

WIPO SME Conference in Buenos Aires

July 17-18, 2008

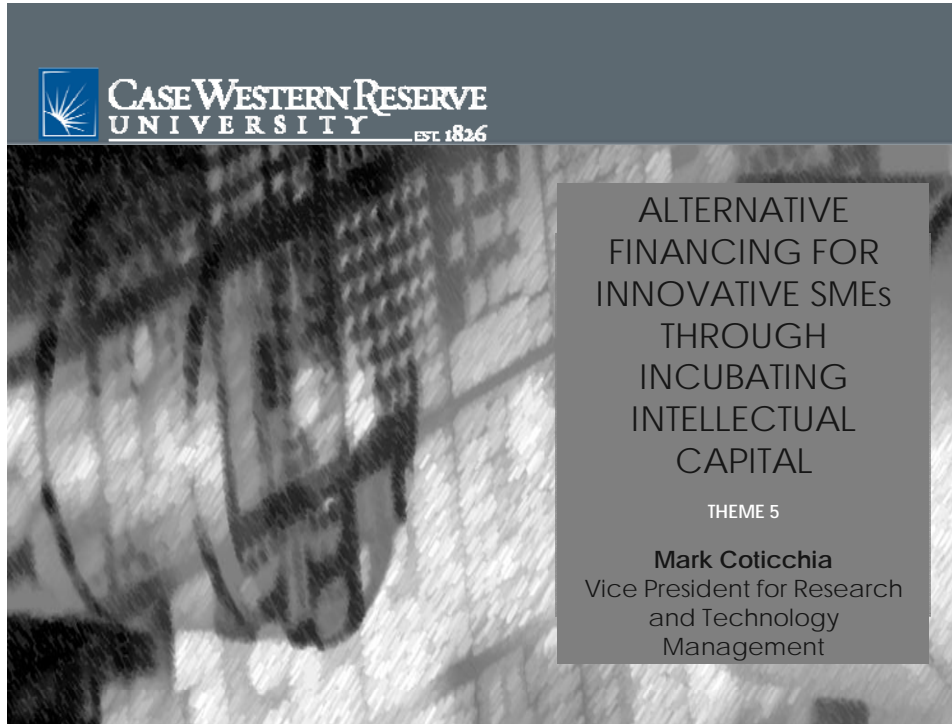
The primary objective of the event is to provide participants practical knowledge on the value of the Intellectual Property Rights system and on the strategic role IP can play in accessing/securing finance from private or public sources.

The program is meant for seed capitalists, business angels, venture capitalists, owners and managers of SMEs, universities, research centers, officials from public sector, private intermediary organizations interested in IP and innovation issues, chambers of commerce, trade institutions and other SME support institutions, entrepreneurs, etc.

There are 130 expected participants with simultaneous translation from English-Spanish and Spanish-English.

Theme 5 is about alternative financing sources for innovative SMEs.

SLIDE 1



- Thank you & introduction
- Our approach at Case Western University involves incubating intellectual capital.
- First, I'd like to explain that my perspective is shaped by my professional experience. My current position is Vice President of Research at a major academic research institution where we conduct over \$400M in research annually. We have a \$1.6B dollar endowment, \$800M operating budget, and my division manages several thousand transactions per year.
- I am an engineer by training and have worked in industry, government, and academia. I have also held various engineering,

marketing, and business development positions in those sectors. In addition, I have been an entrepreneur and an early stage venture capitalist. So I believe that I bring a unique perspective to this subject.

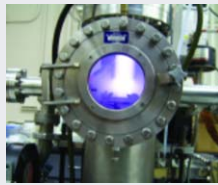
- Also, I recognize that the U.S. system is different from Argentina and South America, and it is truly my hope that you find some ideas and tools that you can borrow from what I am about to share with you. I encourage you to look for the similarities, not the differences.
- Incubating as a concept, it turns out, is too small, too internal, and it needs to be expanded, refined, added to, and improved.
- We need to become more strategic about it.

SLIDE 2

Incubating Intellectual Capital

Capital

- Define it
- Understand it
- Influence it



Talent

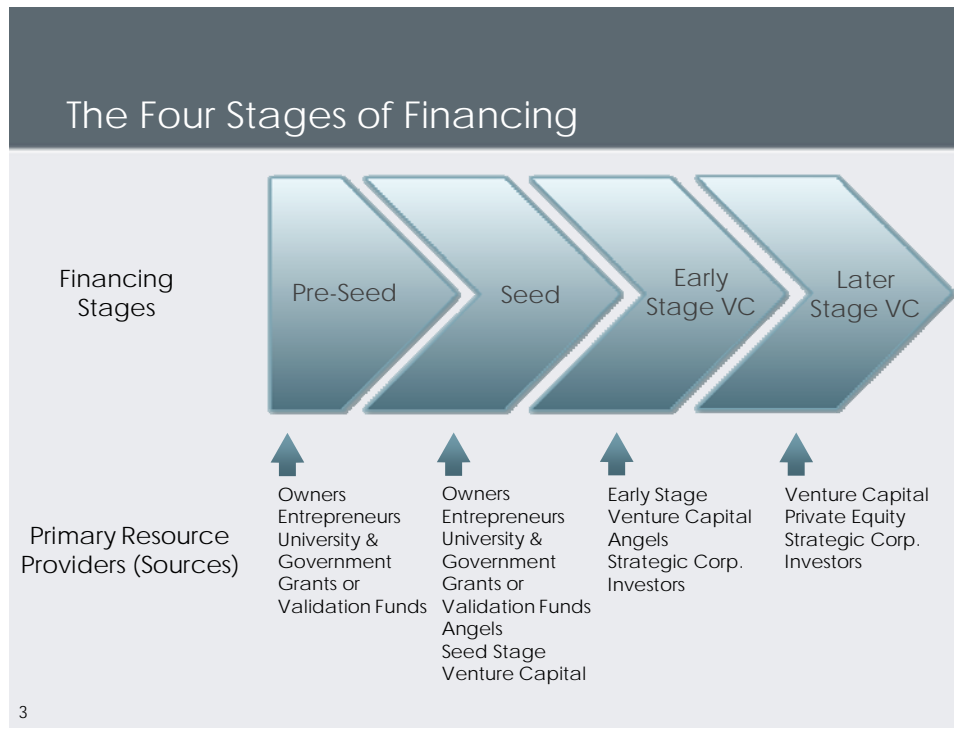
- Define it
- Understand it
- Influence it



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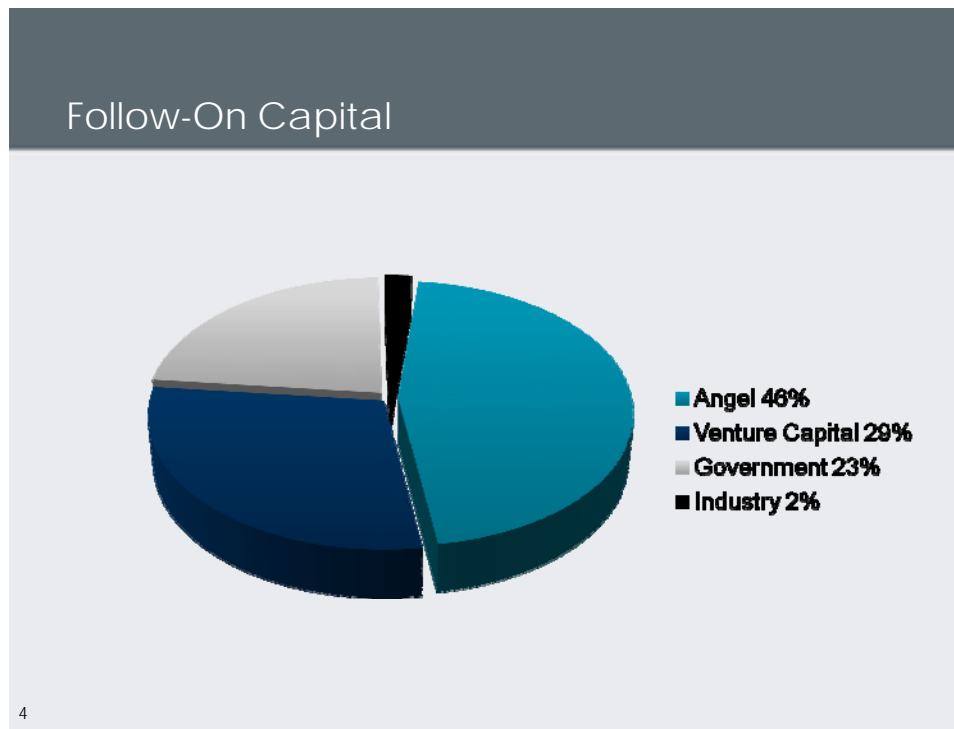
- So, at Case, we try to create and foster an environment for high impact assistance – and transformational change so that companies can grow and attract capital.
- And key to our program is getting aggressive and strategic when it comes to **Capital and Talent**.
- By strategic, I mean you have to define, understand, and influence both capital and talent.

SLIDE 3



- In terms of *Capital*, let's first review the **Four Stages of Financing**.
- Understanding capital begins with knowledge of the various stages in the funding process.
- First, one goes through the mundane but very important work of defining stages of operations, stages of capital, types of investors, and industries.
- This is the first part of creating a culture in your region that understands capital, and is using the same vocabulary to describe it.

SLIDE 4



- A good way to address this is to get a group together to define what capital stages exist in your region.
- In your region, how much money has gone into early stage companies by angel investors in the past 5 years? \$5 million? 100 million? A billion?
- How much by government funds?
- How much by corporate funds?
- How much by venture capital investors?
- How does this compare to other regions and other time periods?
- One way to address the shortcomings that may be identified through this process is by networking; know what conferences and

even online resources exist in your region for attracting capital to companies.

- Get involved and interact.
- Here's one example of an online resource for entrepreneurs to introduce themselves to angel investors.

SLIDE 5

Idea Crossing

Start Connecting
Become a Member Now!

Select who you are and click to start your registration!

- Entrepreneur
- Investor
- Service Provider
- Business Mentor
- Other User

Why Join IdeaCrossing?
For [Entrepreneurs](#), [Investors](#), [Service Providers](#), or [Business Mentors](#), connections are key. IdeaCrossing was created to provide the intersection where ideas meet capital, where deal flow flourishes, and where resources, services and support stimulate growth and opportunity.

"We began getting contacted by interested investors within a few weeks which ultimately resulted in funding from an Angel investor outside our region. IdeaCrossing® proved to be an extremely valuable resource to reach out to investors we would not have gained access to otherwise."
- DimpleDough, Inc. (IdeaCrossing Entrepreneur)

login

Username:
Password:
 Remember Me
Forgot My Password

LOGIN

talktothem

Know someone who could benefit from IdeaCrossing®? Simply enter their email address here. [Click here to preview the email.](#)

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resourcecenter

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- **IdeaCrossing** is an Internet resource available to all individuals and organizations with an interest in supporting and promoting entrepreneurial activity.
- It is intended to help entrepreneurs find the assistance and investment capital they need to launch promising new business ventures. Additionally, IdeaCrossing serves the Angel and Venture Capital Community by identifying and screening new investment opportunities.
- Simply stated, IdeaCrossing is about creating the connections that build businesses.

SLIDE 6

The Ohio Capital Fund

The OHIO CAPITAL FUND
FORT WASHINGTON CAPITAL PARTNERS GROUP • PEPPERHART FARRIS

- ▶ home
- background
- minimum qualifications for consideration
- ▶ submit an investment opportunity
- investment process
- ▶ investment team

The Ohio Capital Fund

What is The Ohio Capital Fund?

The Ohio Capital Fund, a fund of funds, was established by the State of Ohio to help increase private investment in Ohio companies in the seed or early stage of business development. To date, the Ohio Capital Fund has obtained \$150 million of commitments from private resources for investment in qualified venture capital funds. These venture capital funds commit to invest at least half of the Ohio Capital Fund monies in Ohio-based companies, corporations and individuals. The Ohio Capital Fund is actively making commitments to venture capital funds and through these commitments, the Ohio Capital Fund acts as a catalyst to promote venture capital investment in promising Ohio companies.

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- In Ohio, we are fortunate to have various incentive programs to encourage investors to invest in companies.
- In Ohio, funds can be obtained from the **Ohio Capital Fund** and the Ohio Retirement System.
- This incentivizes venture capitalists with money to set up operations in Ohio – it is a way to induce growth of the venture capital industry.
- The Ohio Capital Fund offers \$150 million for high-performing venture capital funds who set up offices in Ohio or who invest in Ohio companies.
- The State of Ohio also has a Technology Investment Tax Credit program. It offers a variety of benefits to Ohio taxpayers who invest in small research-and-development and technology-oriented firms.

SLIDE 7

Ohio Midwest Fund

Ohio Public Employees Retirement System (PERS) and Credit Suisse:

- Invested more than \$125 million in Ohio companies
- Impacted over 2,500 jobs in Ohio
- \$61 million in capital from follow-on investors
- \$186 million impact; i.e. 4.7x multiplier to capital drawn.

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- Another example is the Ohio Midwest Fund.
- The Ohio Midwest Fund is a fund-of-funds that invests in high quality, private equity funds that focus on making investments in the Ohio and Midwest regions.
- The fund is capitalized with \$100 million from the Ohio Public Employees Retirement System (OPERS) and approximately \$2 million from Credit Suisse.
- As of January 2008, 12 fund investments have been made, representing a total commitment of \$72 million. To date, the funds in the program have invested more than \$125 million in Ohio companies—across 24 platform investments, and a number of other bolt-on opportunities;

- Positively impacted over 2,500 jobs in Ohio;
- Attracted over \$61 million in capital from additional investors; and
- Created a net impact in Ohio of \$186 million—or a 4.7x multiplier to capital drawn.

SLIDE 8

Incubating Intellectual Capital

Capital

- Define it
- Understand it
- Influence it

Talent

- ▶ ○ Define it
- Understand it
- Influence it



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- Let's move on to the other major part of our three-dimensional incubation model: Talent.
- What is great talent?

SLIDE 9

Defining Talent

	A Player	B Player	C Player
<i>Performance</i>	✓		✓
<i>Vision</i>	✓		
<i>Intelligence</i>	✓	✓	✓
<i>Leadership</i>	✓		
<i>Drive</i>	✓	✓	
<i>Track Record</i>	✓	✓	

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- Here's an example of how to define great talent – just so you never lose track of what good talent is.
- Have guidelines on what great talent looks like, what tradeoffs companies can and should make regarding talent, when companies should bring in talent, how they should do it, how they should compensate great talent, etc.
- Find the A Players based on their experience and skills, as outlined in this slide.
- Understanding talent means keeping track of it.

- Keep a database of talented entrepreneurs, venture capitalists, etc.
- Keep constant eye on top-talent that has grown companies.

SLIDE 10

What Makes a Service Provider Great?

World Class

- Have served clients around the world
- Expert in working with small, high-growth companies

Extra Effort

- Willing to do something special, economically speaking, for company

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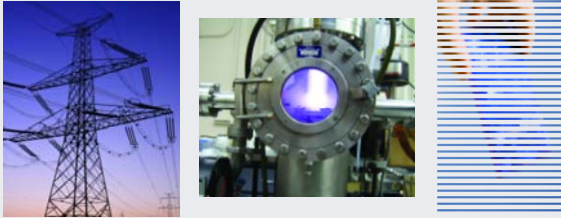
- Also have database of great service providers: Lawyers, marketing consultants, accountants, executive recruiters.
- Make sure they are not just good, but **great**.
- We use two criteria:
- First, are they world class?
- Have they served clients around the world?
- Are they expert in working with small, high growth companies?
- Second, are they willing to do something special, economically, for the company (such as offering a discount; offering equity in lieu of cash; offering to attend a board of directors meetings for free).

- Create a service partners program around such providers.
- Communicate this program, use it, and refine it.

SLIDE 11

Incubating Intellectual Capital

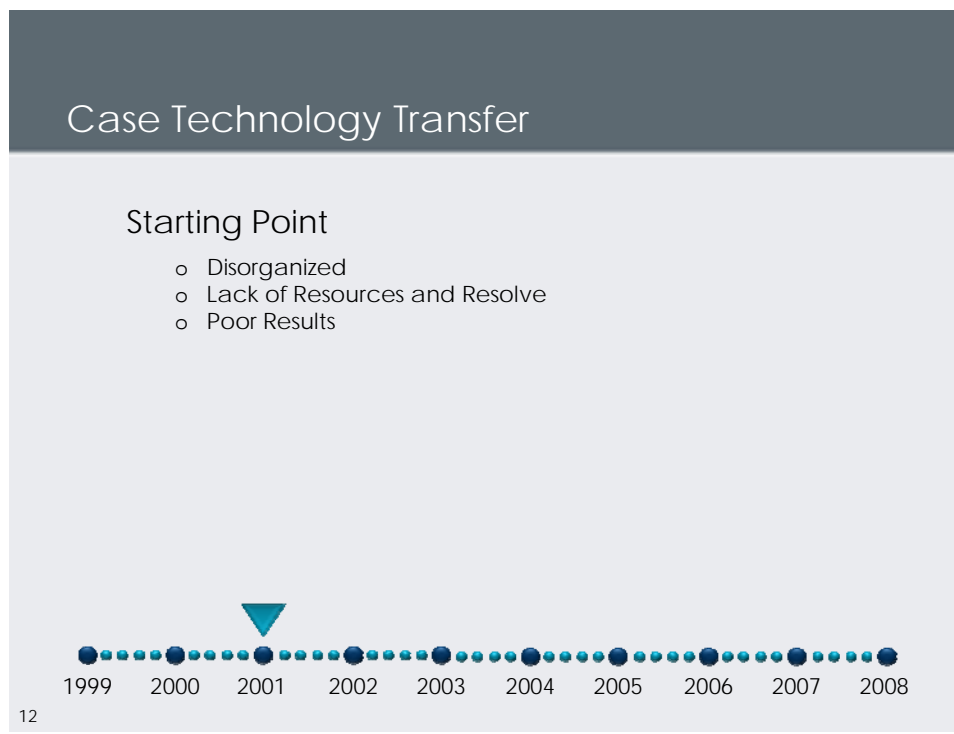
Capital	Talent
<ul style="list-style-type: none">○ Define it○ Understand it○ Influence it	<ul style="list-style-type: none">○ Define it○ Understand it○ Influence it



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- Now let's move to another example of nurturing intellectual capital.
- This time, we're going to talk about **Capital** and **Talent** that were required to completely reorganize the Technology Transfer function at Case Western Reserve University.
- Just as for SMEs, I went through a similar process of assessing **Capital** and **Talent** when I agreed to lead the university's research and technology management efforts in 2001.
- ... of defining it, understanding it, and influencing both to in turn, effect positive change in our region.

SLIDE 12



- In fact, Case was a mess – its tech transfer efforts were disjointed, decentralized, and disorganized internally.
- The university had \$200 million in research, 60 invention disclosures, 10 licensing deals, no spin offs, and \$2 million in revenues, which is 50% off the mark compared to national benchmarks.
- <PAUSE>
- I want to take a moment to point out that the amount and quality of research is an important driver for success in this business. While I am focusing on the technology transfer part of the process of moving research results into society, the technology transfer professionals are only the “packagers”, not the creators or

inventors, and we must not overlook the fact that the size of the research base at an institution, or in a region, is a major determinant for large scale success.

- <PAUSE>

SLIDE 13


Case Technology Transfer

Starting Point

- Disorganized
- Lack of Resources and Resolve
- Poor Results

Principles

- Centralized Function
- Customer Service
- Business-Savvy Staff
- Authority to Move Deals Quickly



1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

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- So, as part of my work when I arrived, Case rebuilt its TTO around four concepts: centralized function, customer service, staff who were business people, and the **authority** to move deals quickly.

SLIDE 14

Case Technology Transfer

Starting Point


- Disorganized
- Lack of Resources and Resolve
- Poor Results

Principles

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- Business-Savvy Staff
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Early Efforts

- Edison Biotechnology Center
- Enterprise Development Inc.



1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

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- Early on in our re-engineering process, Case's technology transfer office worked closely with two entities that Case owned part of – Edison Biotechnology Center and Enterprise Development, traditional incubators that offered, simply, real estate.

SLIDE 15

Case Technology Transfer

Starting Point

- Disorganized
- Lack of Resources and Resolve
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Principles


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Early Efforts

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Keys

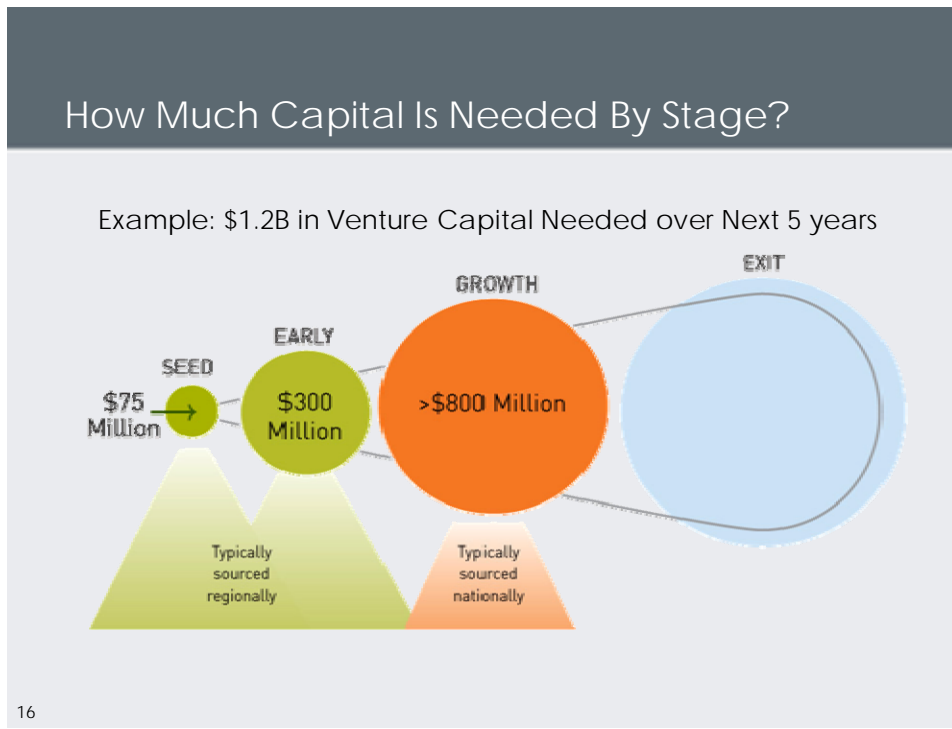
- **Early Stage Capital Task Force**
- **Entrepreneurship Task Force**
- **GVC Report**
- JumpStart and BioEnterprise
- Support incentives for VC investors
- Recruitment of Top Talent to region
- Innovative Policies



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- Gradually, and through diligence and hard work, we began to see some successes.
- We continued to focus on capital and talent.
- Among the key points was our involvement in something called the *Early Stage Capital Task Force*.

SLIDE 16



- The Early Stage Capital Task Force was a group of people in Northeast Ohio – Cleveland’s region – trying to precisely *define* the venture capital situation.
- It took three years to agree and understand it, but we finally did.
- We identified the stages of funding, and tracked amounts of funding to the region – a 23-county area in Northeast Ohio.
- We searched out stories of great exits so that we would understand who had succeeded and how.

SLIDE 17



- The result: The Greater Cleveland Venture Capital report: a roadmap to build the venture capital industry in our region.
- This roadmap identified the *actions* necessary to address the lack of capital and talent.
- Specifically, it paved the way for collaboration, cooperation, and partnership between the research institutions, foundations, angels, VCs, and the state.
- More importantly, it was designed to *reduce risk* and *increase deal flow* in order to attract more venture capital and talent to the region.

SLIDE 18

Case Technology Transfer

Starting Point

- Disorganized
- Lack of Resources and Resolve
- Poor Results

Principles

- Centralized Function
- Customer Service
- Business-Savvy Staff
- Authority to Move Deals Quickly

Early Efforts

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Keys

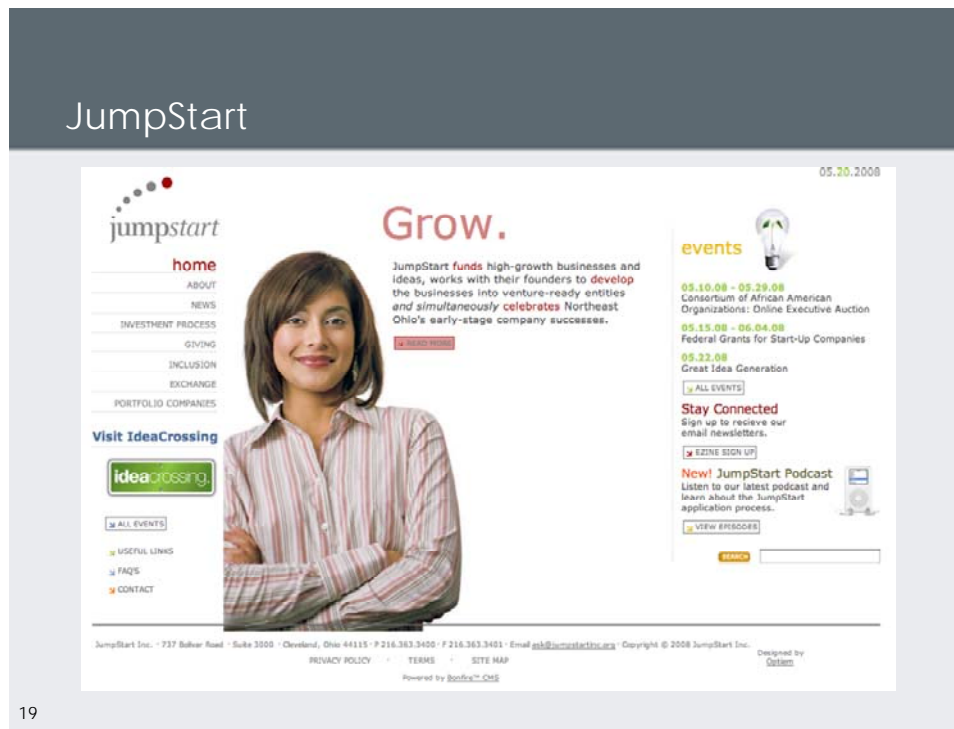
- Early Stage Capital Task Force
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- GCVC Report
- **JumpStart and BioEnterprise**
- Support incentives for VC investors
- Recruitment of Top Talent to region
- Innovative Policies

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

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- The roadmap called for the creation for two new entities: **JumpStart** and **BioEnterprise**.

SLIDE 19



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- *JumpStart* is a seed-funding entity and one of the most active investors in America – it's ranked in the Top 10 by *Entrepreneur Magazine*.
- JumpStart has invested in a couple of Case's spinout companies.
- I'm on the JumpStart board and involved every single day.
- It was not easy to disband some older organizations with outdated approaches.
- But it was the right thing to do.
- This is how to influence capital, and we knew it.
- Another key creation was **BioEnterprise**.

SLIDE 20

BioEnterprise
A Leader in Growing BioScience Companies

FOR ENTREPRENEURS | FOR INVESTORS | FOR MEDIA & COMMUNITY

OVERVIEW
SERVICES
TEAM
COMPANIES
WORKING TOGETHER
NEWSROOM
REPORTS
EVENTS
CONTACT

Welcome to BioEnterprise

Overview
BioEnterprise is a business formation, recruitment, and acceleration initiative designed to grow health care companies and commercialize bioscience technologies. Based in Cleveland, BioEnterprise's founders and partners are The Cleveland Clinic, University Hospitals, Case Western Reserve University, and Summa Health System. The initiative comprises the collective activities of BioEnterprise and its partners' commercialization offices: the [Case Office of Technology Transfer](#), [Cleveland Clinic Innovations](#), [University Hospitals Case Medical Center - Center for Clinical Research](#) and Summa Enterprise Group.

Companies include emerging medical device, biotechnology, and health care services firms. Each year, the BioEnterprise groups choose a select number of companies on which to focus. The resources and networks of the BioEnterprise partners are directed to help those companies achieve greater levels of business success.

NEWS

Current news about BioEnterprise, Cleveland-area medical device, biotech, and health care software and services companies, and updates about health care venture activity in the Midwest.

OrthoHelix Raises \$7.3 Million from Venture Firms

Cardialysis, Global Cardiovascular CRO, Selects Cleveland for US Location

Great Lakes Pharmaceuticals Completes Venture Round

Brazilian Cardiovascular Company Will Open R&D Center in Cleveland

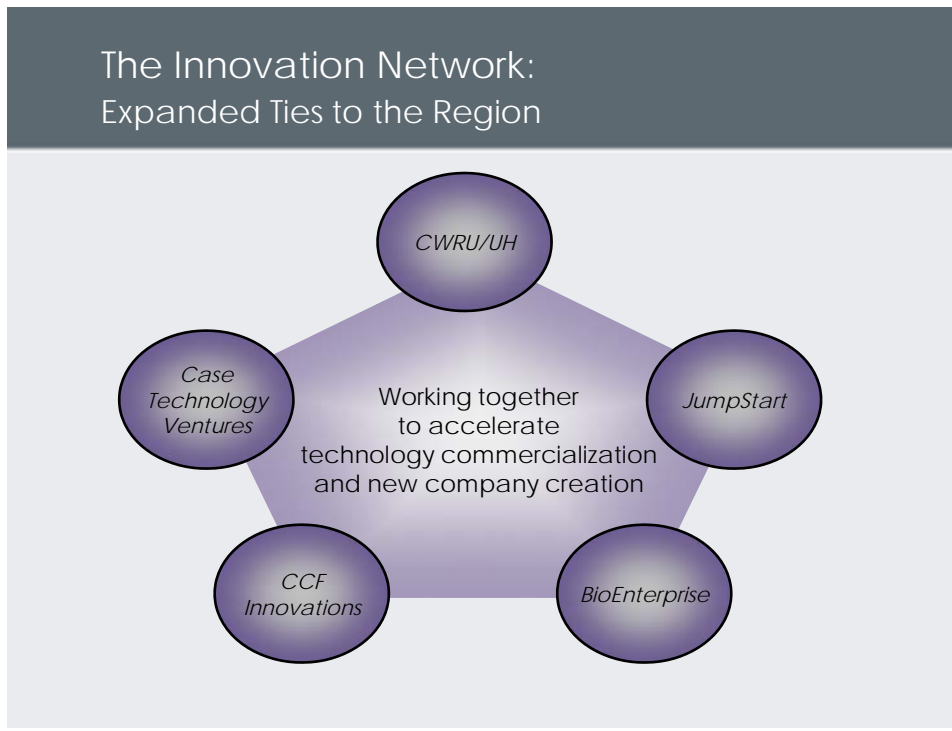
Three National Health Care VCs Establish Ohio Offices

MyriadHealth secures \$1.5 million

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- (BioEnterprise slide)
- This business accelerator helps biomedical companies attract venture capital.
- Has helped attract \$585M out of a total \$860M in capital to medically-oriented companies in Cleveland area over past four years.
- I'm on the BioEnterprise board and have weekly contact.

SLIDE 21 [OPTIONAL]



- BioEnterprise, JumpStart, and the Case Technology Transfer Office are part of what we've come to call Northeast Ohio's **Innovation Network**.
- The network also includes two world-class hospitals that neighbor us, and is a central point of commercialization effort for the region.

SLIDE 22

Case Technology Transfer

Starting Point <ul style="list-style-type: none">o Disorganizedo Lack of Resources and Resolveo Poor Results	Keys <ul style="list-style-type: none">o Early Stage Capital Task Forceo Entrepreneurship Task Forceo GVCV Reporto JumpStart and BioEnterprise➤ Support incentives for VC investorso Recruitment of Top Talent to regiono Innovative Policies
Principles <ul style="list-style-type: none">o Centralized Functiono Customer Serviceo Business-Savvy Staffo Authority to Move Deals Quickly	
Early Efforts <ul style="list-style-type: none">o Edison Biotechnology Centero Enterprise Development Inc.	

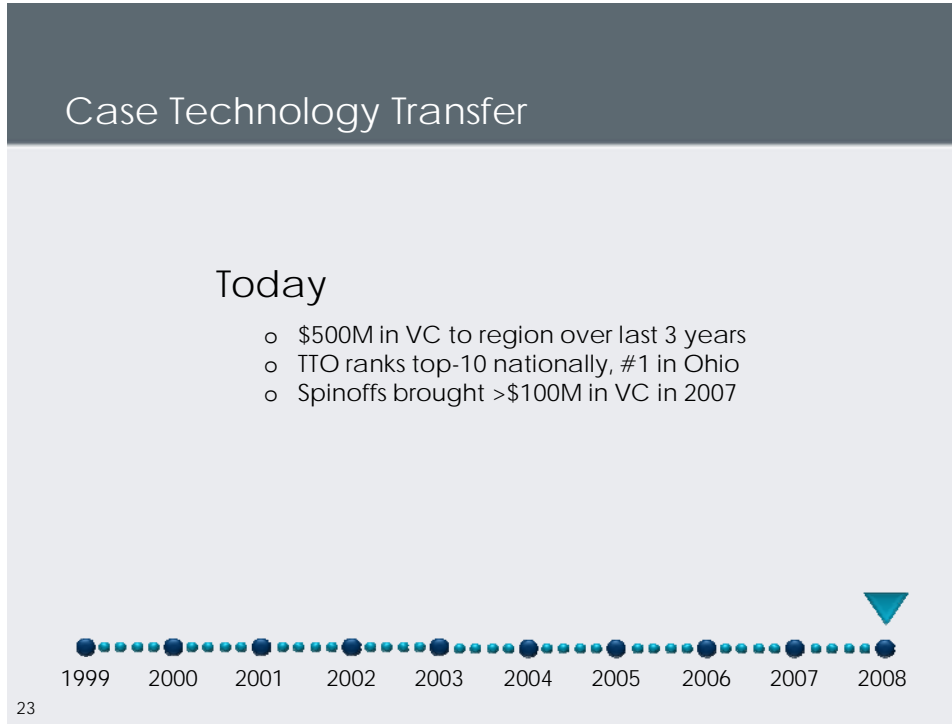
A horizontal timeline from 1999 to 2008. A blue bar highlights the period from 2003 to 2008. Small blue dots are placed at each year mark along the timeline.

- Another key to our transformation in the third dimension was our support of **state incentives** for venture capital investors – such as the Ohio Capital Fund and Ohio Mid-West Fund that I described earlier.
- Partly because of these, more than 20 venture funds have opened here in the past 4 years.
- Cleveland now has more healthcare venture capital investors than any other place between the East Coast and West Coast of the United States.
- Another key to success has been our recruitment of top talent.
- We tried to define it with the A/B/C player chart I showed earlier.

- We provided money to retain executive recruiters to find that first CEO, management team, and money for consultants to hone the business plan.
- The recruiters we used came from the top recruiting firms.
- Our motto on talent – because it’s so hard to get top talent to Cleveland – is “Whatever it takes.”
- That’s the attitude you’ve got to have.
- We have developed **guidelines** on talent – founder’s role, when to hire a CEO and others, how they should do it, etc.
- All of this served as more of a baseline so the building of the management team is done methodically.
- We offer seminars and lectures on a quarterly basis regarding topics such as how to spin off companies, and what is the role of a technical entrepreneur.
- We have developed innovative policies.
- For instance, researchers and professors can have a consulting relationship with the company they spin off, or they can take a leave of absence for up to two years.
- In our IP policy, our inventors get 50% of the proceeds from successful commercialization, including a piece of the equity.
- We work closely with entrepreneur-in-residence programs at a variety of places, including JumpStart and BioEnterprise.
- And we have established a network of great service providers inside and outside the university.

- Our researchers and professors have the “**full force**” of the university behind them to help with deals.
- And now we’re seeing some great successes.

SLIDE 23



- Today, this is how we look:
- Northeast Ohio has attracted \$500 million in venture capital over the last 3 years.
- We're moving toward our goal of \$1.2 billion over the next 5 years.
- Our TTO operation, from its dismal numbers in 2001, now ranks in the top-10 nationally and number one in Ohio.
- Last year, Case's spinouts received more than \$100 million in VC.

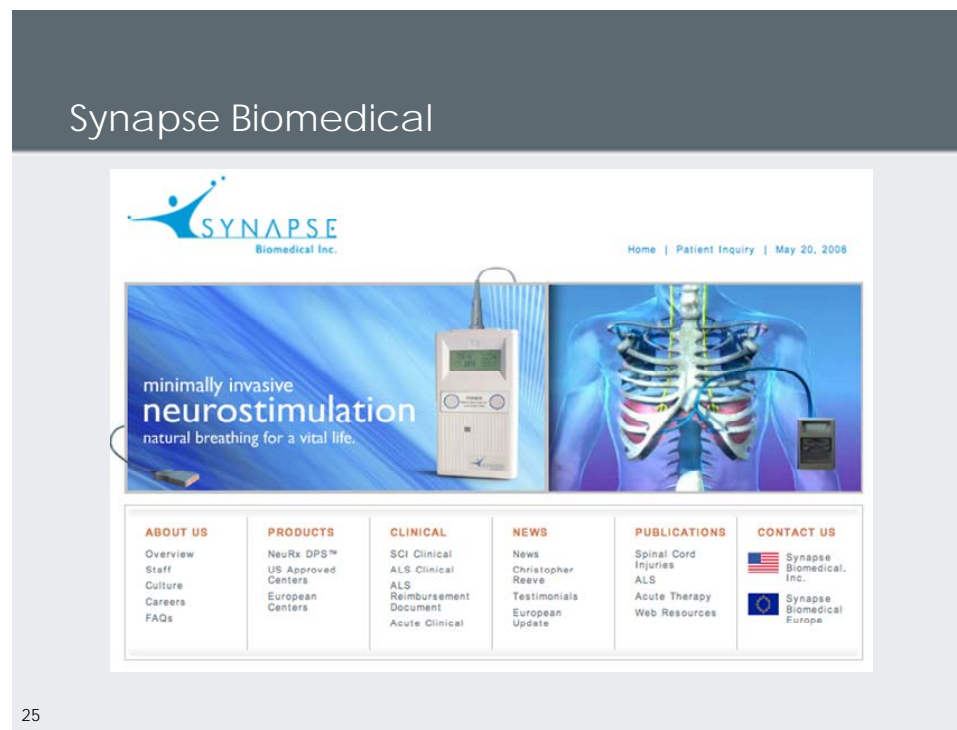
SLIDE 24

The screenshot shows the Athersys website homepage. At the top, the text "Athersys" is displayed in a large, light-colored font against a dark background. Below this, the main content area features a header with the tagline "Developing medicines to improve human health..." and the Athersys logo. A navigation menu includes links for "About Us", "Media Center", "Product Candidates", "Science & Technologies", "Investors", and "Careers". The main body of the page is divided into several sections: a central banner with a photo of a man and a child and the text "Developing medicines that extend and enhance human life."; a left sidebar with four program categories: "Obesity Programs", "MultiStem Programs", "Other Programs", and "Development Status", each with a "Click to Learn More" link; a "Recent News" section with two news items dated May 4, 2008 and April 15, 2008; and an "Upcoming Events" section with one event dated May 8, 2008. At the bottom, there is a paragraph of text describing the company as a clinical stage biopharmaceutical and a footer with links for "Contact Us", "Credits", "Sitemap", "Privacy Policy", and "Legal Information".

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- One of our spinouts, **Athersys**, which develops therapeutics, raised \$80 million and went public.

SLIDE 25



- Another start up, **Synapse Biomedical**, pioneers minimally invasive neuro-stimulation devices.
- It has developed a breathing device that was first trialed by the late American actor Christopher Reeve.
- Synapse attracted capital from early stage funds and then venture capital from California – an example of the increasing amount of capital flowing to Northeast Ohio from other regions.
- Athersys and Synapse are only two of many winners or emerging success stories.
- More great successes are in store for us.

- It's been a lot of work.
- And I should be clear that this has been an effort by many people.
- But I got involved in developing this ecosystem so that the university could be a key player in driving the transformation of the region into a three-dimensional incubator model.

CONCLUSION

SLIDE 26

Learn More About Tech Transfer at Case

To learn more, contact the Technology Transfer Office at Case Western Reserve University. Please visit our Web site:

<http://techtransfer.case.edu>

Technology Transfer Office
Case Western Reserve University
10900 Euclid Avenue, Sears Building, 6th Floor
Cleveland, OH 44106-7219

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- So, tech transfer and incubating technologies is becoming three-dimensional.
- You are right on the cusp of making this happen.
- It takes years; in my experience 3-5 years to start to see this happen, and 5-10 to see real progress and success.
- We have to be patient.
- Most importantly, you've got to just get out there and try to make it happen in your universities, incubators, communities, and companies.

- Get your hands dirty, try some ideas, experiment, and test the barriers.
- Is it worth it?
- You bet, because the price of not doing it is irrelevance.
- We now know that we are not one-dimensional or even two-dimensional, but multidimensional.
- We know that we need to offer very high value resources—more than real estate, and more than editing business plans, which are valuable without doubt, but without doubt they're not enough.
- Rather, we need to offer real guidelines and knowledge and real connections to capital and talent.
- We operate in an ecosystem that is flawed and needs our knowledge and influence to help it improve.
- And as you test it and embrace it, it's a lot of work but it is a lot of fun too.
- Attitude is extremely important and one of the keys to success. And the first step is *believing* that it can be done. Do you **believe**???
- Thank you for the opportunity to speak to you today and I look forward to taking your questions.