

My Strategies to Grant Writing

Presentation for P&T SMARTS

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Background

- 2009: Ph.D. in Applied Math from UD
- 2009 -11: Postdoc at IMA, UMN
- 2011- on: Assistant Professor at RIT. I spend my time:
 - Using math to understand contact lens mechanics, tear dynamics, and droplet dynamics
 - Teaching undergrad/grad mathematics courses
 - Mentoring undergrad/grad research
 - Directing the SMASH Experience for Girls

Grant Writing Background

- Federal Funding:
 - **NSF: Collaborative research proposal with UD**
 - **EDA: Coll. research proposal with UR/B+L**
- State Funding:
 - **CEIS: Research proposal with B+L**
- Corporate/Foundation/Alumni Funding:
 - **B+L: Research proposal**
 - **Fundraising for SMASH (total: \$23,520)**
- Internal Funding:
 - **Professional development**
 - **Research proposals**
 - **SMASH**

Initial Proposal Development Strategies

1. Start with an idea
2. Talk, talk, and talk some more about my ideas with others inside/outside of RIT:
 - **How does the idea fit into my professional story?**
 - Theme: Math Modeling Thin Systems
 - **How does the idea fit into RIT's story?**
 - Resources (faculty, centers, etc), strategic plan, outreach
 - **How does the idea fit into my area of research?**
 - Fills what gap in the literature?
 - **Possible funding sources?**

Proposal Development Strategies

After funding source is identified, I carefully read the solicitation and

- Decide which parts/pieces of my ideas fit
 - *What do I need to stress? (Call program officer)*
 - *What did the reviewers like/dislike? (Call program officer)*
- Build a team to work with
 - *What expertise/synergies at RIT or outside RIT could support the work?*
- Meet with SRS to discuss a budget
 - *I do this early on because Maria helps me craft my ideas*
- Start writing
 - *Start with format in the solicitation*

Things that work for me

- Give a specific but clear overview of the proposal at the beginning
- Tell a story to draw the reader in
- Integrate seamlessly intellectual merit, board impacts, my strengths, RIT's strengths (it can only be done by me and at RIT)
- Use figures/citations to convey additional points (each figure/citation is deliberate)

Overview By Figure

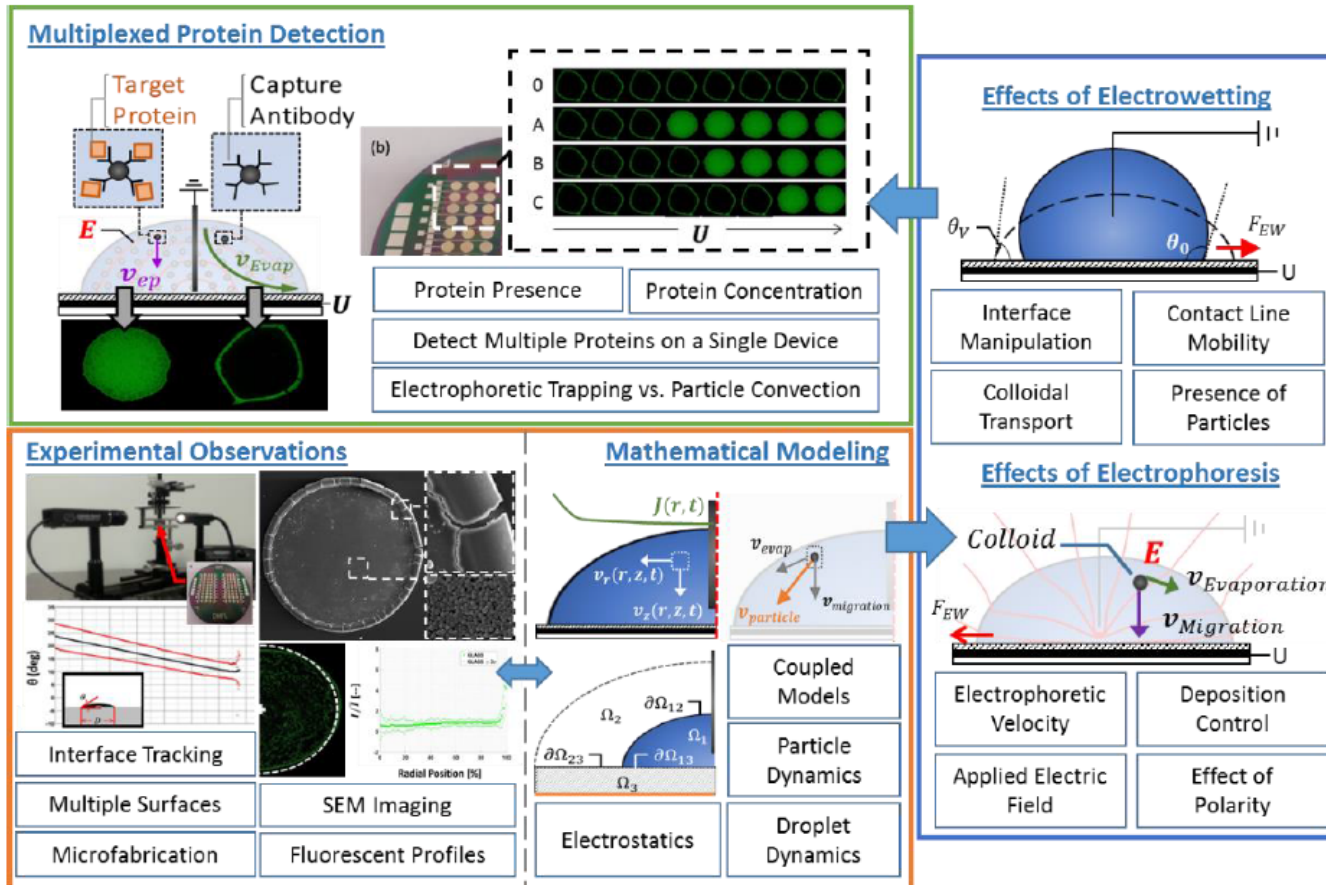


Fig 1 Overview of proposed multidisciplinary research plan.

Why Do I Write Grants?

- To get tenure
- To support my research (resources!)
- To become a better researcher
- To become a better teacher
- To integrate myself RIT's community