Finding Funding in the Sciences (and Engineering)

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“After a job and tenure, an NSERC Discovery Grant is the most important thing in your professional life.”

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Director of

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Finding Funding in the Sciences

Before and after graduation

• Why you need funding?
  • travel, students and RAs, visitors, equipment

• What is available? (slides to come)

• What are the best strategies for getting and keeping funding?
  • view like portfolio management
  • some risk, some certainty
  • keep good records from day one
  • look ahead, but not too far
D-Drive’s Nova Scotia location lends us unusual freedom when interacting globally. Many cities around the world are close enough in a chronological sense to comfortably accommodate real-time collaboration.
Finding Funding in the Sciences

Some General Observations

• Modern science is Global
  • building social networks is crucial

• Proposals must speak to diverse groups of readers
  • experts are rare; knowledge is not

• Success rates are low (20%?)
  • so ideas must be re-purposable

• You are your own best sales-person
  • but bullshit is obvious
Before Graduation

Options are fairly limited

• But you need to get on the circuit!
  • practice, practice, practice
  • friendship/familiarity counts (ref. letters etc)

• Some funds available within University
  • politely ask your supervisor (and others)

• Some NCE- Networks (MITACS) and Institutes (CITA, AARMS, Fields, PIMS, CRM) tie workshop funding in part to graduate students
  • Industrial pre-docs and MITACS internships
"You can't imagine how tight our budget is. We can only work with single-digit numbers."
After Graduation I

Options are still fairly limited

• NSERC is committed to giving new researchers a good start!
  • but application growth is out-stripping funds

• Discovery Grants are key
  • they validate as well as fund (be realistic $-wise)

• NSERC Industrial Funds are less used
  • great, if you’ve a real project and a live company

• NSERC Strategic, Network & Corporate
  • apply with senior partner (‘track-record’ counts)
Other Possible Sources

- **CFI** has just been given $500m for 2010
  - (for equipment) but application growth is outstripping funds

- Many **Agencies** offer funds (ACOA, APICS, CANARIE, Ind. Canada, Genome Canada, NATO, …)
  - make contact early in the process -- some are real, some are bogus, some are a good fit …

- Small sums via **Foundations & Societies** but work may cost more than they fund
  - (“under-head”) pick your spots and keep your eyes open; but grant hunting is not your day job
"'Be careful'! All you can tell me is 'be careful'?"
“My morale has never been higher than since I stopped asking for grants to keep my lab going.”

Robert Pollack, Columbia Professor of biology, speaking on "the crisis in scientific morale", Sept. 19, 1996 at GWU symposium *Science in Crisis at the Millennium*. (p. 1805 27/09/96 *Science*)