


TIMESTEP

Applying for Research Opportunities


Wednesday, November 15, 2023
5:00 - 6:30 pm ★ Steward Observatory, N305

Types of Opportunities

1. Research with faculty
 - a. [Astronomy Research Map](#)
 - b. [UR database](#) (has some flaws)
 - c. Via a program:
 - i. [Arizona Space Grant Fellowship](#)- applications due around June 30 for the following school year
 - ii. [Undergraduate Research Opportunities Consortium \(UROC\)](#) administered by the UA Graduate College
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Types of Opportunities

2. Research Experiences for Undergraduates (REUs)

- a. NSF funds a large number of research opportunities for undergraduate students through its REU Sites program. An REU Site consists of a group of ten or so undergraduates who work in the research programs of the host institution. Each student is associated with a specific research project, where he/she works closely with the faculty and other researchers. Students are granted stipends and, in many cases, assistance with housing and travel. Undergraduate students supported with NSF funds must be citizens or permanent residents of the United States or its possessions. An REU Site may be at either a US or foreign location.
 - b. [Refer to this spreadsheet](#) for listings of physics, astronomy, and STEM education REUs. Note the different tabs at the bottom of the spreadsheet.
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Types of Opportunities

3. Other Programs and Internships

- a. [Refer to this spreadsheet](#) for listings
 - b. National or International (select tabs at bottom of spreadsheet)
 - c. Opportunities for international students or green card holders
 - d. Opportunities for seniors and post-bac
 - e. Industry internships- Raytheon, SpaceX
 - f. [TIMESTEP Summer Tech Internship](#)
 - i. Summer internship for 13 weeks with a local employer
 - ii. \$5000 stipend paid via Bursar's account
 - iii. Build your technical skills and get industry exposure
 - iv. Open to international students (though some individual companies may have restrictions)
 - v. Open to juniors or advanced sophomores
 - vi. Applications open in February
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REU: How to Pick a Program



- Astronomy: https://www.nsf.gov/crssprgm/reu/list_result.jsp?unitid=5045
- Physics: https://www.nsf.gov/crssprgm/reu/list_result.jsp?unitid=69

- Read about each program and ask yourself:
 - Do I want to live in this location all summer?
 - Does the research they offer interest me?

- If you answered yes to both questions, APPLY! It's free!

REU: Applying

- Create a spreadsheet with the following information
- As you *submit* things, change them to green; when fully done, ~~do this~~. Or, have two spreadsheets and delete finished items from one (keep other full to retain all information)

Program	Deadline	Personal Statement	Refs	Website	Other
Program 1	2/04/23	3 pages	Ref1, Ref2	Link 1	Full CV
Program 2	1/29/23	1 page	Ref1	Link 2	Supplemental Qs
Program 3	2/15/23	800 words	Ref1, Ref2, Ref3	Link 3	Supplemental Qs

Activity 1: Organization is key!

- Make a plan with timelines and requirements for the programs you're interested in
- Create a system to keep track of applications and letters of reference
- Using a Google Sheet will allow letter writers to mark when they have submitted your letters (still double check or follow up with a thank you email)
- Use [this spreadsheet](#) or make your own



Activity 2:

Work on CV

Work on Email Requests to Reference Letter Writers

Work on Research Statement (if needed)

Work on Email Requests to Faculty/Post docs for Research



CV- Curriculum Vitae

- Education
- Research Experience
- Publications (if any)
- Presentations (if any)
- Honors and Achievements
- Teaching Experiences
- Employment History
- Important Extracurriculars
(leadership positions)

- [LaTeX CV Template](#)



- [Word CV Template](#)



References



- Can be professors, research advisors, supervisors, etc.
 - Be aware of what kind of program you're applying to!
- Contact them now!!!
 - "Dear Dr. XXX,
I am applying for ** program for summer 2023. Would you be able to write a strong letter of recommendation for me? The first deadline is XXX. I can send you my personal statement and CV for reference. Thank you.
Your name"
 - Provide a concise document of which programs you're applying to, including the deadline and how to submit the LOR (link to a form they'll fill out, or they may be sent an email with instructions)
- Give reminders
- Invite them to any presentations if possible

Email to professor- interest in research

- Look through departmental website to identify faculty
- Include:
 - Who you are- year, major(s), any previous research
 - Your interest- Why this person? What do you find interesting about the research?
 - The request- to set up a meeting to learn more about their research, and ask if there is any opportunity to work with their research group or attend group meetings
 - Attach CV and transcript
- Possible responses
 - You can come to the group meetings to learn more
 - Let's get together to talk about my research
 - I have research opportunities I can discuss with you
 - I don't have time to consider this
 - No response
 - send 1 follow up email 1 week later, then let it go until next semester
 - If they have office hours, you could catch them then

Statements

- Introduce yourself
- Research/related experience
 - Should demonstrate intellectual merit and passion for astronomy/physics!
- What are your research interests?
- Who do you want to work with at a particular school/program? Why?
- Use this [Research Statement Template](#)
- Have others read your statements!
 - Save the date for TIMESTEP's workshop on January ???



Work on one or more of these options

- Identify summer research opportunities- REUs, internships- you want to apply to
 - Identify faculty you'd like to work with
 - Work on CV
 - Work on Email Requests to Reference Letter Writers
 - Work on Email Requests to Faculty/Post docs for Research
 - Work on Research Statement
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