



URGE Session 7 Deliverable: Resource Map for the University of Utah College of Mines and Earth Science (CMES), developed by the CMES URGE Megapod (Pods 1-2-3).

We recognize that mentoring and support resources are critical to creating a safe, inclusive, and anti-racist climate for all individuals, but especially minoritized STEM groups, and at all education and career stages. Therefore, a 'one size fits all' template is not feasible, and here we have focused largely on graduate student and post-doc mentoring plans and key resources. However, we try to emphasize common threads and recommended practices that should be transferable across individual experience levels.

This outline is largely based on 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). In addition to this, two existing resources in CMES provide excellent points for this resource map. They include Dr. John Lin's Research Group Orientation and Guide, and the Dept. of Atmospheric Sciences (ATMOS) Mentor/Mentee Collaboration Agreement (Appendix A). Our recommendation is that other CMES departments (and individual mentors) create similar agreements, with the additional considerations outlined below.

Mentoring plan

- Introduction, statement of intent: The goals are to establish expectations and agreements for a productive, inclusive, safe, and healthy learning and working environment. Open communication is key. Support resources should be clearly identified, and accountability measures to ensure a successful mentor-mentee relationship should be in place.
 - Onboarding/welcome information: 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)
 - Discuss expected roles of advisor, committee, other members of the research group, etc.

- Consider developing a mentor <u>network</u> rather than 1:1 exclusive mentoring model (see Appendix B and also the U of U <u>Matrix Mentoring</u> Network)
- Mentors should be chosen by mentees, not assigned. If there is formal mentoring program, ask the mentee who they might like to be a mentor for them.
- Mentor network should be within and outside of University. Across institutional support is important, as is support outside of academia and in sectors relevant to possible mentee career paths. Alumni may also be underutilized mentors.
- Consider introducing mentor network as a structured exercise for students in a required graduate course, like Reviews of Earth Science in GG or a new course being developed called Transform. The activity should be required to be completed but not required to be shared with the instructor or class, to maintain the students' privacy.
- Funding: Discuss salaries, payroll enrollment, timing of paychecks, benefits, and insurance well in advance
- Mentoring plans should be enforceable by higher administration to protect the mentor and mentee from potential violations. Otherwise, the mentoring plan is not meaningful.
- Outline expectations for taking vacation (e.g., 3 weeks), personal time off, and for reasonable work hours (e.g., 40-50 hrs/wk; be explicit!)
- Evaluations: rubric, frequency for advisor/committee evaluations, encourage self-evaluation (reflection) and review long term goals and how to achieve them

Core work resources

- GG's <u>Professional Ethics Policy</u>, which includes a **Code of Conduct**, should be reviewed and signed by all.
- Communication plan and expectations, e.g. how do members communicate with each other and what times are appropriate
- Reporting Policy address issues related to insensitivity, harassment, exclusion and what are the consequences (e.g. not everyone drinks alcohol; no "locker room" talk), provide additional contacts for reporting outside of advisor. CMES is identifying multiple individuals who can serve as informal support within the College. Session 6 Deliverables also outlined key reporting mechanisms such as the <u>Racist and Bias Incident Response Team webpage</u> in the Office for Equity, Diversity, and Inclusion (EDI), and discrimination, harassment, or sexual misconduct reporting through the Office of Equal Opportunity.
- Conference and workshop participation (how often and who pays for it?)
 - Be explicit about opportunities for this type of participation and at what point they will be expected to attend conferences
 - Be open to considering proposed workshops/conferences, especially for groups like SACNAS, NABG, AISES, GeoLatinas and others.
- Equipment and other necessary items

- Consider funding or providing access to shared-use field equipment, for example
- Community support and mental health resources
 - Provide guided discussion of Truong and Museus (2012) with all graduate students about racial stress coping mechanisms. This will empower mentees with "navigational strategies" identified in papers.
 - Outline key services at UU: good list available at <u>diversity.utah.edu</u> (American Indian Resource Center, DREAM, Ethnic Student Affairs, <u>Black Cultural Center</u>, LGBT resources). See also <u>women's resource center</u>, <u>ASUU</u>, <u>counseling and psychological services</u> (Crisis line: 801-587-3000).
 - Assistance finding accommodations, moving expenses/help
 - Encourage and assist making connections to someone who may understand their experience (e.g., Black male counselor for a Black male student)
 - Calendar(s) of events or mailing lists to join
 - What activities/institutions will help them feel at home? Are there local clubs, religious or spiritual organizations, organizations, hobbies they were previously involved with that they can get connected with in the area? Connecting with cohorts, organizations, social clubs with common identities and/or interests
 - Utilize instructor resource about acknowledge racial events in the news in class and how it impacts students; how to make space to honor and recognize students' experiences. https://cft.vanderbilt.edu/guides-sub-pages/crisis/
 - Dr. Mary Anne Berzins is developing a resource guide for Salt Lake City that will be helpful to faculty, staff and students coming to the U. Specific resources for different persons of color should be included.
 - Starting point, community resources for people of color:
 - Living Color UT
 - Utah Black Chamber
 - Business Guide (local food, salons, churches, cultural resources): <u>The Black Pages</u> and <u>this list</u> from <u>Black Lives Matter Utah</u>
 - Introductions for other people of color <u>fund membership fees</u> for organizations like SACNAS, NABG, AISES, GeoLatinas, ESWN, and others
 - Connect women of color with Women of Color Academics (WOCA) group on campus with events like this 2020 event, "Visioning our Future."

Skillset support resources

- What skills or experiences are required for their research/coursework? e.g., lab safety, driving, hiking/outdoors activities, compass/GPS navigation, swimming/SCUBA, operating power tools, first aid, etc.
- What skills training is supported through the organization, how would someone acquire/improve these skills? What training is available prior to arrival?
- 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?

- Professional development resources
 - Outline available resources for training/development or best practices in:
 - Teaching/pedagogy: UU <u>Center for Teaching and Learning Excellence</u>, UU <u>Center for Science and Math Education</u>, <u>Science Education Resource</u> <u>Center</u>, etc.
 - Project management/budgeting
 - Research Education
 - Media training
 - Writing resources (publications, proposals, abstracts)
 - Public speaking
 - Networking, <u>career planning</u>
 - Design/drafting of figures using Adobe Suite/Python/ArcGIS
 - Note: most software available free/discounted from <u>Office of</u> Software Licensing
 - Getting involved in professional societies
 - Additional coursework
 - List fellowships, internships, summer experiences, field course opportunities
 - Outline departmental and regional seminars, presentation opportunities, and opportunities to meet with speakers for building a professional network

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
- 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

Department of Atmospheric Sciences Mentee/Mentor Collaboration Agreement Mentor (Faculty): Mentee (Student):
As faculty advisor (mentor), I will:
 Serve as an advisor and mentor by providing intellectual guidance, cutting-edge research opportunities, and professional development; Encourage and enable you to participate in scholarly and professional activities such as attending scientific meetings, scientific paper reviews, manuscript authorship, teaching experiences, grant writing, and professional networking; Encourage you to reach out to subject matter experts outside of our research team, including your thesis committee and faculty and staff in other research groups; Assist the development of your research, teaching, writing, and oral and poster presentation skills; Meet regularly with you to evaluate and discuss your research and academic progress; Help you to manage and appropriately balance your research and academic activities; Assist your pursuit of academic and professional success and future employment; Abide by the University of Utah Faculty Code of Responsibilities and not discriminate against, harass, or impose prejudicial treatment because of race, color, religion, national origin, gender, sexual orientation, gender identity/expression, country of citizenship, age, political beliefs, or status as a person with a disability, protected veteran, or because of any other criterion or characteristic that is an impermissible basis, under applicable constitutional or statutory provisions (https://regulations.utah.edu/academics/6-316.php); Not impede communication between you and University Administrators in the Department, College, and University to discuss conflicts that may arise between us; Encourage that you participate fully in Department activities such as: seminars and thesis defenses, Department sponsored social activities, and study sessions with students outside of my group; Encourage improved language skills and inclusiveness by conducting group and professional discussions in English Avoid excessive communication with you after hou
 My expectations are that you (mentee) will: Enthusiastically pursue your graduate education and research; Meet regularly with me through drop-in or scheduled meetings to assess your research and academic progress, define and refine your topic of research, and receive professional guidance; Communicate with your committee members (and if applicable other faculty mentors), including meeting with then as a group at least once a year to review research and progress toward your degree; Fulfill the commitment of research hours expected based on your level of compensation for your assigned research project; Work additional hours on research and academic pursuits needed to complete your degree in a timely fashion; Discuss leaves and vacations with me in advance; Pursue and learn research methods appropriate for your topic area; Exercise the highest integrity in all aspects of your work including the collection, analysis, and presentation of research data and results; Support and nurture the success of our group by asking questions, being collaborative, and participating in open, honest, and respectful communication; Contribute to an environment of collegiality and collaboration with your fellow graduate students and scientists; Abide by the University of Utah Code of Student Rights and Responsibilities (https://regulations.utah.edu/academics/6-400.php); Alert an appropriate contact the Department Chair, Dean, or other University official) regarding any unwelcome conduct, academic or professional misconduct, or unethical actions by students, staff, or faculty; Have fun!
I (mentee), agree to the above Signature Date

Signature

Date

I (mentor), agree to the above

