# of Deals	4,111	3,065	3,526	3,650	861	953	844
	Average (in Millions)	\$7.4	\$6.4	\$6.6	\$7.8	\$6.4	\$7.6	\$7.8
California Total	Total (in Billions)	\$14.4	\$10.8	\$11.7	\$14.4	\$2.8	\$3.5	\$3.8
	# of Deals	1,656	1,245	1,398	1,465	346	384	340
	Average (in Millions)	\$8.7	\$8.7	\$8.4	\$9.9	\$8.0	\$9.0	\$11.1
Northern CA	Total (in Billions)	\$11.2	\$8.1	\$9.2	\$11.6	\$2.2	\$2.8	\$3.0
	# of Deals	1,281	968	1,057	1,158	268	300	273
	Average (in Millions)	\$8.8	\$8.3	\$8.7	\$10.0	\$8.3	\$9.4	\$11.1
Southern CA	Total (in Billions)	\$3.1	\$2.8	\$2.5	\$2.8	\$0.5	\$0.7	\$0.74
	# of Deals	375	277	341	307	78	84	67
	Average (in Millions)	\$8.4	\$10.0	\$7.3	\$9.1	\$6.8	\$7.8	\$11.0
San Diego	Total (in Billions)	\$1.2	\$1.8	\$0.9	\$0.83	\$0.23	\$0.22	\$0.27
	# of Deals	133	109	126	104	32	22	23
	Average (in Millions)	\$8.9	\$16.1	\$6.9	\$8.0	\$7.0	\$9.9	\$11.7

Source: CONNECT, The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial.



## MERGER &amp; ACQUISITION AND OTHER INVESTMENT ACTIVITY

## Value of San Diego M&amp;A Deals Almost Doubles in 2011 to \$6.6 Billion

Company merger and acquisition (M&A) activity in which San Diego companies were the target of acquisition almost doubled during 2011 compared to 2010.

- The value of reported M&A deals closed in the fourth quarter of 2011 in which a San Diego company was the merger or acquisition target totaled almost \$1.2 billion.
- In Southern California, the M&A target market in the fourth quarter fell 39 percent compared to the previous quarter while Northern California as a region fell 70 percent.

REGIONAL M&A DEALS: TARGET COMPANIES ACQUIRED – 4<sup>TH</sup> QUARTER 2011 and FULL YEAR 2011

Region		2010 Q4	2010	2011 Q3	2011 Q4	2011
Northern CA	Total Reported Value (in Millions)	\$9,207	\$56,566	\$16,338	\$4,877	\$62,218
	# of Closed Deals	174	860	219	191	806
Southern CA	Total Reported Value (in Millions)	\$13,301	\$43,697	\$11,429	\$6,940	\$38,900
	# of Closed Deals	224	788	229	219	827
San Diego	Total Reported Value (in Millions)	\$1,680	\$3,859	\$1,970	\$1,233	\$6,615
	# of Closed Deals	41	156	15	32	156

Southern California includes San Diego figures.

Source: Capital IQ, ROTH Capital Partners, commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT

## Value of San Diego M&amp;A Deals Almost Doubles in 2011 to \$6.6 Billion (cont'd)

Company merger and acquisition (M&A) activity in which San Diego companies were the target of acquisition almost doubled during 2011 compared to 2010.

- Deals in which San Diego companies were the buyers totaled \$1.1 billion in 40 deals during the fourth quarter of 2011.
- Southern California companies acquired \$9.2 billion and Northern California purchasers acquired more than \$32 billion in companies and assets in the fourth quarter.
- The San Diego acquirers primarily targeted firms outside California for purchase totaling \$951 million in the fourth quarter, as did Northern and other Southern California acquirers.
- Companies based outside of California acquired 379 California-based companies. Southern California companies accounted for the majority of the acquisitions (123 deals valued at \$4.1 billion) over Northern California (100 deals, valued at \$3.4 billion).
- Total California M&A activity for the fourth quarter of 2011 exceeded \$76 billion in 855 deals.

CALIFORNIA M&A DEALS: BUYERS AND TARGETS – 4<sup>TH</sup> QUARTER 2011

Buyers	Targets									
	Northern California		Southern California		San Diego		Outside CA		Total	
	Deals	Value (\$M)	Deals	Value (\$M)	Deals	Value (\$M)	Deals	Value (\$M)	Deals	Value
Northern CA	68	\$680	12	\$170	2	\$47	138	\$31,577	220	\$32,474
Southern CA	19	\$736	47	\$1,381	5	\$143	145	\$6,926	216	\$9,186
San Diego	4	\$41	5	\$60	3	\$58	28	\$951	40	\$1,111
Outside CA	100	\$3,421	123	\$4,096	22	\$984	134	\$25,100	379	\$33,602
Total	191	\$4,877	219	\$6,940	32	\$1,233	445	\$64,555	855	\$76,373

Southern California includes San Diego figures.

Source: Capital IQ, ROTH Capital Partners, commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT (CONT'D)

## TOP TEN SAN DIEGO REPORTED M&amp;A DEALS – FULL YEAR 2011

Company	Industry	Reported Deal Value (in \$M)
Prometheus Laboratories Inc.	Healthcare Equipment	\$745.5
Manchester Grand Hyatt San Diego	Hotels and Resorts	\$669.8
Hotel del Coronado LP	Hotels and Resorts	\$590.0
Amira Pharmaceuticals, Inc.	Pharmaceuticals	\$475.0
Genoptix Inc.	Biotechnology	\$449.5
One Park Boulevard LLC	Real Estate	\$422.2
Excaliard Pharmaceuticals, Inc.	Biotechnology	\$316.0
Cypress Bioscience, Inc.	Pharmaceuticals	\$226.7
Anadys Pharmaceuticals, Inc.	Biotechnology	\$216.6
Continuous Computing Corporation	Telecommunications	\$123.9
<b>Total 2011 Top 10 San Diego Reported M&amp;A Deal Value</b>		<b>\$4,235.1</b>
<b>Total 2011 San Diego Reported M&amp;A Deal Value</b>		<b>\$6,615.0</b>

## TOP TEN SOUTHERN CALIFORNIA REPORTED M&amp;A DEALS – FULL YEAR 2011

Company	Industry	Reported Deal Value (in \$M)
Beckman Coulter Inc.	Healthcare/Medical Device	\$7,392.9
Nationwide Health Properties	Healthcare/Real Estate	\$7,330.7
Balboa Insurance Company	Insurance	\$1,200.0
BakerCorp	Environmental Products & Services	\$960.0
Macsteel Service Centers USA, Inc.	Metal Supply	\$918.0
Ameron International Corporation	Industrial Products	\$803.9
HCP Ventures II, LLC	Healthcare/Real Estate	\$789.0
Prometheus Laboratories	Healthcare/Medical Device	\$745.5
Manchester Grand Hyatt	Hotels and Resorts	\$669.8
Volcom Inc.	Apparel/Merchandise	\$607.6
<b>Total 2011 Top 10 Southern California Reported M&amp;A Deal Value</b>		<b>\$21,418</b>
<b>Total 2011 Southern California Reported M&amp;A Deal Value</b>		<b>\$38,900</b>

Source: Capital IQ, ROTH Capital Partners.

## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT (CONT'D)

## Private Placements Trend Down in 2011

The value of San Diego PIPE deals declined each quarter throughout 2011.

Private placements are often structured as PIPE transactions (see sidebar) as an alternative way for public companies to raise capital, and are usually considered a good sign for a public company. PIPE transactions provide smaller and mid-sized public companies with a lower-cost and more efficient means of raising capital, when compared to more traditional forms of equity financing such as secondary offerings.

- PIPE transactions issued by San Diego companies fell to \$305 million in the fourth quarter of 2011 from \$422 million in the previous quarter
- ImageWare Systems, Inc. raised \$10 million in gross proceeds while Marshall Edwards, Inc. raised nearly \$2 million. San Diego PIPE deals represented 40 percent of the total deal value in Southern California in the fourth quarter

Similarly, PIPE transactions were down across the state in the fourth quarter of 2011.

- Southern California (including San Diego) companies issued 33 PIPE private placements statewide totaling \$74 million in the third quarter, down 61 percent from the \$190 million raised in 40 deals in the previous quarter
- In northern California, 22 companies closed private placement deals totaling over \$231 million, roughly the same as in the third quarter
- Overall, in the fourth quarter of 2011, California companies raised \$305 million in 55 PIPE deals, and \$2.7 billion in 234 for the full year 2011

## PRIVATE PLACEMENTS BY REGION – PIPE DEALS BY QUARTER

Region		Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Full Year 2011
Northern CA	Total Reported Value (in \$ Millions)	\$458	\$707	\$456	\$232	\$231	\$1,626
	# of Closed Deals	22	23	16	28	22	89
Southern CA *	Total Reported Value (in \$ Millions)	\$482	\$474	\$347	\$190	\$74	\$1,084
	# of Closed Deals	43	34	38	40	33	145
San Diego	Total Reported Value (in \$ Millions)	\$90	\$301	\$70	\$55	\$12	\$438
	# of Closed Deals	13	11	12	10	4	37
California	Total Reported Value (in \$ Millions)	\$940	\$1,181	\$802	\$422	\$305	\$2,710
	# of Closed Deals	65	57	54	68	55	234

Note: \* Southern California  
PIPE totals include San Diego.

*PIPE stands for Private Investment in Public Equities. PIPE transactions are also referred to as private placements or direct placements in public companies. PIPE transactions are privately negotiated sales of companies' securities to individual accredited investors or institutional funds. Small and mid-size public companies often use PIPE financing because they can obtain capital from a PIPE transaction faster and more cheaply than in a public offering. Particularly over the past couple of years, as the markets have remained relatively closed to secondary financing, PIPES have emerged as a stable and sustained source of equity capital for public companies of all sizes.*

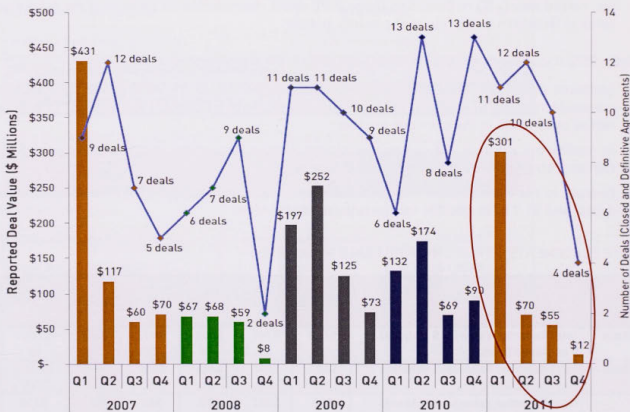
## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT (CONT'D)

 SAN DIEGO PRIVATE PLACEMENTS – PIPE DEALS: 4<sup>TH</sup> QUARTER 2011

Company	Industry	Reported Deal Value (in \$M)
Marshall Edwards Inc. (NasdaqCM:MSHL)	Biotechnology	\$2.0
ImageWare Systems Inc. (OTCPK:IWSY)	Application Software	\$10.0
CommerceTel Corp. (OTCBB:MFON)	Internet Software and Services	\$0.3
Imprimis Pharmaceuticals, Inc. (OTCPK:TDLP.D)	Pharmaceuticals	\$0.1
<b>Fourth Quarter 2011 Total - San Diego PIPES</b>	<b>4 Deals</b>	<b>\$12.4</b>

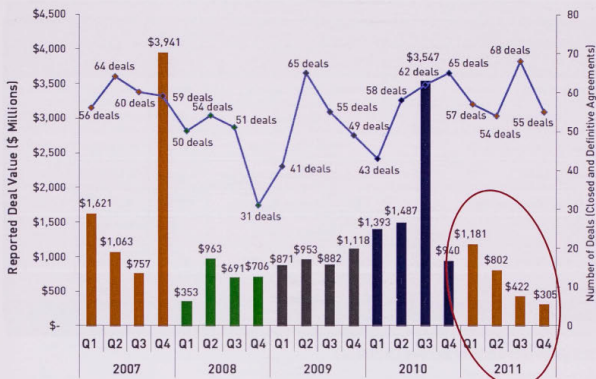
Source: Capital IQ, ROTH Capital Partners, commissioned by CONNECT.

 SAN DIEGO PRIVATE PLACEMENTS – PIPE DEALS: 1<sup>ST</sup> QUARTER 2007 TO 4<sup>TH</sup> QUARTER 2011


Source: Capital IQ, ROTH Capital Partners, commissioned by

## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT (CONT'D)

CALIFORNIA PRIVATE PLACEMENTS – PIPE DEALS: 1<sup>ST</sup> QUARTER 2007 TO 4<sup>TH</sup> QUARTER 2011

Source: Capital IQ, ROTH Capital Partners, commissioned by CONNECT

## IPO Market Picks Up in the Fourth Quarter of 2011

The Initial Public Offering (IPO) market activity for California companies increased during the fourth quarter of 2011.

- Eight California companies went public in the fourth quarter of 2011 – seven of them based in Northern California – raising almost \$2 billion.
- Only one Californian company went public in the third quarter raising \$315 million compared to 12 companies that went public in the second quarter raising more than \$2.4 billion.

CALIFORNIA INITIAL PUBLIC OFFERINGS BY REGION – 4<sup>TH</sup> QUARTER 2011

Region	Reported Deal Value (in \$M)	Number of Deals
San Diego	\$0	0
Southern CA (incl. San Diego)	\$300	1
Northern CA	\$1,619	7
<b>Fourth Quarter 2011 Total - California IPOs</b>	<b>\$1,919</b>	<b>8</b>

Source: Capital IQ, ROTH Capital Partners, commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT (CONT'D)

CALIFORNIA INITIAL PUBLIC OFFERINGS BY COMPANY - 4<sup>TH</sup> QUARTER 2011

Company	Description	Reported Deal Value (in \$M)	City	Region
Jive Software (NYSEGS:JIVE)	Application Software	\$161.3	Palo Alto	Northern CA
Intermolecular, Inc. (NYSEGS:IMI)	Semiconductor	\$96.5	San Jose	Northern CA
ZELTIQ Aesthetics, Inc. (NasdaqGS:ZLTQ)	Medical Technology	\$91.0	Pleasanton	Northern CA
Zynga, Inc. (NasdaqGS:ZNGA)	Home Entertainment Software	\$1,000.0	San Francisco	Northern CA
Ubiquiti Networks, Inc. (NasdaqGS:UBNT)	Communications Equipment	\$105.6	San Jose	Northern CA
Imperva Inc. (NYSE:IMPV)	Systems Software	\$90.0	Redwood Shores	Northern CA
InvenSense, Inc. (NYSE:INVN)	Electronic Components	\$75.0	Sunnyvale	Northern CA
Rentech Nitrogen Partners, L.P. (NYSE:RNF)	Fertilizers and Agricultural Chemicals	\$300.0	Los Angeles	Southern CA
<b>Fourth Quarter 2011 Total - California IPOs</b>	<b>8 Deals</b>	<b>\$1,919.4</b>		

Source: Capital IQ, ROTH Capital Partners; commissioned by CONNECT

## 2011 Saw Surge in IPO Activity Across California

- 29 California companies went public during 2011 - two of them based in San Diego - raising almost \$6 billion in total
- Southern California IPOs raised \$2.8 billion in 10 deals
- 19 Northern California companies went public in 2011 raising \$3.1 billion
- Only nine Californian companies went public in 2010 raising \$1.3 billion

## CALIFORNIA INITIAL PUBLIC OFFERINGS BY REGION - FULL YEAR 2011

Region	Reported Deal Value (in \$M)	Number of Deals
San Diego	\$729	2
Southern CA (incl. San Diego)	\$2,787	10
Northern CA	\$3,142	19
<b>Full Year 2011 Total - California IPOs</b>	<b>\$5,929</b>	<b>29</b>



## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT (CONT'D)

## CALIFORNIA INITIAL PUBLIC OFFERINGS BY COMPANY - FULL YEAR 2011

Company	Description	Reported Deal Value (in \$M)	City	Region
ServiceSource Corporation (NasdaqGM:SREV)	IT Consulting	\$563.8	San Diego	San Diego
AcelRx Pharmaceuticals, Inc. (NasdaqGM:ACRX)	Pharmaceuticals	\$151.3	Santa Monica	Southern CA
Fluidigm Corporation (NasdaqGM:FLDM)	Life Sciences Tools	\$136.5	Santa Monica	Southern CA
The Active Network, Inc. (NasdaqGM:ACTV)	Internet Software	\$165.0	San Diego	San Diego
Air Lease Corporation (NYSE:AL)	Rental & Leasing Services	\$802.5	Los Angeles	Southern CA
Global Eagle Acquisition (NasdaqCM:EAGL)	Investment Bank	\$175.0	Los Angeles	Southern CA
Azteca Acquisition. (OTC BB:AZTA.OB)	Investment Bank	\$100.0	Beverly Hills	Southern CA
Boingo Wireless, Inc (NasdaqGM:WIFI)	Information Technology Services	\$77.9	Los Angeles	Southern CA
Wesco Aircraft Holdings, Inc. (NYSE:WAIR)	Industrials	\$315.0	Valencia	Southern CA
Rentech Nitrogen Partners, L.P. (NYSE:RNF)	Fertilizers and Agricultural Chemicals	\$300.0	Los Angeles	Southern CA
<b>Full Year 2011 Total - Southern California IPOs</b>	<b>10 Deals</b>	<b>\$2,787.0</b>		

Source: Capital IQ, ROTH Capital Partners; commissioned by CONNECT

## Five San Diego Companies Raised Almost \$600 Million in Follow-On Equity Financings in the Fourth Quarter 2011

In the fourth quarter of 2011 the underwritten follow-on public offering market (FPOs) saw 16 California companies raise \$1.9 billion in proceeds from the sale of additional share offerings to investors.

- Five San Diego County companies raised almost \$593 million in follow-on equity capital in the fourth quarter of 2011, almost double from the \$303 million raised by three companies in the previous quarter
- Southern California (including San Diego) accounted for more than half of the California deal value in the fourth quarter with more than \$1 billion in 12 follow-on deals
- Four Northern California companies raised more than \$880 million in the fourth quarter

CALIFORNIA FOLLOW-ON PUBLIC OFFERINGS BY REGION - 4<sup>th</sup> QUARTER 2011

Region	Reported Deal Value (in \$M)	Number of Deals
San Diego County	\$592.5	5
Southern CA (incl. San Diego)	\$1,035.1	12
Northern CA	\$883.3	4
<b>Fourth Quarter 2011 Total - California FPOs</b>	<b>\$1,918.4</b>	<b>16</b>

Source: Capital IQ, ROTH Capital Partners; commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT (CONT'D)

CALIFORNIA UNDERWRITTEN FOLLOW-ON PUBLIC OFFERINGS BY COMPANY – 4<sup>TH</sup> QUARTER 2011

Company	Description	Reported Deal Value (in \$M)	City	Region
Netflix, Inc. (NasdaqGS:NFLX)	Internet Retail	\$200.0	Los Gatos	Northern CA
Oculus Innovative Sciences, Inc. (NasdaqCM:OCLS)	Pharmaceuticals	\$2.1	Petaluma	Northern CA
LinkedIn Corporation (NYSE:LKND)	Internet Software & Services	\$621.3	Mountain View	Northern CA
Dynavax Technologies Corporation (NasdaqCM:DVAX)	Biotechnology	\$60.0	Berkely	Northern CA
Boji Holding Inc. (NasdaqGS:BOFI)	Financial	\$12.0	San Diego	Southern CA
Cadence Pharmaceuticals Inc. (NasdaqGS:CADX)	Pharmaceuticals	\$71.3	San Diego	Southern CA
BioMed Realty Trust Inc. (NYSE:BMR)	Investment - Real Estate	\$404.3	San Diego	Southern CA
Adventrx Pharmaceuticals, Inc. (AMEX:ANX)	Biotechnology	\$17.0	San Diego	Southern CA
Encore Capital Group, Inc. (NasdaqGS:ECPG)	Financial	\$87.9	San Diego	Southern CA
Enova Systems Inc. (AMEX:ENA)	Auto Parts & Equipment	\$1.7	Torrance	Southern CA
Breitburn Energy Partners L.P. (NasdaqGS:BBEP)	Oil and Gas	\$115.1	Los Angeles	Southern CA
Hanmi Financial Corporation (NasdaqGS:HAFC)	Financial	\$70.0	Los Angeles	Southern CA
Kennedy-Wilson Holdings, Inc. (NYSE:KW)	Investment - Real Estate	\$66.0	Beverly Hills	Southern CA
BBCN Bancorp, Inc. (NasdaqGS:BBCN)	Financial	\$55.0	Los Angeles	Southern CA
Lions Gate Entertainment Corp. (NYSE:LGF)	Media & Entertainment	\$134.4	Santa Monica	Southern CA
Arrowhead Research Corp. (NasdaqCM:ARWR)	Biotechnology	\$0.4	Pasadena	Southern CA
<b>Fourth Quarter 2011 Total - California FPOs</b>	<b>16 Deals</b>	<b>\$1,918.4</b>		

Source: Capital IQ, Roth Capital Partners, commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## M&amp;A AND OTHER INVESTMENT (CONT'D)

## San Diego Companies Raised \$1.7 Billion in Follow-On Offerings During 2011

## SOUTHERN CALIFORNIA UNDERWRITTEN FOLLOW-ON PUBLIC OFFERINGS BY COMPANY - 2011

Company	Description	Reported Deal Value (in \$M)
HCP, Inc. (NYSE:HCP)	Real Estate Investment Trust	\$1,107.0
Acacia Research Corporation (NasdaqGS:ACTG)	Patent Consulting Services	\$157.5
Colony Financial, Inc. (NYSE:CLNY)	Real Estate Investment Trust	\$259.0
Realty Income Corp. (NYSE:O)	Real Estate Investment Trust	\$261.1
Encore Capital Group, Inc. (NasdaqGS:ECPG)	Financial Services	\$63.8
Optimer Pharmaceuticals, Inc. (NasdaqGM:OPTR)	Pharmaceuticals	\$67.5
Breitburn Energy Partners L.P. (NasdaqGS:BBEP)	Oil and Gas Exploration	\$91.4
Kratos Defense & Security Solutions, Inc. (NasdaqGS:KTOS)	Aerospace and Defence	\$56.3
Ardea Biosciences, Inc. (NasdaqGS:RDEA)	Biotechnology	\$71.5
Quidel Corp. (NasdaqGS:QDEL)	Health Care Supplies	\$52.6
Excel Trust, Inc. (NYSE:EXL)	Real Estate Investment Trust	\$136.8
Breitburn Energy Partners L.P. (NasdaqGS:BBEP)	Oil and Gas Exploration	\$138.5
Wilshire Bancorp Inc. (NasdaqGS:WIBC)	Financial Services	\$100.0
Alexandria Real Estate Equities Inc. (NYSE:ARE)	Real Estate Investment Trust	\$415.3
OxCom, Inc. (NasdaqGM:DXCM)	Life Sciences - Medical Device	\$74.0
Hudson Pacific Properties, Inc. (NYSE:HPP)	Real Estate Investment Trust	\$101.6
Kilroy Realty Corp. (NYSE:KRC)	Real Estate Investment Trust	\$200.8
Zogenix Inc. (NasdaqGM:ZGNX)	Health Care	\$60.0
Realty Income Corp. (NYSE:O)	Financial Services	\$214.2
Sabra Health Care REIT, Inc. (NasdaqGS:SBRA)	Health Care Real Estate Investment Trust	\$150.0
Nationwide Health Properties, Inc.	Financial Services	\$113.2
BioMed Realty Trust Inc. (NYSE:BMR)	Investment - Real Estate	\$404.3
Cadence Pharmaceuticals Inc.	Pharmaceuticals	\$71.3
Encore Capital Group, Inc. (NasdaqGS:ECPG)	Financial Services	\$87.9
Breitburn Energy Partners L.P. (NasdaqGS:BBEP)	Oil and Gas Exploration	\$115.1
Hanmi Financial Corporation (NasdaqGS:HAFC)	Financial Services	\$70.0
Kennedy-Wilson Holdings, Inc. (NYSE:KW)	Investment - Real Estate	\$66.0
BBCN Bancorp, Inc. (NasdaqGS:BBCN)	Financial Services	\$55.0
Lions Gate Entertainment Corp. (NYSE:LGF)	Media & Entertainment	\$134.4
2011 San Diego Deals > \$50M	13 Deals	\$1,621.3
2011 Total - San Diego Follow On Public Equity Offerings		\$1,739.6
2011 Southern California Deals > \$50M	29 Deals	\$4,896.0
2011 Total - Southern California Follow On Public Equity Offerings		\$5,235.5

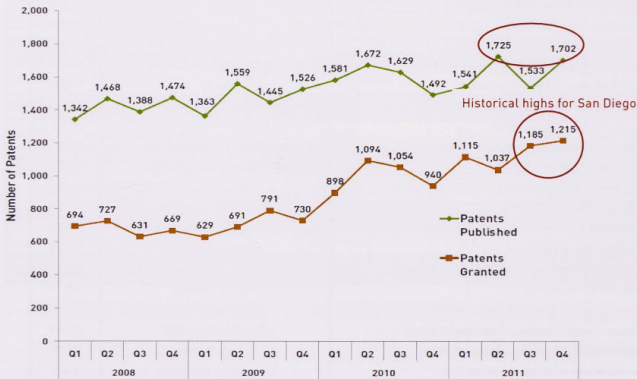
Source: Capital IQ, ROTH Capital Partners, commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## PATENT ACTIVITY

## San Diego Patent Activity Hits All-Time High in 2011

- 1,215 patents were granted in the fourth quarter of 2011 in San Diego County – a historical high for the region, and up almost 30 percent from the 940 granted in the fourth quarter of 2010.
- 1,702 patent applications published were up in the fourth quarter of 2011 in San Diego, almost equaling 11 percent the 1,725 in the second quarter of 2011, which was an all-time high for the region.
- New initiatives by the U.S. Patent and Trade Office aim to reduce patent backlog and quicken the pace of patent examination, which would greatly benefit tech entrepreneurs aiming to secure the intellectual property of their innovations.

SAN DIEGO PATENT ACTIVITY – 1<sup>ST</sup> QUARTER 2008 TO 4<sup>TH</sup> QUARTER 2011

Source: United States Patent and Trademark Office; UC San Diego Extension, commissioned by CONNECT

U.S. Patent and Trade Office Director David Kappos outlined the progress and plans for future initiatives to speed the pace of patent examination at a CONNECT Public Policy forum in December 2011. In his recent public blog, Kappos commented, "For the first time in several years, the Patent and Trademark Office was able to reduce the backlog of unexamined patent applications to below 665,000, a remarkable achievement considering the five percent increase in patent applications filings in FY2011. Through improved practices and processes, we are on track to push the backlog down even further, helping deliver new technologies to the marketplace faster, which in turn spurs job creation and drives economic growth for our country."

## CONNECT INNOVATION REPORT (CONT'D)

## PATENT ACTIVITY (CONT'D)

“The recent USPTO initiatives have clearly led to positive differences in how the USPTO is operating. Those initiatives have definitely led to the USPTO granting patents at a faster pace. That trend is evidenced by the increase in the pace of patents granted for San Diego inventors and entrepreneurs, which has been accelerating since early 2009. Successfully securing their intellectual property is critical for technology companies’ success in attracting capital investment and protecting their innovations,” said Richard Campbell, leader of the patent prosecution and counseling practice at Procopio, Cory, Hargreaves & Switch LLP.

In September 2011, President Obama signed into law the *America Invents Act*. This sweeping legislation equips the USPTO with the resources necessary to operate an efficient IP system that processes patent applications and issues high-quality patents quickly. By transitioning to a simpler, more objective, and more inventor-friendly system of issuing patents, the new law helps ensure that independent inventors and small entities have greater clarity and certainty over their property rights and will be able to navigate the patent system on a more equitable footing with large enterprises.

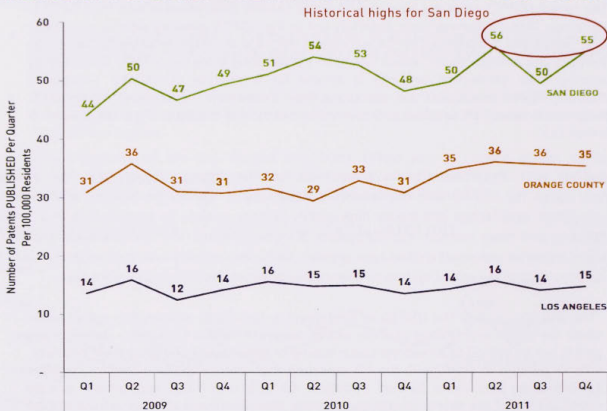
“The AIA also allows the USPTO to implement a fast-track examination option under which the patent examination process will be completed within 12 months. Getting a key patent can be critical to an entrepreneur hoping to raise capital and grow their business, with 76 percent of startups in the US reporting that venture capital investors consider patents when they make funding decisions. So with over 2,000 applications already submitted under the new acceleration program, many hundreds of office actions mailed and over 20 notices of allowance, businesses of all sizes are already leveraging the new tool to develop, grow and market their products and services with unprecedented swiftness, under the AIA,” commented Director Kappos.

- San Diego continued to lead the Southern California region in the fourth quarter of 2011 in terms of patent density measured by the number of patents published and granted per 100,000 residents over the past three years
- The number of patent applications published rose in San Diego and Los Angeles Counties during the fourth quarter of 2011; Orange County patent applications published dipped very slightly in the fourth quarter

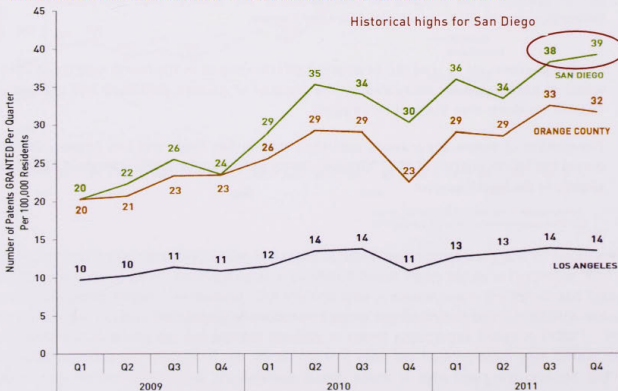
## CONNECT INNOVATION REPORT (CONT'D)

## PATENT ACTIVITY (CONT'D)

## PATENT DENSITY PER QUARTER - PATENT APPLICATIONS PUBLISHED: Q1 2008 TO Q4 2011



## PATENT DENSITY PER QUARTER - PATENTS GRANTED: Q1 2008 TO Q4 2011

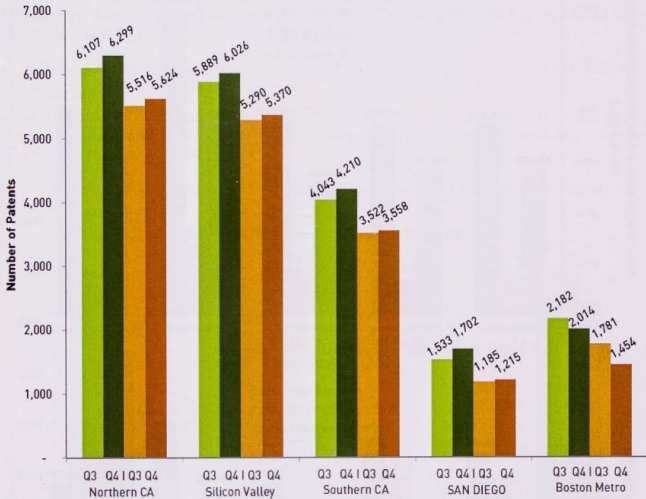


## CONNECT INNOVATION REPORT (CONT'D)

## PATENT ACTIVITY (CONT'D)

## Patent Activity Up Across California in 2011

## PATENTS PUBLISHED AND GRANTED BY REGION – 3RD QUARTER 2011 vs. 4TH QUARTER 2011



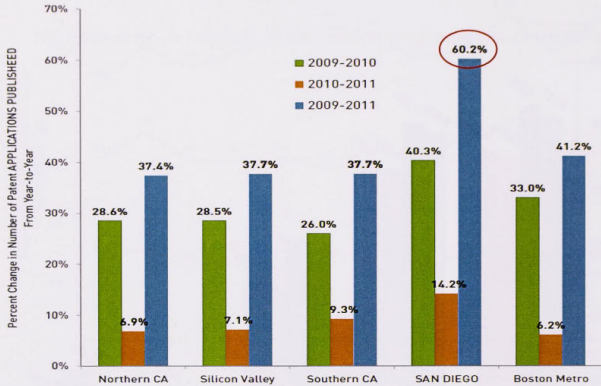
Source: United States Patent and Trademark Office; UC San Diego Extension; commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## PATENT ACTIVITY (CONT'D)

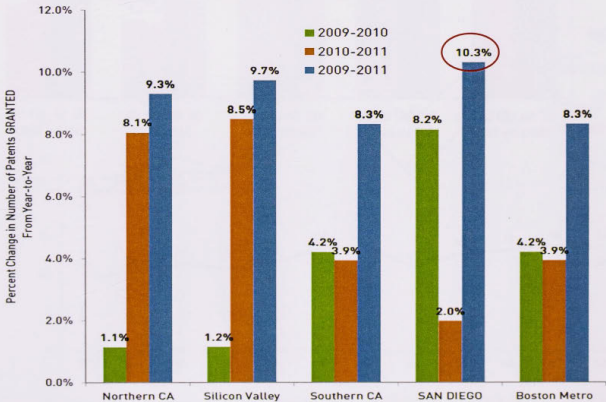
## San Diego Leads California in Patent Growth During Last Two Years

## YEAR-TO-YEAR GROWTH – PATENT APPLICATIONS PUBLISHED: 2008 TO 2011



Source: United States Patent and Trademark Office, UC San Diego Extension, commissioned by CONNECT

## YEAR-TO-YEAR GROWTH – PATENTS GRANTED: 2008 TO 2011



Source: United States Patent and Trademark Office, UC San Diego Extension, commissioned by CONNECT



## CONNECT INNOVATION REPORT (CONT'D)

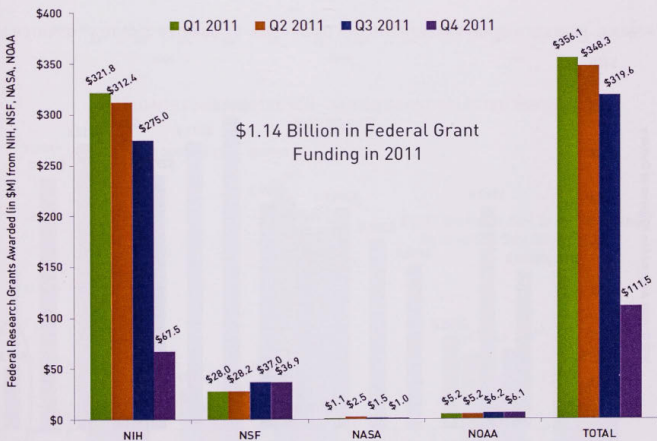
## FEDERAL RESEARCH GRANTS: SAN DIEGO AND CALIFORNIA

## Federal Research Funding Down Slightly In 2011; NIH Funding Drops Sharply In Fourth Quarter

San Diego's federal research grant funding from the National Institutes of Health (NIH), National Science Foundation (NSF), National Aeronautics and Space Administration (NASA) and National Oceanic and Atmospheric Administration (NOAA) and Department of Defense SBIR/STTR funding totaled more than \$1.1 billion in 2011, down 15 percent from \$1.3 billion in 2010.

- NSF funding hit new highs in the latter half of 2011 to total more than \$130 million in research grants for San Diego
- NIH funding to San Diego organizations was down sharply (-75 percent) in the fourth quarter as a result of the agency operating under a continuing budget resolution - further reductions are anticipated in 2012

## FEDERAL RESEARCH GRANTS RECEIVED IN SAN DIEGO – NIH, NSF, NASA AND NOAA



Source: NIH, NSF, NASA, NOAA, UC San Diego Extension; commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## FEDERAL RESEARCH GRANTS: SAN DIEGO AND CALIFORNIA (CONT'D)

## NIH Funding Declines Sharply Due To Agency Operating On a Continuing Resolution

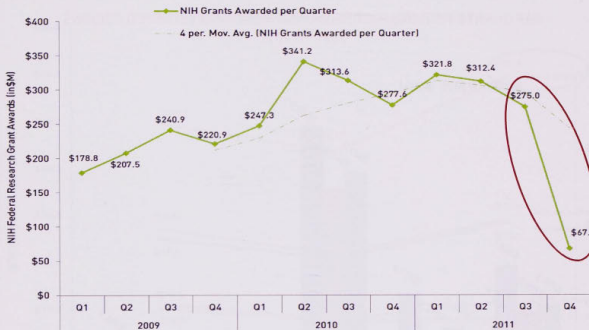
- In the fourth quarter of 2011, San Diego research institutions and innovation companies received more than \$67.5 million in NIH funding
- This dramatic drop from previous quarters was due to the agency operating under a Continuous Resolution (CR) signed by President Obama on November 19, 2011, essentially operating without an approved budget
- The CR continued government operations through December 16, 2011 at the FY 2011 level minus 1.5 percent
- Until FY 2012 appropriations are enacted, NIH issued non-competing research grant awards at a level below that indicated on the most recent Notice of Award
- Spending cuts will further impact NIH funding as the government's efforts at deficit reduction bite deep into research grant awards

FEDERAL RESEARCH GRANTS RECEIVED IN SAN DIEGO - NIH 1<sup>ST</sup> QUARTER 2008 TO 4<sup>TH</sup> QUARTER 2011

Source: NIH; UC San Diego Extension; commissioned by CONNECT

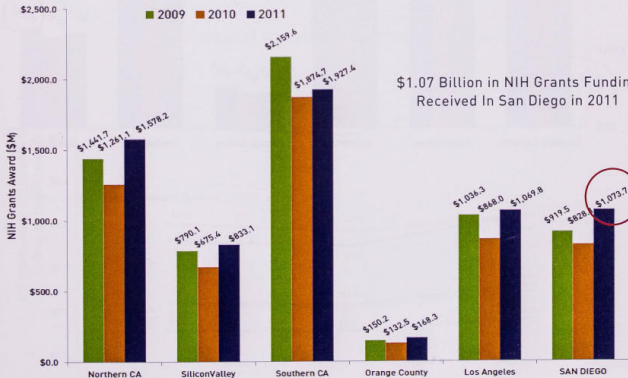
## CONNECT INNOVATION REPORT (CONT'D)

## FEDERAL RESEARCH GRANTS: SAN DIEGO AND CALIFORNIA (CONT'D)

 FEDERAL RESEARCH GRANTS RECEIVED IN SAN DIEGO - NIH 1<sup>ST</sup> QUARTER 2009 TO 4<sup>TH</sup> QUARTER 2011


Source: NIH, UC San Diego Extension, commissioned by CONNECT

## NIH GRANTS FUNDING RECEIVED - SAN DIEGO AND SELECTED REGIONS 2009 TO 2011



\$1.07 Billion in NIH Grants Funding Received In San Diego in 2011

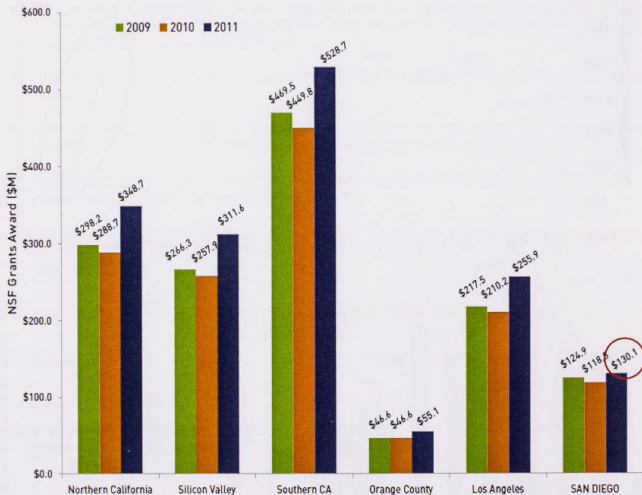
Source: NIH, UC San Diego Extension, commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## FEDERAL RESEARCH GRANTS: SAN DIEGO AND CALIFORNIA (CONT'D)

\$130 Million in NSF Grants Funding Received in San Diego In 2011 – New High

NSF GRANTS FUNDING RECEIVED – SAN DIEGO AND SELECTED REGIONS  
2009 TO 2011



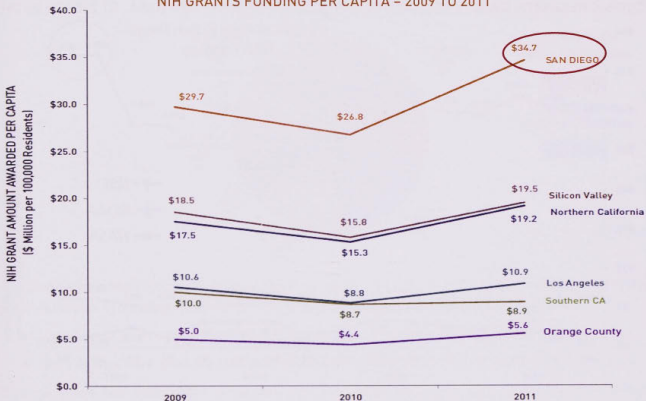
Source: NSF; UC San Diego Extension, commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## FEDERAL RESEARCH GRANTS: SAN DIEGO AND CALIFORNIA (CONT'D)

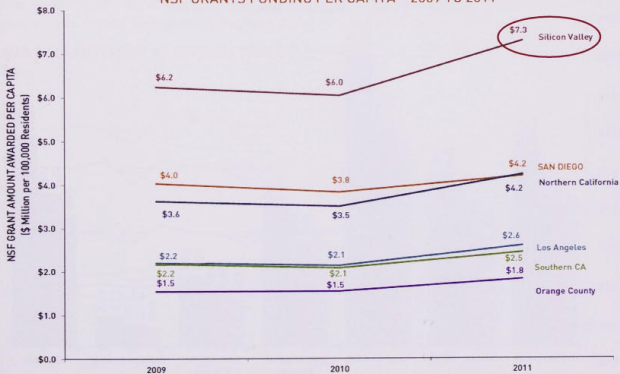
San Diego Leads California in NIH Funding Per Capita; Silicon Valley Leads NSF Funding Per Capita in 2011

NIH GRANTS FUNDING PER CAPITA – 2009 TO 2011



Source: NSF, UC San Diego Extension, commissioned by CONNECT

NSF GRANTS FUNDING PER CAPITA – 2009 TO 2011



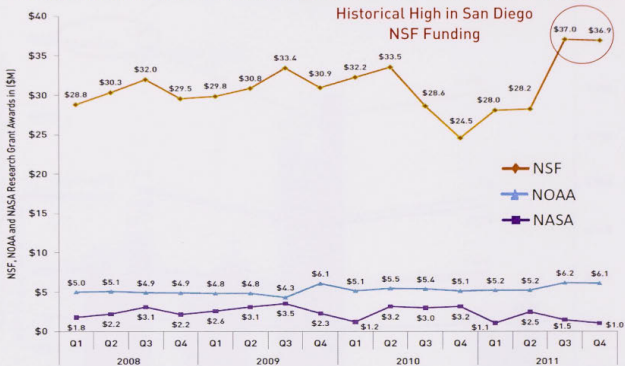
Source: NSF, UC San Diego Extension, commissioned by CONNECT

## CONNECT INNOVATION REPORT (CONT'D)

## FEDERAL RESEARCH GRANTS: SAN DIEGO AND CALIFORNIA (CONT'D)

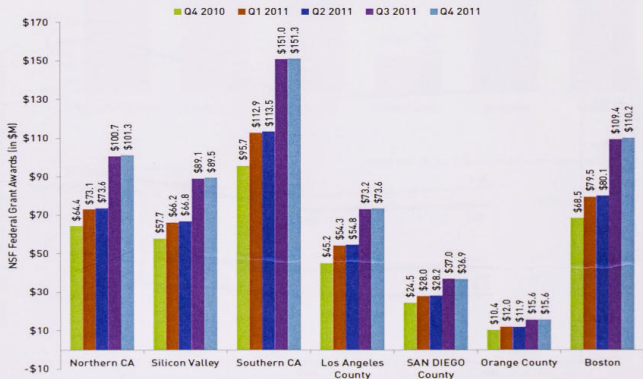
San Diego received more than \$6 million in federal research funding from National Oceanic and Atmospheric Administration (NOAA), and \$1 million from NASA in the fourth quarter of 2011.

## FEDERAL RESEARCH GRANTS RECEIVED IN SAN DIEGO - NSF, NOAA AND NASA Q1 2008 TO Q4 2011



Source: NSF, NASA, NOAA, UC San Diego Extension, commissioned by CONNECT

## NSF FUNDING RECEIVED - SAN DIEGO AND SELECTED REGIONS

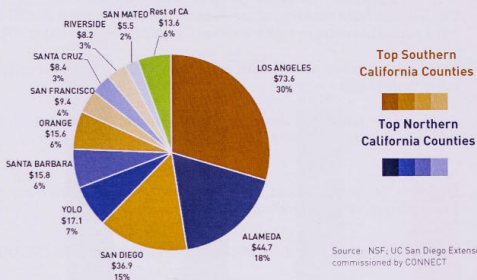


Source: NSF, UC San Diego Extension, commissioned by CONNECT

CONNECT INNOVATION REPORT (CONT'D)

FEDERAL RESEARCH GRANTS: SAN DIEGO AND CALIFORNIA (CONT'D)

NSF FUNDING RECEIVED – TOP TEN CALIFORNIA COUNTIES – 4<sup>TH</sup> QUARTER 2011  
CALIFORNIA TOTAL: \$249M

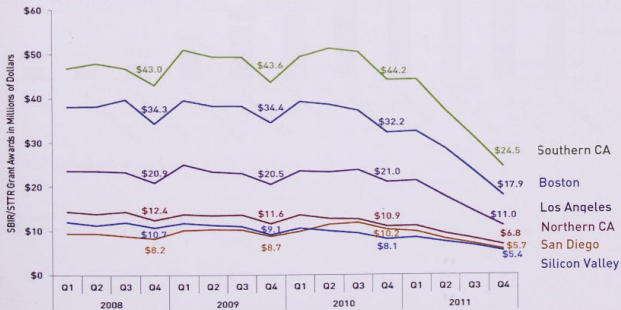


San Diego innovation companies received \$5.7 million in Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program grants in the fourth quarter of 2011.

- San Diego as a region received \$30.5 million in SBIR/STTR funding during 2011
- All regions have shown a marked reduction in SBIR/STTR funding during that past year

Through these two competitive programs, the U.S. Small Business Administration (SBA) Office of Technology ensures that the nation's small, high tech, innovative businesses are a significant part of the federal government's defense technology research and development efforts. SBIR/STTR funding is only a small portion of total federal Department of Defense spending in the San Diego region.

REGIONAL DEPARTMENT OF DEFENSE SBIR/STTR FUNDING – Q1 2008 TO Q4 2011

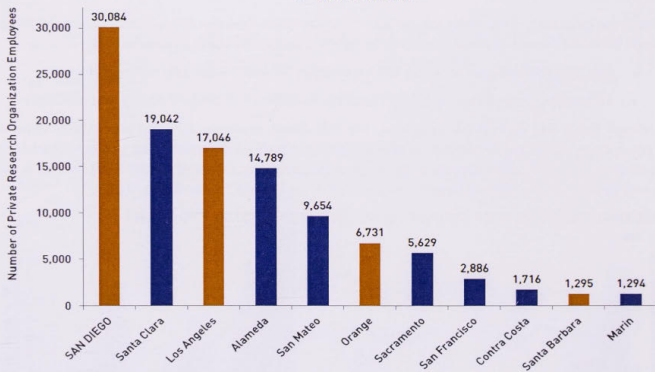


## CONNECT INNOVATION REPORT (CONT'D)

## PRIVATE RESEARCH ORGANIZATION EMPLOYMENT AND WAGES

## San Diego Leads California in Private Research Organization Employment

- San Diego private research organizations employed almost 30,000 workers according to the most recently available data from the U.S. Department of Labor (Q2 2011)
- Santa Clara ranked second with more than 19,000 and Los Angeles was third with slightly more than 17,000
- Southern California private research organizations employed almost 57,000 employees in the second quarter of 2011 compared to the 54,000 employees in the northern California region
- Southern California, Silicon Valley and Boston have the greatest concentrations of private research organization employment in the nation

TOP 10 COUNTIES IN CALIFORNIA RANKED BY PRIVATE RESEARCH ORGANIZATION EMPLOYMENT  
2<sup>ND</sup> QUARTER 2011

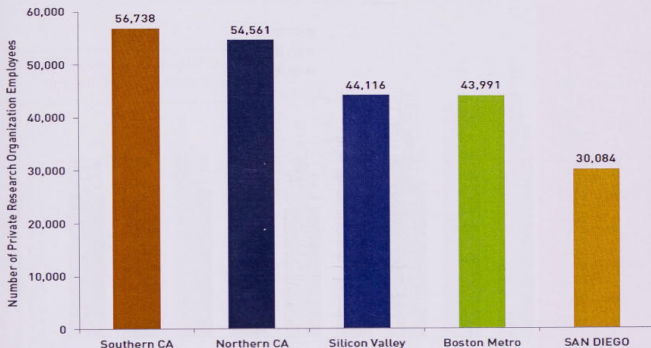
Latest quarter data available Q2 2011

Source: Quarterly Census of Employment, U.S. Bureau of Labor Statistics; UC San Diego Extension, commissioned by CONNECT



## CONNECT INNOVATION REPORT (CONT'D)

## PRIVATE RESEARCH ORGANIZATION EMPLOYMENT AND WAGES

REGIONAL PRIVATE RESEARCH ORGANIZATION EMPLOYMENT – 2<sup>ND</sup> QUARTER 2011

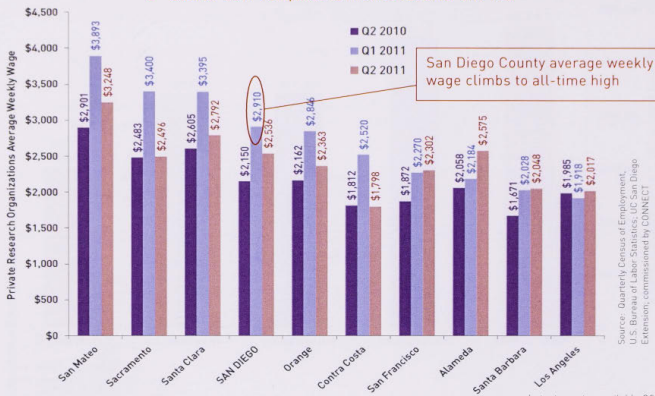
Source: Quarterly Census of Employment, U.S. Bureau of Labor Statistics, UC San Diego Extension, commissioned by CONNECT

- San Diego's private research organization average weekly wage climbed to its highest level (\$2,910/week) for the first quarter of 2011 and dropped back to \$2,546/week in the second quarter
- San Diego County private research organization wages ranked fourth highest in California in the second quarter of 2011 behind San Mateo (\$3,248/week), Santa Clara (\$2,792/week) and Alameda Counties (\$2,575/week), and higher than Boston (\$2,589/week)

## CONNECT INNOVATION REPORT (CONT'D)

## PRIVATE RESEARCH ORGANIZATION EMPLOYMENT AND WAGES

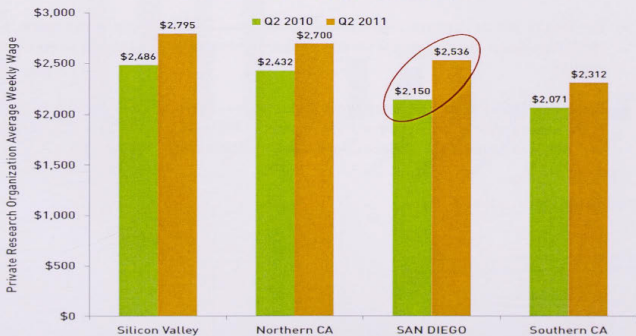
## PRIVATE RESEARCH ORGANIZATION AVG. WEEKLY WAGES – TOP TEN COUNTIES IN CALIFORNIA

 2<sup>ND</sup> Quarter 2011 Compared to Previous Quarter and Year


Source: Quarterly Census of Employment, U.S. Bureau of Labor Statistics; UC San Diego Extension, commissioned by CONNECT

Latest quarter available Q2

## REGIONAL PRIVATE RESEARCH ORGANIZATION AVERAGE WEEKLY WAGES

 2<sup>ND</sup> QUARTER 2010 versus 2<sup>ND</sup> QUARTER 2011


Source: Quarterly Census of Employment, U.S. Bureau of Labor Statistics; UC San Diego Extension, commissioned by CONNECT

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## APPENDIX: SUMMARY TABLES - NEW INNOVATION COMPANIES

## CALIFORNIA

CONNECT Innovation Report: Summary Table - California Start-up Technology Companies 2007 to 2011

	2007				2008				2009				2010				2011				Annual				
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2007	2008	2009	2010	2011
<b>TOTAL</b>	382	422	844	1,319	414	472	730	580	476	729	417	700	357	597	734	445	597	475	592	414	2,941	2,197	2,522	2,350	2,440
Pharma/Bio/Medical	38	83	144	256	49	78	144	126	84	184	138	121	71	102	159	134	93	110	115	121	643	341	970	1,508	439
Communications	57	42	133	132	44	54	128	111	84	90	103	99	62	102	139	113	123	145	107	113	384	337	377	414	455
Computer & Electronics	54	64	161	412	109	112	113	90	74	122	106	125	53	82	92	100	43	94	104	90	691	424	427	327	321
Defense and Transportation	20	24	16	30	19	25	20	41	29	28	24	31	20	36	21	31	30	32	27	34	92	105	112	104	158
Environmental Technology	29	18	38	39	25	30	42	23	30	47	48	40	26	45	37	48	35	33	27	38	123	120	184	158	130
Recreational Goods/Manufacturing	9	15	15	17	14	9	29	18	17	15	6	13	9	21	29	55	45	32	20	15	56	70	51	114	112
Software	156	155	337	334	134	165	232	169	147	221	192	231	114	211	219	177	229	229	192	238	962	790	791	723	807
<b>PERCENT OF TOTAL:</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Pharma/Bio/Medical	15%	20%	19%	27%	17%	16%	23%	22%	18%	26%	22%	22%	20%	17%	27%	21%	16%	16%	19%	20%	22%	20%	23%	22%	18%
Communications	15%	15%	15%	10%	11%	11%	18%	19%	18%	12%	17%	16%	17%	17%	16%	17%	21%	27%	18%	13%	13%	15%	15%	18%	19%
Computer & Electronics	14%	15%	19%	31%	26%	24%	15%	16%	16%	17%	17%	18%	15%	14%	13%	15%	7%	14%	18%	15%	23%	19%	17%	14%	13%
Defense and Transportation	5%	6%	2%	2%	5%	5%	3%	3%	6%	4%	4%	4%	6%	6%	3%	9%	5%	5%	5%	6%	3%	5%	4%	5%	5%
Environmental Technology	8%	4%	4%	3%	6%	6%	6%	4%	8%	9%	8%	6%	7%	8%	5%	7%	6%	5%	5%	6%	4%	5%	8%	7%	5%
Recreational Goods/Manufacturing	2%	4%	2%	1%	3%	2%	4%	3%	4%	2%	1%	2%	3%	4%	4%	8%	9%	5%	2%	2%	2%	3%	2%	5%	5%
Software	41%	37%	39%	25%	32%	35%	32%	29%	31%	30%	31%	33%	32%	35%	30%	27%	38%	34%	32%	29%	33%	32%	31%	31%	36%
<b>Annual Change:</b>																									
Number Change	31	50	-136	-739	62	256	-113	120	-119	-132	119	-140	240	78	-144	-44	-794	325	-172	130					
TOTAL	8%	12%	-16%	-56%	15%	54%	-15%	21%	-25%	-18%	19%	-8%	67%	13%	-20%	-7%	-27%	15%	-7%	6%					
Pharma/Bio/Medical	19%	-6%	6%	-66%	22%	108%	-17%	27%	-15%	-45%	44%	-16%	31%	8%	-42%	-11%	-33%	29%	-21%	-14%					
Communications	-27%	-13%	4%	-14%	95%	47%	-20%	-12%	-28%	-11%	25%	-1%	98%	45%	-22%	-29%	-12%	12%	10%	10%					
Computer & Electronics	102%	75%	-36%	-76%	-32%	9%	-6%	9%	-28%	-33%	-13%	-20%	-19%	15%	13%	-10%	-39%	1%	-23%	1%					
Defense and Transportation	-5%	-4%	25%	37%	53%	12%	20%	-24%	-21%	29%	-12%	0%	50%	-11%	29%	10%	14%	7%	-4%	14%					
Environmental Technology	-14%	67%	11%	-39%	56%	123%	14%	74%	-33%	-33%	-22%	20%	35%	-27%	-27%	-21%	-2%	62%	-20%	-15%					
Recreational Goods/Manufacturing	56%	-60%	93%	6%	21%	67%	-79%	-26%	-47%	40%	383%	323%	400%	52%	-11%	-73%	25%	-27%	124%	-2%					
Software	-14%	6%	-31%	-49%	10%	34%	-17%	37%	-21%	-5%	-14%	-23%	20%	82%	4%	-19%	29%	0%	-16%	24%					
<b>Quarter Change:</b>																									
Number Change	40	443	453	-905	597	257	-150	-104	253	-112	83	-343	240	139	-76	-43	79	-83	24						
TOTAL	10%	105%	52%	-69%	14%	54%	-21%	-18%	53%	-15%	13%	-49%	87%	22%	-19%	-10%	12%	-12%	4%						
Pharma/Bio/Medical	43%	100%	116%	91%	127	113%	-22%	-36%	121%	-24%	17%	54%	44%	95%	-32%	32%	18%	5%	5%						
Communications	9%	115%	-1%	-67%	22%	137%	-13%	-23%	5%	14%	-5%	-27%	61%	9%	-19%	9%	18%	-24%	-25%						
Computer & Electronics	19%	152%	156%	-74%	3%	1%	-20%	-18%	65%	-13%	18%	-58%	55%	12%	9%	-37%	11%	-13%	10%						
Defense and Transportation	20%	-28%	61%	-37%	32%	-20%	105%	-29%	-3%	-14%	29%	-25%	80%	-42%	48%	-3%	7%	-16%	24%						
Environmental Technology	-38%	111%	0%	-34%	20%	40%	-45%	70%	72%	-28%	-17%	-25%	73%	-18%	30%	-27%	-6%	-18%	41%						
Recreational Goods/Manufacturing	67%	0%	13%	-18%	-36%	222%	-38%	-6%	-12%	-60%	117%	-21%	133%	38%	90%	-18%	-29%	-38%	-25%						
Software	-1%	117%	-1%	-60%	22%	41%	-27%	-13%	50%	-13%	20%	-50%	82%	4%	-19%	29%	0%	-16%	24%						

## SAN DIEGO

CONNECT Innovation Report: Summary Table - San Diego Start-up Technology Companies 2005 to Q4 2011

	2005				2006				2007				2008				2009				2010				2011				Annual							
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2005	2006	2007	2008	2009	2010	2011					
<b>TOTAL</b>	48	102	93	89	81	56	45	49	59	52	104	137	44	67	97	72	64	101	74	35	64	94	84	70	76	91	75	107	61	241	232	282	219	277	212	
Pharma/Bio/Medical	17	24	28	38	18	13	14	14	9	19	29	40	12	21	30	22	19	27	29	25	8	15	30	15	10	13	11	13	22	21	67	86	95	110	71	67
Communications	2	14	24	2	15	7	9	6	6	8	14	4	7	15	12	14	12	14	9	9	7	10	16	15	17	12	17	18	8	44	37	36	44	48	54	
Computer & Electronics	6	14	4	13	7	10	6	4	4	9	19	43	6	10	14	4	4	12	5	4	5	4	10	14	2	8	7	7	37	27	35	34	25	36	24	
Defense and Transportation	0	2	3	1	6	1	4	0	0	2	3	2	2	4	0	1	0	0	0	0	4	1	6	1	4	1	6	1	15	4	11	5	9	12		
Environmental Technology	0	16	6	9	2	10	7	3	2	0	6	4	3	3	6	4	3	12	4	4	1	3	3	2	6	4	6	7	39	22	16	25	10	21		
Recreational Goods/Manufacturing	0	0	0	0	0	0	0	0	0	0	3	2	0	3	5	3	2	2	2	1	0	0	0	0	7	9	4	3	0	8	14	10	23	23		
Software	15	32	26	28	32	15	15	16	15	13	27	34	25	21	25	23	22	24	30	11	31	26	24	20	27	27	23	20	99	79	84	100	80	109		

Source: CONNECT, Nabira University System Institute for Policy Research.

	2005				2006				2007				2008				2009				2010				2011							
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2005	2006	2007	2008	2009	2010	2011	
<b>TOTAL</b>	54	-9	-4	-8	-25	-1	-6	-10	13	82	33	-91	21	30	-25	-65	-23	-4	-39	20	30	-10	-14	8	16	16						
Pharma/Bio/Medical	7	4	10	-20	-5	1	2	-7	0	12	-28	0	9	4	-8	-18	-8	0	-17	18	18	-4	2	0	4	2						
Communications	12	-12	-24	13	-8	-3	1	2	6	-10	3	-3	0	-1	-5	0	-2	3	-1	-1	2	-5	-9									
Computer & Electronics	8	-10	9	-6	3	-4	-2	0	5	10	24	-37	4	4	10	-7	-1	3	-2	5	4	12	6	-1	0	0						
Defense and Transportation	2	-1	-2	-5	-3	0	-4	0	-2	0	1	-1	0	2	0	-4	-1	0	0	0	0	0	0	0	0	0						
Environmental Technology	8	-10	3	-7	8	-3	-4	-1	-2	8	-4	-1	0	-3	-2	-1	9	-6	-2	-3	2	0	0	-1	4	0						
Recreational Goods/Manufacturing	0	0	0	1	-1	0	0	0	-1	-2	3	0	-2	-1	-2	-2	0	1	5	3	4	-2	-3									
Software	17	-8	0	6	-7	0	0	-1	-2	24	-19	6	4	5	0	4	-10	14	-1	-7	0	0	0									
<b>TOTAL annual change</b>	33	-48	-59	40	-1	-24	-4	-46	80	7	15	-77	25	30	-14	-21	-31	37	-10	36	12	-3	9									
Pharma/Bio/Medical	-1	-11	-14	-22	-9	16	14	24	3	2	-18	7	6	1	-3	-11	3	-11	-22	4	-10	3	-2									
Communications	17	-7																														

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The CONNECT Innovation Report is available online at <http://www.connect.org/programs/connect-track/>









Catalyzing Innovation in San Diego

The CONNECT Innovation Report provides a set of indicators of the strength and impact of the innovation economy in San Diego versus other areas of the state or country depending upon the indicator.

It demonstrates that San Diego is a leading center for innovation because of the region's world-class research, leadership and management talent.

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