

# Summer Research Opportunities Workshop

Fall 2024



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Undergraduate Research  
Student Ambassadors



# Summer Research Opportunities Workshop

Fall 2024

Feel free to grab some food and chit chat until we start!

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# Who Are We?

- Undergraduate Research Student Ambassadors (URSA)
- Under Office of Undergraduate Research & Discovery (URCD)
- Multidisciplinary undergraduate student group
- Aiding peers in navigating research opportunities
- Weekly office hours + organize workshops



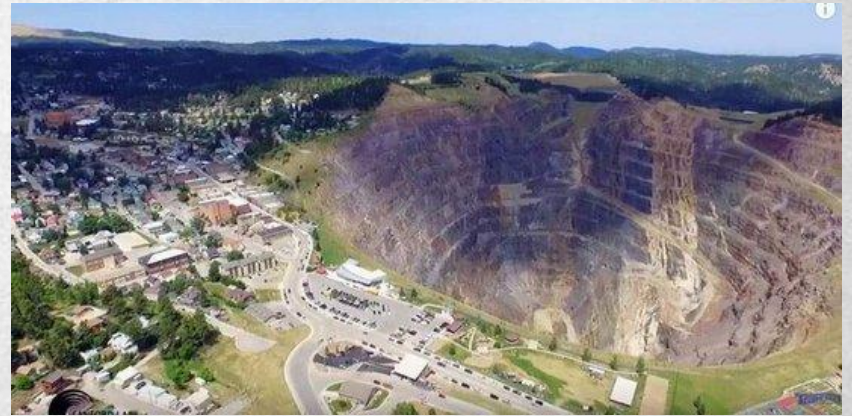
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# Why Summer Research?

- Usually paid
- Explore potential careers / graduate programs
- Travel to other places
- Lifelong connections
- Open new doors



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# Common Opportunities

- University / National Lab
  - REUs, SULIs, SURFs, NASA O-STEM/Pathways, independent grants
- Industry R&D
- Government / Policy
- MSU Summer Research
- National Fellowships



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# REUs

- Research Experiences for Undergrads
- Funded through the National Science Foundation (NSF)
- Usually at host universities
- Used to recruit potential grad students
- Opportunities in most STEM fields
- Can apply to and be accepted to a project outside your previous coursework/research
- Free housing + other benefits on top of pay
- Very competitive and nationally recognized
- Usually due early February – varies by site/discipline
- [Online REU grant directory](#)



National  
Science  
Foundation



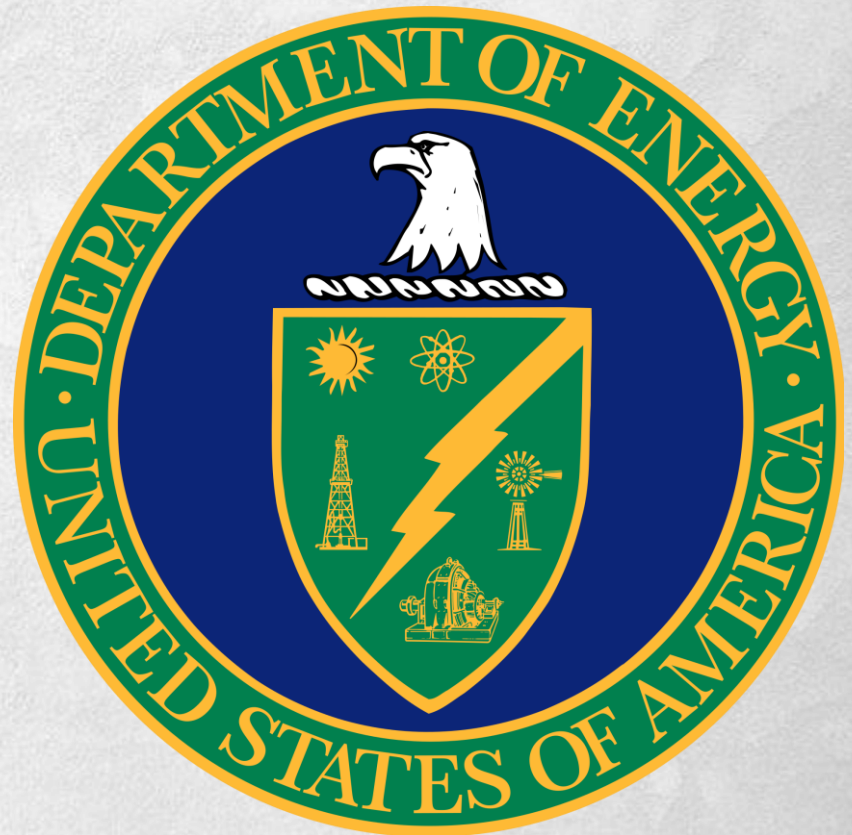
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# SULIs

- Science Undergraduate Laboratory Internships (SULIs) funded by the Department of Energy
- 10 week summer program at national research labs
- \$650 / week + housing and travel assistance
- Select top 3 national labs + research interests out of a list of 18 labs (including Argonne, Oak Ridge, Los Alamos etc)
- Work closely under lab faculty and staff with potential for long-term career in government labs



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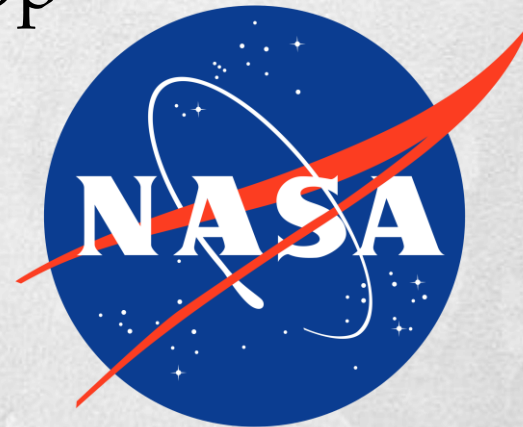


# NASA OSTEM

- Internships (summer/fall/spring) at NASA centers.
- Most are due ~ February
- Additionally, there are specific NASA JPL Lab internships
- <https://www.nasa.gov/learning-resources/internship-programs/>

# NASA Pathways

- Internships that are a direct pipeline to NASA careers
- Functions like a Co-Op



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# Industry R&D

- Co-Ops / Internships in industry in research can involve research!
- Talk with prospective sites about what your exact job would entail
- The Career Center can be a good place to tap for help here



# Government / Policy

- Internships at policy centers / on the Hill
- Funding can be rough
- Sometimes not research intense at all, sometimes akin to continuous literature review
- Can be an option as a "break" from STEM research /classes for some people
- Not looked down upon! (especially if completed by otherwise STEM research)
- i.e. the American Physical Society offers D.C. internships in science policy



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# MSU Summer Research

- Always a good option!
- Often paid per hour
- Centers in the research park (CAVS, ICET, HPCC, etc)
- Professors with summer grants
- Can lead to Fall/Spring term undergraduate work and a long-time mentee-mentorship relationship



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# Other Opportunities

- Professional organizations
- Summer Undergraduate Research Fellowship (SURFs)
- <https://www.pathwaystoscience.org/>
- DAAD RISE
  - Research in Germany funded by the German government
- [NOAA Undergraduate Research Fellowships](#)
- ??????



# How to Apply

- Common application elements:
  - Recommendation Letters (~3)
  - Statement of Intent / Research Statement
  - CV / Resume
  - Project Selection
- 99.9% of the time fully through online application portals, with maybe an interview
- Very rigid due dates – keep track of 'em
- Can create an Excel spreadsheet to keep track of applications (good for graduate schools too)



# Recommendation Letters

- Think about who can talk about what the program looks for
- Good to have people from different institutions (an MSU professor + a previous internship mentor + ...)
- **Ask at least two weeks in advance**
- Provide materials that you will send to the program (CV, research statement, statement of intent etc)
- Clearly communicate deadlines
- Follow up as need be
- **Document** with more information about this



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# Statement of Intent

- Narrative description of *your story*
- Why this research / this major / this career path etc.
- Address the specific questions in the application
  - Reword them – gets old to re-read the exact same words
  - Integrate them into the narrative about you
- Reuse old application components as appropriate
- Peer review!



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# Other Application Materials

- Research statement
  - Past work connected with the opportunity you are applying to
- Future career
  - Be honest! But don't be afraid to emphasize how this opportunity can play a role in your "story" even if it is not apparently relevant
- CV / Resume
  - Plenty of resources on campus to help with this (Career Center / Writing Center)
  - Good templates online (word or latex)





# How To Make a Choice

- How does this fit into your research trajectory?
- How are the benefits?
- Would this lead to a pleasant/fun experience?
- Is there something unique about the specific opportunity?
- Are there more long-term benefits?
- What resources will the program invest in me?
- How does the timing work out?



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# Takeaways

- Start early!
- Research what the specific programs want
- Apply to different kinds of opportunities (not only REUs etc) and as many as you feel its appropriate
- Explore research you couldn't do otherwise
- Have a backup



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# Resources

- <https://www.urcd.msstate.edu/>
- <https://www.career.msstate.edu/>
- <https://www.writingcenter.msstate.edu/>
- <https://new.nsf.gov/funding/initiatives/reu/search>
- <https://www.pathwaystoscience.org/>
- <https://science.osti.gov/wdts/suli>
- <https://www.nasa.gov/learning-resources/internship-programs/>
- <https://www.noaa.gov/education/opportunities/students>



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# Q&A



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# Thank you! Questions + Work Time

Post-Workshop  
Survey



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