

Department of Earth and Environment Sciences

Support for Graduate Students

Updated September 2021

The objective of this summary of support for graduate students in the department is to provide information on what is available, how often it is available, how the opportunities might occur or be advertised and how funding decisions are made. For completeness we cover both the academic year (fall and spring semesters) and summer funding. Note that for all department funding decisions the objective is to provide opportunities for all students and to be diplomatic, fair, and transparent when decisions are made.

Support during the academic year (Fall and Spring semesters)

Graduate students are supported during the academic year through a variety of methods.

Typically, ~50% of graduate students are supported on TAs with the other 50% supported via other means:

- **Teaching Assistantships.** Currently ~20 TAs are funded by the College of Arts and Sciences. TAs require that students assist with classes/labs/recitations for up to 20 hours a week during the semester, and in return receive a TA stipend and tuition support. TAs are awarded to graduate students when they apply for graduate school following an established procedure that evaluates the merit of the application and equity of support across the faculty and research groups. College guidelines indicate a preference for funding doctoral students. Graduate students who rotate off or alternate with other funding (such as SU fellowships, RA's, STEM, McNair, etc.) may also be supported on a TA.
- **Research Assistantships:** These are funded by individual faculty advisors from external research grants that have been obtained by proposals submitted to NSF, NASA, DOE, etc. Usually, these funds are for designated projects or parts of projects dealing with research on a specific topic with a set of objectives or scope of work. Advisors can support graduate students on RA during any period of their program if they have sufficient research grants, in normal situation. Each year, faculty members are required to write detailed reports to funding agencies on progress made on these grants.
- **SU Fellowships.** One new PhD student per year is typically funded by the College of Arts and Sciences as a SU Fellow. Funding is typically for years 1 and 3 of a PhD (with years 2 and 4 usually supported on TA or other funding). Funding is for the fall and spring semesters and does not include summer funding. These fellowships are earmarked to support excellent applicants in any given year. Faculty advisors nominate student applicants for these awards during the admission season. Following a full faculty discussion and vote, a ranked list of 3 potential fellowship candidates is formulated. Faculty take into account the quality of the student application, the likelihood the student will accept a fellowship (but perhaps not a TA) and also any recent SU Fellowship support that faculty member may have received.
- **Targeted Fellowships:**
 - **STEM Fellowships.** STEM fellowships are designed to increase participation in graduate education for historically under-represented groups (<https://www.syracuse.edu/admissions/cost-and-aid/types-of-aid/graduate-student-aid/fellowships/>). These fellowships are funded by the graduate school and are available every year. Usually, the department nominates graduate student applicants but continuing graduate students can also be nominated. In 2021, 5 STEM Fellowships were available across the university, for doctoral students only. Funding is typically for years 1 and 3 of a PhD program. Funding is for the fall and spring semesters and does not include summer funding. Information for when STEM Fellowships are available is sent via email to department chairs early in the spring semester of each year. The chair either notifies the faculty or delegates to the DGS and GAC, who then notify faculty members. The SU administration may also email departments (e.g., the chair, or department

administration or the DGS) to notify them that graduate student applicants who may be eligible for these fellowships have applied to the graduate program. Individual faculty members or members of the GAC will, after discussions with the student applicant, and with their consent, nominate students for STEM Fellowships. A ranked list of up to 3 students, determined by faculty discussion and faculty vote, along with supporting information is submitted by the DGS to the graduate school. The Chair, or more typically the DGS writes a nominating memo that includes supporting information on the STEM Fellowship candidate to the Dean of the Graduate School. A committee appointed by the graduate school selects the students to whom fellowships are then offered. Departments reserve a TA position for new student applicants who have been nominated for these fellowships. If unsuccessful with a STEM Fellowship award, the student applicant will be offered the reserved TA position.

- **McNair Fellowships.** These are funded by the College of Arts and Sciences. To be eligible for consideration, students must be either from an underrepresented group (African American, Hispanic, or Native American) or have been a McNair Scholar at their undergraduate institution (<https://www.syracuse.edu/admissions/cost-and-aid/types-of-aid/graduate-student-aid/fellowships/>). In 2021, two fellowships were available across the College, for doctoral students only. Information on if and when these fellowships are available is emailed to chairs of department by early to middle of each spring semester of each year. The chair either notifies the faculty or delegates to the DGS and GAC, who then notify faculty members. The SU administration may also email departments (e.g., the chair, or department administration or the DGS) to notify them that graduate student applicants who may be eligible for these fellowships have applied to the graduate program. Individual faculty members or members of the GAC will (after discussion with the student applicant, and with their consent) nominate students. In 2021, the department was permitted to nominate one PhD applicant, determined following full faculty discussion and faculty vote. The Chair or more typically the DGS writes a nominating memo that includes supporting information on the McNair Fellowship candidate to the Senior Associate Dean of the College. The decision-making process at the college level is unknown. Departments reserve a TA position for new student applicants who have been nominated for a McNair fellowship. If unsuccessful with a McNair Fellowship award the student applicant will be offered that TA.
- **Mid-Late Program Support:**
 - **REDF Funding for PhD candidates.** (REDF: Research Excellence for Doctoral Fellowships). These fellowships for existing doctoral candidates are funded by the Graduate School. The department currently has 3 REDF fellowships that resulted from a proposal written by the GAC and submitted to the Graduate School in 2018. Applicants must be ABD (all but dissertation), which means they have successfully passed their qualifying exam and completed all required coursework. It is currently unknown how many REDFs will be awarded to our department after 2021. REDFs are advertised by the DGS, usually in the early Fall, with a call for late-Fall applications. The GAC rank submissions according to a well-published Rubric (<https://answers.syr.edu/display/EarthSci/Frequently+Accessed+Forms+and+Guidelines>). There is no faculty vote or discussion beyond advisor support letters that are submitted with the student applications, and thus the decision of the REDF committee is final.
- **External Student-Generated Support:** Graduate students are encouraged to apply for external funding. These opportunities provide important grant-writing experience and are key to building strong resumes. They may also allow more flexibility and independence for students who have strong research ideas beyond their advisor's currently funded projects.

- **Future Investigators in NASA Earth and Space Science and Technology (FINESST)** has replaced the NASA Earth and Space Science Fellowship (NESSF) which have previously awarded to PhD students in the department. Those interested in applying for NASA fellowships should submit proposals to FINESST, which is solicited under NASA Research Opportunities in Space and Earth Sciences (ROSES).
- **Department of Energy Office of Science Graduate Fellowship program (SCGF)** has supported outstanding graduate students pursuing graduate training in basic research in areas including environmental sciences relevant to the Office of Science mission areas.
- **The National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP)** supports outstanding graduate students in NSF-supported STEM disciplines who are pursuing research-based master's and doctoral degrees. To check eligibility and to apply see <https://www.nsfgrfp.org>.
- Foreign sponsorship (International Students): Fulbright Commissions or foreign national programs (e.g., Brazil). Foreign students typically apply for these in their home countries and then select universities/faculty with whom to work with. These are usually excellent fellowships, although applicants to SU may be asked to pay for partial graduate tuition costs which, dependent on the fellowship may reduce their own stipends. Return to the foreign sponsor's country for a minimum period of time can be a condition of these fellowships.

Pay schedule:

Graduate students are paid for 9 months – therefore “guaranteed minimum funding” is 9 months of funding on a TA, RA, Fellowship, etc. Graduate student stipends for the academic year are disbursed in 18 semi-monthly disbursements for August through May (less applicable withholding taxes), paid on the fifteenth (or the closest business day) and on the last business day of the month.

Summer support for graduate students: “Roadmap to summer funding”

Note the funding discussed below addresses “stipends” not “research” support. These are different types of support. Stipends can be equated with money for living, whereas “research support” is applied to support of one’s research (e.g., fieldwork, lab work, analytic costs, etc.). The department does offer some limited research support (which is managed by the DGS and the GAC who send out requests for applications in the early-middle spring (usually in March) and make recommendations to the chair in April. This research funding is usually from “endowed gift” accounts which have been set up via bequests or gifts to the department (<https://thecollege.syr.edu/earth-sciences-department/giving/>). As such there are “guidelines and/or rules” for how those research funds can be spent and that may not include their use for “stipends”. To date the department has not offered “summer stipends”.

- **Summer funding via funds from your advisor.** It is typically the primary responsibility of the faculty advisor to fund graduate students through the summer. Faculty usually rely on external research grants to provide summer funding for students. Pending proposals are not guaranteed to be funded, and hence anticipated funding may not be realized, through no fault of the advisor. There is no set amount of funding for summer support. Note that federal funding cannot be used to support graduate students while they are on long periods of vacation during summer. There is a section in the annual graduate student report that explicitly deals with funding for the upcoming summer and, for continuing students the upcoming academic year. The annual report process must include a discussion of summer funding so use this annual report to raise the issue of summer funding – a discussion that usually happens in late November. A graduate student may be funded by their own advisor to work on another funded project unrelated to the graduate student’s research. A RA salary level typically requires 20 hours work per week on a dedicated research project.

- ➔ **Graduate school summer fellowships** (PhD candidates). For the last two years the graduate school has offered stipends to PhD candidates who are in good academic standing, have completed their coursework, have passed their PhD qualifying exam and who anticipate defending their thesis by the end of the following spring semester. In 2019, 3 PhD candidates from the department were awarded these stipends, with 4 in 2020 and 1 in 2021. These scholarships for 2021 were a fixed stipend of \$4000. The graduate school sends an email to the chair and/or DGS – who then advertise this to the graduate students/faculty. Graduate students apply, faculty write letters of support and the graduate school decides the awards.
- ➔ **The College of Arts and Sciences “cash” stipends.** Sometimes (not every year) the chair will get an email, often late in the semester, from the Deans Office indicating cash stipends on the order of \$750. In 2021 there were four such stipends offered to the department. The chair seeks input from faculty, the chair decides the recipients. These stipends are typically “need” based.
- ➔ **EES teaching options.** During the summer, TAs are needed to help with EAR summer courses. For example, there may be a need for TAs for EAR 105/104 summer session 1 and 2, and EAR 111, but these courses may change from year to year. Occasionally, graduate students are asked to teach a summer EAR course. The chair seeks applicants, and the chair decides on summer session instructors and TA’s.
- ➔ **Other EES support:** For example, cataloging and organizing teaching collections, special tasks related to lower division instruction). Occasionally there is extra work available during the summer, usually paid hourly.
- ➔ **Internships** (e.g., USGS, Chevron, Exxonmobil, US National Park Service, Smithsonian). Often graduate students take an active role in applying for internships that are relevant to their career aspirations. Faculty members are also contacted by colleagues who seek to fill summer positions and often a faculty member will have long-standing contacts with companies. It is recommended that students investigate potential summer opportunities during the fall semester. Some of these opportunities are often advertised (e.g., emails sent out via listservs) in January.