



URGE Resource Map for the University of Minnesota

This is a draft Resource Map for the (Bio)geochemistry Pod at the University of Minnesota. 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. 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.

Mentoring plan

- This resource map should be shared with all new hires and new students along with other onboarding materials to help them connect them with the resource that will help them succeed
- Pls or supervisors should also schedule individual and group meetings and set clear expectations with new hires or students.
- Pls or supervisors should provide regular evaluations:
 - Students receive feedback through the Annual Review at the end of each academic year. This includes self reflection and conversations with committee members about progress, long and short term goals, and development of an Individual Development Plan to meet those goals.
 - Post docs also receive feedback through an annual review with their PI that includes self reflection, a review of progress, goal setting, and professional development plans.
 - Informal feedback should also be given regularly in individual meetings with staff or students

Core work resources

- Code-of-conduct all members must sign a code of conduct that addresses inclusivity and diversity, mental health, publications or outputs, social media use, working hours, and vacation
 - School of Earth & Environmental Sciences Code of Conduct (Link)
 - Department of Earth & Environmental Sciences Field Activities Code of Conduct (<u>Link</u>)
 - Department of Earth & Environmental Sciences Field Programs Sexual Misconduct Policy (<u>Link</u>)
- Communication plan and expectations

- Annual reviews are required for all members of the department, during
 which supervisors discuss with students or employees about expectations
 and progress. Supervisors submit the mutually-agreed appraisal to the
 University at the end of this process.
- Supervisors are required to formally meet students or employees during the year.
- Beside formal meetings related to the annual review process, supervisors typically interact with students or employees during weekly or bi-weekly group meetings or other occasions throughout the year.
- Some research groups in the department also maintain their own statements that lay out more specific expectations for members of the group, and make their statements publicly available on their research website for prospective students.
- UMN is transitioning into the use of the online Performance Appraisal Tool (PAT) (<u>Link</u>). It is expected that annual goal upkeeping and review should not be a single event, but involves continuous conversations between supervisors and students/employees throughout the year, so that any concerns can be addressed in a timely fashion.

Reporting Policy

 Besides advisor, a list of other possible reporting mechanisms can be found from University Compliance Program website (<u>Link</u>)

Equipment

- The department has a range of field equipment, and one way to find out what is available would be contacting the department field committee
- Conference and workshop participation
 - Postdoc researchers typically attend conferences once or twice a year, although there is no policy regulating the number of meetings they have to attend. Often, participation is funded through sponsored projects, so the number of participation is dependent on the funding availability.
 - Conference and workshop participation of students can be paid by several ways: (1) financial support from the conference; (2) volunteering for the conference; (3) sponsored or non-sponsored fund from advisors; (4) the department also has some financial support that can be applied for annually
- Community support and mental health resources

- Assistance finding accommodations, moving expenses/assistance
 - The <u>Disability Resources Center</u> on campus is an outstanding office on campus that services the entire community. They assist with: determining and implementing reasonable academic, workplace, and guest accommodations; providing education on access and inclusion; partnering with University offices to ensure meaningful physical and technological access
 - The Earth and Environmental Sciences just developed a new scholarship for all incoming graduate students. Each student receives \$2K to help defray the costs of moving, purchasing a new computer, etc.
 - Students that are experience food insecurity can receive groceries through the Nutritious U Pantry.

Mental Health

- Let's Talk is a program that provides informal drop-in consultations at locations around campus for U of M students throughout the academic year. They offer free, confidential, drop-in services for students. Let's Talk is not a substitute for formal counseling and does not constitute mental health treatment, but counselors can listen to specific problems, provide support, help explore solutions and give information about other resources.
- Student Mental Health
- Boynton Health Services provides counseling, psychatric treatment, and crisis response.
- Outline services at organization/university: diversity officer, counseling and psychological services, ombudsperson, affinity groups, etc.
 - Diversity Officers
 - The Office for Equity and Diversity has a range of officers to contact.
 - The Earth and Environmental Sciences Department has an active <u>DEI Committee</u> with student, staff, and faculty members.

Counseling

- The university of Minnesota offers a variety of group and individual counseling services through the Student Counseling Services
- <u>Boynton Health Services provides counseling, psychatric treatment, and crisis response.</u>

Affinity Groups

- The <u>Circle of Indigenous Nations</u> recruits, retains, and graduates
 American Indian/First Nations/Alaskan Native students by
 promoting cultural values that help indigenous students become
 self-directed, excel academically, and succeed in all areas of
 individual matriculation, academic pursuits, and career aspirations.
- The Office of Equity and Diversity maintains a list of <u>affinity groups</u> for faculty and staff, including The Asian American Pacific Islander Desi Faculty and Staff Association, the American Indian Faculty &

- Staff Association (AIFSA), the the Black Faculty & Staff Association (BFSA), the The Latino/a/x Faculty and Staff Association, the U of M Indigenous Women & Women of Color, and others.
- With more than a thousand groups on campus, students are sure to find multiple groups that fit their diverse interests. Students can find groups, their contact information and their upcoming events on GopherLink.
- A variety of groups and multicultural centers specific to students, staff, and faculty are listed on the <u>Campus Climate page</u>.
- Encourage and assist making connections to someone who may understand their experience
 - There are a number of affinity groups (defined above) on campus for developing a sense of community
 - The Black Indigenous People of Color (BIPOC) Mental Health Collective (MHC) was formed in January 2019 due to a community desire to create a radical healing space to foster conversations around the topic of Mental Health and Wellbeing in our communities. This group is open to students (undergraduate and graduate), staff, and faculty at the University of Minnesota. This is a space for Black, Indigenous, Latinx, Middle Eastern and North African (MENA), Desi, Asian, and/or People of Color voices, experiences, and stories. Mixed race, QTIPOC, and trans-racial adopted folks.
 - The Student Counseling Services offers a **Diversity Liaison Counselor**: This counselor works to form relationships with students who have experienced more barriers to accessing traditional counseling services.
- Calendar(s) of events or mailing lists to join
 - The College of Science and Engineering Diversity and Inclusivity Alliance maintains once of the most comprehensive calendar of events for all campus DEI events
 - The Office of Equity and Diversity maintains a mailing list

Skillset support resources

- What skills or experiences are required for their work/coursework? e.g., driving, hiking/outdoors activities, compass/GPS navigation, swimming/SCUBA, operating power tools, first aid, etc.
 - hiking/outdoors acitvities (some students have never gone camping before); Things PI's and professors can do for their students (grad and undergrad students)
 - Prepare a checklist of things to bring or wear
 - Ask who is comfortable swimming or traveling on a boat
 - Be aware of allergies and any supplies to bring in case of a serious allergic reaction

- Plan for students with disabilities and how to make the field accessible (ex. Wheelchairs, Deaf/Hard of Hearing, Blind, etc)
- What skills training is supported through the organization, how would someone acquire/improve these skills? What training is available prior to arrival?
 - Trainings for the things listed above were either not provided or not easy to find on the university website
- Do they need to know how to code? If so, what languages? (e.g., R, Matlab, Python) If they do not have this skill, what resources/training are available?
 - Excel (bare minimum)
 - Coding is an essential skill, any coding language will suffice (R, Matlab, or Python are the most common) attach links for coding classes
- Professional development resources
 - Outline available resources for training/development or best practices in:
 <u>UMN Graduate School Academic and Career Development Workshops</u>
 - Teaching/pedagogy
 - Center for Educational Innovation
 - Teaching resources
 - Workshops and events
 - Project management/budgeting
 - UMN Libraries Services for Graduate Students
 - Student Writing Support UMN
 - Media training
 - Library Media Services for Students
 - Access to software and equipment
 - Appointments with Media Consultants
 - Library Media Services for Faculty/Staff
 - Integrating media literacy into your curriculum
 - Support designing media assignments
 - Science Communication
 - Sciworthy + Science Writing Certificate
 - o AGU Sharing Science

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- Proposal writing
 - <u>UMN CLA Proposal Development for Graduate Students</u>
- Public speaking / Networking
 - UMN Esri Innovation Program Outstanding Student Competition
 - UMN 3-minute thesis competition
 - American Geophysical Union Voices for Science Program
 - o Policy Track
 - Media/ Communications Track
 - <u>UMN Women in STEMM Collaborative See list of members for</u>
 <u>Women in STEM groups on campus</u>

- o Artemisia Leadership Initiative
- CSE Women in Science and Engineering (WISE)
- o Empowering Women in Science (EWIS) UMN
- Instrument/Software Training
 - Design/drafting of figures using Adobe Suite/Python/ArcGIS
 - o <u>UMN Software Acquisition</u>
 - Get Started with ArcGIS online
 - UMN U-Spatial Training
 - GIS Courses at UMN
 - Scientific Equipment/Instruments
 - UMN Characterization Facility (training or use)
- Getting involved in professional societies
 - Geological Society of America North Central Section
 - American Geophysical Union
 - Association of Women Geoscientists MN Chapter
 - American Chemical Society MN Chapter
 - American Geosciences Institute
 - Lunar and Planetary Institute
 - American Institute of Professional Geologists (AIPG) MN section
- Additional coursework
 - UMN ESCI Courses
 - UMN Soil Water & Climate Courses
 - <u>UMN Land and Atmospheric Science Courses</u>
 - UMN American Indian and Indigenous Studies Courses
- Job Search / Planning
 - UMN Interviews & Job Offers
 - UMN Resumes & Cover Letters
 - UMN Job Search Resources
 - LinkedIn Geoscience Job Network (i-GEO jobs)
 - Beyond the Professoriate
 - UMN Graduate School Academic and Career Planning Resources
 - UMN Graduate School Transferable Skills Checklist
- Fellowships, Internships
 - NASA Astrobiology Institute Funding Opportunities
 - Future Investigators in NASA Earth and Space Science and Technology (FINESST) Fellowship
 - NSF Graduate Research Fellowship Program
 - US Department of Energy Oak Ridge Fellowships
 - Christine Mirzayan Science & Technology Policy Graduate Fellowship
 Program
 - UMN Institute on the Environment Fellowships
 - UMN Informatics Institute / MnDRIVE Fellowship
 - Diversity of Views Experience Fellowship
 - <u>UMN Graduate School Fellowships for Incoming Students</u>

- UMN Graduate Education Office Fellowships
- UMN ESCI Department Fellowships
 - NOTE: These graduate fellowships are not awarded in addition to the funding you receive as a TA or RA. Rather, they are ½ time fellowships that replace half your funding as an RA or TA.
- UMN Doctoral Dissertation Fellowship
- MN Sea Grant Knauss Fellowship
- Association of Women Geoscientists Student Awards (scroll)
- University Corporation for Atmospheric Research Fellowships
- UMN Institute on the Environment Graduate Leaders
- UMN Institute on the Environment Graduate Scholars
- American Geosciences Institute Internships/Fellowships
- User Funding
 - Pacific Northwest National Lab Environmental Molecular Sciences Lab
- Summer experiences, Field course opportunities
 - International Geobiology Course
 - NASA Astrobiology Institute Online Courses
 - Marine Biological Laboratory Microbial Diversity Summer School
 - International Astrobiology Summer School Santander, Spain

- Outline departmental and regional seminars, presentation opportunities, and opportunities to meet with speakers for building a professional network
 - Department of Earth and Environmental Sciences Seminars
 - <u>UMN ESCI Student Research Symposium</u>
 - Saint Anthony Falls Laboratory Seminars
 - Center for Science, Technology, and Environmental Policy Seminars
 - Twin Cities Science Policy Network
 - UMN Institute on the Environment Events
 - <u>UMN Department of Civil- Environmental- and Geo- Engineering</u> Seminars
 - UMN Water Resources Science Seminars
 - Association of Women Geoscientists Webinars
 - UMN Dept. Land and Atmospheric Sciences Seminars
 - UMN Water Network
 - UMN IonE Boreas Community Hours
 - AIPG Seminars/Meetings
- Finding jobs after graduation
 - BioTechnology Institute UMN Opportunities
 - UMN CSE Career Center
- Outreach resources

- Outline opportunities, expectations, benefits, and/or compensation for mentoring new hires and/or students who wish to engaged in belonging, accessibility, justice, equity, diversity, and inclusion (Be A JEDI) efforts
 - The <u>ESCI DEI</u> homepage talks about the missions and visions of the ESCI department along with goals and activities that students, staff and faculty can participate in.
 - JEDI seminars are held weekly by the department.
 - Inclusive teaching workshop is offered in collaboration with <u>UMN-CEI</u> and <u>Sehoya Cotner</u> of the SEISMIC Initiative.
 - Earth & Environmental Sciences is also a committed participant of Unlearning Racism in Geoscience (URGE).
 - ESCI members can also participate in the CSE <u>Diversity & Inclusivity</u>
 <u>Alliance</u> which is comprised of students, faculty, postdoctoral researchers, staff, and alumni from throughout the college. The goal of this Alliance is to improve the college's climate through advancement and practice of diversity, equity and inclusion (DEI).
 - The MESA program makes some of the educational and research material accessible to the public through a series of exhibits in and around John T. Tate Hall on the east bank of the UMN Twin Cities campus.
 - OSA is a student-run program designed to improve public communication of science and interdisciplinary collaboration. They produce public exhibits and events that provide scientific context for artistic works and artistic expression of scientific research.
 - The Office of Equity and Diversity also offers Equity and Diversity

 Certificate Programs that are free for all current students, staff, & faculty on all five system campuses.
 - The Office of Equity and Diversity currently offers a series of online ECHO workshops where participants complete a set of readings and then participate in a synchronous small group workshop. Although required for completion of the Certificate Program mentioned above, these workshops are open to all faculty, staff, and graduate students and are free of charge.
 - CSE's <u>Diversity and Inclusion Opportunities</u> webpage also talks about diversity related opportunities and <u>support services</u>.
 - The Empowering Women in Science group runs a <u>A Friend in STEM</u> mentoring program for UMN scientists to mentor STEM students. The group aims to retain all groups in STEM fields including women and BIPOC students.
- Explicitly acknowledge, discuss, and suggest policies to limit the "time tax" put on people of color for participation in Be A JEDI activities and support clear path for opting out
 - No information available.

- o Information on honoraria and establishing/charging speaker fees
 - Instructions for Collaboratives to make payments to non-University people or companies, or to pay honoraria to visiting speakers or consultants can be found <u>HERE</u>.