

Mathematical Biology at BCIT: a Case Study in Starting and Funding a Research Program at BCIT

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Start Up

1995

PhD, Post-
UBC docs

1998

BCIT, full
teaching

1 conference
presentation

1999-2003

20-40% Research
Associate, UBC

- started plant computations
- Published post-doc papers
- 1 preliminary paper
- ~ 2 conferences/year

- Getting a toe-hold to expand on your expertise.
- Collaborations.

Plants, part I

2001-2003

20% BCIT
support

Technology
Centre Staff
Applied R&D
Fund, I

2003

10%
Consultant,
Harvard

2004-2006

20% BCIT support

Technology
Centre Staff
Applied R&D
Fund, II

- 'Hodgepodgery': Dr. Norman Streat
- Annual applications; 3 yr. limits; expectation of external connections and support

Fruit Flies (from a post-doc project)

2001-2003

'side of desk'

Started collaboration with Dr. Spirov, Stony Brook

- 4 early papers
- Application for US NIH grant

2004-2009

NIH awarded:

- 50% support
- BCIT subcontract to Stony Brook

- ~ 8 papers
- Postdocs, collaborations
- Conferences
- Experiments

Collaborations continue: U.S., Russia, Brazil, Sweden

(BCIT PD)

Plants, part II

2005-2007

3 Applications
for NSERC DG

20% BCIT support
from: WED; SCAS
internal fund

- Big paper
accepted in 2007
- Changed NSERC
Committee

2008-2013

NSERC DG awarded:

- BCIT support negotiated
(continuing)
- Support of summer students
- Graduate student? ->
technician

- Collaborations
with UVic (adjunct
professor) and
UBC

Things that helped

- Kept emails/discussions active after post-docs
- Got a break with a part-time UBC appointment
- Department supportive of research adding to BCIT
- Finding hot 'niches' in the field
- Many small BCIT 'pots'
- Initial work could be done with a computer

Tips?

- Let your colleagues, Department head, Dean know what you're doing (School research committee seminars?). Let each level know why it's good: student experience; reputation (yours, department's, BCIT's); currency.
- Build internal and external collaborations. Find your expertise, or where your expertise fits with others' projects.
- Apply for all chances for funding – when your project is ready. Tailor your project for the fund. Build up. Be ready to string together short term support.

Government Research Grants

- Have a clear, important, do-able message. What are you going to do, why is it important, why should you get a piece of the very small national pie to do it.
- Preliminary results – probably a few years, at least, of internally supported work.
- Publish – granting agencies are very academically oriented. You are in the pool with UBC, UofT, etc.
- Collaborate – ‘centres’ are good.
- Train – students are important.
- Your time, for NSERC projects, is determined by BCIT; be prepared to advocate for your project and get clear commitments on internal support.