

Starting New Research Projects and Building Collaborations



Early Career Faculty Workshop
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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?

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How do you develop new research directions?

(questions pre p. 3-17)

Write down strategies for how to develop new research directions.

What are some considerations to take into account when developing new research directions?

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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

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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

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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

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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

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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?

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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?

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

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)

#3 Who might be able to work with you (near or far) in new or ongoing research?

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
- Introduce yourself to people whose work you know
- Use social networking like ResearchGate

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

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#5 Commit to one thing you will do.



Initiating Collaborations



How do you ask?

- 1) Do your homework. Know what your collaborator does and what they can contribute.
- 2) Introduce yourself first – ideally you have the opportunity to interact with them or meet them in person first
- 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

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#6 Pitch

