
New Faculty Forum Collaboration

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Academic Collaboration - Upsides

Why Collaborate?

- Lever resources
- Access more specialized equipment, expertise
- Multiply impact, productivity
- More stimulating intellectually
- Enable interdisciplinary projects
- Richer training environment for HQP



Academic Collaboration - Downsides

Potential Downsides

- Muddy contribution (esp. former supervisors)
- Dependent upon others
- Funding can become more complicated
- Must work at establishing and sustaining relationships



Collaboration and Publication

Half Year	Papers	%Collab.	Collab Cites	Solo Cites
2012 to June 30	439	64.2%	0.83 each	0.79 each
2007 to June 30	387	60.5%	14.03 each	10.63 each
2002 to June 30	200	50.5%	20.50 each	17.36 each

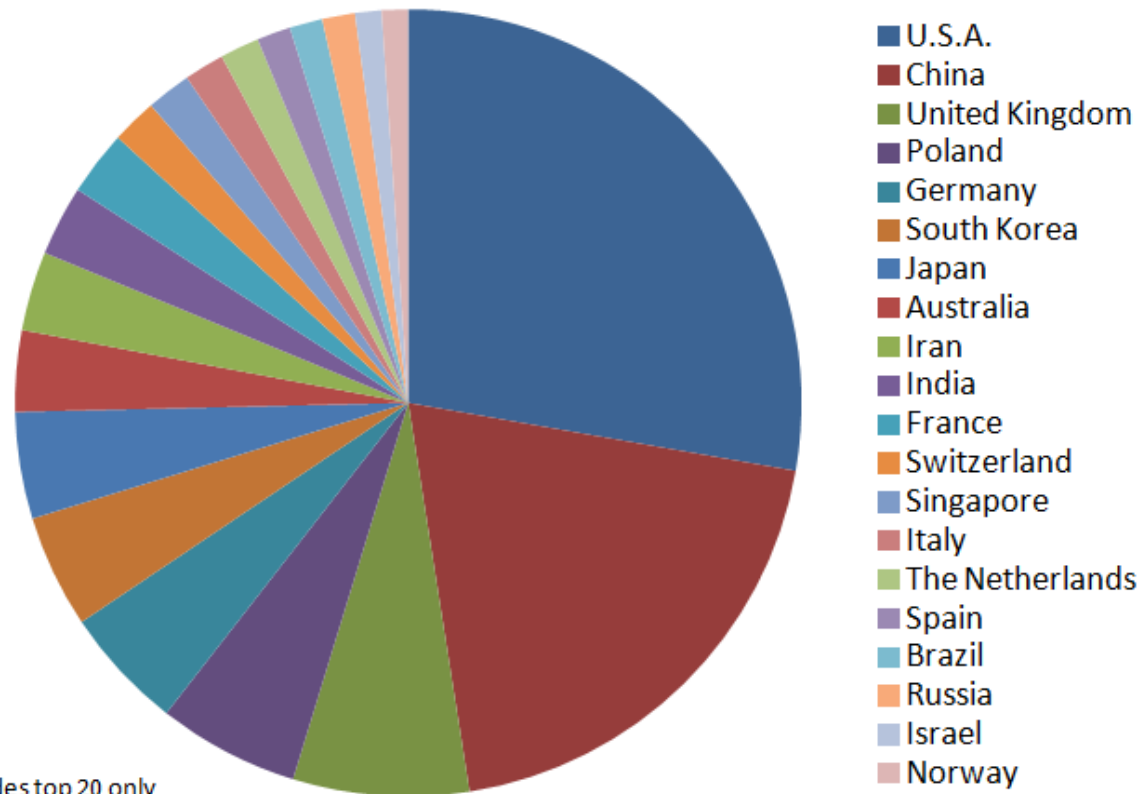
*Data from Web of Science for UofA Engineering,
effective Feb. 25, 2013*



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Collaboration by Country

Distribution of International Collaborative Publications
by Country (2006-2012)*



*Includes top 20 only



Collaboration by Institution



Developing Academic Collaborations

How to establish collaborations

- Personal contact important
 - Conferences, visits, talks, HQP, extended network
- Institutional engagement
- Cold calls
 - Exposure through literature, web site



Industrial Collaboration - Upsides

Why Collaborate?

- Secure funding
- Access to industrial equipment, settings, data
- Reinforce relevance of research
- Improved technology transfer
- Richer training environment for HQP
- Placement of HQP



Industrial Collaboration - Downsides

Potential Downsides

- Takes time to build relationship
- Agreements often difficult, cause delays
- IP may get tied up
- Confidentiality may restrict ability to publish
- Mismatch of expectations (especially timelines)
- Risks of deploying students
 - Greater potential to breach confidentiality agreement
 - May be constrained in publishing thesis
 - Conflicts between industry and student IP rights



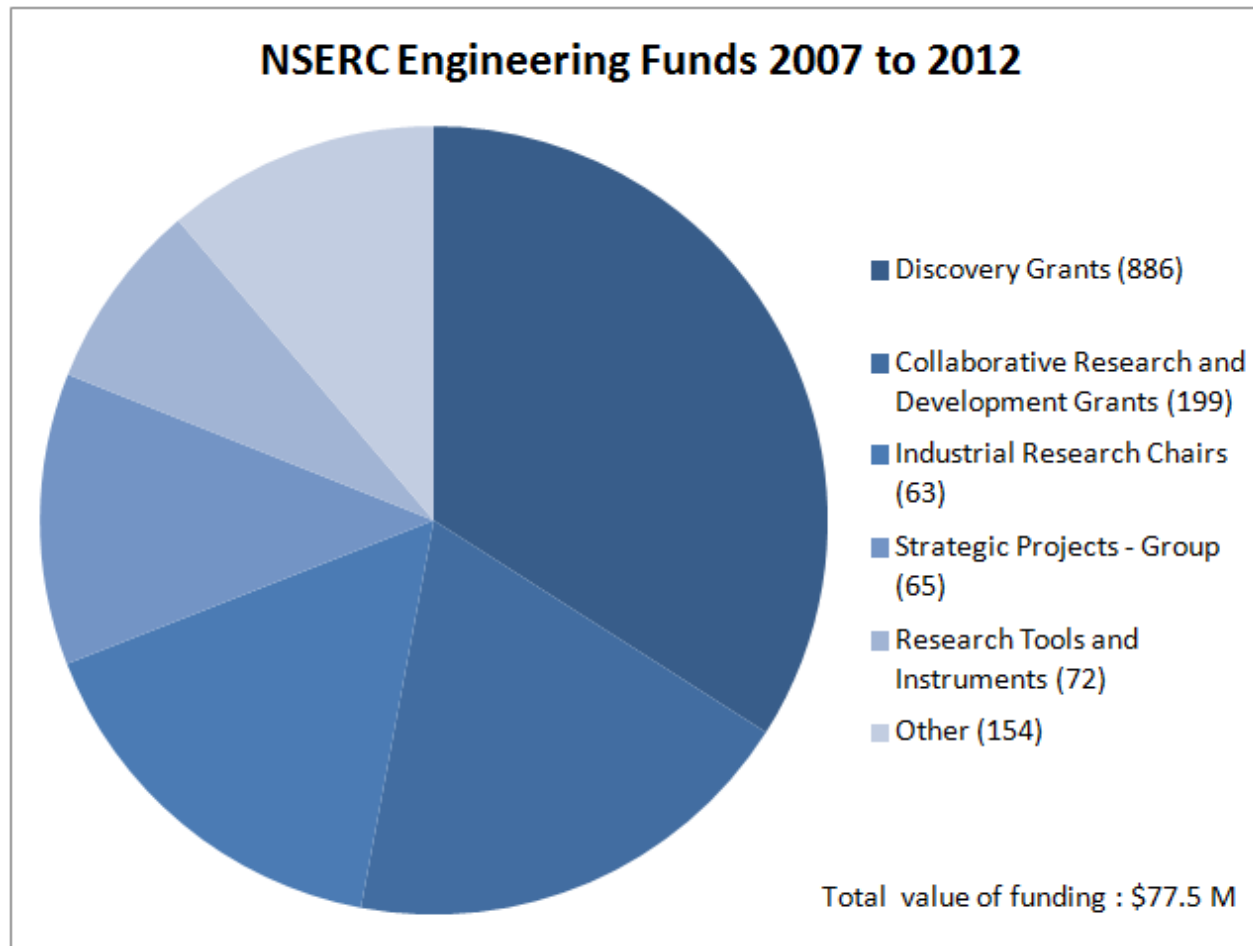
Programs to Support Industry Collaboration

NSERC

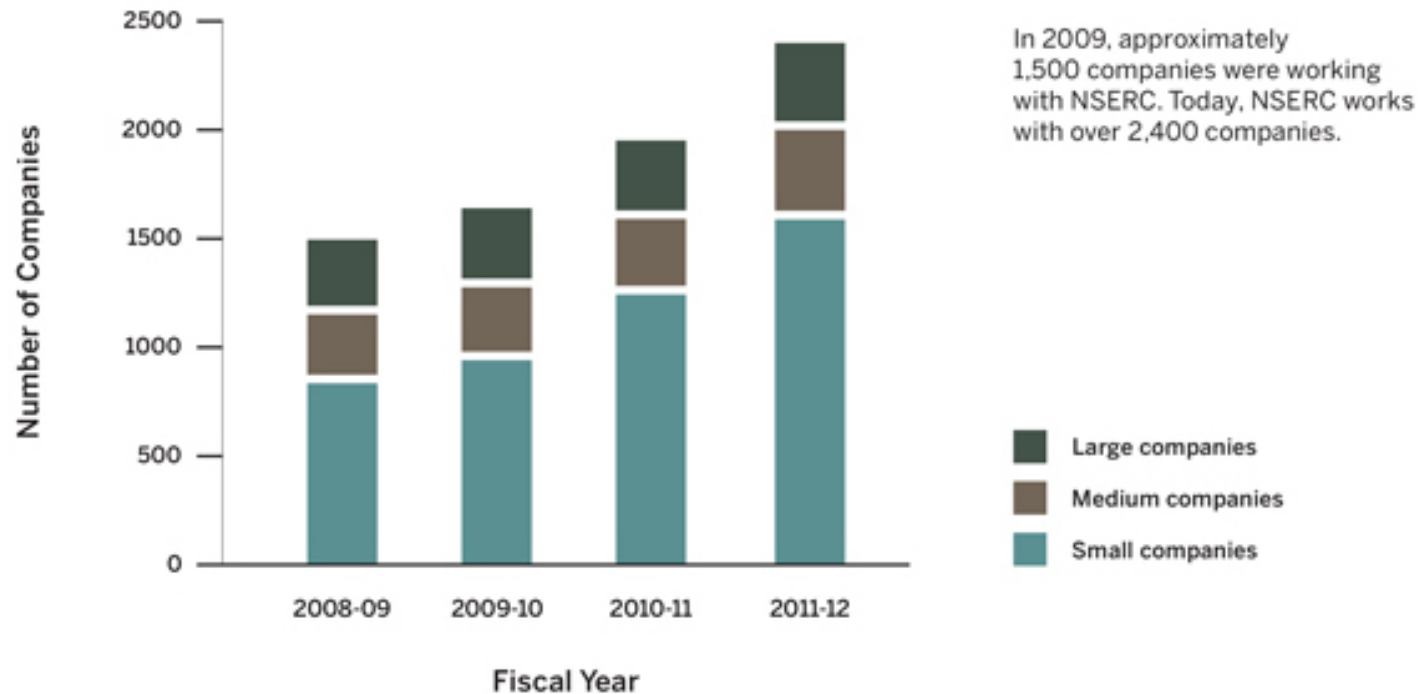
- Interaction (\$5K, 3 months, new contact)
- Engage (\$25K, 6 months, some in-kind needed)
- Collaborative R&D (CRD)
 - 2:1:1 matching, high success rate, <3 years
- Industrial Research Chair (IRC)
 - 1:1 matching, large programs (\$200K+), 5 years



Impact on NSERC Funding



Corporate Collaborator Profile



<http://www.nsercpartnerships.ca/Strategy-Strategie/Index-eng.asp>



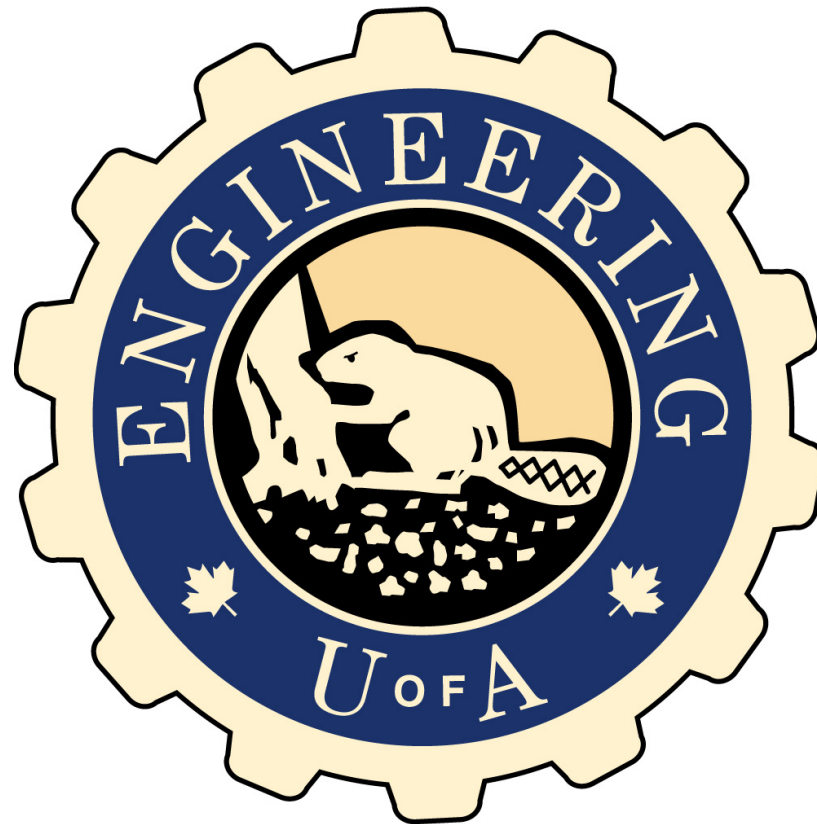
Developing Industry Collaborations

How to establish collaborations

- Personal contact important
 - Conferences, visits, talks, HQP, extended network
- Know their business and the value proposition you present for them
 - From their perspective, you're there to help them, not vice versa
- Understand their sensitivities (eg. IP, confidentiality, competitors, time to market)
- Industry is often more interested in your HQP than your technology



Questions...?



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