NSCI 800 - Introduction

@GunnarBLOHM

On being a scientist: http://www.youtube.com/watch_popup?v=wIBjGV3OB0o#t=47

Goals of NSCI 800

- Overview of Neuroscience
  - Multi-disciplinary
- Provide basic research tools
  - Management
  - Open Science
  - How to write
  - Effective communication
- Enable professional development
  - Long-term career vision
- Kick-start scientific networking
  - Support group & audience
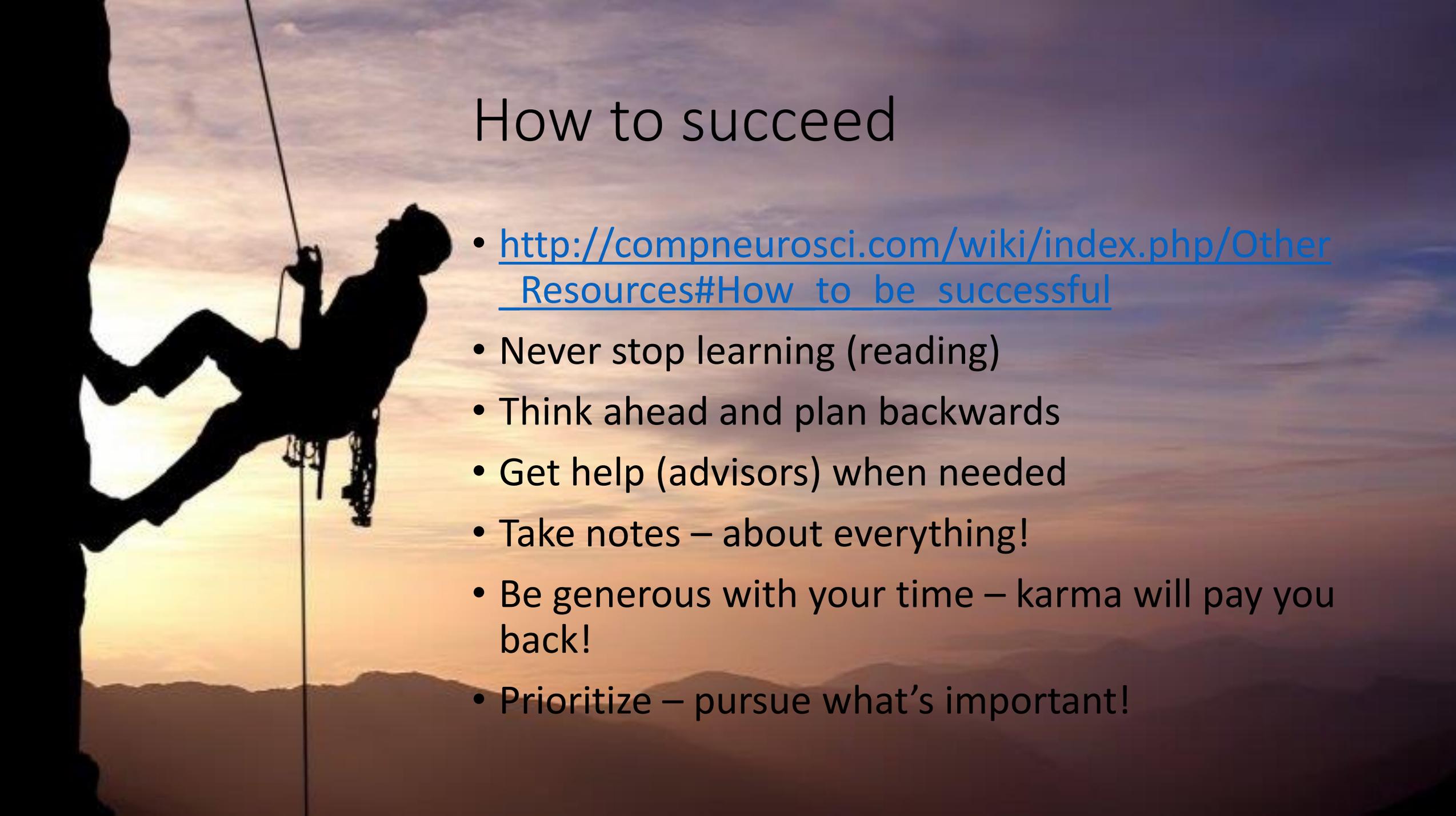
A GOAL WITHOUT A PLAN IS JUST A WISH

Today

- Grad school mental health / work-life balance
- How to succeed
- Career development
- Social media & science

Mental health / work-life balance

- http://compneurosci.com/wiki/index.php/Other_Resources#Work-life_balance_.26_mental_health

- Enjoy Grad School and graduate student life!!!

- Get enough exercise and sleep! (don't give up on those)

- Eat healthy!

- Be social

- Find your happy zone (hobby, sport, activity)

- Don't obsess about your future

- Make good decisions and never regret

- Remember why you're here

Mental health / work-life balance

- Being a graduate student can be stressful

- Mental health is like physical health: IMPORTANT!

- Get help for both if needed…
    - Friends
    - Family
    - Supervisor / graduate assistant / graduate coordinator / SGPS…

- Seek professional advice: https://www.queensu.ca/studentwellness/

How to succeed

- http://compneurosci.com/wiki/index.php/Other_Resources#How_to_be_successful

- Never stop learning (reading)

- Think ahead and plan backwards

- Get help (advisors) when needed

- Take notes – about everything!

- Be generous with your time – karma will pay you back!

- Prioritize – pursue what's important!

How to succeed

- Work on important problems
- Always work on the edge of your abilities
- Always pursue higher standards of quality (NSCI 801 plug…)
- Scientific soundness should never be compromised
- Work on unique problems for which you have unique expertise
- Always have a plan
- Embrace constructive criticism
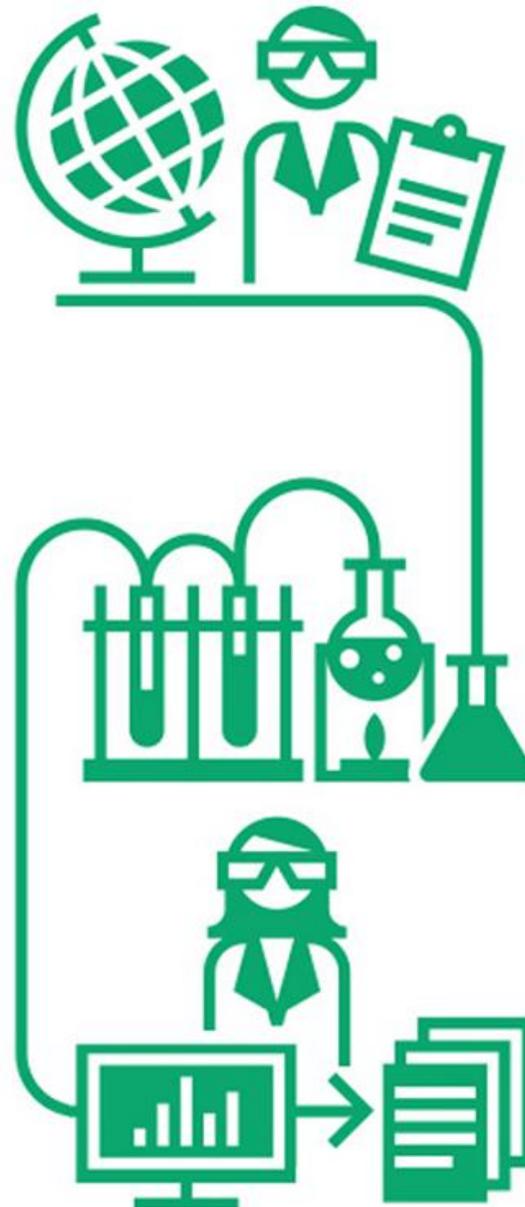- Be passionate about your work – if you're not, no one will…

Career development

- Graduate School is not a goal in itself
- You're here to prepare for a professional life
  - Academia
  - Industry
  - Government
- New professional development plan…
  - A.k.a GRS learning plan: http://neuroscience.queensu.ca/document/273
  - GRF goals: http://neuroscience.queensu.ca/document/274

Learning through sciencing...

Planning
1. Specify your research question
2. Write and register a study protocol
3. Justify your sample size
4. Write a data management plan
5. Reduce bias

Execution
6. Avoid questionable reseach practices
7. Be cautious with interpretations of statistical significance
8. Make your research open

Reporting
9. Report all findings
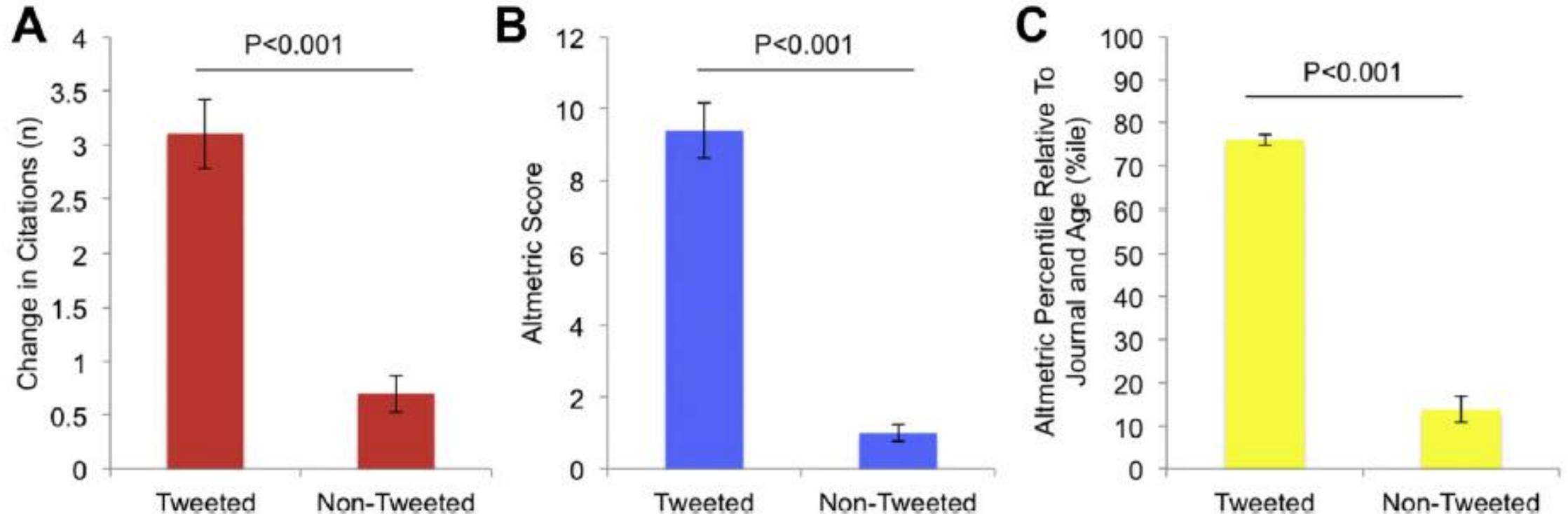10. Follow reporting guidelines

Social media & science

- Social media is a tool for science!
  - Promote yourself
  - Promote your work
  - Influence people
  - Make a bigger impact beyond science
  - Find employment
  - Find common interests / collaborations
  - Build your scientific network!

  - Learn more / different things
  - Ask questions
  - Diversify
  - Identify trends

Impact of Twitter

- Altmetrics ("**alternative metrics**"): traditional measurements of academic success such as citation counts, journal prestige (impact factor), and author H-index

Course info / sides

- http://www.compneurosci.com/NSCI800.html

    - All materials will be on OnQ or course website

- Weekly lecture, Q&A and discussion: Tue @ 12:30pm (mandatory attendance)

- Course evaluation:
    - 1-page research project summary

Questions?

http://compneurosci.com/wiki

https://twitter.com/GunnarBlohm