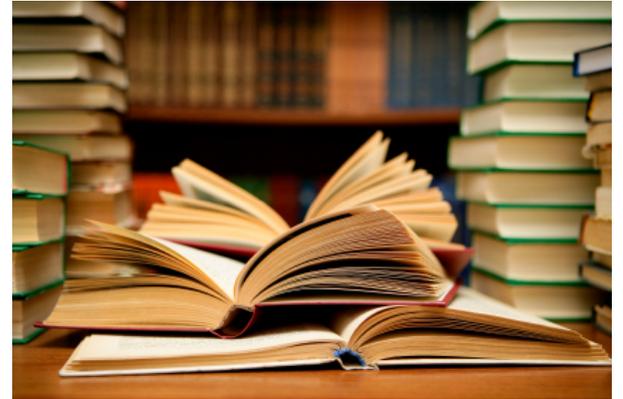
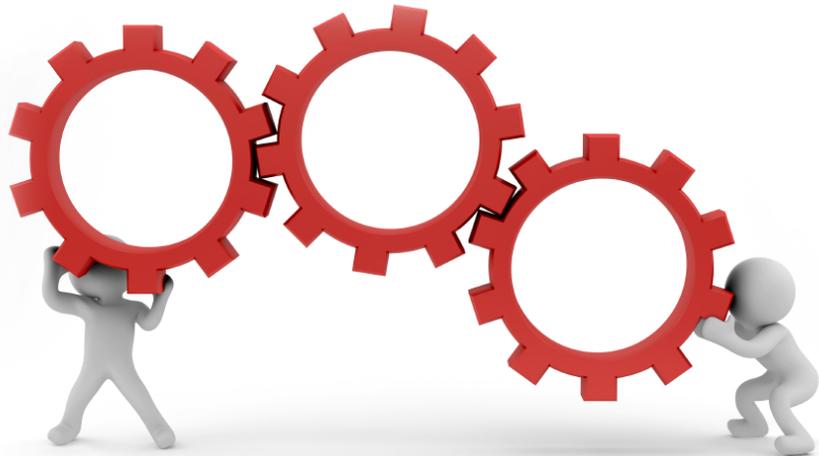


# Starting New Research Projects and Building Collaborations

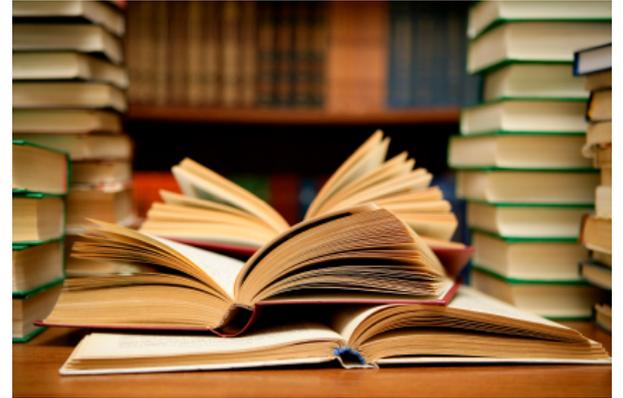


Early Career Faculty Workshop  
2017



Sarah Penniston-Dorland  
Benjamin Laabs

# New Research Projects



You've finished your PhD and/or post-doc.

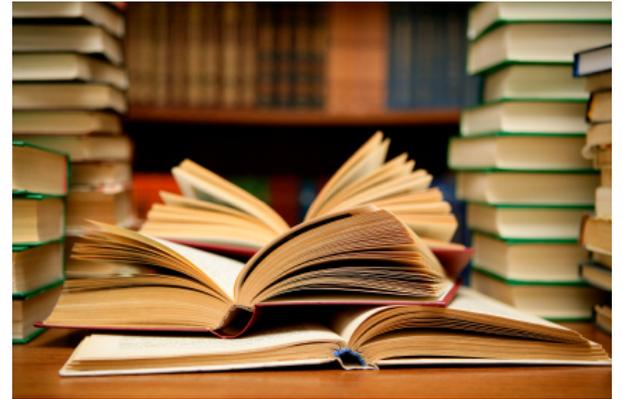
Now what?

Continue working along the line of your PhD/  
post-doctoral research?

Start in new directions?

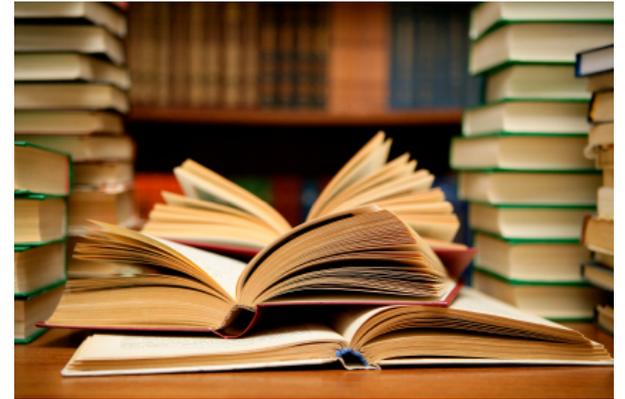
# **New Research Projects**

How do you develop new research directions?



# New Research Projects

How do you develop new research directions?



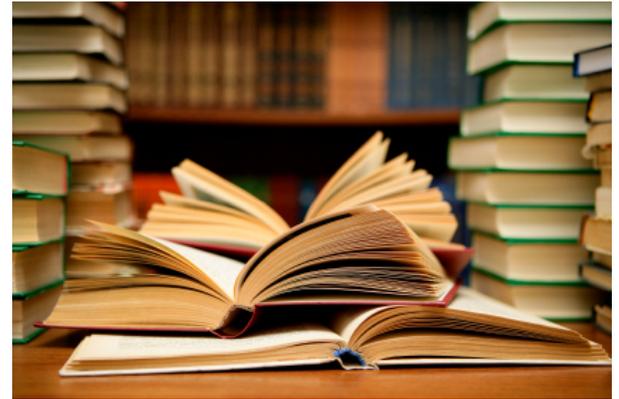
Brainstorm new ideas yourself

- Address questions you have had in the past
- Read papers on topics related to your field
- Attend different sessions at conferences

Talk to other people

- PhD/post-doc advisor
- Colleagues in your department and/or the person you replaced
- Make new connections

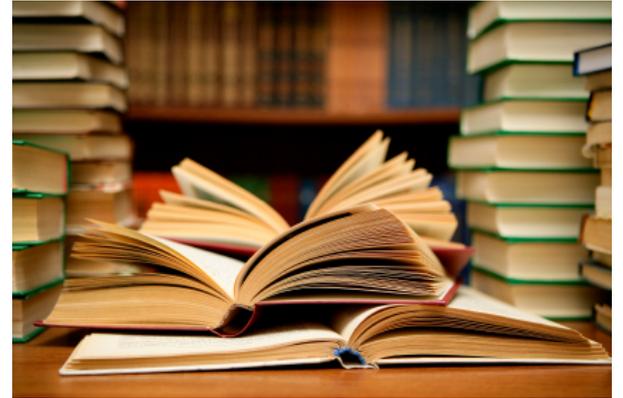
# New Research Projects



Things to consider when choosing new directions:

- Make sure topic is of broad interest
- Build on your strengths and expertise
- “More of the same” is not easy to fund
- Don’t aim too big – the topic needs to be solvable given your experience/capabilities
- Find out what is being done already in your field (don’t want to do something that is already being done!)
- Collect preliminary data to demonstrate feasibility

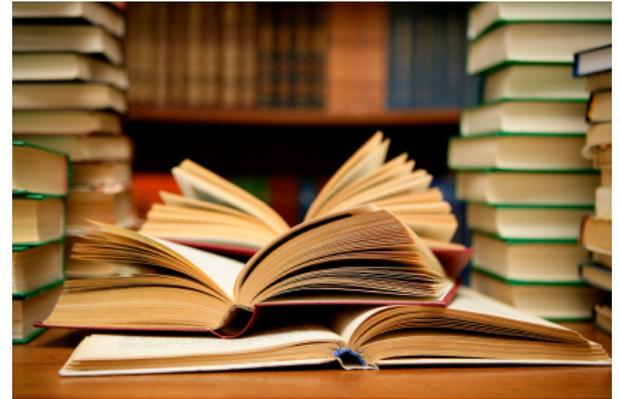
# New Research Projects



Things to consider when choosing new directions:

- Take advantage of your local resources
  - How to apply your expertise to the local geology/environment
  - Local industry
  - Use existing departmental facilities
  - Capitalize on student interest

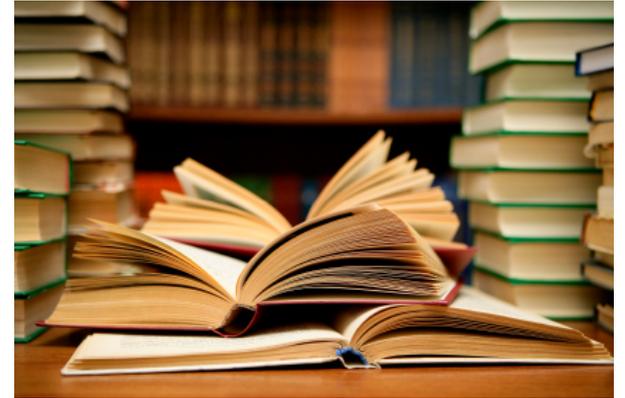
# New Research Projects



Diversify - Try to build your research so you are working on more than one project at a time.

- Variety is the spice of life!
- Minimizes delays due to equipment failure or competitive NSF programs
- Will provide projects for a larger number of students
- You can be working on writing up one project while starting another
- Ideally will provide a steady stream of papers

# New Research Projects

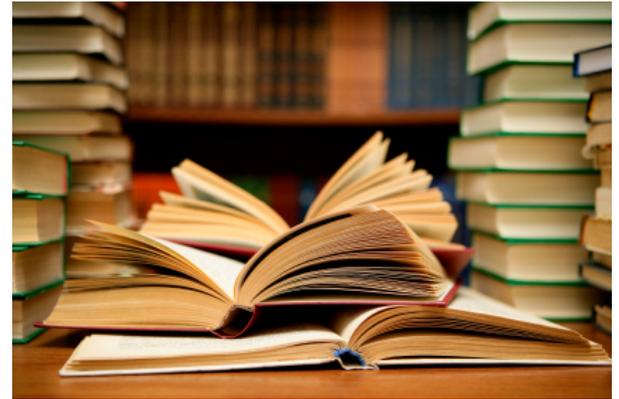


Expertise – It is important for you to become recognized as an expert in some area(s)

- Develop a common theme or themes to your research
  - You will become known for that work and recognized as an expert in that field
  - You will be invited to give talks, submit papers, etc. in that area

***#1 What is that area for you?***

# New Research Projects



Take a moment to think about some possible new areas for new research projects.

***#2 In what new areas might you develop a new research project?***

Think about people who might be able to help you with these new directions.

***#3 Who might be able to help you with these directions?***

# Building Collaborations



Why collaborate with others?

- The sum is greater than the parts.
- Learn from your collaborators.
- Collaborative research may help you break into getting funded.
- Fostering a community can lead to future opportunities!

# Building Collaborations

Collaborations close to home



- Colleagues with complementary interests
- Senior-level colleagues
- Colleagues with instrumentation that may be of use to you
- Colleagues within your university but outside your department

***#4 Make a list of possible “local” collaborations***

# Building Collaborations



Collaborations farther from home – how do you meet people?

- Professional meetings
- Try some new, smaller meetings (e.g. Gordon conferences) – good investment of start up
- Go to smaller functions at big meetings (e.g. Area of interest meetings at AGU)

***#5 Make a list of potential “non-local” collaborations***

# Building Collaborations



How do you get yourself known?

- Convene sessions at professional meetings
- Invite big names to give talks in your session or at your home institution
- Serve on panels and committees
- Review NSF proposals (but not too many)
- Introduce yourself to people whose work you know
- Use social networking like ResearchGate

***#6 List some activities you can engage in to get yourself known***

# Initiating Collaborations



How do you ask?

- 1) Introduce yourself first – ideally you have the opportunity to interact with them or meet them in person first
- 2) Do your homework. Know what your collaborator does and what they can contribute.
- 3) Send them an email, Call them on the phone, Talk to them at a conference
- 4) Sell the science
- 5) Make the contributions/expectations of each partner clear

# Starting New Research Projects and Building Collaborations



***#7 What are you going to do?***

