

Application for Summer Undergraduate Research Funding 2021 UT Austin Department of Astronomy & McDonald Observatory

This application is for UT Austin undergraduates who are interested in pursuing department-funded research in the Department of Astronomy & McDonald Observatory during the summer of 2021. The deadline to apply is *midnight on Friday, April 16th*.

This PDF lists all of the survey questions so you can best prepare your answers prior to submitting your online application. The online application is available at this link:
https://utexas.qualtrics.com/jfe/form/SV_2ukVjUbOji3kQd0

1. First / Preferred Name
2. Last Name
3. Pronouns (e.g. she/her/hers, he/him/his, they/them/theirs, etc)
4. Email Address where we can reach you
5. Best Phone number to reach you
6. UT EID
7. Enrolled in which major(s)/degree program(s)
8. You identify as a:
(note this may differ from your credit-hour status)
 - 1st year undergraduate
 - 2nd year undergraduate
 - 3rd year undergraduate
 - 4th year undergraduate
 - 5th year undergraduate
 - non-traditional undergraduate or post-bac student
 - other
9. Racial / Ethnic Identity
10. Gender Identity

Academic Preparation

The next several questions ask you about your academic experience at UT and preparation for research.

11. What is your GPA?
12. Check all of the classes on this list you have taken or in which you are currently enrolled:
 - AST307 - Introductory Astronomy
 - AST376R - Research Methods
 - AST352K - Stars
 - AST364P - Planets
 - AST358 - Galaxies

- AST353 - Astrophysics
AST376C - Cosmology
AST376 1 - Observational Astronomy
AST210K - FRI
AST 1/2/375 - Independent Study/Research
13. Are there any other classes you have taken that you feel are relevant for developing background knowledge/research experience that are not on the previous list?
 14. Have you applied for summer research funding through any other funding scheme or opportunity? If so, which opportunities? If you've heard back positively, how much funding have you received (let us also know if you haven't heard back or heard that you haven't received funds)? For examples of other ways to secure funding for undergraduate research, see this CNS page listing opportunities (cns.utexas.edu/tides/undergraduate/funding-opportunities).
 15. Are you submitting this application to:
 - start a new research project
 - start a new research project with a particular mentor (and you have already established communication with this mentor)
 - continue working on a research project already underway with your research mentor
-

Area of Interest & Short Essay Responses

This section of the application will ask you some questions about your area of interest and asks you to reply to a series of short essay prompts.

If you answered “start a new research project” to question 15, please answer questions 16-18. If not, skip to question 19.

16. Please let us know what areas of research you are most interested in pursuing during the summer. Rank the following topical areas from 1 (most excited to work on) to 4 (least excited to work on):
 - Planets / Planetary Formation
 - Star / Star Formation / Interstellar Medium
 - Galaxy Evolution
 - Cosmology
17. Please let us know what type of astronomical research you are most interested in pursuing during the summer. Rank the following types of research from 1 (most excited to work on) to 4 (least excited to work on):
 - Observations / Telescope Data
 - Big Data / Machine Learning
 - Simulations
 - Analytical Theory

18. Please let us know how strong your preferences from the previous two questions are. For example, do you strongly favor working on observations of galaxies? Or do you have slight preference for working on simulations of exoplanets? Feel free to elaborate on how strong those preferences are here. (No more than 1-2 sentences)

If you are continuing a project or starting a project with a particular mentor, answer questions 19-20. If not, please skip to question 21.

19. With whom are you proposing to work this summer?
This individual should be a professor, research scientist or postdoctoral scholar at UT. If you plan to work with a graduate student, you should list them and their immediate supervisor here.
20. If this project is a continuation, how long have you worked on this project so far?
This is not a continuation; it is a new project.
1 semester
2-3 semesters
more than 3 semesters

Short Response Essays

Please provide short responses to the prompts given below in no more than 200 words each. We recommend writing your answer in a word processor and copying the text into this box when you are ready to submit your application.

21. Short Response Prompt #1: Learning from Experience
Please either (1) describe any research you have done and what was something difficult you learned from that experience, or (2) if you have not done any research, explain an instance in your past where you were faced with a significant challenge (personal or academic), persevered, and what the experience has taught you.
22. Short Response Prompt #2: Career Goals
Tell us a bit about your career aspirations, how they formed, and how you hope to reach your career goals and work toward them in the next ~5 years.
23. Short Response Prompt #3: Interest in Research at UT
Please tell us why you are specifically interested in pursuing research in UT Astronomy this summer. What do you hope to learn (that is unique from your coursework)? How do you think it will impact your career aspirations? Describe why a certain area of research (of the choices you specified above) is appealing to you.

If you are continuing a project or starting a project with a particular mentor, answer questions 24-25. If not, please skip to question 26.

24. Short Response Prompt #4: Project Description

Please describe the primary science motivation for the project you plan to pursue this summer. In other words, write a short abstract for the project itself in your own words addressing why the project is important in the broader context of astronomy, how the project will be accomplished, and what you'll use to complete the project.

25. Short Response Prompt #5: Project Timeline and Goals

Please provide a brief description of the project goals and what you hope to accomplish this summer. Also provide a best-guess timeline for you to achieve those goals. Does the project have any planned deliverables (i.e. poster presentations, conference talks, research notes, refereed publications?), and if so, what is the timescale to reach those deliverables?

26. What is your availability to work on research over the summer 2021?

Please let us know if you intend to work on a research project full time or part time, over what date range you are available, and what other commitments you expect to hold over the summer (for example, if you plan to take courses, do you plan to conduct research part-time while enrolled or not conduct research during those weeks?).

27. In the event we are able to return to campus for all or part of the summer, do you anticipate being physically present in the department and using the astronomy computer lab?

Yes

Maybe

No

I don't know yet

28. If the opportunity is available, are you interested in continuing this research into the fall 2021 semester?

Yes

Maybe

No

29. Is there anything else you would like to share that you think is relevant to this application that hasn't been covered by the previous questions? If not, you can leave this blank.