



Investing in Life Science Innovation

RIVERVEST®

“Strategic Risk Mitigation with Startups as Partners”

NSF ERC 2009 Annual Meeting
December 3, 2009

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RiverVest Venture Partners

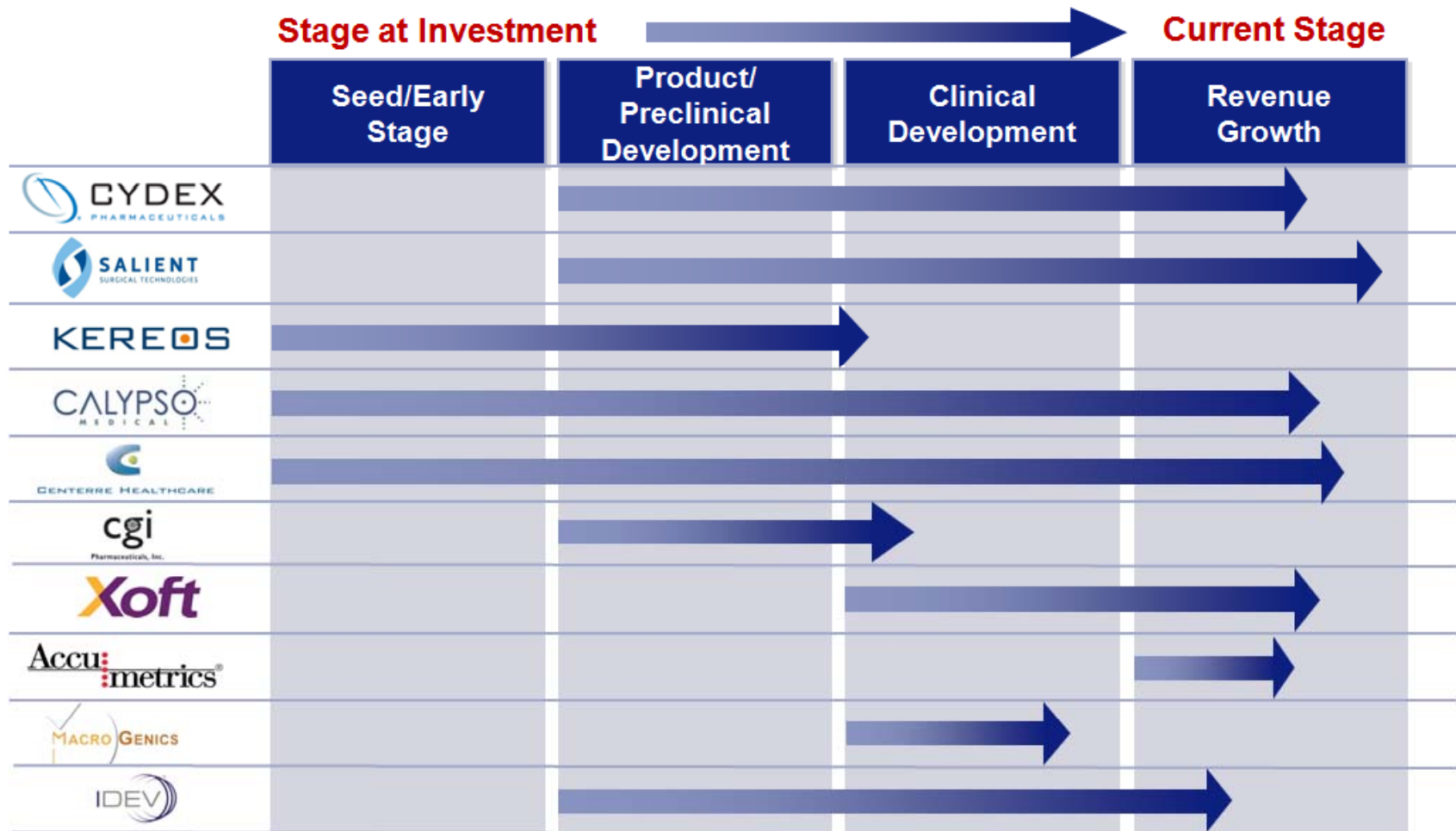
Overview of Presentation

- Background on RiverVest
- VC investing climate
- Implications for startups
- What RiverVest looks for in a startup
- Thoughts about university startups
- Conclusions

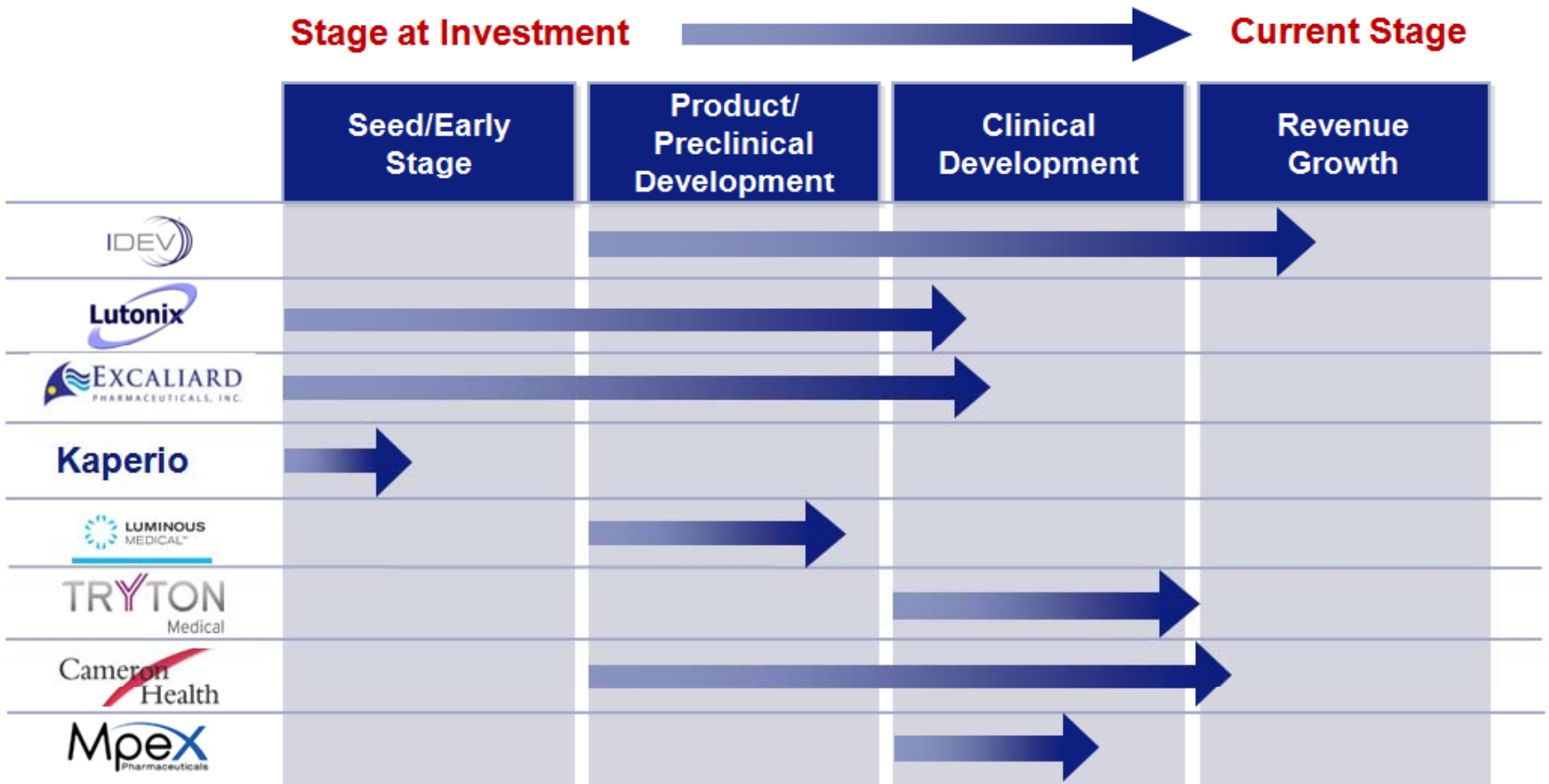
RiverVest Venture Partners

- Focus on life science investing (medical device, biopharma)
- Team with extensive research, clinical, operational, and investment expertise committed to helping entrepreneurs build successful companies
- Two funds totaling \$165 million in capital; investments in more than 20 portfolio companies
- Flexible with respect to stage; currently focused on later-stage opportunities, but have founded six companies in the past
- Centrally located in St. Louis, MO

Fund I Unrealized Investments



Fund II Unrealized Investments



Current VC Investing Climate

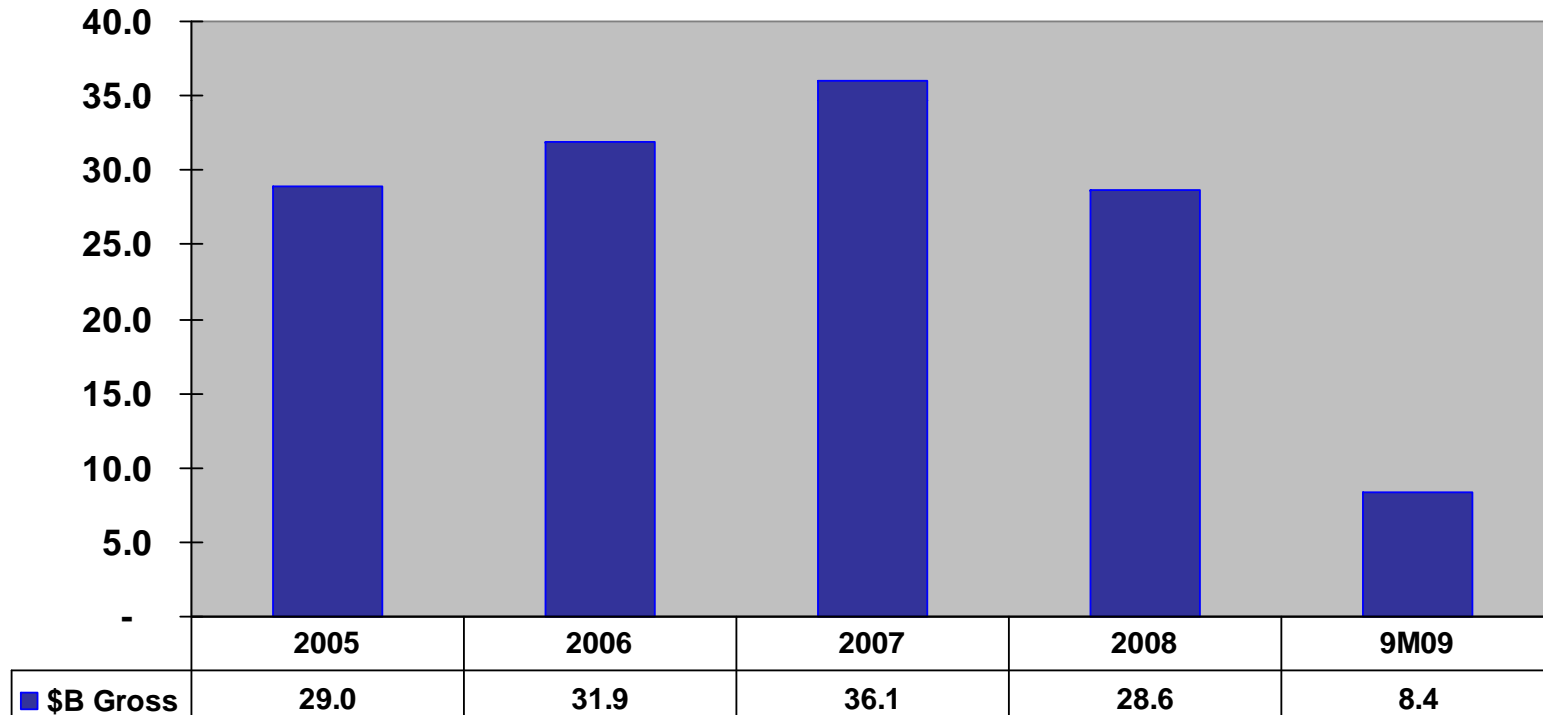
- Drop in number of firms, capital under management
- Slowdown in fundraising
- Decline in investment activity
- Sluggish exit environment

The number of US VC firms and managed capital have peaked

At Year End	# Venture Firms	Capital Under Management
1970	28	\$1B
1980	92	\$4B
1990	393	\$29B
2000	881	\$225B
2006	1027	\$278B
2008	882	\$197B

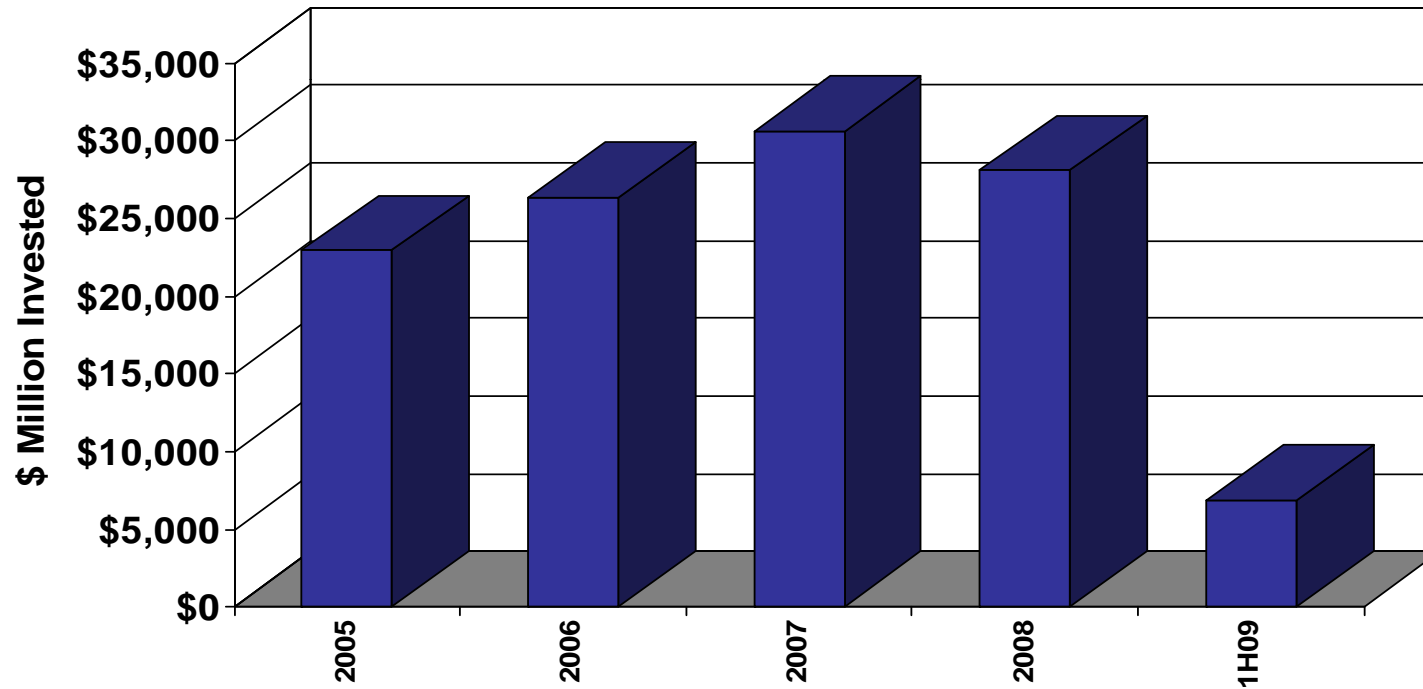
Source: 2008 NVCA Yearbook, prepared by Thomson Reuters, figure 1.04

VC fundraising down somewhat in 2008, but could be down 50% in 2009



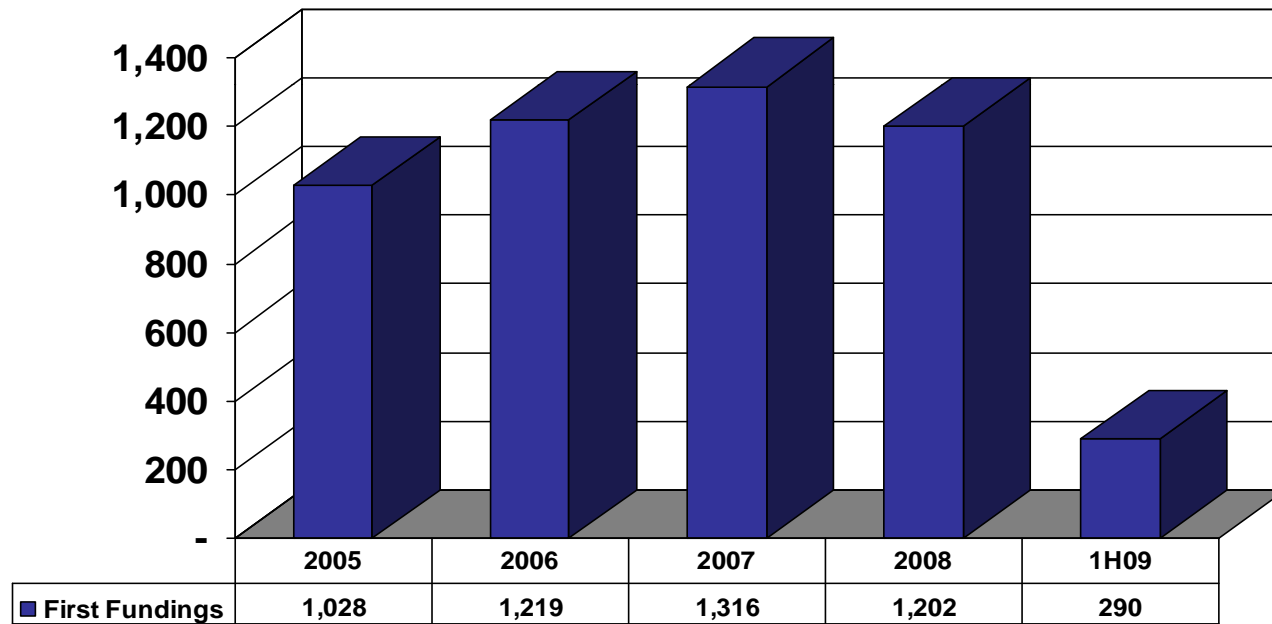
Source: Thomson Reuters/NVCA

VC investment was down only 8% in 2008; on pace for a 50% decline in 2009



Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report

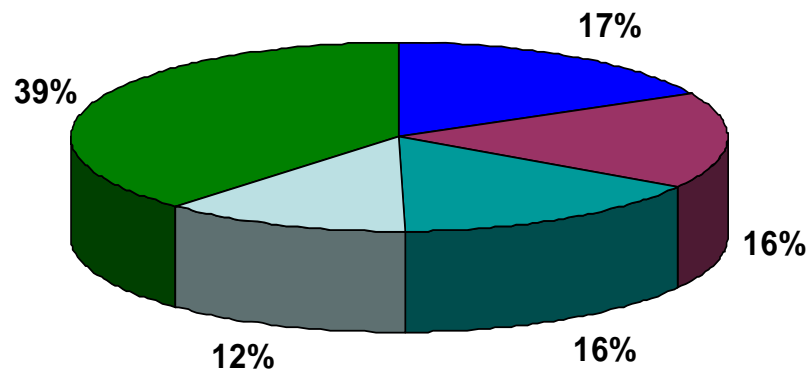
Despite recession Q4, VCs funded 1,202 new companies in 2008;
very slow through 1H 2009



Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report

Heaviest venture-funded industries in the U.S. today are software, energy, biotech and medical devices

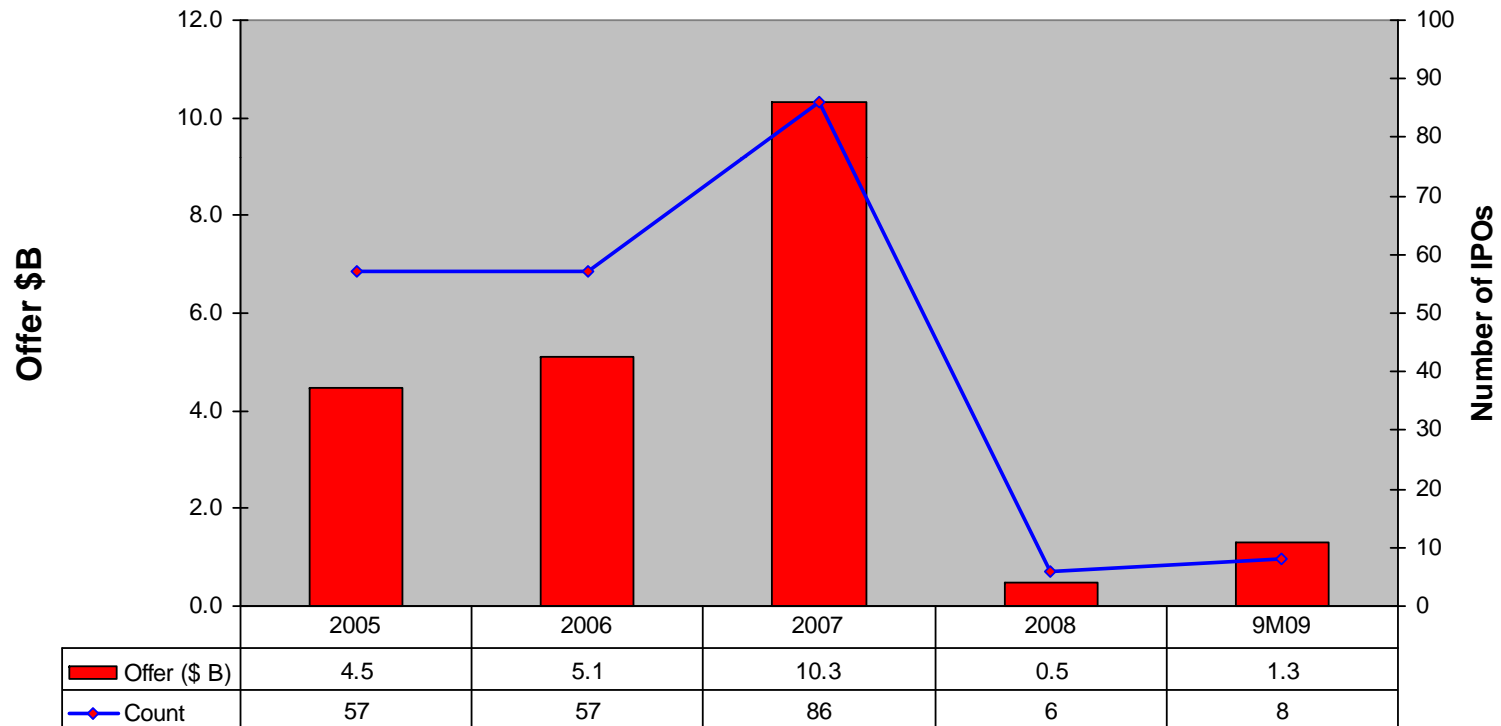
2008



■ Software ■ Energy/Ind ■ Biotech ■ Med Dev ■ Other

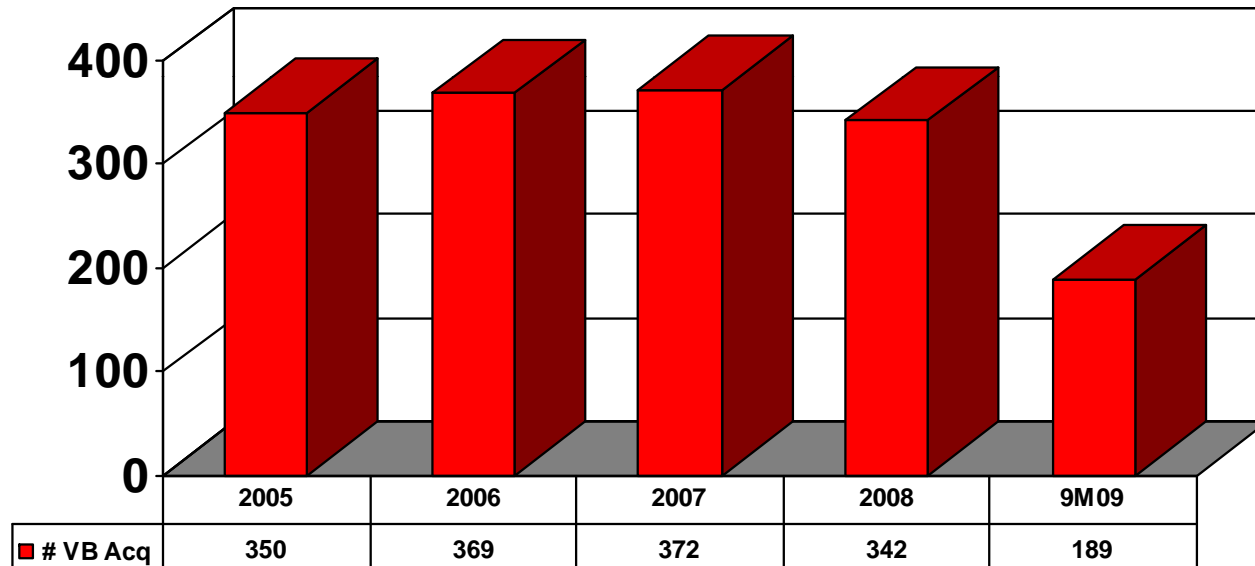
Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report

IPO levels were okay in 2007; awful since



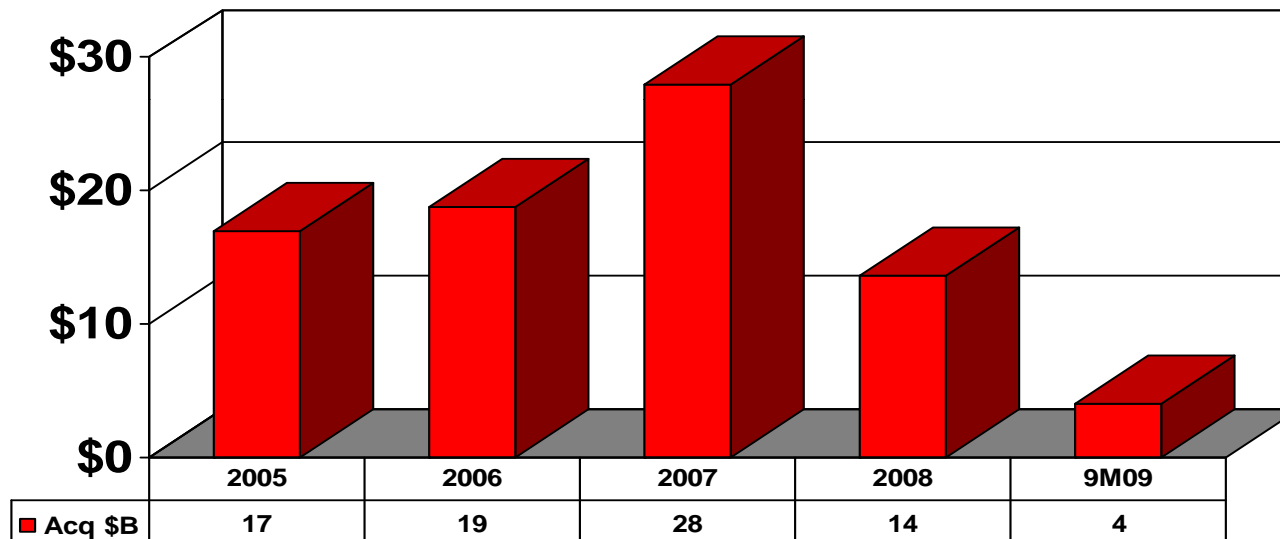
Source: Thomson Reuters/National Venture Capital Association

Acquisition of venture-backed (“VB”) companies were steady; down now



Source: Thomson Reuters/National Venture Capital Association

M&A exits aren't providing much liquidity either



Source: Thomson Reuters/National Venture Capital Association

Implications of Current Climate for Startups

- Heightened capital risk, particularly for early-stage companies
- Growing funding gap between founding and becoming venture-ready
- Suggests need to access:
 - More R01 grants prior to founding
 - SBIR/STTR grants afterwards
 - Community-based, “return-insensitive” funding
 - Angel funding

What We Look for in a Startup

- Novel technology; completed *in vivo* proof of concept
- Large market opportunity
 - Unmet need
 - Opportunity to do something better and cheaper
 - Good fit with existing medical practice
- Clear regulatory pathway; high level of confidence re CMS reimbursement

What We Look for in a Startup (cont'd)

- Significant value inflection point able to drive an exit in three to five years
- Capital efficiency
- Natural strategic buyers
- Strong IP position; freedom to operate

Case Study: Lutonix™ Medical



Minneapolis, MN

History

- Co-founded in May 2007 by Fund II and the inventor (more than 100 patents on products with combined 2006 revenues over \$3 billion), who sought out RiverVest as a co-founder
- Medical device company developing drug-eluting balloon for interventional cardiology
- Low technical and clinical risk in multi-billion dollar interventional cardiology markets
 - Robust clinical proof-of-concept data in hand; lead scientist and clinical PI exclusively engaged by Lutonix
 - Easy, immediate market penetration expected with a clear clinical value proposition and virtually no interventional cardiologist training required
- \$5 million Series A Preferred Stock financing (July 2007) syndicated with U.S. Venture Partners; \$20 million Series B Preferred Stock financing (October 2008) led by Versant, and included new investor Delphi, at 2x the Series A price per share

Execution

- Dennis Wahr, MD, former RiverVest managing director, transitioned from part- to full-time CEO; RiverVest helped write IP and form the company
- Efficiently selected the best product design for use in clinical testing
- Achieved goal of commencing clinical trials within two years of closing the Series A financing; European trials began enrolling patients in Q2 '09, and U.S. clinical trial designs are awaiting approval from FDA
- Will pursue an expanded set of indications on supplemental funds committed by existing investors

Thoughts about University Startups

- Common stock ownership position for University that is reasonable in relation to value added
- Modest upfront license fee/patent costs; deferred milestone fees based on events that truly enhance value, facilitate funding
- Single-digit royalties

Thoughts about University Startups (cont.)

- Sublicensing provisions that recognize need to partner with industry to advance development, commercialize
- Conflict-of-interest policies that foster appropriate participation of academic founders
- Control of IP estate by startup if venture-backed

Conclusions

- Cast net broadly in seeking appropriate ERC startup partner(s)
- Consider selecting startup partners that have already received venture funding
 - Better access to capital
 - Ability to draw on experience/expertise of venture investors
 - Milestone-driven operating regime that encourages good execution
- Develop technology under ERC/university umbrella as long as possible
- Be highly selective in forming companies; most difficult startup climate in last 10 years



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Appendix - Portfolio Company Overview

Portfolio Company Overview

Medical Device



Accumetrics, Inc. www.accumetrics.com

San Diego, CA

Medical diagnostics company commercializing the VerifyNow® System for the assessment of platelet function in patients taking antiplatelet therapies.



Calypso Medical Technologies, Inc. www.calypsomedical.com

Seattle, WA

Medical device company commercializing a proprietary localization system to improve accuracy and management of external beam radiation therapy.



Cameron Health, Inc. www.cameronhealth.com

San Clemente, CA

Medical device company commercializing a next-generation implantable defibrillator that is easier to implant and does not require leads that attach to the heart.



IDev Technologies, Inc. www.idevmd.com

Houston, TX

Medical device company commercializing a novel stent for the treatment of peripheral vascular disease.



Luminous Medical, Inc. www.luminousmedical.com

San Diego, CA

Medical device company developing an innovative automated glucose measurement system to facilitate tight glycemic control in hospital settings.

Portfolio Company Overview



Lutonix Medical, Inc. www.lutonix.com

Minneapolis, MN

Medical device company developing drug-coated balloon catheters for the treatment of vascular disease.



Salient Surgical Tech., Inc. (fka TissueLink Medical) www.salientsurgical.com Dover, NH

Medical device company commercializing innovative radio-frequency electro-surgical instruments for orthopedic, spine, and general surgery.



Tryton Medical, Inc. www.trytonmedical.com

Durham, NC

Medical device company commercializing novel stent systems for the treatment of bifurcation lesions in coronary arteries.



Velocimed, LLC

Minneapolis, MN

Medical device company developing endovascular and cardiology-related technologies. (Acquired by St. Jude Medical in April 2005.)



Xoft, Inc. www.xoftinc.com

Fremont, CA

Medical device company commercializing electronic, miniaturized x-ray technology for use in radiation oncology.

Portfolio Company Overview

Biopharma



Cabrellis Pharmaceuticals Corporation

San Diego, CA

Specialty pharmaceutical company developing therapies for the treatment of cancer. (Acquired by Pharmion in November 2006.)



CGI Pharmaceuticals, Inc. www.cgipharma.com

Branford, CT

Biopharmaceutical company developing novel therapeutics targeting protein kinases for cancer and autoimmune/inflammatory diseases.



Conforma Therapeutics Corporation

San Diego, CA

Biotechnology company developing drugs that target a novel pathway, HSP90 inhibition, for the treatment of cancer. (Acquired by Biogen Idec in May 2006.)



CyDex, Inc. www.cydexinc.com

Overland Park, KS

Specialty pharmaceutical company focusing on hospital-based injectable drugs and commercializing a proprietary technology that improves drug solubility.



Excaliard Pharmaceuticals, Inc. www.excaliard.com

San Diego, CA

Biopharmaceutical company developing drugs for the local treatment of fibrosis, including skin scarring.



Kaperio, Inc.

St. Louis, MO

Seed-stage biopharmaceutical company focusing on cardiovascular disease.

Portfolio Company Overview



Kereos, Inc. www.kereos.com

St. Louis, MO

Biotechnology company developing molecular imaging agents and site-targeted drugs for cancer and cardiovascular disease.



MacroGenics, Inc. www.macrogenics.com

Rockville, MD

Leading antibody therapeutics company focusing on autoimmune diseases and cancer.



Mpex Pharmaceuticals, Inc. www.mpexpharma.com

San Diego, CA

Clinic-stage biopharmaceutical company developing new therapies to combat the growing issue of antibiotic resistance, initially focusing on cystic fibrosis and chronic obstructive pulmonary disease.



Xcyte Therapies, Inc. www.xcytetherapies.com

Seattle, WA

Biotechnology company developing novel cell-based immunotherapeutic treatments for cancer and infectious disease. (IPO in March 2004.)

Other



CENTERRE HEALTHCARE

Centerre Healthcare Corporation www.centerrehc.com

St. Louis, MO

Healthcare services company developing and operating free-standing inpatient rehabilitation hospitals in partnership with leading acute care medical centers.