

RESEARCH STRATEGIES



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Doing Research at a Teaching-focused School

- How is research defined?
- How do I stay involved in the research community?
- How do you start working with others?
- How do I fund my research?



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HOW IS RESEARCH DEFINED?

What Does Research Mean?

- Primary research area
 - Not involving your Ph.D. advisor
 - Not on your Ph.D. work
- Interdisciplinary research
 - Is your contribution just application of knowledge or new contribution?
- Pedagogical research
 - Create a study with quantifiable results
 - Present outcome of using approach in courses
 - Create new tool or artifact for course
- Student research involvement



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Don't Assume. Ask What is Valued.

- Ask early and ask often!
 - Department chair
 - Department colleagues
 - Dean
 - Tenure and promotion committee members
- Choose valued options



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Create a Small Mix of Projects

- Keep one solo project
- Create a collaboration with a researcher in your field
- Create an interdisciplinary project with someone at your school



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**HOW DO YOU STAY INVOLVED IN THE
RESEARCH COMMUNITY?**

Get Out in the World!

- Attend one major conference per year
 - Reconnect with existing work friends
 - Identify 5 people you want to meet
 - Prep by reading papers and preparing questions
- Serve on a PC or grant review panel
 - Have friends or advisor suggest you
 - Go in person
- Have students present research posters
 - Create students people want
- **Always** have an elevator talk prepared



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Be Careful with Service

- You will not get tenure for doing a lot of service
- But, you may connect with a potential research collaborator via a service opportunity
- Be very judicious
 - Learn how and when to say “No”



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Remember to Read

- Shoot for reading or skimming one paper a week
- Learn how to read papers effectively and efficiently



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HOW DO YOU START WORKING WITH OTHERS?

How Do You Start Peer Collaborations?

- How do you come up with an idea to work on?
 - Think about how you would extend some existing work
 - Do you have a valuable skill or viewpoint to offer?
- How do you make it happen?
 - Start with a specific problem or paper idea
 - Reach out to people at conferences
 - Choose people you like



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How Do You Successfully Collaborate?

- Go to the other researcher's location to get things started
- Have a student work on the project
 - Co-advise a graduate student
 - Have your student do a summer internship at their location
- Communicate regularly
- Set concrete goals



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How Do You Successfully Collaborate With Students?

- Find the right students and the right number
 - Ask strong students in your classes
 - Ask colleagues for student suggestions
- Start student on a trial basis to evaluate
 - Do you communicate well?
 - Is the student invested enough?
 - Is the student skilled enough?
- Ways to get started
 - Course credit during semester
 - Paid research during semester
 - Paid summer research
- Provide lots of organization and explanation of research process



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HOW DO YOU FUND YOUR RESEARCH?

Some Practical Tips for Funding

- Find out about university funds
 - Startup funds
 - Travel and research grants
 - Fellowships
- Ask colleagues how they got funding and how much
 - Ask them for their successful proposals
 - Ask them to read your proposals drafts for feedback
- Talk to folks in your grants office
- Call your program officers and ask questions



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Funding Handout

- NSF
 - Career
 - REU
 - RUI
 - ROA
- DARPA
- DOE
- L'Oreal
- AAUW
- Google Research
- Packard Foundation
- Sloan



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QUESTIONS?