URGE Resource Map for University/Organization

This is a draft Resource Map for the NARWaL pod at UNC Chapel Hill and University of Waterloo. 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, core work resources, etc
  - The goal of this resource is to provide a starting point and central list to help incoming students access poorly presented resources or “hidden curriculum” opportunities and expectations. A summary of mentoring, lab standards, safety procedures, lab reporting standards, and other relevant material can be found in the lab values statement. A few specific examples of resources and expectations are outlined below.
  - Conference and workshop participation: how often and who pays for it?
    - These conversations can be awkward for new students, but is a conversation every student and advisor has had before. Be explicit about desired and/or required opportunities for this type of participation and at what point students will be expected to attend and present at conferences.
    - If students have questions regarding expectations, ask the postdoctoral researchers and experienced PhD students about their experiences.
    - In addition to conferences hosted by large, international organizations, there are also more interdisciplinary, identity-based and local conferences, Ex. Carolina Climate Resilience Conference, STEM Noire, SACNAS.
  - Requirements for department funding and responsibilities associated with funded positions
    - UNC Geological Sciences Teaching Assistant Requirements
    - UNC Geological Sciences graduate student handbook
- Must apply for external grant to be eligible for supplemental Martin research funds
  - See list at end of document
- Community support and mental health resources
  - **UNC Benefits and Services** provides a list of services tailored to postdoctoral researchers but many services are applicable to students as well.
  - Assistance finding accommodations, moving expenses/assistance
    - UNC Subleases, Roommates, Off Campus Housing and Apartments Facebook group: [link](
    - Buy Nothing Sell Nothing Facebook groups (free exchange of all sorts of goods--great for housing supplies and is very active locally): [link](
  - Services at UNC
    - UNC ombuds office: [ombuds.unc.edu](
    - UNC Diversity and Inclusion Office: [https://diversity.unc.edu/](
    - CAPS Counseling Services at UNC: [https://caps.unc.edu/](
      - CAPS multicultural health program: [https://caps.unc.edu/services/multicultural-health-program](
    - Better help ([https://www.betterhelp.com/](
  - Calendar(s) of events or mailing lists to join
    - Job ListServ: [https://mailman.ucar.edu/mailman/listinfo/es_jobs_net](
    - Job Board: [www.findajob.agu.org/jobs/](
    - Job Board: [www.joshwaterjobs.com](
  - Suggestions for finding local clubs, activities, institutions, organizations, etc.
    - **Meetup** for finding local affinity groups: ([https://www.meetup.com/](
    - UNC affiliated clubs: [https://heellife.unc.edu/organizations](
    - Facebook groups - for finding local affinity groups
  - Businesses or other needs, e.g. gyms, barber shops/hair services, etc.
    - Get a bike! **Recyclery** for cheap/free, **Back Alley** for new, Chapel Hill **bike lanes/paths**
    - **UNC transportation** resources:
      - **Biking**
      - **Local** and **regional** public transit
      - **Carpooling, car sharing, etc**
    - The **Chapel Hill subreddit** also has many threads on businesses and resources
  - Follow people on Twitter! BIPOC researchers making waves in their field:
    @BetinaBrockamp @HendrattaAli @aaberhe @BerondaM @IBJIYONGI @ravenscimaven @astronaia @That_Astro_Chic @astrotoya @KYT_ThatsME @DNLee5 @TheSistasinSTEM @DrRubidium for more, check out **WaterPOC database**
  - Organizations for people of color or first generation students (some examples given below and a larger list presented at the end of the document)
- Request that membership fees, if they exist, be funded by your advisor or department! Ask other students about how to navigate this.
- Carolina First Generation Graduate Student Organization: [link](#)
- UNC Black Graduate and Professional Student Association: [link](#)
- Research Triangle NC 500 women science pod: [link](#)
- Geolatinas: [link](#)
  - Expectations for taking vacation and for reasonable work hours are covered in the lab values statement

- **Skillset support resources**
  - Peer mentorship and assistance is encouraged in the lab. If you have any questions or need suggestions be sure to ask your lab members.
  - Do you want or need to know how to code?
    - Research in the Global Hydrology Lab does require the ability to code, but you don’t need to know this prior to arrival! Lab mates will help answer questions!
    - Here are a few common languages that are used
      - R or Matlab (either one is fine, but you'll learn/teach yourself R basics in the required ‘Data Analysis’ class
        - R cheatsheets: [https://www.rstudio.com/resources/cheatsheets/](https://www.rstudio.com/resources/cheatsheets/)
      - Python and/or Javascript for Google Earth Engine
        - Link to a bunch of help resources
        - Setting up Google Earth Engine in python using Google Colab: [link](#)
        - UNC research computing for access to computational resources and training

- **Professional development resources**
  - Available resources for training/development or best practices in:
    - Teaching/pedagogy
      - NAGT: National Association for Geoscience Teachers: [link](#)
      - Teach the Earth (lots of peer-reviewed earth science curriculums at all levels): [link](#)
      - UNC Center for the Integration of Research, Teaching and Learning: [link](#)
    - Media training
      - UNC Media and Design Center ([link](#))
      - UNC Makerspace (3D printing, laser cutting, woodshop, prototyping of materials): [link](#)
    - Scientific writing
      - UNC writing center ([link](#))
      - Free online courses ([link](#))
  - Public speaking
● Toastmasters

■ Networking
  ● See list below

■ Design/drafting of figures using Adobe Suite/Python/ArcGIS

■ Getting involved in professional societies
  ● AGU H3S (link)
  ● Young Hydrology Society (YHS) (link)
  ● EGU ECS representative (link)
  ● UNC GSA (link)

■ Additional coursework
  ● HydroLearn (link) offers hydrology courses

○ List fellowships, internships, summer experiences, field course opportunities
  ■ See list below

○ Outline departmental and regional seminars, presentation opportunities, and opportunities to meet with speakers for building a professional network
  ■ UNC Geological Sciences Seminars (postdoc access): Postdoc@listserv@email.unc
  ■ UNC Geological Sciences event page: link

● 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
    ■ Time tax is the disproportionate time marginalized students and researchers spend serving on diversity, equity and inclusivity committees and mentoring students that take time away from their research. These opportunities are meaningful and provide value to yourself and to the community, however, can lead to burnout. Students are encouraged to pursue these activities and develop a plan with your advisor or mentor to be able to balance research and synergistic activities.

○ Reading Material
  ■ One mentor isn’t enough. Here’s how I built a network of mentors (link)
  ■ The importance of stupidity in scientific research (link)
  ■ Scientific progress is built on failure (link)
Networking and Mentorship Programs
Note: This work is currently being compiled by the JEDI Committee with the AGU Hydrology Section student subcommittee and will be a public resource in the very near future. Please do not reproduce without reaching out to Danyka Byrnes first! Our amazing volunteers have put their time into this.

SciMatch Program (teach your research in an underserved middle school for a day): https://ncsciencefestival.org/scimatch

WinSPIRE (summer internship program for women & non-binary high school students focusing on underrepresented minorities and first generation future college students): link

Alaska Native Science & Engineering Program

American Indian Science and Engineering Society

Asian Americans and Pacific Islanders in Geosciences

Earth Science Women's Network
Support scientist today and welcome scientists tomorrow

Ostem
Science, Technology, Engineering, and Mathematics (oSTEM) non-profit professional association for LGBTQ+ people in the STEM community.

National Association of Black Geoscientists
To inform students of career opportunities that exist in Geoscience

SACNAS
An inclusive organization working to foster success of Chicanos/Hispanics and Native Americans from college students to professionals.

500 Women Scientist
To serve society by may making science open, inclusive and accessible

AGU365
Mentoring365 is a virtual mentoring program developed among Earth and space science organizations to facilitate an exchange of professional knowledge, expertise, skills, insights, and experiences through dialogue and collaborative learning. The program provides mentors and mentees with structured, relationship-building tools to develop and accomplish focused career goals.

Earth Sciences Mentor Match
Connecting students with mentorship support to apply for fellowships and graduate school in Earth Sciences (including ocean, atmospheric, and planetary sciences).

500 Women Scientist Pod
To serve society by may making science open, inclusive and accessible

International Association for Geoscience Diversity
Global network of higher education faculty, staff and students, geoscience industry representatives, disabilities education researchers, and anyone interested in fostering accessible science. Their goals are to provide training and support to promote inclusive communities of research, instruction and active engagement for students, faculty, and geoscience practitioners with disabilities.

500 Queer Scientists
Visibility campaign for LGBTQ+ people and their allies working in STEM and STEM-supporting jobs, with the goals of ensuring the next STEM generation has LGBTQ+ role models, helping the current generation recognize they’re not alone, and creating opportunities for community connections and greater visibility within STEM.

Society of Latinxs/Hispanics in Earth and Space Sciences
Community of Latinx/Hispanic undergraduate students, graduate students, postdocs, faculty, and professionals dedicated to increasing and reinforcing the representation of Latinx/Hispanics in the Earth and Space Sciences through outreach, visibility, networking, and mentorship.

GeoLatinas
An inclusive, member-driven organization with the mission to embrace, empower, and inspire Latinas to pursue and thrive in careers in Earth and Planetary Sciences

Disabled for Accessibility in Space
DAIS is a platform to lift up disabled voices in planetary and space science fields through networking, community support, and advocacy. They are inclusive of all people that are associated with and/or working in space-related fields (e.g. geology, astronomy) with any type of disability or chronic illness. Their mission and driving purposes are to provide support to each other and to advocate for disability awareness and accessibility in physical and virtual community workplaces and environments.

Latinos in Science and Engineering

Minorities in Agriculture, Natural Resources and Related Sciences

Society of Wetland Scientists Multicultural Mentoring Program

STEMNoire
STEMNoire is a research conference and holistic wellness program intentionally curated to connect, uplift, and empower women of the African diaspora in the fields of Science, Technology, Engineering, and Mathematics (STEM).

American Association for Hispanics in Higher Education, Inc. Graduate Student Fellows Program
The AAHHE Graduate Student Fellows Program’s (GSFP) primary goal is to prepare Latina/o/x doctoral scholars for successful careers in academia; the GSFP also provides support to Latina/o/x scholars interested in pursuing careers within administration and policy in post-secondary education.

Science Graduate Student Research (SCGSR) Program
Prepare graduate students for science, technology, engineering, or mathematics (STEM) careers critically important to the DOE Office of Science mission, by providing graduate thesis research opportunities at DOE laboratories.
MentorNet
Our objectives are to provide ALL STEM students in the United States with access to effective mentorships in a vibrant community committed to student success.

Environmental Data Science Inclusion Network
The Environmental Data Science Inclusion Network (EDSIN) is dedicated to facilitating and supporting diversity, equity, and inclusion within the environmental and data science fields. They do this through activities that support progress in nine priority areas: Accessibility, Education and Training, Professional Development, Allies, Collaboration, Recruitment and Retention, Data Ethics, Cultural Change and Relevance.

Fellowships, Scholarships and Programs

UNC Award and Scholarships
A range of scholarships from UNC for faculty, staff, community members and current Carolina students. Check out the Diversity Awards which serve to recognize people and groups that have given their time and effort to advance diversity, equity and inclusion at Carolina and in our surrounding community.

List of Paid Summer Research Opportunities for Undocumented Students (compiled by Dr. Matthew Cover)

Future Investigators in NASA Earth and Space Science and Technology (FINESST)
NASA's Research Opportunities in Space and Earth Sciences 2019 (ROSES-2019) to support graduate student-designed and performed research projects that contribute to the Science Mission Directorate’s (SMD’s) science, technology and exploration goals.

UNC Royster Society of Fellows
Royster Society of Fellows was created through the vision and generosity of Dr. and Mrs. Thomas S. Royster in 1996. This is the premier doctoral recruitment fellowship at the University of North Carolina at Chapel Hill.

NASA Fellowships and Internships
NASA internships and fellowships leverage NASA's unique missions and programs to enhance and increase the capability, diversity and size of the nation’s future science, technology, engineering and mathematics (STEM) workforce.

NASA Minority University Research and Education Project (MUREP)
The Minority University Research and Education Project (MUREP) is administered through NASA's Office of STEM Engagement. Through MUREP, NASA provides financial assistance via competitive awards to Minority Serving Institutions

Ford Foundation Fellowship Programs [US]
An extremely competitive program that offers predoctoral, dissertation (final year of PhD) and postdoctoral fellowships. The Ford Foundation aims to increase ethnic and racial diversity in college and university faculties. Provides networking and career development events. Immigration Restrictions: Must be a US citizen US National or US permanent resident. Open to DACA individuals

McNair Scholars Program [US]
To prepare, empower and expose academically talented low-income, first generation and underrepresented students toward pursuit of an advanced degree. Undergraduate students apply to the program. Once accepted they chose a faculty mentor in their field to work with. There is no financial burden to the faculty mentor as the program funds summer research. The faculty mentor is expected to train/mentor the student in research and the program supplies other professional skills/services such as resume building, community service, college tours, financial planning cultural/social/networking events. The program is funded nationally and directly through universities.

Previous NSF Applicant and Winners
See a list and packages of NSF winners from all different backgrounds. This resource can be used to help put together your package!

Vanier (Canada)

PhD Fellowships for Women Scientists from Science and Technology Lagging Countries
The Fellowship is offered to women scientists from science- and technology-lagging countries (STLCs) to undertake PhD research in the natural, engineering and information technology sciences at a host institute in another developing country in the Global South.

American Fellowship (Women and girls)
AAUW American Fellowships support women scholars who are pursuing full-time study to complete dissertations, conducting postdoctoral research full time, or preparing research for publication for eight consecutive weeks.

500 Women Scientists Fellowship for the Future
Fellowship to support women of color who are pursuing community-based STEMM projects.

AAAS Entry Point Program [US]
Recruitment program to connect STEM undergraduates and graduate students with apparent and non-apparent disabilities to summer internship opportunities.

L'Oreal USA for Women in Science Fellowship [US]
Postdoctoral fellowship for women in STEM who are committed to serving as role models for future women scientists.

Graduate Fellowships for STEM Diversity [US]
Partnership between government agencies and laboratories, industry, and higher education with the goal of increasing the number of American citizens with graduate degrees in STEM fields. Open to all US citizens regardless of race or gender, but emphasizes recruiting a diverse applicant pool (and has the most diverse applicant pool of any US-based national STEM fellowship).

June Bacon-Bercey Scholarship in Atmospheric Sciences for Women
AGU scholarship ($1,000) for undergraduates and graduate students who are doing research in the fields of atmospheric sciences and meteorology or whose research is related to these fields.

Hispanic Scholarship Fund [US]
Offers mentorship and professional development opportunities to high school seniors, undergraduates and graduate students with Hispanic heritage, as well as the chance to apply for scholarships and conference attendance.
Harriet Evelyn Wallace Scholarship [US]
$5,000 scholarship for women graduate students.

Data Science Program - DS4A Empowerment
Scholarship Program that aims to train minorities worldwide in python programming. Open to all disciplines and career levels (high school, undergraduate, graduate, professionals, veterans,..)

IAGD Student Pathways Scholarship
This scholarship opportunity is intended to provide funds for students with disabilities to alleviate the costs while completing their degrees. These funds can be widely used from paying for tuition, parking passes, groceries, rent, etc. In the age of COVID this is especially important, and for many of our student members it was important beforehand and will be afterwards.

GSA Expanding Representation in Geosciences Scholarship [US]
This scholarship is for undergraduate students who are from groups who are underrepresented in the geosciences. There are six $1,500 awards and students can either apply or be nominated. Applications and nominees must be U.S. citizens studying at an accredited university or college in one of GSA's regional sections (including Canada and Mexico).

Out to Innovate Scholarships [US]
Scholarships intended for LGBTQ+ undergraduate and graduate students pursuing degrees in science, technology, engineering, or mathematics (STEM) programs. The scholarships are designed to promote academic excellence and increased visibility of talented LGBTQ+ students in STEM careers.

American Indian College Fund
The American Indian College Fund provides financial support for Native American students and tribal colleges and universities, and also supports programs for institutional growth and sustainability and cultural preservation.

STEM For Her
STEM for Her is an organization working to promote education to create awareness, excitement, and opportunities among girls and young women to launch successful STEM-related careers.

Financial Aid, Scholarships, and Programs Aimed at Women
A compiled list from Maryville University of programs and scholarships for women in underrepresented fields, mothers returning to college, and much more.

Inclusive Graduate Education Network Opportunities for Students
List of organizations and programs that partner with IGEN to offer professional development, conferences, workshops, fellowships/scholarships, and/or internships.