

The Academic Life: What Does a Prof **Really** Do?

John Stockie

CFD Research Group Meeting

<http://www.math.sfu.ca/~stockie/research/cfdgroup.html>

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Outline

- 1 Teaching
- 2 Research
- 3 Service
- 4 Pros and Cons

Motivation

- An academic job is a multi-faceted one.
- On the surface, it seems that all we do is **research** and **teaching** . . . but there is much, much more to it than that!
- Responsibilities can be classified under 3 headings:
 - ① teaching
 - ② research
 - ③ service
- The “official” split is 40/40/20 but it’s much more like 75/75/75.
- The hours are long, the pay is OK, but it can be **very** rewarding!

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Teaching

- Undergraduate teaching, mostly service courses (calculus and linear algebra for biologists, engineers, social sciences, . . .)
- Fewer courses for math majors and at the upper division
- Teaching graduate courses is a luxury
- Visiting high schools provides its own rewards
- Exciting aspects: designing new courses, special topics and grad courses, integrating technology.

Roles: teacher, mentor

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Research

- Publishing journal articles, books, conference papers
- Attending seminars
- Travelling to conferences and presenting research (talk or poster)
- Supervising students and postdoctoral fellows
- Applying for research funding (grant proposal writing):
 - Federal sources (NSERC, CIHR, Mitacs)
 - Provincial agencies
 - Foundations
 - Industry
- Collaborating with researchers from elsewhere
- Consulting with industry

Roles: researcher, expert, writer, mentor, manager, consultant



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Service

- Reviewing journal articles
- Serving on journal editorial boards
- Reviewing grant proposals
- Serving on review panels for grants, departments, institutes
- Serving on internal and external thesis committees
- Serving on other committees (department, university, external)
- Reviewing external tenure and promotion cases
- Joining and participating in professional societies
- Organizing conferences or thematic programs
- Public outreach
- (for some) Taking on administrative/leadership positions (department chair, dean, vice-president, president)

Roles: critic, communicator, facilitator, leader, politician

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Drawbacks

- There is a lot of stress during your first 6 years as you prepare for your tenure review
- The hours can be very long, and work easily spills into evenings and weekends
- The pressure to publish is always there
- Undergraduate teaching can be a real drag unless you continually renew yourself
- No-one is telling you what to do
- (for some) Finding novel research problems to work on can be challenging

Benefits

- I get to do math every day and get paid for it
- Once through the tenure hoop, the job is **very stable**
- The pay isn't bad
- I love to teach
- My working hours are flexible
- I am my own boss
- My work life is never dull
- I love to travel
- Working with students can be a real joy
- There is never a shortage of cool things to do
- If I want to get more into politics or advocacy, academic freedom is a huge plus
- (for some) Power

Questions?