This is a Resource Map for the Department of Geosciences Pod at the University of Massachusetts, Amherst. 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/).

**Mentoring Plans**

- **Mentoring Graduate Students**
  - The seminars for 1st year MS and PhD students in Geosciences provide strategies that help all students navigate graduate school. One of the benefits of this seminar is the cohort building that provides a way for peer mentoring throughout graduate school.
  - Summary of the intent of the resource map as well as the plan for working with new hires/students for connecting them with resources that will be of most use to them, e.g. schedule for initial call(s) and/or meeting(s) to identify needs/interests.
  - Individual/Group meeting expectations (interval/frequency, journal articles, presentations, socializing, time management, reviewing manuscripts, revising manuscripts/dealing with rejection, careers, current events, media requests).
  - Individual faculty members will be required to develop a lab group code of conduct that addresses the specific expectations listed here.
  - Mentoring training is required for faculty who advise grad students, and serving on student committees. Training provided through the UMass College of Natural Sciences (https://www.umass.edu/graduate/mentor-training) was developed by the National Research Mentoring Network, entitled The Center for the Improvement of Mentored Experiences in Research. Students and their advisors should map out what they can reasonably expect of each other when they begin working together.
  - Some requirements outlined in the code of conduct.
  - Evaluations: rubric, frequency for advisor/committee evaluations, encourage self-evaluation (reflection) and review long term goals and how to achieve them.
    - Grad student handbook

- **Mentoring Faculty**
  - Mentoring committees benefit from clear structure how often they meet, who organizes the meeting and the scope of the meetings. General information on mentoring available from the [UMass Advance Program](https://www.umass.edu/graduate/mentor-training).
    - New faculty have a 3 person mentor committee, chosen by the department head in consultation with the new faculty.
Mentor committees for lecturers and other non-tenure-track or other non-traditional appointments need to pay particular attention to the expectations of work that may differ significantly among positions and be composed of individuals who can collectively mentor the individual in all areas of their work.

Associate Professors should have mentor committees that may differ from the one that they had pre-tenure. See UMass Advance for information on mentoring and their finding that associate professor dissatisfaction is high at UMass [link].

- Mentoring Staff
  - UMass Workplace Learning and Development offers workshops for skill development.
  - We are not aware if staff currently have formal mentoring committees.

Core work resources
- Code-of-conduct is in development (deliverable #6) and is currently being reviewed by the faculty. When finished all members must sign this code of conduct that addresses inclusivity and diversity, mental health, publications or outputs, social media use, and other items.
- All divisions (graduate students, faculty, professional staff) have active unions that determine working hours, vacations, benefits and other items directly pertaining to the workplace.
- Profession Seminar, a weekly brown bag seminar for the entire Geosciences Department (GEO 701), required of all graduate students, provides professional development, skill skill building and mentoring opportunities.
- Reporting Policy - An anonymous reporting system is in development, with discussions between this group and the Department Head. It will address issues related to insensitivity, harassment, exclusion and what are the consequences. It will provide additional contacts for reporting outside of one’s advisor or the Graduate Program Director.
- Equipment - the UMass Outing Club provides equipment for rental, the Geoscience Graduate Student Organization (GGSO) is looking to establish a more formal collaboration with them and start building up a stash of our own for the department to loan out.
- Conference and workshop participation
  - Students who do not have funds to attend conferences can apply for travel funds. These are funds from the graduate school that the Graduate Program Directors of Geosciences and Geography administer.
  - Support to attend upcoming workshops can be requested from named Alumni funds in the department. These funds, disbursed every Spring, are well timed to support summer workshops.
  - Students wanting to attend identity group conferences (NABG, SACNAS, NAISA, etc.) can request department support from the GPD and Department Head. Student winners of the department diversity award are given funds to attend...
identity group meetings. Bromery fellows are given research funds that they may use to support travel to any conferences including those that are especially for minoritized groups.

**Community support and mental health resources**

- Services at organization/university:
  - Counseling services for students have two counselors of color available
  - Counseling groups for students of color (need more)
  - Advocacy: Graduate students of color Association GSCA, UMass faculty of Color Employee Resource Group, [https://www.umass.edu/studentlife/rso](https://www.umass.edu/studentlife/rso)
  - Cultural Centers: Malcolm X cultural center; Josephine White Eagle cultural center, Latin American cultural center; Yuri Kochiyama cultural center
  - General connections to University activities and services found at Diversity, Equity, and Inclusion.
  - UMass Employee Resource group for faculty and staff of color. Several groups allow folks with multiple minoritized identities to find support.
  - The Department has a [calendar of events](https://umass.edu/calendar) and a listserv, and the graduate students have a Slack channel and their own listserv
  - UMass Student Affairs and Student Engagement & Leadership host a variety of activities for the UMass Community [advertised on Campus Pulse](https://www.umass.edu/campuspulse), and the Valley Advocate newspaper [advertises a wide range of activities](https://www.valleymagazine.com) in the broader Amherst area
  - The “[unofficial incoming student guide](https://umass.edu/studentlife/rso)” lists many community resources and advice for moving to the area, compiled by past and current UMass Geoscience Graduate Students
  - Expectations for taking vacation and for reasonable work hours depends on union; faculty, staff and students have different unions with different expectations

- Needed:
  - We need both monetary and organizational assistance finding accommodations, moving and paying initial graduate student fees. This is especially needed for international students whose costs are often far higher.
  - Encourage and assist making connections to someone who may understand their experience (e.g., Black male counselor for a Black male student), perhaps an incoming graduate student buddy program.
  - Summer funding, especially for international students who are not able to find other jobs for those months.
  - Collaborative RA funding resources. If one faculty member has summer funding for multiple students, can cover a student from a different lab for the summer. This will also help to build departmental community.
  - Faculty support of graduate student initiatives and involvement in URGE.

**Skillset support resources**
● UMass graduate school’s **Office of Professional Development** and the UMass HR department’s **Workplace Training** offer workshops for skill development in a wide range of topics.

● UMass runs writing retreats for faculty of color and other events.

● Graduate students are assessed upon arrival for necessary courses and skills. A temporary committee for each student makes suggestions for additional courses, skills required, and associated activities that will be helpful for their program.

● The first-year graduate seminar introduces expectations and strategies for success in graduate school. This seminar was formerly just for PhD students, but an additional seminar for MS students was recently introduced. An equivalent undergraduate seminar is a possibility to explore.

● Seminars are organized as-needed to explore specific topics or skill sets. Students typically receive one unit of course credit for attending these seminars. Informal evening workshops on topics such as R or Python have been organized in the past, by both faculty and graduate students. A list of external tutorials, hackathons, bootcamps, and other resources would be helpful to create and maintain.

**Professional development resources**

● Available resources for training/development or best practices in:
  ○ Teaching/pedagogy
    ■ **Center for Teaching & Learning**
    ■ Teaching & Learning (Library Resources)
    ■ **Home - CIRTL Network Commons**
  ○ Project management/budgeting
    ■ **Post Graduate Program in Project Management - In Partnership with Simplilearn**
  ○ Media training
    ■ **UMass Amherst Public Engagement Project**
  ○ Proposal writing
    ■ First-year seminar
    ■ Prospectus process for PhD students
  ○ Public speaking
    ■ **Three Minute Thesis | Graduate School**
    ■ Prosem & conference presentations
  ○ Networking
    ■ Alumni job panels
    ■ Geo department listserv
  ○ Visualization/Design
    ■ **UMass GIS Hub**
    ■ Instructional Media Lab
  ○ Getting involved in professional societies
    ■ AAG
    ■ **AAG Careers and Professional Development Webinar Series**
    ■ GSA
● **GSA CEUs**
  ■ AGU
  ● **Learn and Develop | AGU**
    ■ Regional sections (e.g. NEGSA/NESTVAL)
    ■ Discipline-specific sections (e.g. AGU EPSP)
    ■ Community-driven societies (e.g. Friends of the Pleistocene)
  ○ Additional coursework/methodology training
    ■ **UMass Institute for Social Science Research (ISSR)**
  ○ Additional Professional Development
    ■ **Professional Development | Graduate School**
    ■ **Office of Faculty Development**
● Fellowships, internships, summer experiences, field course opportunities
  ○ A non-exhaustive list: NSF (GRFP, GROW, GRIP, INTERN), NASA, NOAA, NPS, USGS, MA Geological Survey, Ford Foundation, Fulbright, National Geographic, AWG, GSA, AGU, Hertz Foundation, Sigma Xi (additional sources listed [here](#))
    ■ The Department usually holds an annual research funding panel as part of the first-year seminar
    ■ Develop a resources page and/or Slack channel, and update regularly
    ■ Find a support system to allow this regular updating; potential ideas are the GGSO and/or Climate Committee
    ■ Do better than email blasts (which do get the info out but aren’t easy to digest), and make the information flow 2-way to accept and compile suggestions as well as disseminating them
● Graduate students have an opportunity to meet with GLS speakers following their talk, and BRiDGE lecture series include an hour-long informal mentoring workshop with graduate students.

**Outreach resources**
● 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
  ○ Seminars
    ■ DIP seminar (voluntary, receive course credit)
    ■ Prosem (mandatory, receive course credit, degree requirement)
    ■ GLS (voluntary but encouraged, speakers are funded by an unknown amount)
    ■ BRiDGE (voluntary, speakers are funded by an unknown amount)
    ■ 5-college symposium (voluntary, funding status unknown)
    ■ URGE (voluntary)
    ■ Bromery lecture (voluntary, funded by an unknown amount)
    ■ SES/CNS talks & webinars (voluntary, funding status unknown)
    ■ **NECASC webinars** & International Quaternary Webinar
  ○ Trainings
    ■ Faculty mentoring training
CNS TA training
- **OPD trainings/workshops**
- Optional DEI, allyship, and bystander trainings offered sporadically through various UMass offices and community organizations

- **Other resources**
  - Conference funds for students presenting
  - Alumni scholarships graduate students may apply for to cover research expenses, fieldwork, or professional development opportunities
  - AGU Bridge recruits and funds graduate studies for students of Color
  - The newly-formed Geoscience Graduate Student Organization has a small operating budget and event funds through the Graduate Student Senate
  - Ducks in a row mentoring night and [resource list](#) for undergrads
  - Occasional department/alumni career panels for undergrads and graduate students
  - Climate Committee established to identify ways to improve department climate and implement solutions
  - TA fellowships and training through the College of Natural Sciences
  - Bromery fellowships to fund graduate studies for students of Color and organize interdisciplinary symposia
  - The Department Chair can allocate small funds for events (such as the holiday party and end-of-year celebration)
  - Peer writing accountability groups within the Department and summer graduate student writing groups run by OPD
  - The Instructional Media Lab provides training and technical support

- **Community partnerships** (list is not exhaustive, and includes both partnerships with the Department and individual members of the Department)
  - Eureka
  - RiverSmart
  - Boy Scouts
  - STEMSEAS
  - Big Brothers Big Sisters
  - Kestrel Land Trust
  - Amherst Regional Public School System

- **Targets for improvement include:** 1) increased undergrad support in the form of mentoring, conference funds, research opportunities, community building, and skill training, 2) staff support in the form of filling open positions, improving working conditions and job security, and expanding support and inclusion for staff members, and 3) mechanisms to ensure that the burden of DEI work is more equitably distributed amongst our community, improved facilities

- **Several awards exist for DEI work on various levels, including within the Department of Geoscience, the College of Natural Sciences, UMass Amherst, and through affiliated organizations and professional societies. Service is a component of tenure decisions for tenure-track faculty, and expected of graduate students according to the Graduate**
Student Handbook, but these requirements are loosely-defined and poorly enforced. We have included additional details on commitments to broader impacts and DEI initiatives in our draft Code of Conduct pending review by the faculty and Department Chair to distribute the responsibilities more equitably, with the goal of establishing clearer expectations and evaluation criteria. We will also prioritize the creation of a centralized repository for ongoing initiatives to streamline these efforts, remove barriers for participation, allow them to continue beyond the duration of an individual's time at UMass, and improve recognition for ongoing work.

● Any member of the UMass community may nominate someone for the invited speaker series (GLS, BридGE, and Bromery); nominees are added to a list and remain listed until an invitation is extended to them. The list is maintained by an annually-rotating, self-organized group of students and faculty or formal committee, also responsible for selecting which speakers to invite during the year they serve. Invited speakers typically receive some form of compensation, with the amount and awarding process varying based on the lecture series, travel costs, and potential other factors. Efforts are currently underway to develop a formal process for requesting/receiving speaker funds, and to make the speaker selection process and compensation decisions more transparent.