# **VENTURE FINANCING**

TRENDS & ANALYSIS



### INTRODUCTION



#### **ABOUT THE STUDY**

This study was prepared by Tom Bird, an independent healthcare analyst and author for Gryphon Analytics, a leading independent healthcare research portal.

Venture capital continues to play a pivotal role in the development of novel medical innovation from new biotechnology therapies to revolutionary medical devices. These innovative medical technologies affect virtually all Americans.

The purpose of the study is to provide corporate finance professionals, operators, and investors, an overview of the fundamental trends impacting venture capital investment in the healthcare and life sciences communities.

This study is part of Gryphon Analytics' public outreach program aimed at collecting and disseminating information about the important role that life sciences venture investing plays in driving revolutionary medical innovation.



The information presented in this report has been gathered with the utmost care from sources believed to be reliable, but is not guaranteed. This analysis has been prepared and is based on information available to it, including information derived from public sources that have not been independently verified.

The statistics for this publication were assembled primarily from the MoneyTree™ Report by PricewaterhouseCoopers, The National Venture Capital Association Yearbook 2012 by Thomson Reuters, and DowJones VentureSource.

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### **TRENDS**



After rising in 2011, U.S. venture capital investment fell 10% last year as firms put less money into consumer, internet, renewable energy and healthcare companies.

Overall, investors deployed \$26.5 billion into 3,698 financings for U.S.-based venture-backed companies. Deal volume fell 6% from the prior year while VCs deployed lower capital amounts per transaction.

#### **Quarterly Trending**

For the fourth quarter, venture investment of \$6.4 billion into 968 companies fell 3% in dollars, but rose 5% in deal volume over Q3 2012.

Compared to the prior year same quarter, venture investments were 13% less while deal volume remained equal.

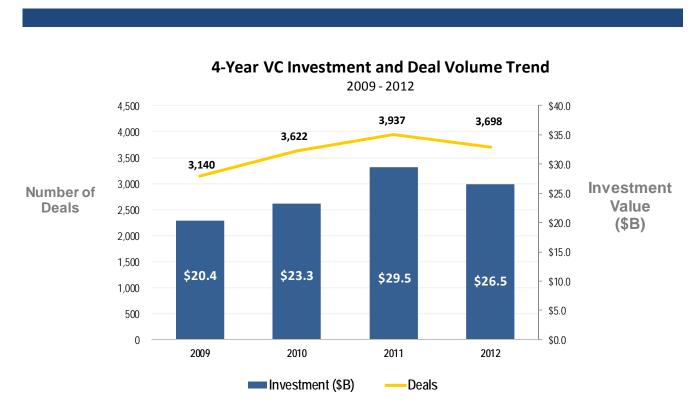
Interestingly, according to Dow Jones VentureSource, corporate investments reached 2000 levels for the first time. Eight deals in the fourth quarter alone generated a 32% increase in capital.

GENERAL ECONOMIC UNCERTAINTY CONTINUES TO HINDER CAPITAL INVESTMENTS, AND VENTURE CAPITAL FINANCING IS NO DIFFERENT

# YEAR-OVER-YEAR INVESTMENT TRENDS



Investment and deal volume over the past 4 years have resulted in +7.9% and +4.2% CAGRs, respectively.

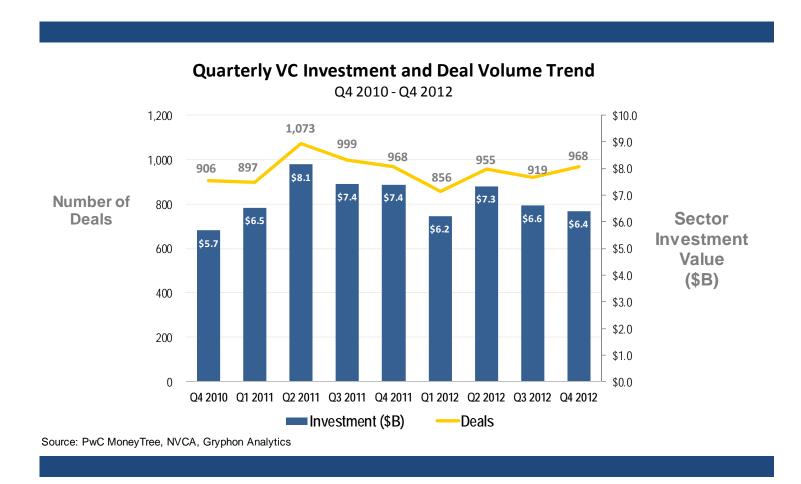


Source: PwC MoneyTree, NVCA, Gryphon Analytics

# **QUARTERLY INVESTMENT TRENDS**



Quarter-over-quarter venture capital trends demonstrate an active and strengthening investment market.



# INVESTMENT BY STAGE OF DEVELOPMENT



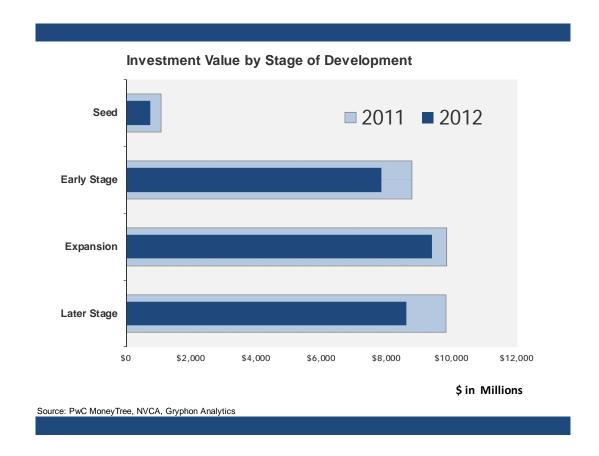
#### **INVESTMENTBYSTAGE**

USD \$, millions

STAGE	2011	2012
Seed	\$1,056	\$725
Early Stage	8,761	7,832
Expansion	9,836	9,374
Later Stage	9,810	8,594
Total	\$29,463	\$26,525

In 2012, all development stages experienced a decline in investment dollars.

Investment decline relative to 2011 was concentrated amongst Later Stage and Early Stage companies, declining -41% and -32%, respectively.

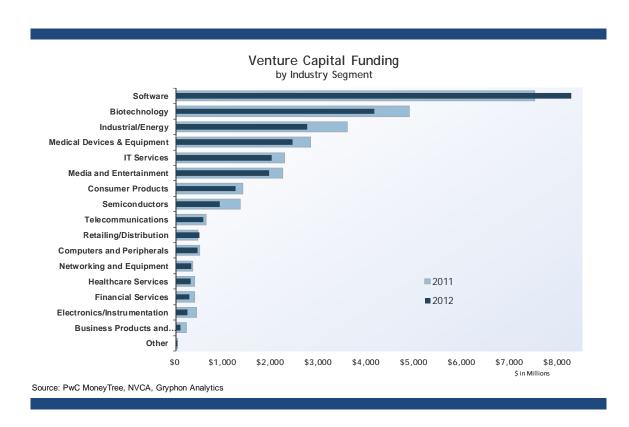




# **VENTURE CAPITAL FUNDING BY SEGMENT**

Double-digit decreases in investment dollars across most industries, specifically the traditionally capital intensive Clean Technology and Life Sciences sectors, offset the increases seen in the Software sector in 2012.

SEGMENT _	2011	2012
Software	\$7,513	\$8,270
Biotechnology	4,886	4,148
Industrial/Energy	3,583	2,748
Medical Devices and Equipme	2,814	2,439
IT Services	2,270	2,001
Media and Entertainment	2,240	1,955
Consumer Products	1,399	1,246
Semiconductors	1,345	920
Telecommunications	630	579
Retailing/Distribution	453	497
Computers and Peripherals	494	453
Networking and Equipment	357	316
Healthcare Services	394	310
Financial Services	394	284
Electronics/Instrumentation	438	237
Business Products and Service	217	98
Other	37	23
	\$29,463	\$26,525





# LIFE SCIENCES TRENDING & ANALYSIS

### LIFE SCIENCES TRENDS



Venture capitalists invested a total of \$6.9 billion in 824 Life Sciences deals during the year, compared with \$8.1 billion in 836 deals during 2011. The number of Life Sciences companies receiving VC funding for the first time reached the lowest level since 1995 with only 135 companies receiving funding in 2012.

#### **First-Time Financing**

First-time funding for life sciences companies fell 41% in dollars to \$664 million going into 135 companies in 2012. This marked the lowest number of companies receiving funding for the first time since 1995.

First-time / Seed stage deals in the life sciences sector averaged \$4.9 million for 2012, compared to \$6.3 million in 2011 companies. The Biotechnology industry accounted for 54% of first-time financings in the Life Sciences sector in 2012.

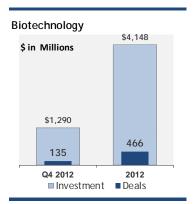
WITH CHATTER ABOUT AN UNFRIENDLY REGULATORY LANDSCAPE GETTING LOUDER AND A GENERALLY UNCERTAIN EXIT ENVIRONMENT, HEALTHCARE VENTURE CAPITAL WAS HINDERED IN 2012

# LIFE SCIENCES SUB-SEGMENT TRENDS3



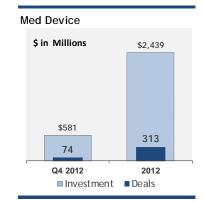
Biotechnology investment dollars declined 15% with volume flat in 2012 to \$4.1 billion going into 466 deals, placing it as the 2<sup>nd</sup> largest investment sector for the year in terms of dollars and deals.

For the Q4 of 2012, \$1.3 billion went into 135 Biotechnology companies, an increase of 3% in dollars and 13% in the number of deals from Q3 when \$1.2 billion went into 119 rounds.

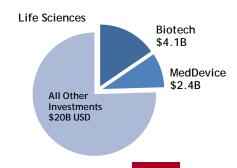


Medical Device industry fell 13% in dollars and 15% in deals in 2012, finishing the year with \$2.4 billion going into 313 deals.

For the fourth quarter, Medical Devices saw an increase of 32% in dollars and 9% in deals from Q3 2012 with \$581 million going into 74 deals.



Life Sciences sector (Biotech and Medical Devices combined) accounted for 25% of all venture capital dollars invested in 2012 compared to 26% in 2011. Much of the decline for the year occurred in 1<sup>st</sup> time financings where both Biotechnology and Medical Devices saw the lowest number of deals since 1995.



### **FUNDING BY SUB-SEGMENT**



#### **Funding by Sub-segment**

Three of the seven Biotechnology subsegments exhibited growth in 2012 Q4, compared to the prior quarter. Dollars invested in the Biosensors, Biotech Research, and Biotech-Human subsegments rose 415%, 58%, and 41%, respectively. The Biotech-Human subsegment accounted for the largest share of dollars in the fourth quarter at \$1.1 billion. For the full year 2012, Biotech-Human also led in funding at \$3.2 billion, but, like all of the Biotechnology subsegments, it experienced a decline in funding when compared to 2011.

For the full year 2012, all three of the Medical Device subsegments recorded a decline in funding. The Medical Therapeutics subsegment captured the majority of the investments in the Medical Device industry in 2012, accounting for 61 percent of the deals and 80 percent of the dollars. In Q4, only the Medical Therapeutics subsegment experienced an increase, jumping 65 percent over the prior quarter to \$520 million.

# **LIFE SCIENCES TRENDS**

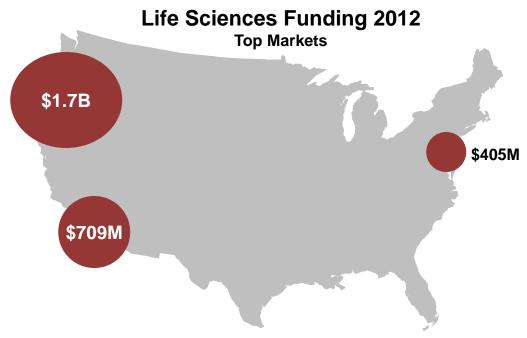


#### **Investments by Region**

The top 3 metropolitan regions receiving Life Sciences venture capital funding during 2012 were San Francisco Bay (\$1.7 billion), San Diego Metro (\$709 million), and NY Metro (\$415 million).

In Q4, the top 5 metropolitan regions receiving funding were San Francisco Bay (\$588), Boston (\$278), NY Metro (\$214), San Diego Metro (\$142), and the Great Lakes (\$94 million).

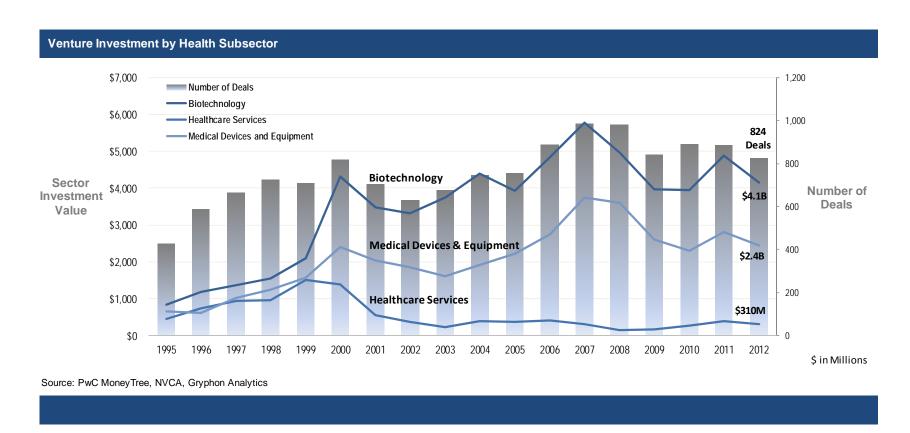
Investments in Biotechnology deals accounted for 71% of the dollars invested in the top five regions in Q4 2012.



# LIFE SCIENCES INVESTMENTS



Life sciences investment was suppressed for much of the year, particularly with first-time fundings, due in part to the impact of an uncertain regulatory and reimbursement environment.



# LIFE SCIENCES COMMENTARY



In a shaky economic climate, where fund raising has become tight and there are decreasing opportunities to exit the market, venture capital firms have become extremely cautious in selecting investments. This has led to a depreciation in deal values. However, segments like Biosensors and Biotech Research have earned sizeable additions of new funding, with positive trends set to continue.

Patent expiration and lengthy approval times have increased the costs of drug development. This, coupled with a slow economy, has made VC investors reluctant to heavily invest in high-cost new drug development. As an alternative, many investors have focused on enhanced drug delivery technologies and product life cycle management technologies.

Extended approval times related to drug development have prolonged the timeline to ultimately enter the commercial market – chances of realizing commercial profit has been an material consideration for financial and corporate investors.

Venture capital backed life sciences investment depends upon a predictable and efficient path within the regulatory environment.

Public policy continues to drive venture capital investment in very specific ways.



# **CALIFORNIA INVESTMENT TRENDING & ANALYSIS**





VC investments in the Los Angeles area, including Orange, Ventura and Santa Barbara counties, rose 13% to about \$1.3 billion in 2012, up from \$1.1 billion the previous year.

CALIFORNIA		
2012		
USD \$, millions		INVESTMENT
	DEALS	AMOUNT
San Jose	1,149	\$10,868
Los Angeles / Organge County	267	\$2,085
San Diego	101	\$1,117
Total	1,517	\$14,070







The San Jose / Silicon Valley area continues to reign supreme in venture capital investment, for the most recent quarter Software and Life Science investments comprised 39% and 26% of all fundings.

SILICON VALLEY		INVESTMENT
USD \$, millions	DEALS	AMOUNT
Software	137	\$985
Biotechnology	28	455
Industrial/Energy	15	228
Consumer Products & Services	17	184
Medical Devices and Equipment	15	158
Media and Entertainment	34	125
IT Services	22	117
Semiconductors	9	61
Healthcare Services	2	58
Computers and Peripherals	4	43
Business Products & Services	3	30
Networking and Equipment	2	30
Retailing/Distribution	5	24
Telecommunications	3	16
Financial Services	3	16
Electronics/Instrumentation	5	7
Total	304	\$2,537
NOTABLE BIOTECH (SAN JOSE)		
Intarcia Therapeutics, Inc.		\$156M
Ultragenyx Pharmaceutical, Inc.		\$75M
Crescendo Bioscience, Inc.		\$28M

Pearl Therapeutics, Inc.

Labrys Biologics Inc

Cell Works Group Inc

Solstice Biologics LLC

VeraCyte, Inc.

Igenica Inc

Allakos Inc

Edison Pharmaceuticals Inc

Advanced Cell Diagnostics, Inc.

\$23M

\$20M

\$15M

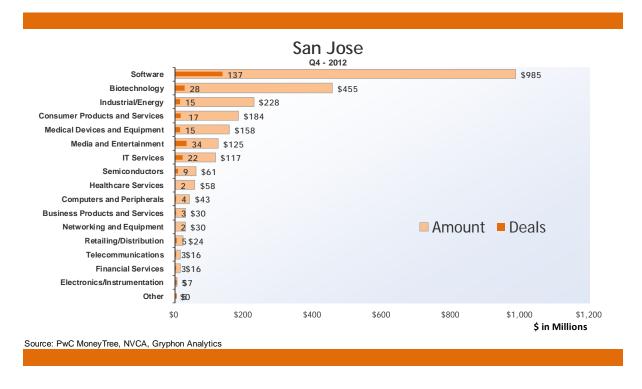
\$15M

\$13M

\$12M

\$11M

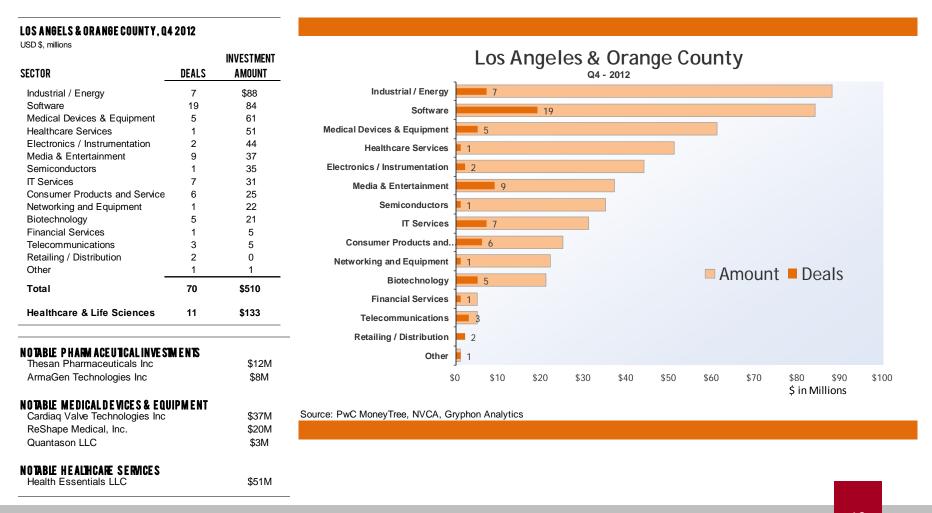
\$10M \$10M







The tech-heavy startup scene in Los Angeles helped the region buck a national trend last year, drawing more venture capital investments as the nation saw an overall decline.

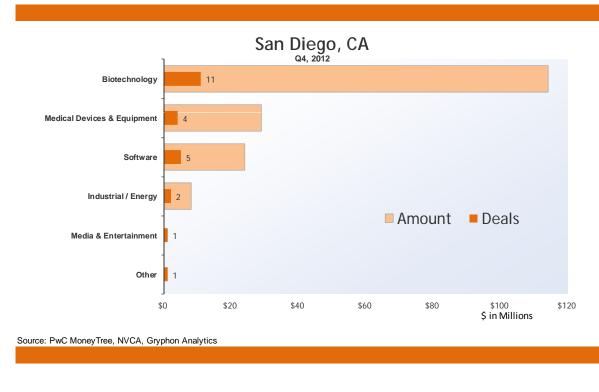


# Gryphon Analytics

# **SAN DIEGO**

Venture capitalists invested more money into San Diego startup companies in 2012 compared to the prior year, bucking the national trend. Investors committed \$1.12 billion to 113 companies, up from \$930 million invested in 101 companies in 2011 -- surpassing \$1 billion for the first time since 2008.

SAN DIEGO, Q4 2012 USD \$, millions	DEALS	INVESTMENT Amount
Biotechnology	11	\$114
Medical Devices & Equipment	4	29
Software	5	24
Industrial / Energy	2	8
Media & Entertainment	1	<1
Other	1	<1
Total	24	\$175
Ambit Biosciences, Inc. Lithera Inc Cebix, Inc. Auspex Pharmaceuticals, Inc. Epic Sciences Inc Avelas Biosciences, Inc. MabVax Therapeutics Inc Ignyta, Inc. Fate Therapeutics, Inc. Elcelyx Therapeutics Inc		\$22M \$21M \$18M \$17M \$13M \$8M \$5M \$3M \$3M
NOTABELMED DEVICES (SAN DI Tandem Diabetes Care Inc Obalon Therapeutics Inc	E60)	\$20M \$5M
KFx Medical Corporation		\$3M
Naviscan Inc		Ψ





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