Professional Development: Key to Success in Grad School

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DMS Brown Bag seminar

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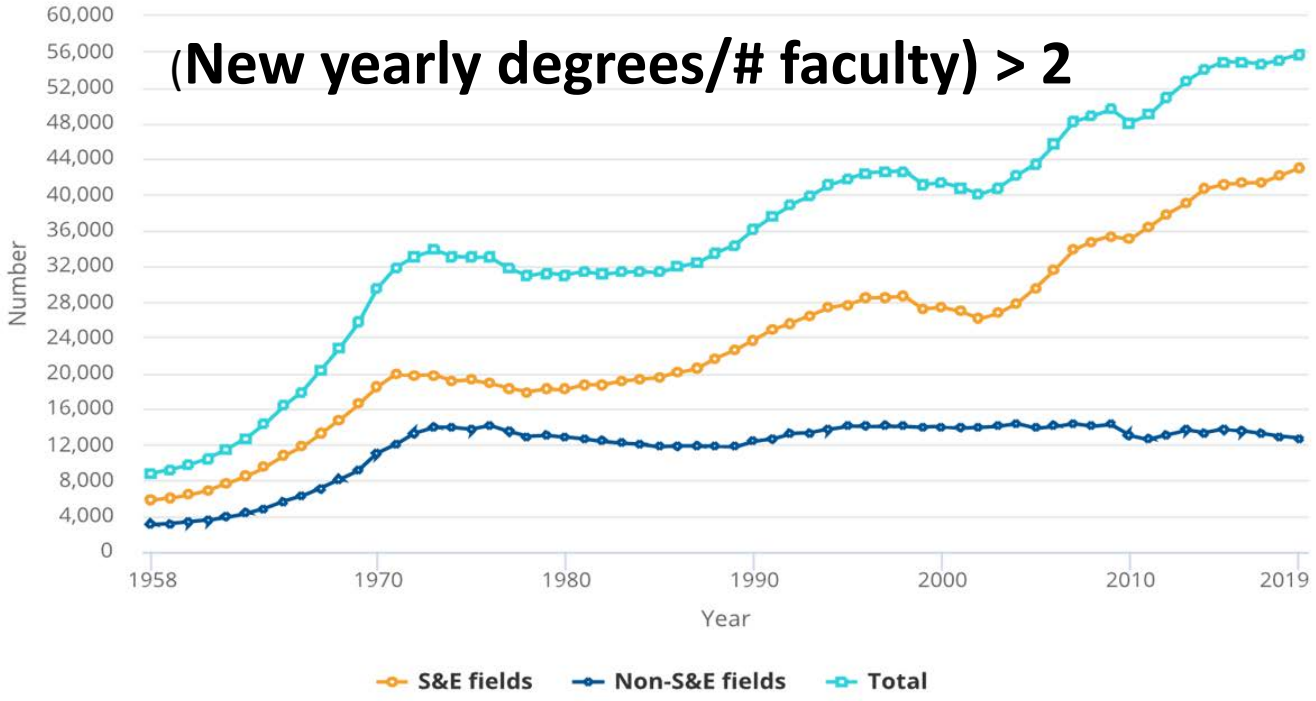
Credit: Cathy Renwick, Pinterest

The Professional Landscape

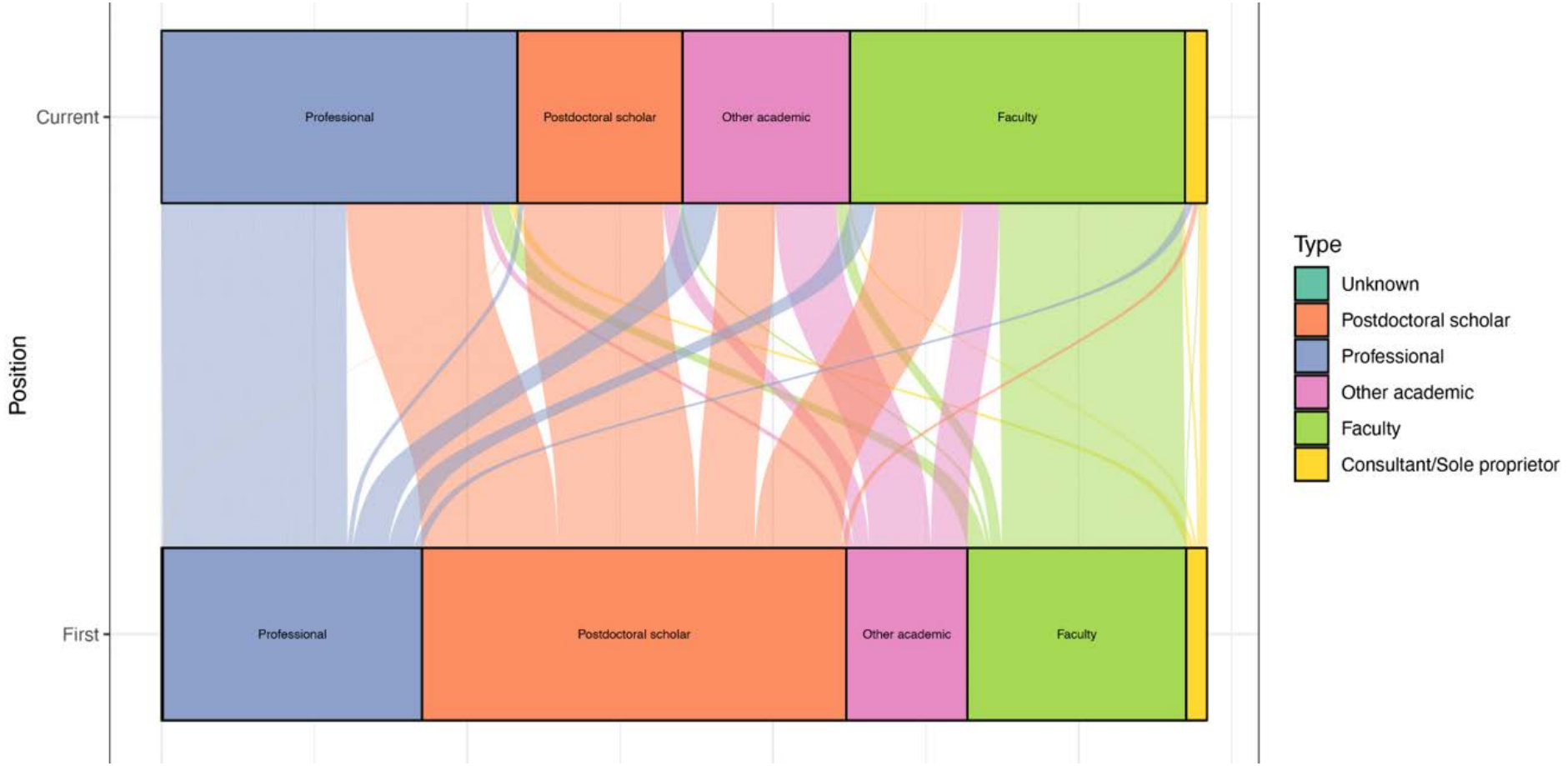
Doctorates awarded by U.S. colleges and universities: 1958–2019



S&E = science and engineering.

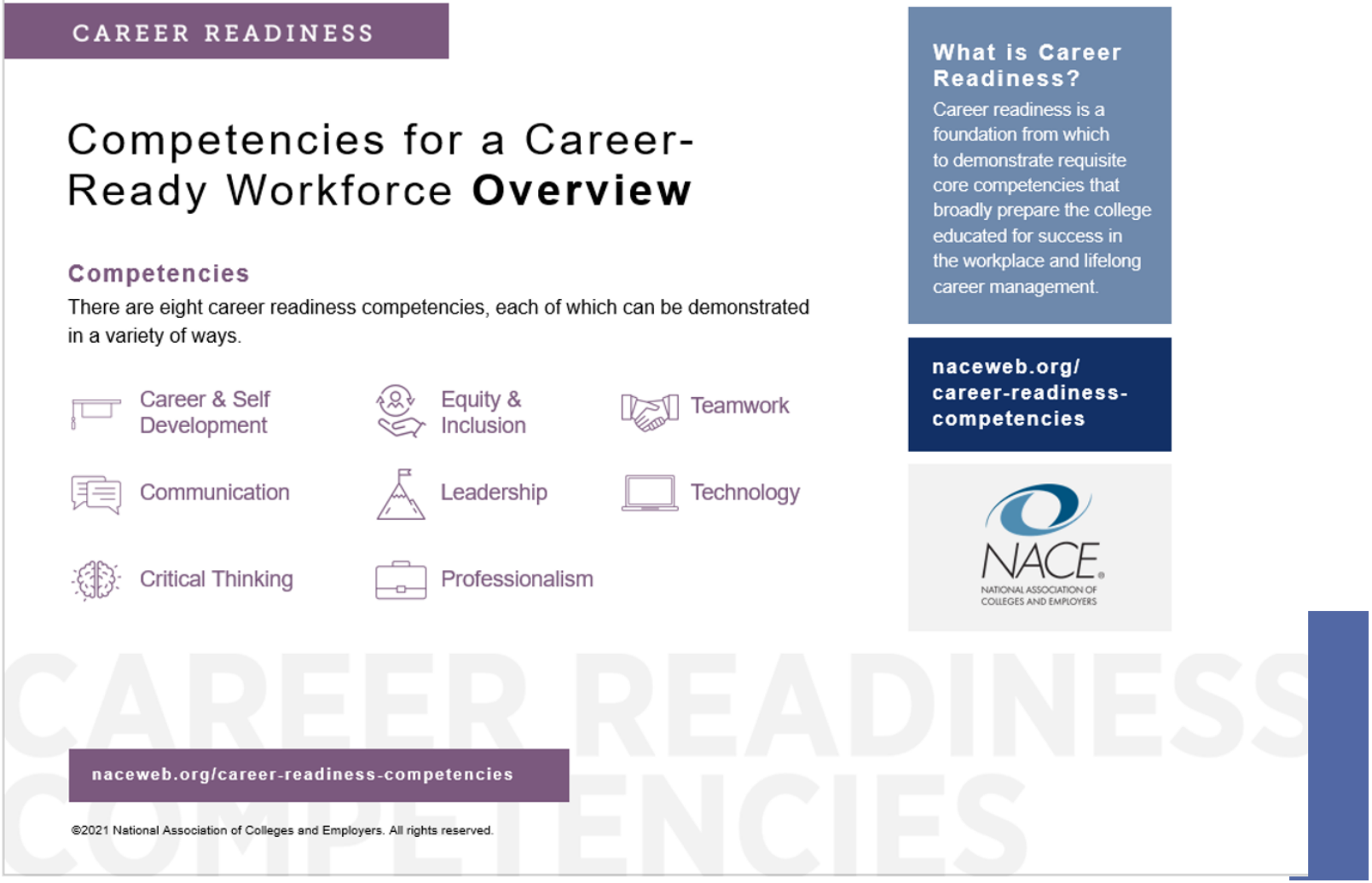
Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2019. Related detailed table 1.

Career Path Post-Graduation



Source: Uconn Grad School

Universal Career Readiness Competencies Sought by Employers



Not Much Different for Postdocs

The six core competencies are:

1. Discipline-specific conceptual knowledge
2. Research skill development
3. Communication skills
4. Professionalism
5. Leadership and management skills
6. Responsible conduct of research

Geosciences-Specific

- Oral/written communication
- Teamwork/collaboration
- **Technology mastery** (data management, analytics, modeling, AI, Bioinformatics, etc.)
- Leadership/Management
- Professionalism/work ethic
- Self-awareness and career development
- Global perspective

Source:
http://www.jsg.utexas.edu/events/files/Grad_skills_Summit_2019.pdf

ONGOING GRADUATE STUDENT CAREER PREPARATION ACTION ITEMS

Engage NOW to become the most competitive candidate!

Understand & Utilize Campus Resources

- ☐ Become familiar with the services and resources that the Center for Career Development offers graduate students. http://career.uconn.edu/
- ☐ Gain knowledge about any career preparation that occurs within your field of study at UConn or through your professional associations.
- ☐ Learn about the programs and services offered by the Writing Center. http://writingcenter.uconn.edu/
- ☐ Connect with programs at the Institute for Teaching and Learning to stay current with best practices in the classroom. http://itl.uconn.edu/
- ☐ Read career-related announcements sent to you through the Graduate Student Listserv and other communication channels.
- ☐ View The Graduate School's centralized calendar of events.
- ☐ Consider enrolling in a UConn Certificate Program to build a specific skill set and knowledge base. http://grad.uconn.edu/

Create and Keep Professional Documents Up-to-date

- ☐ Update or create your CV and/or résumé and review it each semester.
- ☐ Keep an electronic portfolio of anything that you feel shows evidence of your accomplishments.
- ☐ If you teach, compile student evaluation data of your courses.
- ☐ Familiarize yourself with the content that is typically included in a Statement of Teaching Philosophy and/or Research Statement.
- ☐ If embarking on an academic job search, periodically write down ideas of content to include in your Statement of Teaching Philosophy or Research Statement.
- ☐ Create drafts of outreach content that you can adapt when desiring to connect with others for networking, informational interviewing, and/or future job search.
- ☐ Ask people for recommendations while they still remember you.

Consistently Explore Career Fields & Career Paths

- ☐ Become acquainted with industry-specific job search websites. Identify employers of interest and also view actual jobs, familiarizing yourself with the experiences, skills, and training needed to be a competitive applicant.
- ☐ Seek opportunities to develop career-related skills through campus and community involvement and workshop attendance.
- ☐ Attend, network, and present at professional conferences.
- ☐ Conduct informational interviews with people working in career areas of possible interest.
- ☐ Consistently use LinkedIn to learn about peoples' work.
- ☐ Test various career paths through short-term career exploration activities, internships, or summer fellowships.
- ☐ Identify funding sources for continued research if that is a career path option.

Create & Cultivate Your Digital Footprint

- ☐ Conduct an Internet search on your name and see what comes up.
- ☐ Create a strong LinkedIn and/or other electronic professional profile.
- ☐ Contribute to conversations within professional groups and forums.
- ☐ Consider creating a blog or consistently contributing to one in your primary and secondary fields of study.
- ☐ Consider creating your own website with professional content.
- ☐ Make choices about your digital involvements and create a rhythm to your participation.
- ☐ Add videos of your best presentations or job talks to your electronic profile.
- ☐ Explore using an electronic dossier service to organize and gather your professional materials.

To schedule an appointment with a career consultant at the Center for Career Development, call 860.486.3013.

career.uconn.edu
860.486.3013

UCONN

Professional Development Program for Graduate Students of DMS

Tools and opportunities for proficiency:

- **Research & Scholarship**
- **Professional**
- **Job Market**

Elements of Professional Development Program at DMS

- GPA of 3.0 or above
- Plan of study
- Passing the comprehensive general examination (Ph.D. students)
- Completion of thesis
- Annual student report
- Friday seminar series and brown bag series
- Graduate student research colloquium (Feng)
- Travel awards
- Competitive research fellowships
- **Professional development course (MARN 5500)**
- **Individualized Development Plan (http://marinesciences.uconn.edu/academic/graduate-student-handbook/#prodev)**
- Exit Interview

Proficiency

- **Research and scholarship:**

  Research skills, thesis, publications, ethics

- **Professional:**

  Presentations, grants, research management, leadership, conflict management

- **Job Market:**

  CV or résumé, teaching portfolio, job application and interview, networking

IDP Advantages

- Research and scholarship proficiency
- Learn the business of science
- Prepare to succeed in the work market
- Satisfactory and productive experience in graduate school

Building your IDP (see graduate student handbook)

- **Aptitudes/Interests**: Assess current skills, strengths and weaknesses, interests, and explore career fits
- **Plan**: How to develop skills to meet academic and professional goals
- **Evolve**: Communicate with supervisors, advisors, and mentors about changing goals and related skills

See: myidp.sciencecareers.org

Your IDP Road: You and Your Mentor

Basic Steps	***For Graduate Students***	***For Mentors***
Step 1	Conduct self-assessment	
Step 2	Write an IDP. Share IDP with mentor and revise	Review IDP and help revise
Step 3	Implement the plan. Revise IDP as needed	Establish regular progress review
Step 4	Survey opportunities with mentor	Discuss opportunities with student

Creating your IDP

Areas to develop (Assess your scholarly and professional competencies. What do you need to develop?) **Questionnaire**	**Goals: long—term** (What will you do to improve in the areas you have identified?) **SMART**	**Goals: Short term** (What could you do this year?)	**Strategy for Reaching Goals**	**Steps and Timeline for completion of goals** (What steps will you take to accomplish your goals and by when?)	**Resources available** (Human or electronic)	**Outcomes** (What will you have done to indicate that you have reached your goals?

SMART

- **S**pecific – Is it focused and unambiguous?
- **M**easureable – Could someone determine whether or not you achieved this goal?
- **A**ction-oriented – Did you specify the action you will take?
- **R**ealistic – Considering difficulty and timeframe, is this goal attainable?
- **T**ime-bound – Did you specify a deadline?

Areas and Goals for Professional Development – Matt Sasaki

Establish a broad knowledge base –
Strategy goals [career advancement]:
- Consistently attend seminars and lecture series
- Continue to read papers on a wide range of topics; discuss with other people or in a journal club

Tactics goals [skill improvement goals]:
- Take courses on molecular biology (Fall 2017)

Become more comfortable with statistical analysis and design of experiments –
Strategy goals:
- Work on critical analysis of experimental design from papers
- Take an active role in experimental design in lab projects

Tactics goals:
- Take two stats courses (Fall and Spring 2017-2018)

Work on writing papers and navigating the peer review process –
Strategy goals:
Tactics goals:
- Publish at least one paper a year

Begin to work on writing and managing grant proposals and budgets –
Strategy goals:
- Study successful funding proposals

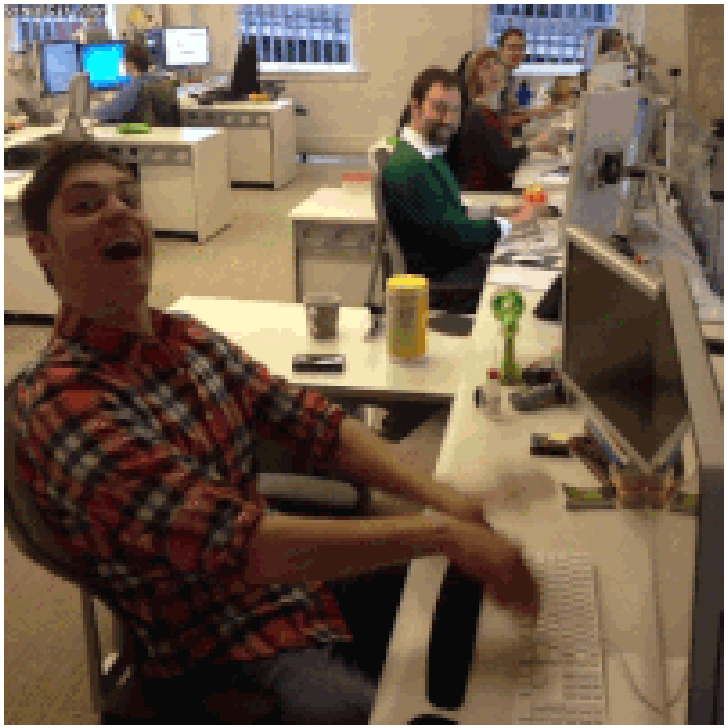
Tactics goals:
- Complete preliminary study and furnish results into full NSF proposal (Fall 2017?)
- Talk with Lydia about managing lab and ordering

Become comfortable presenting research to scientific audiences –
Strategy goals:
Tactics goals:
- Give at least 1 scientific talk per year (brown bag or at conference)

Hone teaching and mentoring; Become more comfortable with delegating tasks –
Strategy goals:
- Mentor/work with undergrads on research project
- Continue to TA courses

Tactics goals:
- Lecture for undergrad courses when available
- Take at least 1 workshop on teaching/pedagogy per year

WHAT'S YOUR NEXT STEP?



- **Giddy up: Start working on your IDP**
- **Will ask for IDP in your annual report (due in January)**