

The background features two large protein structures on the left, one with a red glow and one with a green glow. On the right is a grey toolbox with yellow handles, containing compartments labeled 'Inhibitors', 'Activators', and 'Modulators' with various protein icons.

Faculty Information Exchange Series

Early Career Researchers: Advice to Get Started

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Molecular and Cellular Biology

My research journey



BSc in Beijing Normal U (1999-2003)
Biotechnology



MSc with Dr. J. Heddle (2003-2005)
Cytogenetics & Mutation research



Principal Investigator
Design and synthesize proteins
to understand biology and to
develop therapeutics



Lunenfeld-Tanenbaum
Research Institute

MOUNT SINAI HOSPITAL
Joseph and Wolf Lebovic Health Complex

PhD with Dr. D. Durocher (2006-2011)
DNA damage and repair & telomere biology



Postdoc with Drs. S. Sidhu and J. Moffat (2012-2018)
Protein engineering & functional genomics



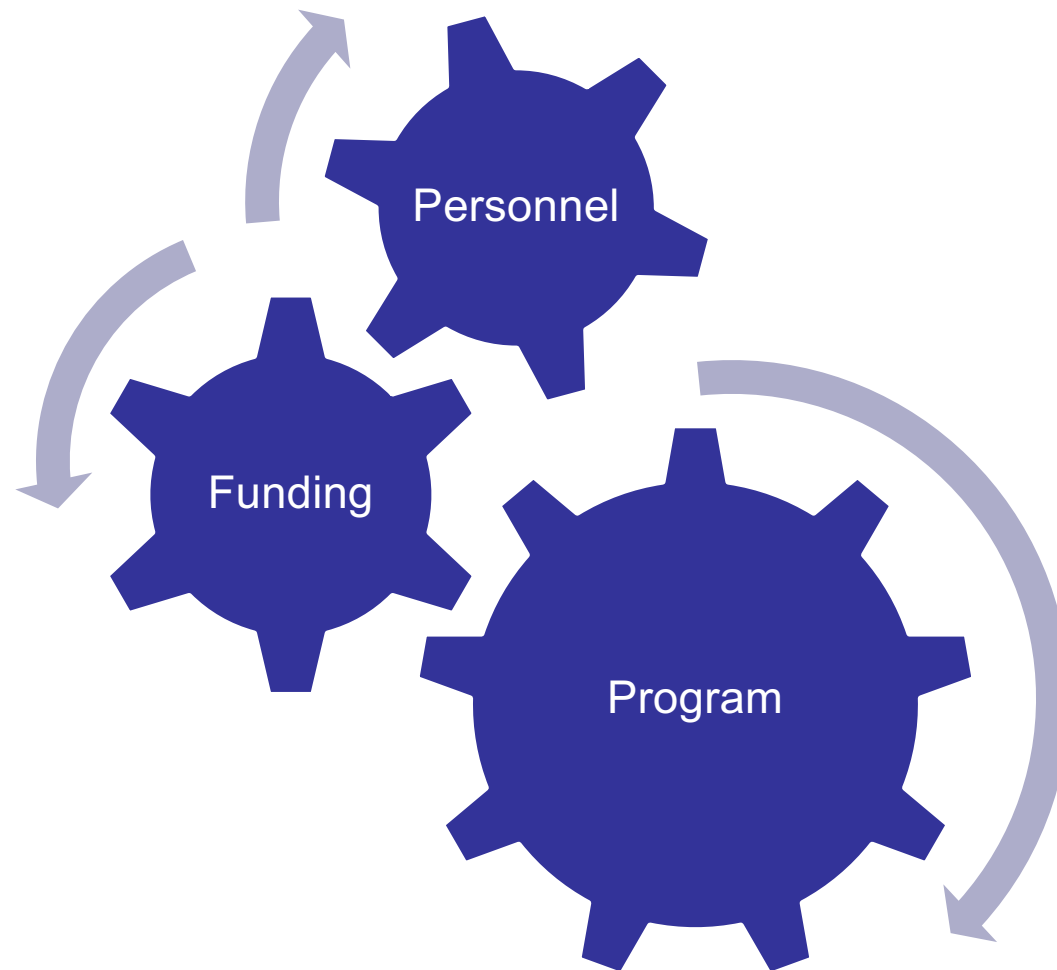
Disclaimer

Very biased and naive view,
probably cynical at times...

Identify and understand expectations

- **You:** believe in yourself, be kind to yourself, just pursue the best science
- **Colleagues:** be proactive to approach them, keep consistent communication
- **Department/College/Union:** rules are vague at times, consult and confirm when in doubt

Clarify your research needs



Research Programs

- ***Sustainability***: balance short term and long term goals.
- ***Fundability***: e.g. strategize to accumulate preliminary data for grants vs. for papers
- ***Collaboration***: can't rely on it if you are the PI. For co-PI work, don't get distracted
- ***Publication***: need constant "output", no gaps

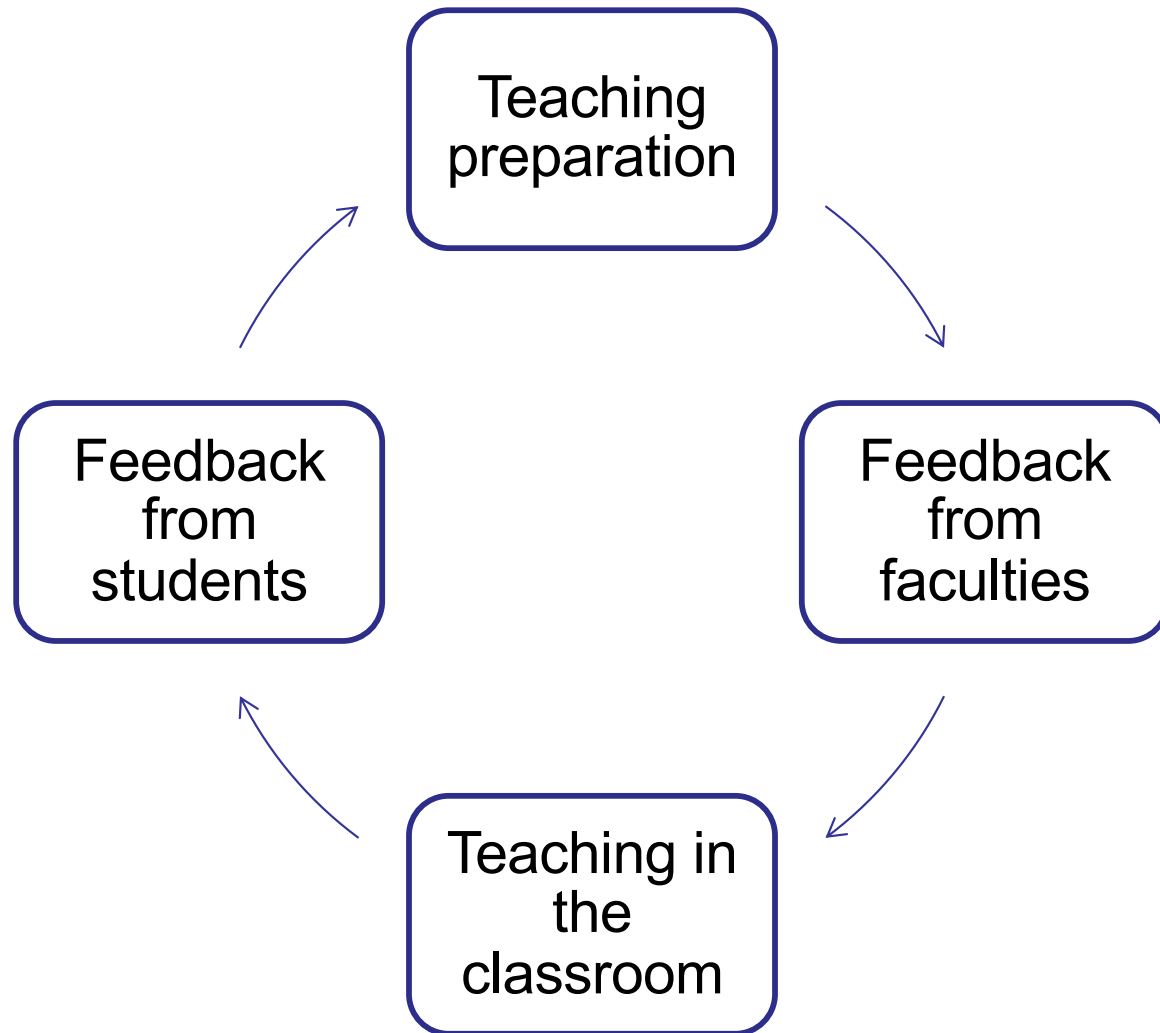
Funding applications

- **Proposal:** only submit the best you can, back it up with your own track record, no caveats
- **Get help from:** former panel members, colleagues, friends, professional editing services
- **Diversification:** operating, equipment, personal award (international, federal, or provincial)

Lab recruitment and management

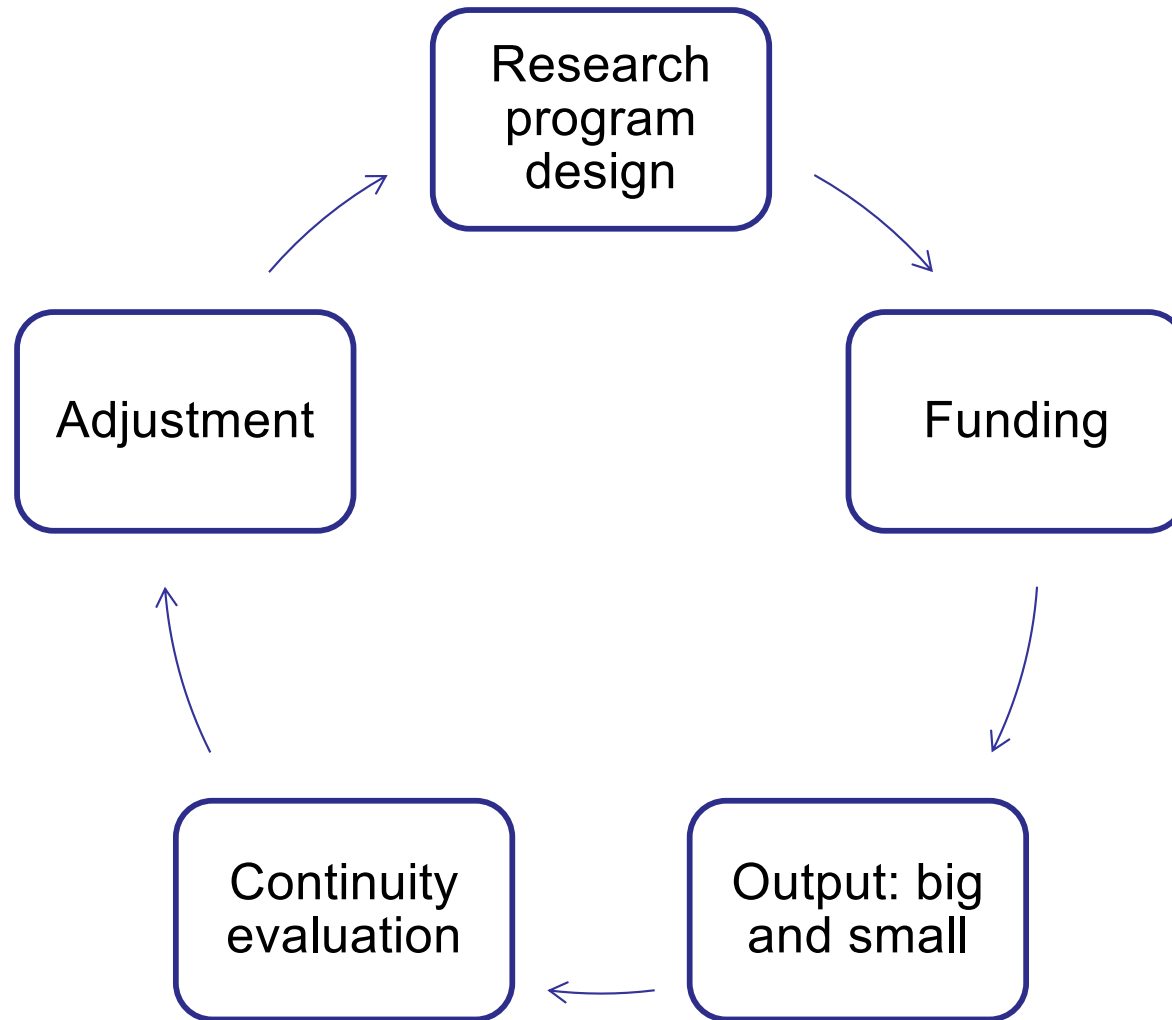
- **Branding:** lab website, social media, guest lectures
- **Recruitment:** believe your gut feeling. How to keep good people around? You are your own best postdoc
- **Management:** establish good culture, develop your management skills

Set realistic goals and achieve them: **Teaching**



Think from student's perspective

Set realistic goals and achieve them: **Research**



Rejection is normal

Set realistic goals and achieve them: **Service**

- Do not get distracted from too much service
- Balance between in- and out of university work
- It should help you build your own research program (e.g. connection, network, collaboration, funding, etc.)

Identify and manage individual barriers

- **Mentor:** recommendation for speaker/reviewer and new recruits
- **Colleagues:** collaboration, infrastructure, sharing experiences
- **Lab members:** celebrate every win, go through the hard times together