



# BioNorth - Ottawa - 2007

## Turning Ideas into Commercial Success

November 2007

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# PROFESSIONALS AT CREA

- **René Gosselin, B.Sc., MBA**
  - Managing partner
- **Charles Farrar, B.Sc., MBA**
  - General partner
- **Richard Côté, M.Sc., MBA**
  - Partner
- **Frank Béraud, B.Sc., MBA**
  - Project director
- **Pierre Chrétien, B. Sc.**
  - Project director
- **Nathalie, Ouimet, M.Sc., MBA**
  - Technology transfer director

# ABOUT CREA

Life science professionals that has a long history working with emerging Canadian companies and the investors who fund them by providing business advice and support to :

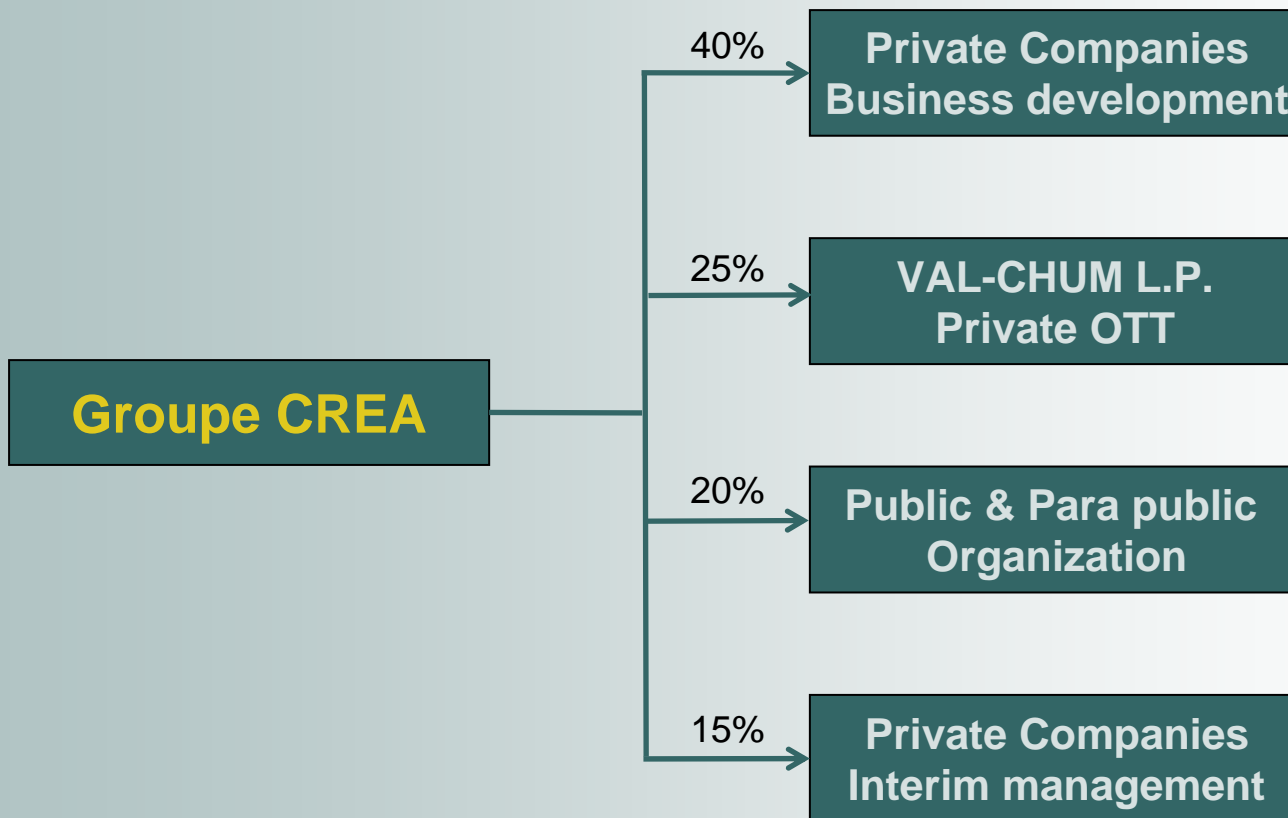
Companies : Biotechnology

Medical devices

Health care companies

Research centers public and private

# CREA's BUSINESS ACTIVITIES



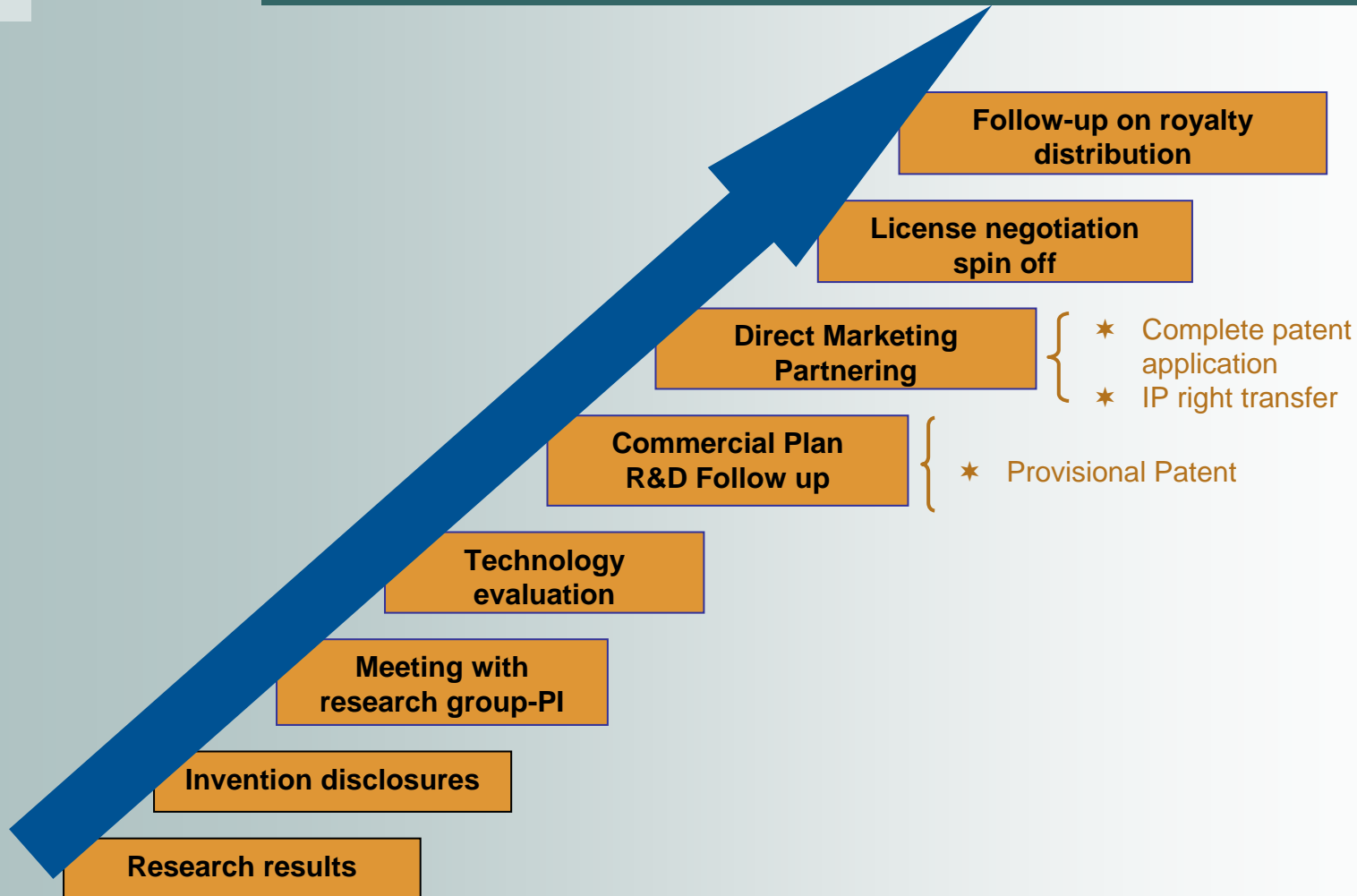
# PRIVATE OTT

- Private Office of Technology Transfer for research centers - mostly research hospitals (VAL-CHUM)
- Integrated services:
  - Researchers support for grant application
  - Technology transfer related agreements
  - Technology evaluation
  - Technology transfer / Licensing negotiation

# SUCCESSFUL TRACK RECORD - OTT

- Since 2004
  - 50 invention disclosures
  - 9 active licenses and spin-offs
  - Approx. 3 new deals per year
  - 24 available technologies for licensing
  - 45 patented technologies in portfolio

# INNOVATION PATHWAY



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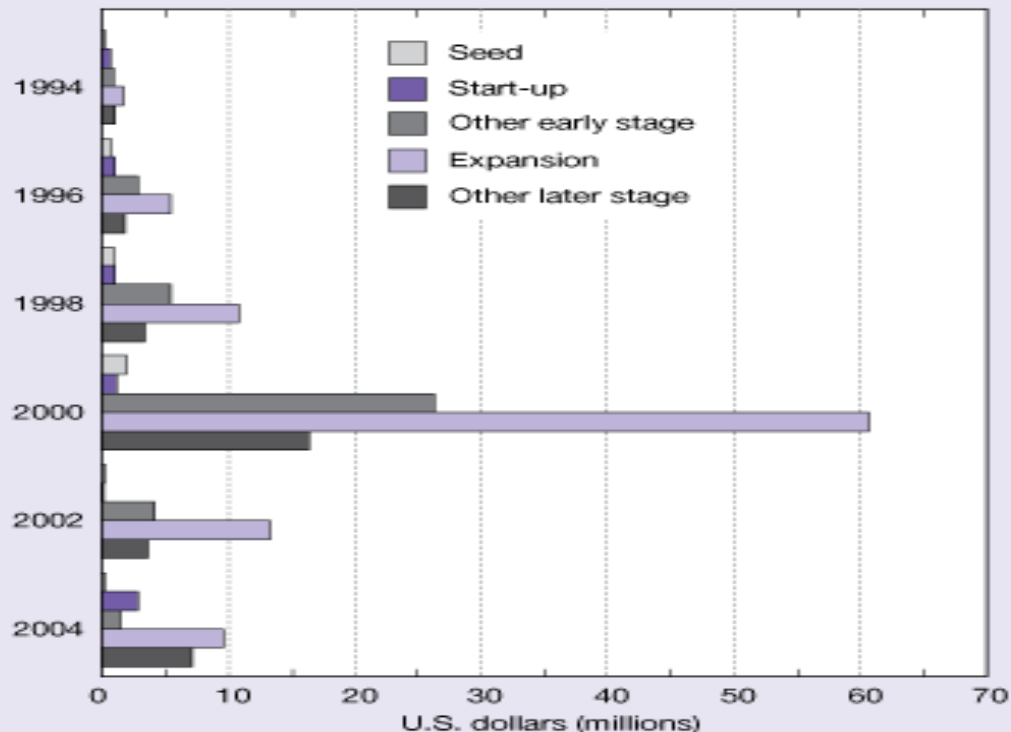
# FINANCING IS STILL POSSIBLE...BUT

- Venture capitalists have pumped a record \$2.8 billion into U.S.-based healthcare companies - Q1-2007
- Biopharmaceutical companies have attracted more than 26% of the total capital raised Q1- 2007

➔ **THE LIFE SCIENCES SECTOR IS EXPERIENCING A RESURGENCE**

# BUT... MOSTLY LATE STAGE

Figure 6-33  
U.S. venture capital disbursements, by stage of financing: 1994-2004



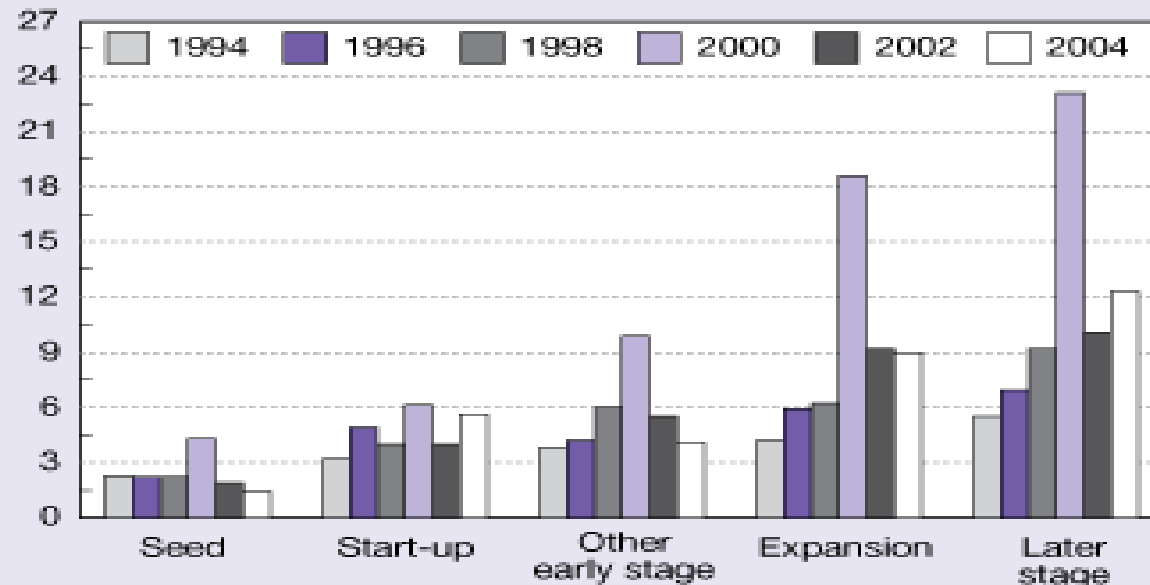
SOURCE: Thomson Financial Services, special tabulations (May 2005). See appendix table 6-19.

*Science and Engineering Indicators 2006*

# BUT... DECLINE EARLY STAGE

Figure 6-34  
**Value of average investment by venture capital funds, by stage of financing: 1994–2004**

Dollars (millions)

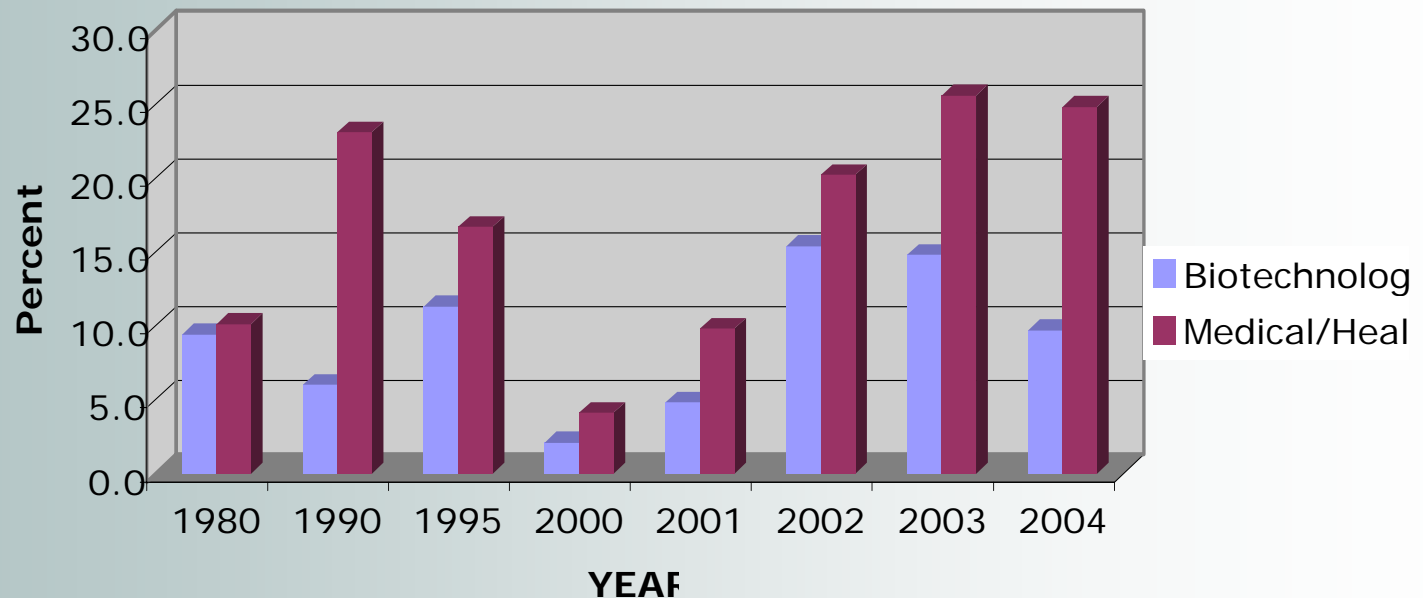


SOURCE: Thomson Financial Services, special tabulations (May 2005). See appendix table 6-19.

*Science and Engineering Indicators 2006*

# BUT... INCREASE IN MEDICAL HEALTH

U.S. VENTURE CAPITAL SEED DISBURSEMENTS -



SOURCE: Thomson Financial Services, special tabulations (May 2005).

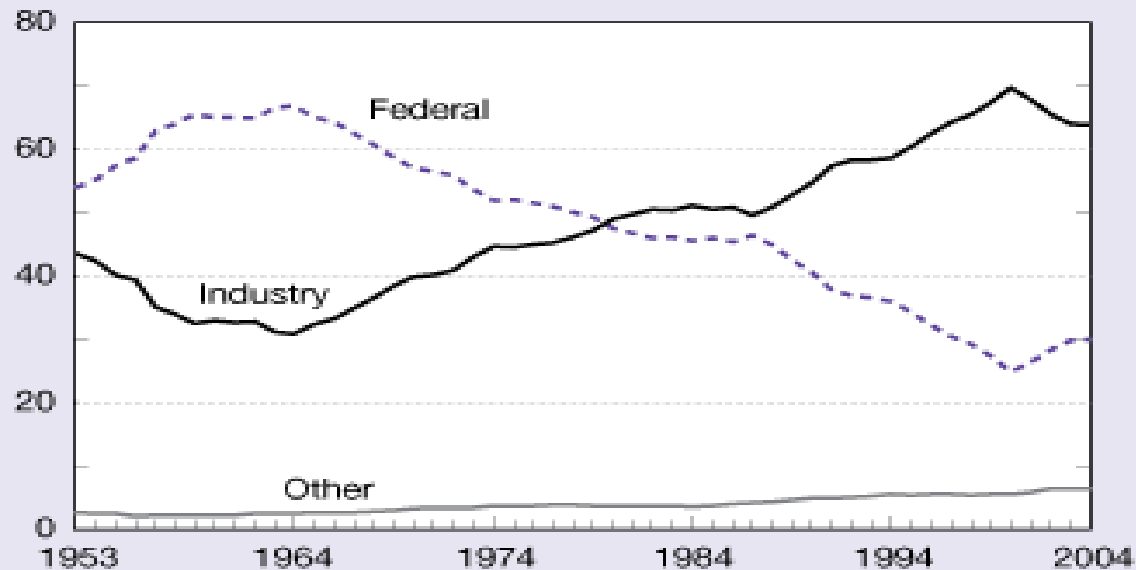
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# AND... INDUSTRY IS GETTING INVOLVED

Figure 4-3  
**National R&D expenditures, by source of funds:  
1953–2004**

Percent



SOURCE: National Science Foundation, Division of Science Resources Statistics, *National Patterns of R&D Resources* (annual series). See appendix table 4-5.

*Science and Engineering Indicators 2006*

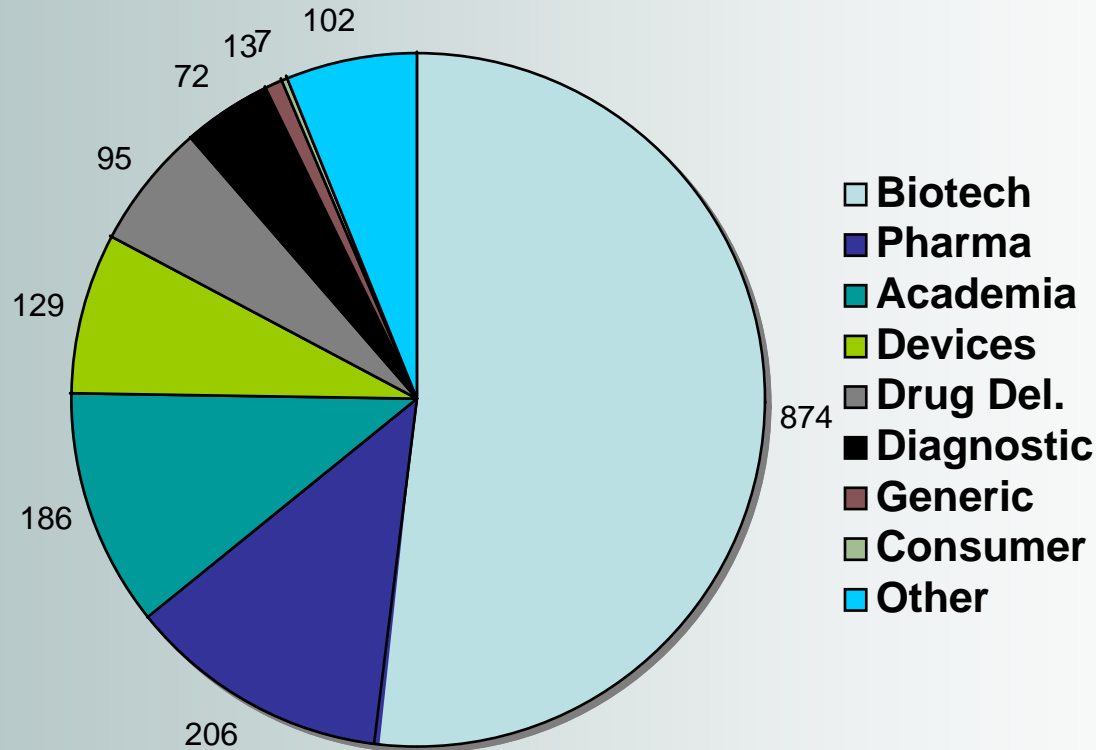
# TRENDS

- Big pharmas are externalizing R&D more and more
- Lagging pipelines (patent expiration)
- Renewed opportunity for M&A markets leading to shorter exits
- Fewer licensing opportunities from Europe and Japan, increasing big pharma's reliance on biotech
- Fewer IPOs more outright acquisitions

# TRENDS - MORE LICENSING DEALS

- Per quarter deals have gone from 182 (Q1-00) to 254 (Q2-2002)<sup>1</sup>
- Same period - 2,164 deals involving 1,684 companies
- Increase of 19 % per year.
- Trend is to be maintained at 16 % increase for the next 5 years
- Big Pharmas are shifting from phase I/II or III to pre-clinical to early clinical opportunities

# TRENDS - STILL BIOTECH

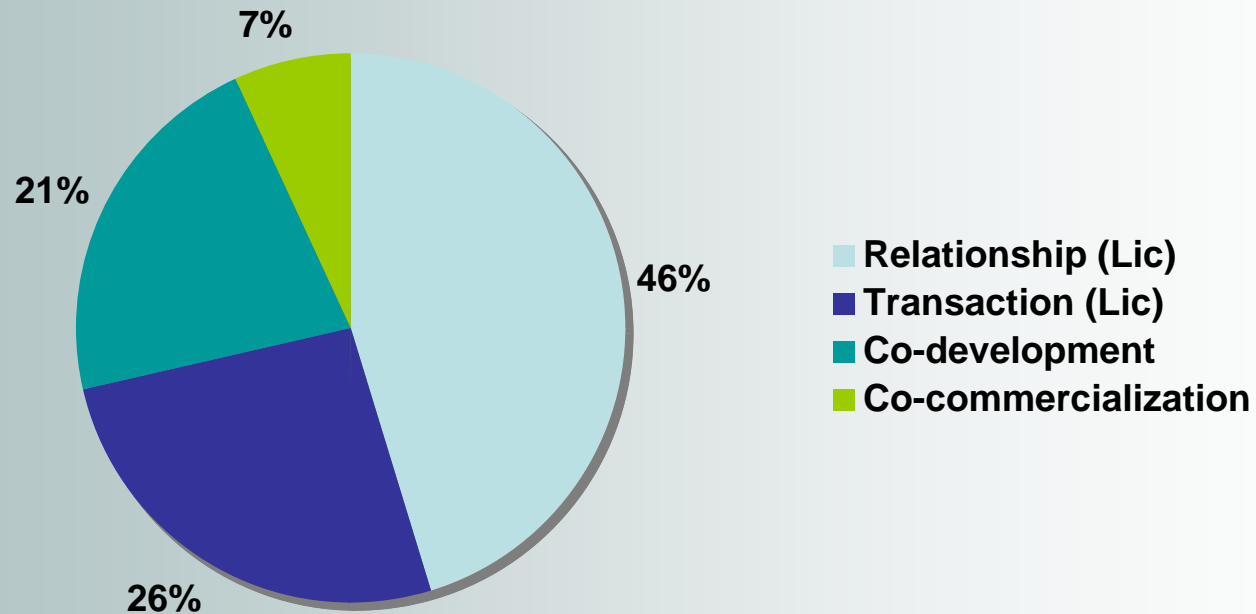


1,684 company-deals in 2 years - 2000 to 2002 (Source : Business Insights)

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# TRENDS - STARTS WITH A RELATIONSHIP

Licensing and Other Agreements - 2001 to 2002



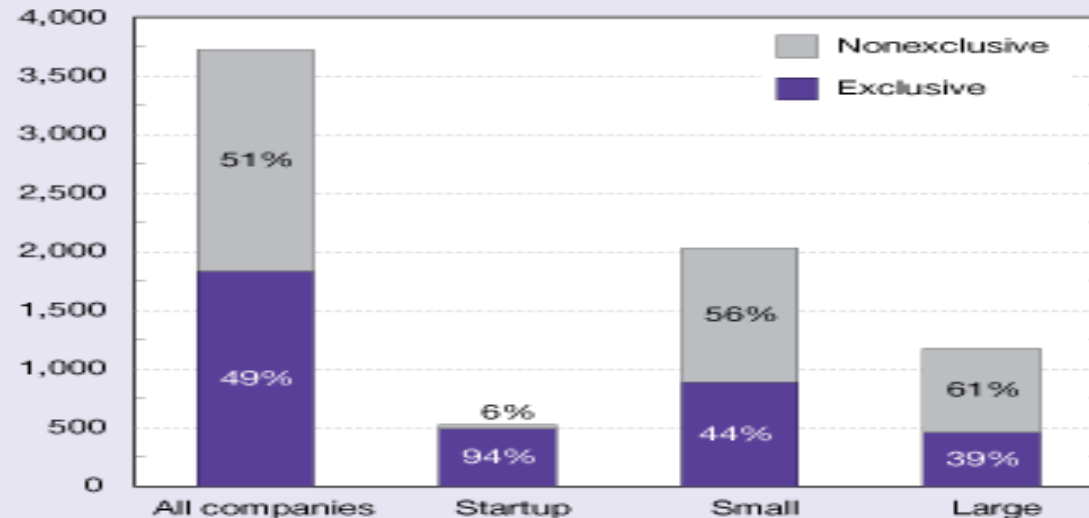
Source : Business Insights

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# TRENDS - MORE WITH SMALL COMPANIES

Figure 5-61  
**Characteristics of licenses and options executed by U.S. universities: 2003**

Licenses/options



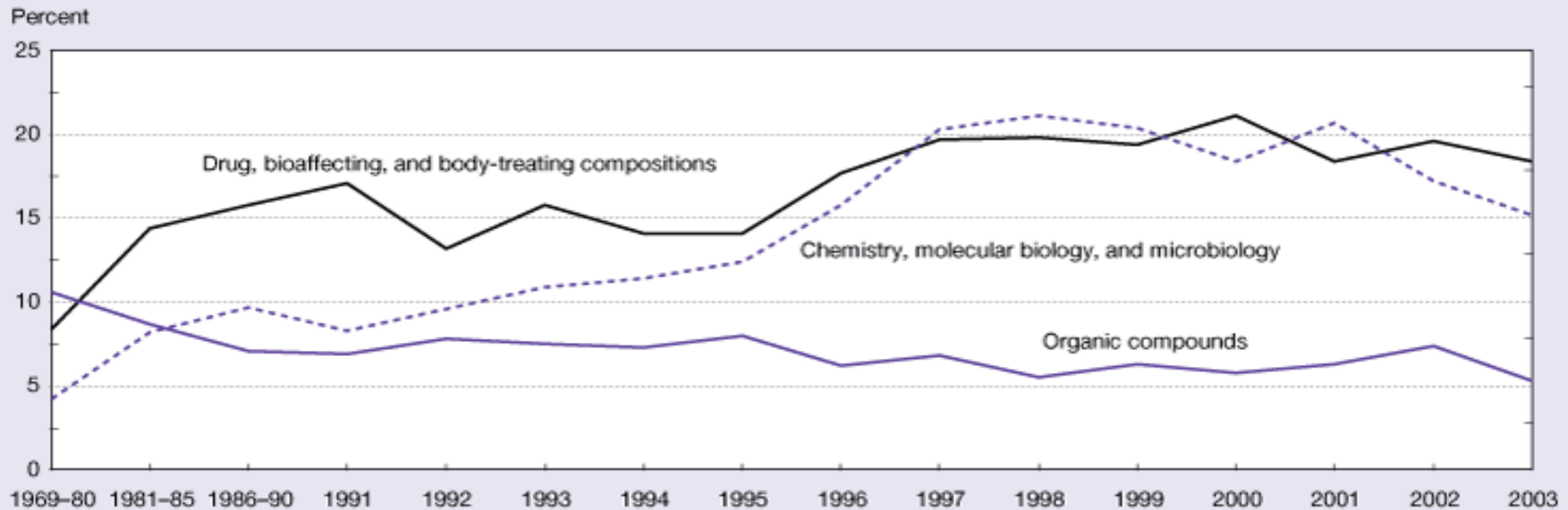
NOTES: Exclusive agreements do not allow sharing or marketing of technology to other companies, whereas this is permitted under nonexclusive agreements. Numbers in bars are percent share of exclusive and nonexclusive licenses of each type of company. Large companies are firms with >500 employees when license/option was signed. Small companies are firms with <500 employees when license/option was signed. Start-up companies are companies that were dependent on licensing of academic institution's technology for initiation.

SOURCE: Association of University Technology Managers, AUTM Licensing Survey: FY 2003 (2004).

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# TRENDS - LIFE SCIENCES

Figure 5-60  
**Academic patents in three largest utility classes: 1969–2003**

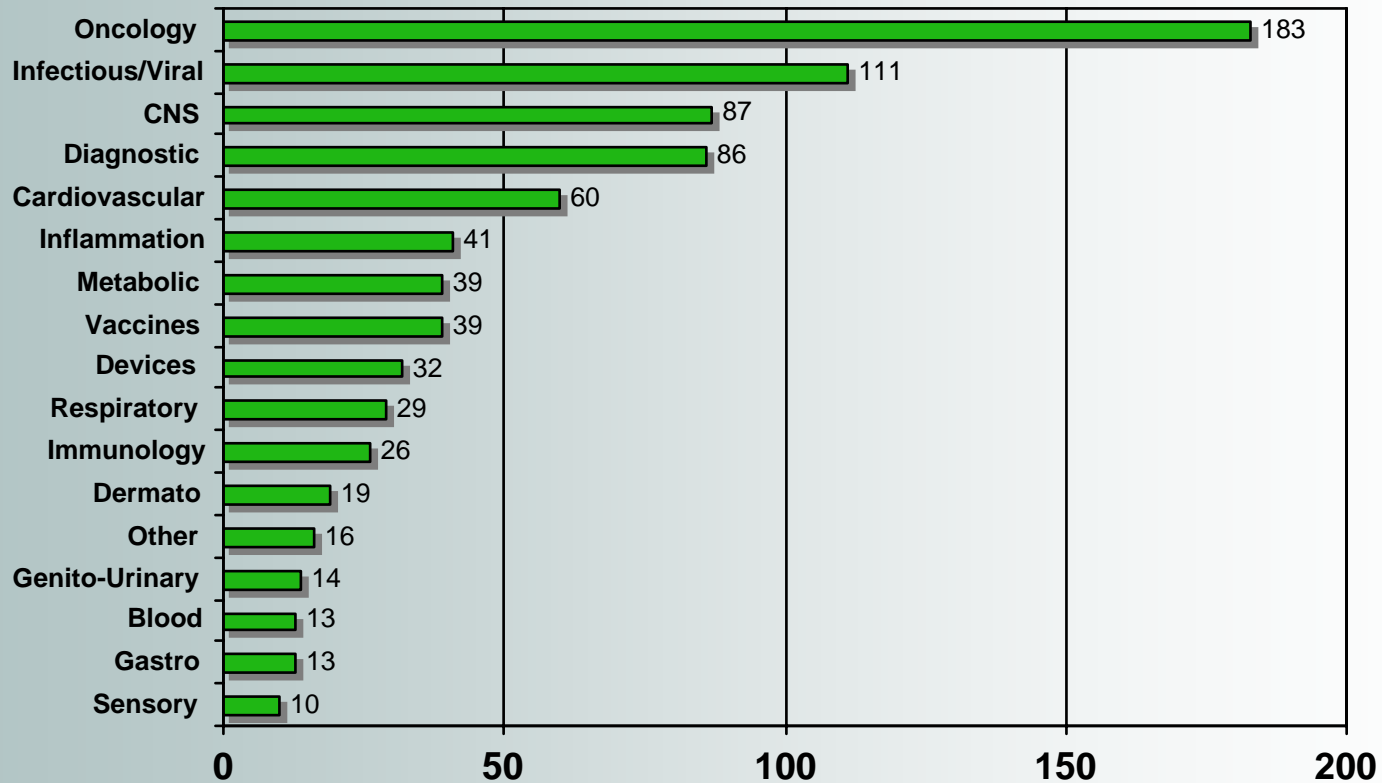


SOURCES: U.S. Patent and Trademark Office, *Technology Assessment and Forecast Report: U.S. Colleges and Universities, Utility Patent Grants, 1969–2002* (2001); and National Science Foundation, Division of Science Resources Statistics, special tabulations.

*Science and Engineering Indicators 2006*

# TRENDS - Therapies

622 Therapy area-specific alliances 2001-2002



Source : Business Insights

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# WHAT'S IN AND OUT

- In
  - CNS
  - Immune function diseases
  - Metabolic disorders
  - Cardiovascular diseases (some)
  - Infectious diseases (back in vogue)
  - Medical devices (looked for by VCs)
- Out
  - Decrease interest in oncology

# BE PREPARED

- Having good quality results
- Having matured your technology
- Having tailored research (validation) to industry practices
- Record and appraise your technology on a regular basis

# BE SELECTIVE

- Profiling your ideal Partner
  - Big Pharma
  - Mid size pharma
  - Start-up
- Who is responsible in the company
  - You want to talk to the right person(s)
  - You want to talk to more than one person (30% will leave)
- Know the company's technologies
  - Is there a real fit ?
- It's not a one size fits all - Be flexible !

# START THE PROCESS EARLY

- Put your product/technology on the radar screen
- Keep your best prospects informed
- Go and visit - get a meeting going
- Strong communications (set the right focus)
- Be patient - one year - sometimes more
- Come back with the accomplished milestones

# BEFORE NEGOTIATING

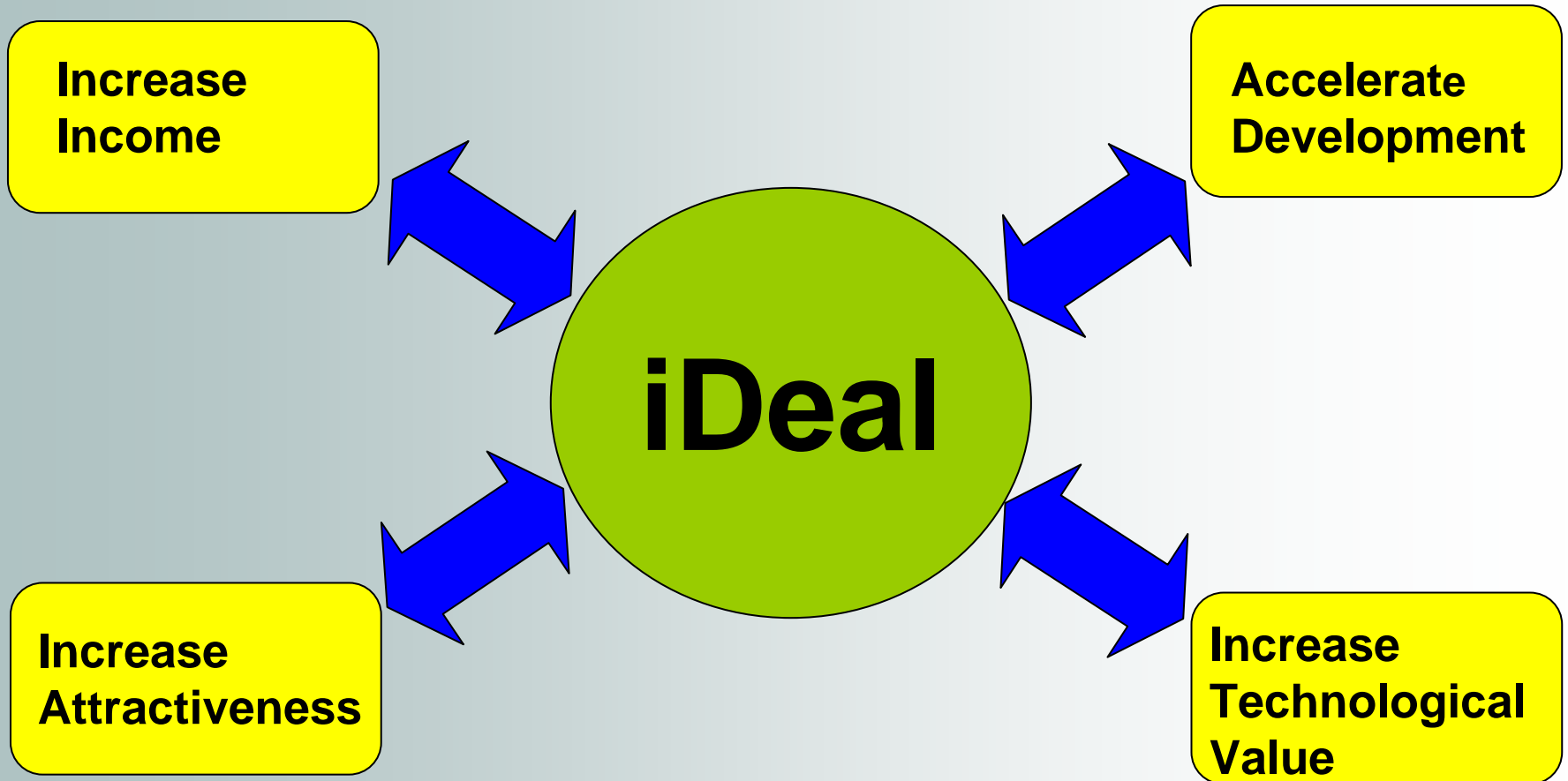
- Don't get into a legal agreement right away
- What are we talking about
- Elaborate first on each parties' expectations
- What are the general terms of the deal sought
- Term sheet (2 - 3 pages)

# BE FLEXIBLE

*Less than 50 % of  
alliances will survive 3 years !!!*

- Look at the bigger picture (not just your piece of the pie)
- Gradually build on relationship (step by step)
- Structurally adaptable - Look for win-win
- Anticipate business risks (alternatives)
- Clearly define managers roles
- Clearly define partnership plan (clear metrics)

# CREATING VALUE



# iDeal - CREATING VALUE

- THE FIRST GOALS ARE :
  - Making a deal that works the first time around
  - Reaching the determined milestones
  - Accelerating development of the technology
  - Mitigating risk
  - Increase competitive advantage
  - Blocking competitive threats

# MANAGING THE “TWILIGHT ZONE”

“Innovative (intrapreneurial) organization has a “grassroots model” : unconventional strategies to respond continuously to a complex, unpredictable environment.” (Henry Mintzberg)

“Inventors are rarely able to successfully commercialize their own inventions. They must learn to embrace a business mindset and work with an entrepreneurial team.” (Tom Hockaday)

# TAKE HOME MESSAGE

- Set and maintain the proper focus
- Confront the challenges of leveraging your technology (be creative)
- Do not underestimate the challenges you will face along the way
- Be flexible
- Put your technology on the radar screen now

# CREA GROUP

Thank you

René Gosselin

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# TRENDS - INCREASE PATENTING

Appendix table 5-69

## Academic patenting and licensing activities: 1991-2003 (Selected years)

Activity indicator	1991 (98)	1995 (127)	2000 (142)	2001 (139)	2002 (156)	2003 (165)
	Millions of dollars					
Net royalties	na	239.1	1,012.0	753.9	868.9	866.8
Gross royalties	130.0	299.1	1,108.9 <sup>a</sup>	868.3	997.8	1,033.6
Royalties paid to others	na	25.6	32.7	41.0	38.8	65.5
Unreimbursed legal fees expended	19.3	34.4	64.2	73.4	90.1	101.3
New research funding from licenses	na	112.5	184.0	225.7	212.8	212.8
	Number					
Invention disclosures received	4,880	7,427	10,802	11,259	12,638	13,718
New U.S. patent applications filed	1,335	2,373	5,623	5,784	6,509	7,203
U.S. patents granted	na	1,550	3,272	3,179	3,109	3,450
Startup companies formed	na	169	368	402	364	348
Revenue-generating licenses/options	2,210	4,272	7,562	7,715	8,490	11,118
New licenses/options executed	1,079	2,142	3,569	3,300	3,660	3,855
Equity licenses/options	na	99	296	328	373	316
	Percent <sup>c</sup>					
Sponsored research funds	65	78	86	84	87	87
Federal research funds	79	85	92	92	93	94

NA = not available

<sup>a</sup> Includes one-time payments of equity cash in and funds received from settlement of patent infringement suit.

<sup>b</sup> Directly related to license or option agreement.

<sup>c</sup> Of national academic total represented by number of institutions reporting.

NOTE: Number of institutions reporting given in parentheses.

SOURCE: Association of University Technology Managers, AUTM Licensing Survey (various years).

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