



Research and Technology Transfer

Grant Writing Workshop 2025

Day 4



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Identifying Good Collaborators: Building a Collaborative Team Based on Complementary Skills

Research and Technology Transfer

research@astate.edu



Meet Your Presenters



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Define Your Goals and Needs

- Before you start looking for research collaborators, you need to have a clear idea of what you want to achieve and what you need from them. Having a clear and realistic goal and need will help you narrow down your potential collaborators and communicate your ideas, plans, and expectations.
 - Do you have a specific research question, problem, or gap that you want to address?
 - Do you need a complementary skill, method, or perspective that you lack?
 - Do you want to expand your network, access new resources, or increase your visibility?

Search for Relevant and Diverse Profiles

Once you have defined your goals and needs, you can start searching for research collaborators who match your criteria. There are many ways to find potential collaborators:

- Browsing online databases, platforms, and directories
- Attending conferences, workshops, and seminars
- Reading publications, blogs, and newsletters
- Joining professional associations
- Asking for referrals from peers, mentors, or contacts

Collaborating Effectively

Considerations before collaborating:

- How does this opportunity move your research agenda forward?
- How does the project fit in your professional development goals?
- Do I have the resources necessary to engage in this collaboration effectively?

Collaborating Effectively

- Seek common understanding
- Lay clear ground rules
- Define and operationalize project goals and scope
- Address institutional barriers
- Ensure open and honest communication

Collaborating Effectively

Considerations for engaging collaborators:

- Time: Faculty need opportunities to interact, develop ideas and work well together. Developing a shared language is necessary for interdisciplinary collaborations.
- Equity: Avoid unequal involvement in research or unfair recognition of time and effort in PI/Co-PI roles and authorship.
- Inclusion: Treat others with respect. Intellectual and demographic diversity enhances creativity and insight.
- Good Communication: Develop strategies for working together. Clear conversations about expectations, roles, and responsibilities help maintain respectful communication. Recognize that roles can develop and change over the course of a collaboration.

Establish a Formal Agreement and Plan

- A formal agreement is a document that outlines the purpose, scope, duration, and terms of the collaboration. The agreement can include information on authorship, ownership, ethics, confidentiality, and dispute resolution. A formal agreement can help avoid future misunderstandings, conflicts, and legal issues.
- A plan is a document that describes the goals, objectives, activities, milestones, and deliverables of the collaboration. the plan can include research questions, methods, data, analysis, outputs, and dissemination. A plan can help coordinate work, monitor progress, and evaluate outcomes.

Role of AI

Why Use AI in Grant Writing?

AI can support researchers in key grant-writing tasks by:

- **Saving time:** Generating drafts, summaries, rewording, etc.
- **Improving clarity:** Refining tone, style, and structure
- **Enhancing precision:** Language polishing, proposal alignment with solicitation guidelines
- **Staying organized:** Tracking deadlines, tasks, and collaboration

⚠ **AI is a support tool, not a substitute for expertise or originality**

Role of AI

Where AI Helps — and Where It Doesn't

Use AI for:

- Drafting sections (abstracts, biosketches, needs statements)
- Clarifying complex ideas or rephrasing technical content
- Generating checklists/timelines from RFPs
- Summarizing relevant literature (e.g., using Elicit or Scite.ai)
- Finding matching grant opportunities (e.g., GrantForward + Notion AI)

Avoid AI for:

- Writing methodology or budget justifications without human input
- Submitting unreviewed or unverified AI-generated text
- Interpreting funder intent or reviewer expectations

 **Always apply your judgment and revise thoroughly**

Role of AI

Pros, Cons & Smart Use Strategies

Pros:

- Accelerates drafting
- Enhances writing quality
- Aids non-native English speakers
- Assists in early brainstorming

Cons:

- May generate inaccurate or outdated info
- Cannot understand nuanced grant requirements
- Ethical gray zones: originality, plagiarism, transparency

Smart Use Tips

- Treat AI as a co-writer, not a ghostwriter
- Cite original sources yourself — AI often fabricates them
- Use clear prompts (e.g., "Write a 250-word summary for a federal STEM grant")
- Ask AI to review and improve, not just write

Role of AI

Funder Expectations & Ethical Use

Most funding agencies (e.g., NSF, NIH, ERC, Horizon Europe):

- Do not ban AI use in proposal drafting
- Expect full intellectual ownership by the applicant
- May require disclosure if AI is significantly used
- Warn against plagiarism or unverified claims

Best practices for faculty:

- Disclose AI use in a cover letter or narrative section (if in doubt) or in a statement if requested or required by the sponsor
- Keep a log of AI-generated content you used and revised
- Follow A-State's or funder's AI use guidelines (some are emerging)



Role of AI

Key Takeaways for Faculty

- AI can boost productivity and polish — when used wisely
- Do not outsource your intellectual contribution
- Use AI for tasks that are mechanical, not strategic
- Always revise, verify, and contextualize AI content
- Disclose AI use transparently as appropriate and required
- Your expertise and insight remain irreplaceable in securing funding



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Sentence Simplification

Instructions:

- You'll be given five real-style grant sentences.
- For each, rewrite the sentence in simpler, clearer, and more concise terms—without changing the meaning.
- Use plain academic English, cut unnecessary jargon, and aim for reader-friendly phrasing.
- Try to keep short and powerful—clear writing increases your chances of funding.



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Building Methodology

Task: Build your own methodology

Time: 1 hour



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Engaging Students in Research Development and Mentorship

Office of Student Research and Scholarship

Dr. Kari Harris, Director

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Collaborations and Resources



Considerations for
student support in grant
development



Institutional Support



Funding Sources

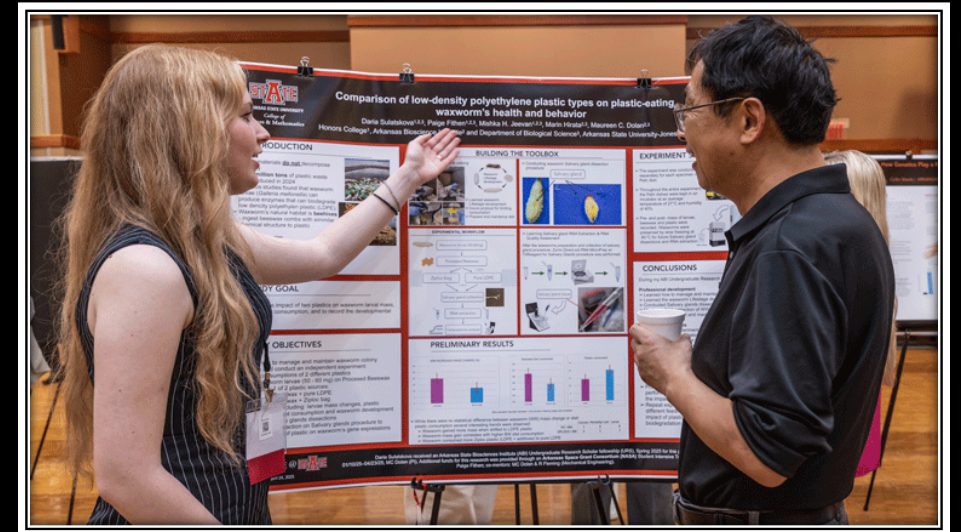


Benefits to students,
institution, and faculty



Developing capable
researchers

2025 Create@State
Symposium of Research and Creativity



Student Daria Sulatskova presents her poster to
Dr. Jay Xu, professor of biochemical engineering.



Including Student Support in Your Grant Budget

Concerns:

- Pairing students with appropriate mentors
- Allocating an appropriate share of the work to students in the research proposal
- What standards are in place to ensure an equitable selection of students for the proposed work?
- Ensuring students are paid appropriately for their time spent on projects
- Ensuring students have enough time to participate; Flexibility



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Including Student Support in Your Grant Budget

Contact Us! We can help with things like...

- Institutional Support
- Mentorship plans
- How to determine compensation for undergraduate and graduate students
- Tuition remission
- Stipends vs. Employment – What is allowable and how do you choose?



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Gain an Edge: Institutional Support

When preparing a grant, you may have an opportunity to describe how A-State already supports students and encourages research and scholarship. This helps to show grant reviewers how and why A-State is the *RIGHT* place for the project you are proposing. Consider including resources we offer such as:

- Seed funding for students
 - A-State Research and Creativity Awards
 - A-State Travel Awards
 - Match for SURF grants
- Outreach coordinators for K-12 involvement
- Staff dedicated to student research efforts
- Accessibility
 - Student access to technology (computers, software, data centers, etc.)
 - Writing and Tutoring Centers
 - Student Support staff and services (Counseling centers, Pack Support)

Potential Funding Sources

SURF (Student Undergraduate Research Fellowship) grants

OSRS Student Research Travel Awards

Graduate School Student Travel Awards

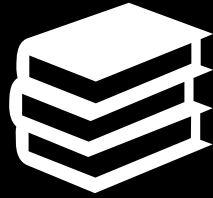
Internal seed grants that emphasize student involvement

Outside Institutional partnerships (Example: Hanover, Grants Resource Center)

Partnerships with Institutional development office for funding portfolios



Benefits of Intentional Focus on Student Research



Student Benefits



Institutional
Benefits



Faculty Benefits



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Benefits of Intentional Focus on Student Research

Student Benefits

- Enhanced sense of belonging
- Hands-on application of classroom-based learning
- Leadership development
- See themselves as a scientist/researcher
- Networking
- Higher graduation rates
- More likely to be accepted to grad/professional school

Institutional Benefits

Faculty Benefits

Benefits of Intentional Focus on Student Research

Student Benefits

Institutional Benefits

- Higher retention rates
- Greater student acceptance to graduate/professional schools

Faculty Benefits



Benefits of Intentional Focus on Student Research

Student Benefits

Institutional Benefits

Faculty Benefits

- Better engaged with students
- Builds mentoring skills
- Potential to expand research areas



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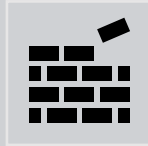
Tips and Resources for Developing Capable Researchers



CUR Resources for Mentors
and Students

[How and Why We Mentor](#)

[Five Effective Strategies for Mentoring Undergraduate Students](#)



Scaffolding – Create clear goals and objectives, and ensure students understand the steps to take



Operational Empathy – Intentionally create an environment where students feel safe to learn and explore new ideas



Methodology Presentation

Instructions:

- Each person gets a scoring sheet with names, numbers, and a rubric.
- Say your name and number, then briefly present your methodology in 2–3 minutes.
- Others listen and score you using the rubric.
- The person with the highest total score at the end wins.



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Contact Research and Technology Transfer

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