
URGE Resource Map for Northwestern EPS

This is a draft Resource Map for Northwestern University Earth and Planetary Science department, drafted by GeoEquity. This was adapted from the "Sample Ph.D. Mentoring Plan" developed by Vashan Wright (Woods Hole Oceanographic Institution) and Karin Block (City College of New York and CUNY Graduate Center), License: [CC BY-NC-SA 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/). Some of these will be resources common to all and some will be questions for identifying specific resources based on needs/interests identified during initial meetings while implementing the mentoring plan.

Suggestions for continued work and/or ideas are in italics

Outline of Topics for PI's/Lab Groups

This list of topics was inspired by the example deliverable to address common research group dynamics. We encourage all PIs/lab groups wishing to formulate documents to support new students in their group to consider the below prompts:

- Mentoring plan: this section should include a plan for working with new hires/students and connecting them with resources that will be of most use to them, including a summary of the intent of the resource map, as well as a schedule for initial meeting(s) to identify needs/interests. For example:
 - Can also link to or highlight department-wide mentoring plan resources (below)
 - Scheduling of initial meeting with PI/mentee and what topics to be covered in the meeting should be explicit
- Individual/Group meeting expectations (can be included in a Code of Conduct)
 - Interval/frequency of group meeting
 - Time management guidelines. This could potentially include:
 - Any working hour expectations
 - Encouragement for mental health breaks/vacation and family time
 - Guidelines for vacation (e.g., are you encouraged to let your PI know? Is this a must or a suggestion? Do you need to let anyone in the laboratory know?)
 - Common places to find journal articles and what journals the lab group often reads/uses
 - Guidelines for presentations
 - Should the document be shared with the PIs?
 - Do people often practice in lab group meeting?
 - How is this practice suggested?
 - Socializing (see opportunities to connect with other students below)
 - Information on conferences (see department wide conferences for more resources)
 - What conferences does the group often attend?
 - When in your career/how often should you plan to attend conferences?
 - How will they be funded?

- Professional development workshops, summer school, etc., that are specific to your field (e.g., Isocamp for isotope geochemists, Urbino summer school for paleo-student, and others)
- Reviewing manuscripts
 - Will students be invited to review manuscripts? If so, what are the expectations there?
 - Are there any resources that can help prepare a student of what to expect when taking on manuscript reviews?
- Revising manuscripts/dealing with rejection
 - What is the working style of the PI?
 - What can the student expect?
- Career guidance
 - What should a student expect from the lab group in terms of career guidance?
 - What other resources are available for career guidance at NU? (see also department wide professional development resources)
- Acknowledgement of how current events intersect with work/science
- Media requests
 - How are these initiated?
 - Who might you expect to be contacted by?
- Training and protocols: specific to lab groups
- Communication plan:
 - What modes of communication exist for the lab group?
 - Are there any limits to when/how the group should communicate with each other? How are the communication channels maintained?
 - When you have a question, where should you go?
 - Could outline different contacts for different spaces (e.g., for specific lab-based questions see X, for access to a new lab talk to Y, for questions about a conference talk to Z)

For an example of a PI/Lab group document

see: <https://docs.google.com/document/d/10y7TP48ik1rcQBPA5Do8mZM7DJ5EbF0hyWP-csgb1QE/edit> with more examples linked at the end of this document. *Group will reach out to find examples of strong codes of conduct.*

Summary of Resources for Students, Staff, and Faculty of Color

These links highlight groups and resources that promote the mental, social, and professional wellness of our students, staff, and faculty of color. We will work to include these organization and spaces in the graduate student handbook. These resources are also repeated below in the departmental and NU general resources.

- URM Student Organizations: <https://www.tgs.northwestern.edu/diversity/retention/student-organizations/index.html>
- URM peer mentor program: <https://www.tgs.northwestern.edu/diversity/retention/tgs-diversity-peer-mentor-program.html>
- Academic honor society for URMs: <https://www.tgs.northwestern.edu/diversity/retention/bouchet-honor-society/index.html>

- Quarterly diversity celebrations: <https://www.tgs.northwestern.edu/diversity/retention/diversity-celebrations/index.html>
- Affinity Groups:
 - For students: <https://www.northwestern.edu/studentaffairs/community/student-affairs-staff/student-affairs-human-resources/staff-development/standard-affinity-groups.html>
 - For staff: <https://www.northwestern.edu/diversity/resources/staff-affinity-groups/>
- Mental health counseling at the Counseling and Psychological services (CAPS): <https://www.northwestern.edu/counseling/>
 - CAPS has hosted Students of Color Wellness and Support Group in the past
 - CAPS has a referral database where mental health providers can be filtered by specialization and provider identity
- Additional information on resources for URM is available here: <https://sites.northwestern.edu/geoequity/resources/>
- Diversity Officer: <https://www.northwestern.edu/diversity/about/Staff> and Office of Diversity and Inclusion workflow schematic: <https://www.northwestern.edu/diversity/about/Staff/office-of-institutional-diversity-and-inclusion-organizational-chart.pdf>
- Graduate Student Union has a slack channel dedicated to resources and spaces for student of color. Get involved by reaching out to leadership: <https://sites.northwestern.edu/glac/>
- Professional societies (for societies that may fit with intersectional identities, see full list below):
 - ADVANCEGeo: <https://serc.carleton.edu/advancegeo/resources/index.html>
 - National Association of Black Geoscientists: <http://www.nabg-us.org/>
 - Black in Geoscience: <https://blackingeoscience.org/>
 - Geoscience Alliance: Broadening Participation of Native Americans in Geoscience: <https://geosciencealliance.wordpress.com/>
 - Society of Latinxs/Hispanics in Earth and Space Science (SOLESS): <https://ciresdiversity.colorado.edu/soless>
 - Coalition of Hispanic, African and Native Americans for the Next Generation of Engineers and Scientists (CHANGES): <http://www.changescoalition.org/>
 - Society for Advancement of Chicanos and Native Americans in Science (SACNAS): <https://www.sacnas.org/>
- Fellowship opportunities:
 - NABG Scholarship: <http://www.nabg-us.org/scholarship-info.html>
 - Ford Foundation Diversity Fellowships: https://sites.nationalacademies.org/PGA/FordFellowships/PGA_047958

JEDI Outreach resources

NU GeoEquity recognizes that Justice, Equity, Diversity and Inclusion (JEDI) work can be a rewarding way to build community, develop other professional development skills, and network with people that hold similar identifies. We list a few spaces for graduate students, staff, and faculty to become involved in this work below:

- GeoEquity: GeoEquity is a JEDI group that focuses on driving culture and policy changes within EPS, NU and in society. Students, staff, and faculty are encouraged to get involved. Many opportunities exist to contribute: <https://sites.northwestern.edu/geoequity/>
- Northwestern Academic Programs and Centers: <https://www.northwestern.edu/diversity/resources/academic-programs-and-centers/index.html>

- TGS Diversity and Inclusion Internship, compensated with a \$600 monthly stipend
- *We will work to compile opportunities for faculty and staff*

We also recognize that students, staff and faculty of color are often asked to take on more service tasks that are not compensated. This invisible labor can result in a time tax in which your personal time is consumed with work related activities. We encourage all community members to say no to taking on new roles they feel that they do not have the capacity for, or interest in. In order to assist with this opting-out process, we hope to address these questions:

- *What does a path for opting out of service work look like for us?*
- *Does NU offer any compensation for students/staff/faculty of color working in these roles?*
- *Information about honoraria--what students/staff/faculty should expect for their time, etc.*

Department resources: Mentorship

- During graduate student orientation, students are presented with, and given the Graduate Student Handbook in writing.
 - For a full list of topics covered, visit the graduate student handbook here: https://www.earth.northwestern.edu/documents/grad_program/eps_gradguide_2020-2021.pdf
- Bi-weekly Gradinars (hosted by the Director of Graduate Studies) have become our formal space for presenting resources and expectations for new students
 - After graduate student handbook discussion, Gradinars expand in scope to talk about other social and professional development opportunities (e.g., clubs to join, mental health, bystander intervention, writing publications for peer review)
- Responsible Conduct of Research training is hosted in the winter quarter and presents information on lab safety, reporting, field safety, ethics in research, etc.
 - Students, postdocs, and new faculty are required to attend
- Questions specific to research mentorship should be covered by the PI/Lab Group
- At present, we have not found any documents that are provided to faculty, staff, or postdocs when they begin a new role
 - *We will continue to inquire about the documents and/or make suggestions of helpful welcome documents*

Northwestern and TGS resources: Mentorship

Mentoring and Career Development for New Faculty:

- Northwestern offers a faculty mentoring program, to which early-career faculty are invited: <https://www.northwestern.edu/provost/faculty-resources/career-development-leadership/CareerDevelopmentPrograms/faculty-mentoring-program.html>
- More generally, the Office of the Provost hosts mentoring and career development events: <https://www.northwestern.edu/provost/faculty-resources/career-development-leadership/CareerDevelopmentPrograms/index.html>

- Northwestern is a member institution of the National Center for Faculty Development and Diversity (NCFDD), and any Northwestern faculty can access NCFDD resources for free: <https://www.facultydiversity.org/>

Student Mentorship:

- TGS peer mentorship: <https://www.tgs.northwestern.edu/diversity/retention/tgs-diversity-peer-mentor-program.html>
- Northwestern mentorship: <https://mentor.northwestern.edu/>
- Research evaluations:
 - Faculty evaluations are provided to students once per year during the spring quarter
 - Graduate student self-evaluations are completed prior to the students' spring committee meeting through the Graduate Student Tracking System (GSTS; see page 9 of the EPS Graduate Student Handbook: https://www.earth.northwestern.edu/documents/grad_program/eps_gradguide_2020-2021.pdf for more information)
 - Graduate student receive evaluations from their PI after their spring committee meeting on GSTS
- Teaching evaluations:
 - The Course and Teacher Evaluation Council (CTEC) collects teaching evaluations via the online teaching platform Canvas for all faculty teaching a course along with TA's (see page 7 of the EPS Graduate Student Handbook: https://www.earth.northwestern.edu/documents/grad_program/eps_gradguide_2020-2021.pdf for more information)

Department core work resources

Code of conduct:

- *We are working to explore creating a code of conduct for our department and/or lab spaces*
- Northwestern nondiscrimination statement is listed on the EPS Graduate Student Handbook on page 28 https://www.earth.northwestern.edu/documents/grad_program/eps_gradguide_2020-2021.pdf

Communication plan:

- *We are working to explore a communication plan at least for our department and/or lab spaces*
 - Communication plan should include common listservs and alternate modes of communications along with the guidelines for using these methods of communication (e.g., do you need to check with someone before sending a message? Are there times you should refrain from sending messages?)
 - For lab spaces, this could include scheduling time in lab spaces, how to gain access to those calendars, when to sign up, how long in advance to allow for scheduling of trainings, etc.

Reporting Policy:

This could be added to the EPS grad student handbook in this form or as a flowchart (goal in URGE deliverable 2), which will cover where students should report in specific situations. Please see NU core work resources (below) for more.

- Reporting within the department:
 - Department Chair: Matthew Hurtgen (Currently holding position 2021-2024) <https://www.earth.northwestern.edu/our-people/faculty/hurtgenmatthew>
 - Assistant Department Chair: Patricia Beddows (Currently holding position 2021-2022) <https://www.earth.northwestern.edu/our-people/faculty/beddows-patricia.html>
 - Director of Graduate Studies: Suzan van der Lee (Currently holding position as of 2021-2022) <https://www.earth.northwestern.edu/our-people/faculty/van-der-leesuzan>
 - Director of Undergraduate Studies: Daniel Horton (Currently holding position as of 2021-2022)
 - Ombudspeople: Yarrow Axford: <https://www.earth.northwestern.edu/our-people/faculty/axford-yarrow.html>, Steve Jacobsen: <https://www.earth.northwestern.edu/our-people/faculty/jacobsen-steven.html>
 - Note: ombudspeople are for the graduate students and postdocs in the department and students/researchers can work with the department chair to define the role/guidelines if desired

Equipment

- *We will work to incorporate equipment resources in multiple documents like the Grad Student Handbook and the GeoEquity/EPS website.*
 - The Northwestern Norris Center has equipment for rent: <https://www.northwestern.edu/norris/arts-recreation/norris-outdoors/>
 - There is some field gear in the department: *we need to take stock of this*
 - *Many people have discussed starting a drive for old gear to enhance the department wide equipment stock*

Conference and workshop participation

- Conference travel guidelines are listed on page 15 of the EPS Graduate Student Handbook:

https://www.earth.northwestern.edu/documents/grad_program/eps_gradguide_2020-2021.pdf

Northwestern Core Work Resources

- Office of Equity (great resource to help guide where to report): <https://www.northwestern.edu/equity/>

- For reporting cases of sexual misconduct or discrimination/harassment: <https://www.northwestern.edu/equity/resources/report-an-incident/index.html>
- For help navigating the reporting system: <https://www.northwestern.edu/inclusion/respectnu/birt.html>
- Northwestern Community Standards: <https://www.northwestern.edu/communitystandards/>
 - Contains the student handbook, and information pertaining to reporting a general concern about a student or student's conduct, or a concern related to hate
- Graduate School specific resources: <https://www.tgs.northwestern.edu/academic-policies-procedures/academicstudent-services/>
- Inquiries concerning The Graduate School's academic policies and procedures:
 - Northwestern University: <https://www.northwestern.edu/student-conduct/about-us/student-handbook/assets/student-handbook.pdf>
 - The Northwestern University graduate student handbook outlines policies and procedures for reporting incidents in higher detail.
 - General policies at the University level can be found here: <https://www.northwestern.edu/equity/policies-procedures/policies/index.html>

Department community support and resources

Explore adding these to the EPS graduate student handbook or another visible location

Outreach and extracurriculars:

- *GeoEquity is currently working to create an outreach and club repository*
- Geoclub, connect with graduate students and undergraduates that love the Earth! <http://nuesc.weebly.com/>

Community support:

- EPS ombudspeople and other channels of reporting can help you work through an issue (see reporting guidelines above)
- **The URGE pod considered trying to implement a program to pair an older student with an incoming student, postdoc or an older staff with an incoming staff to show them around the area, ask questions about housing, etc. Within these conversations, we would like to stress conversations about safety and inclusion for various identities.**
- Grace Schellinger has spearheaded a mental health initiative that focuses on the impact of mental health in our research space, promoting conversations within our department, and sharing helpful resources

Northwestern/TGS community support & mental health resources

Finding accommodations and moving assistance:

- TGS resources on housing: <https://www.tgs.northwestern.edu/services-support/housing/index.html>
- TGS International Student Services: <https://www.tgs.northwestern.edu/services-support/international-student-services/index.html>

- TGS Transportation Services: <https://www.tgs.northwestern.edu/services-support/transportation/index.html>

Mental health and happiness services:

- Diversity Officer: <https://www.northwestern.edu/diversity/about/Staff> and office of Diversity and Inclusion workflow schematic: <https://www.northwestern.edu/diversity/about/Staff/office-of-institutional-diversity-and-inclusion-organizational-chart.pdf>
- Counseling and Psychological services (CAPS): <https://www.northwestern.edu/counseling/>
 - CAPS has hosted Students of Color Wellness and Support Group in the past
 - CAPS has a referral database where mental health providers can be filtered by specialization and provider identity
- Affinity Groups: <https://www.northwestern.edu/studentaffairs/community/student-affairs-staff/student-affairs-human-resources/staff-development/standard-affinity-groups.html>

Childcare assistance:

- TGS grant: <https://www.northwestern.edu/hr/benefits/work-life/paying-for-childcare/graduate-student-childcare-grant.html>
- TGS Child and Family Resources: <https://www.tgs.northwestern.edu/services-support/family-resources/child-family-resources.html>

Extracurricular activities and community building:

- Student enrichment services: <https://www.northwestern.edu/enrichment/index.html>
- Multicultural student affairs: <https://www.northwestern.edu/msa/>
- Graduate Student Union has a slack channel dedicated to resources and spaces for student of color and you can reach out to leadership to get involved: <https://sites.northwestern.edu/glac/>
- Northwestern has inter-mural sports: <https://nuim.northwestern.edu/> and other mini-courses that are hobby focused: <https://www.northwestern.edu/norris/arts-recreation/mini-courses/>
 - Note, some of these spaces require a fee to join
- TGS community and campus resources: <https://www.tgs.northwestern.edu/services-support/community-campus-life/index.html>
- Exercise and gyms: your student activity fee (required for students) includes access to the Northwestern Recreation Centers <https://nurecreation.com/>

Religion and religious spaces:

- Northwestern's campus hosts a number of religious and spiritual spaces: <https://www.northwestern.edu/religious-life/discover-our-spaces/meditation--prayer-spaces-on-campus.html>
- Religious student organizations: <https://www.northwestern.edu/religious-life/find-a-community/religious-student-organizations.html>

Professional development (conferences and professional societies):

- TGS will provide funding (the Conference Travel Grant) for two conferences over the course of an academic career if presenting: <https://www.tgs.northwestern.edu/funding/fellowships-and-grants/internal-fellowships-grants/conference-travel-grant.html>
 - This funding can be used for all conference fees, including membership fees
 - We encourage all students to apply for this funding to attend conferences that align with their research goals and the identities they hold
 - Professional societies focused on a common identity are:
 - ADVANCEGeo: <https://serc.carleton.edu/advancegeo/resources/index.html>
 - National Association of Black Geoscientists: <http://www.nabg-us.org/>
 - Black in Geoscience: <https://blackingeoscience.org/>
 - Geoscience Alliance: Broadening Participation of Native Americans in Geoscience: <https://geosciencealliance.wordpress.com/>
 - Society of Latinxs/Hispanics in Earth and Space Science (SOLESS): <https://ciresdiversity.colorado.edu/soless>
 - Coalition of Hispanic, African and Native Americans for the Next Generation of Engineers and Scientists (CHANGES): <http://www.changescoalition.org/>
 - Society for Advancement of Chicanos and Native Americans in Science (SACNAS): <https://www.sacnas.org/>
 - Earth Science Women's Network (ESWN): <https://eswnonline.org/>
 - Association for Women Geoscientists (AWG): <http://www.awg.org/>
 - Women in Geothermal (WING): <https://wing.wildapricot.org/>
 - The International Association for Geoscience Diversity — dedicated to creating access and inclusion for people with disabilities in the geosciences: <https://theiagd.org/>
 - National Institute for Faculty Equity (NIFE): <https://serc.carleton.edu/facultyequity/index.html>
- Outside of NU Mentorship resources:
 - Earth Science mentor match: <https://esmentormatch.github.io/>
 - AGU Mentoring 365: <https://mentoring365.chronus.com/>

Work expectation:

- *We have discussed building work expectations for lab-specific spaces (analytical and computational)*
 - We want to stress that these should also be centered on safety in these spaces and mental health

Department and NU/TGS skillset support resources

We will continue to discuss where these resources should be stored/advertised

Fieldwork skillsets:

- Driving training and practice driving large vehicles
- Comfort with swimming

- Adult swim lessons are offered through Northwestern: <https://nurecreation.com/sports/2015/8/12/adultswimlessons.aspx>
- Diversity in Aquatics provides resources on learning how to swim: <http://www.diversityinaquatics.com/page/adult-learn-to-swim>
- First aid/wilderness first aid is encouraged through outside workshops

Research skillsets:

- Common research skillsets include: writing, teaching, coding, public speaking, science communication, media creation, networking, drafting figures, specific coursework, drafting grants and/or fellowships
 - Note: Each individuals may enter graduate school with a specific career path, or this career path may develop with time. Specific skillsets/training for this career may not be listed above and are encouraged
 - Planning coursework:
 - EPS coursework guide helps discover what courses are offered through the department: <https://www.earth.northwestern.edu/courses/2020-2021/course-descriptions/index.html>
 - The EPS Graduate Handbook includes a number of resources for planning our academic coursework and meeting requirements: https://www.earth.northwestern.edu/documents/grad_program/eps_gradguide_2020-2021.pdf
 - Writing, science communication, and presentation:
 - Medill x Science and Society Science Writing Class (application usually opens in August)
 - TGS writing workshops for grants and dissertation writing: <https://www.tgs.northwestern.edu/about/news/professional-development.html>
 - EPS has offered classes on science communication
 - Coding, figure drafting, ArcGIS:
 - NUIT hosts many helpful workshops on coding, drafting figures, etc.: <https://www.it.northwestern.edu/research/training.html>
 - NUIT also offers quarterly subscriptions to Dataquest: <https://www.it.northwestern.edu/research/campus-events/data-camp.html>
 - EARTH 361, Scientific Programming in Python focuses on learning Python
 - ArcGIS courses also offered in the Environmental Science department: <https://envsci.northwestern.edu/undergraduate-program/courses/2020-2021/index.html>
 - ArcGIS computing services: <https://www.library.northwestern.edu/libraries-collections/government-collection/maps-gis/>
 - ArcGIS license information: <https://www.it.northwestern.edu/software/arcgis/index.html>
 - Data visualization courses offered by the Integrated Data-Driven Discovery in Earth and Astrophysical Sciences (IDEAS) Focus Summer School: <https://www.ideas.ciera.northwestern.edu/focus-summer-school/>
 - IDEAS offers a TGS certificate as well: <https://www.ideas.ciera.northwestern.edu/ids/>
 - Teaching

- The SEARLE center offers many workshops, sources and programs to increase your expertise: <https://www.northwestern.edu/searle/>
 - Inclusive teaching resources: <https://www.tgs.northwestern.edu/diversity/inclusive-teaching-resources.html>
 - Project management/budgeting/leadership
 - Kellogg Certificate of Management for Scientists and Engineers: <https://www.kellogg.northwestern.edu/programs/management-scientists-engineers.aspx>
 - Professional Societies/Development:
 - NU professional development workshops and events: <https://www.tgs.northwestern.edu/about/news/professional-development.html>
 - NU EPS Gradinars have focuses on many professional development topics
- Media training
 - Research Communication Training Program (Spring/Summer course depending on year): <https://rctp.northwestern.edu/>

Common fellowships/research funds for graduate students:

- Information about internal and external fellowships is provide on page 14 of the EPS Graduate Student Handbook: https://www.earth.northwestern.edu/documents/grad_program/eps_gradguide_2020-2021.pdf
- Other fellowships not mentioned in the Graduate Student Handbook Include:
 - NABG Scholarship: <http://www.nabg-us.org/scholarship-info.html>
 - GSA Grants: https://www.geosociety.org/GSA/Education_Careers/Grants_Scholarships/GSA/grants/home.aspx?hkey=e4133995-e8fd-43a7-b169-7323b0d72ee9
 - AGU Grants: <https://education.agu.org/grants/>
 - NDSEG (National Defense Science and Engineering Graduate fellowships): <http://www.asee.org/ndseg/>
 - Ford Foundation Diversity Fellowships: https://sites.nationalacademies.org/PGA/FordFellowships/PGA_047958
 - AAAS Science Media Fellowship: <https://www.aaas.org/programs/mass-media-fellowship>
 - American Association of University Women Fellowships and Grants: <http://www.aauw.org/what-we-do/educational-funding-and-awards/>
 - National Geographic Research Grants: <https://www.nationalgeographic.org/funding-opportunities/grants/what-we-fund/>
- *Examine adding these the the Graduate Student Handbook*