

Starting from scratch

- It's OK to start small
- Nothing is wasted
- Build on strengths
- Learn from everything

Start small, learn, and grow

- Institutional grants (take the applications seriously)
 - Small travel grants (professional societies)
 - Small local grants (alignment of objectives)
 - State level grants (VGN, EPSCoR, etc.)
 - National Level (NIH, NSF, etc.)
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- NOTE—this does not need to be sequential!
Can apply for federal money from the beginning,
but smaller grants in parallel.

Grants 2002-2003

Received

- Vermont Genetics Network/BRIN summer research support: \$10,000.
- Waterloo Maple Maplet Development Grant: \$4,500.
- Waterloo Maple Maplet Toolbox Development Grant: \$4,000.
- SMC Jr. faculty summer support grant (internal): \$3,000 (replaced by external funding).
- SMC faculty development grant: Maplet pilot program: \$2,500 (replaced by external funding).
- SMC faculty development grant: Campus-wide Maplet implementation: \$2,500.
- SMC travel funding for Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton: \$950.
- SMC travel funding for SIAM/CAIMS joint meeting, Montreal: \$350.
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Submitted

- Association for Women in Mathematics/NSF Mentoring Travel Grant (\$600).
- Vermont EPSCoR Industrial Partners Initiative Grant.

(Eventually: NSF STEM--\$550,000, NSF ANTC--\$200,000)

Waste not, want not

- Other grants (including info like fringe rates...)
- Expository papers
- Introductions and settings for research papers
- Tenure and Promotion narrative
- Departmental newsletters and reviews
- Fast ramp-up for research students
- Staying focused

Note: Reporting completes and continues the cycle—
highly reusable material here, too.

Some recent rip-offs...

- J. Ellis-Monaghan, G. Pangborn, “Using DNA self-assembly design strategies to motivate graph theory concepts,” in press, *Math. Model. Nat. Phenom.*
- L. Beaudin, J. Ellis-Monaghan, G. Pangborn, R. Shrock, “A little statistical mechanics for the graph theorist,” *Discrete Mathematics*, 310 (13-14) 2010, 2037-2053.
- Pretty much the whole research sections of both my tenure and promotion narratives.

Know your assets

- Working with students
- Access to good lab
- Natural resources
- Institutional supports
- Inter-institutional collaborations
- Mentors

What is consistent with both your goals and the granting institution's goals?

Learn everything you can

- Workshops
- Online resources
- Feedback from applications
- Advisors and other mentors
- Volunteer to review/referee
- Help make information available

You're here, right?

- **2002**
- BRIN/VT Genetics orientation, poster session, talks, grant resources all day session in August 2002 at UVM.
- BRIN/VT Genetics Grant Writing workshop June 2003 at Middlebury College.
- **2003**
- SPIN and SMARTS/GENIUS workshop run by Hilda Alajajian from UVM office of sponsored programs, SMC October 2003.
- **2004**
- VGN-EPSCoR grant-writing workshop, Middlebury College, 6/3/04.
- VGN-EPSCoR retreat, UVM, 8/11/04.
- **2005**
- SPIN SMARTS/GENIUS orientation workshop, SMC, Spring 2005
- VGN-EPSCoR grant-writing workshop, Saint Michael's College, 6/3/05.
- VGN-EPSCoR retreat, 8/17/05.