Career and Professional Development Planning at Michigan State University

Dr. Matt Helm, Coordinator of Ph.D. Career Services
http://grad.msu.edu/prep/
Goals of Session

- Expose students to Ph.D. Career services—Resources, services, programs
- Expose students to PREP Model for Career and Professional Development
- Have students self assess in key competency areas for success in all sectors
- Have students think strategically about what successful career and professional development means using PREP matrix
Note on Purpose

—“Purpose is a deep source of meaning, the reason we are alive; it generates energy and life direction.” (Handbook on Coaching)
Definition of Graduate and Professional Socialization

- The process through which individuals gain the knowledge, skills, and values necessary for entry into a professional career requiring an advanced level of knowledge and skills.
PREP at Michigan State University:
Service to graduate students based on scholarship.

Planning for career and professional goals-
entry to exit

Resilience and tenacity through multiple
career and life stages

Engagement in decision-making and skill
development

Professionalism in research, teaching, and service
The mission of Ph.D. Career Services is 1) to enhance the quality of career and professional development planning at the doctoral level and 2) Connect graduate students to career and professional development opportunities consistent with their goals and values. In order to accomplish this mission, Ph.D.C.S. provides specialized services, resources, and programs that enhance and supplement those offered by academic units and other campus career offices.
PhD Career Services
Services, Programs, Resources

- Career Consultations and Counseling for Academic and Nonacademic positions
- PhD Job Search Workshop Series
- PREP Resources
- My Spartan Career and Career Search
- Alumni Networking Opportunities
- PhD Career Resource Library
- Credential Files

Appointments with Dr. Matt Helm can be scheduled at: http://careernetwork.msu.edu/students/advising
Where do Engineering Ph.D.’s work?

- What skills are important to these environments?
- Self Assessment
Graduate Student Career Developmental Process

CAREER

Job Search/Action Plan
- Resumes, interviews, researching options (Networking)

Focusing
- Which organizations are a good fit?
- What do I need to be competitive? Who can connect me to these organizations? (Networking)

Exploration
- What’s out there? What options do I have? What jobs fit my skills? What careers and industries can use them? (Networking)

Self Assessment
- Who am I? What are my interests? What kinds of skills do I have? What are my work-related values? What is my work style?

Adapted from Peter Fiske: To Boldly Go: Practical Career Advice for Scientists, Workshop at MIT, April 1998. Modified from Stanford University Career Development Office.
Graduate student tasks & responsibilities:

- Define course of study, research topics
- Learn and develop expertise in your subject area
- Learn research practices & to manage your research responsibilities
- Publish, present research to diverse audiences
- Support & funding for research
- TA, and develop teaching proficiencies
- Become a member of your “community of practice”
Three Stage Model of Graduate Student Development*

1. Early Stage

2. Mid Stage

3. Late Stage

This model illustrates some of the commonly encountered challenges facing graduate students.

*Adapted from materials MIT model
Early Stage

(1st year, thesis proposal, up to qualifying exams)

Primary Goals

• Maintain motivation

• Manage academic demands

• Develop a clear sense of purpose & direction

Is this what I really want to do & why am I doing this? Is this going to help me graduate?”
Early Stage: Coursework (Early Years)

Ph.D. Career Services

- Self Assessment: Attend career workshops.
- Exploration: Get familiar with Ph.D. Career Services and PREP Resources
Early/Coursework: Your Department

- Mentoring: Plan your course of study with your advisor
- Exploration: Attend department orientations, training sessions
Mid Stage
(qualifying or preliminary exams, research and classes)

- “Will I ever finish?”
- Pressure from family/major professor
- Few milestones
- Difficulties with:
  - procrastination
  - perfectionism
  - motivation
  - time management
Qualifying Exams
(MID Stage to Late Stage)

**Ph.D. Career Services**

Academic Career
- Develop your CV. Attend a CV workshop.

Expanded Career Options: Exploration:
- Seek internships in industry.
- Attend panels on career opportunities outside the lab.
- Read about career options.
- Take additional coursework in areas to expand your marketability and skills (finance, entrepreneurship, management).
Your Department: Qualifying Exams (Mid to late stage)

- **ACADEMIC CAREER**: Exploration/Networking: Attend conferences in your field.

- Exploration: Gain experience as a teaching assistant. Seek experience overseeing undergraduate research.

- **Expanded CAREER OPTIONS**: Networking: If you are doing research that has industry applications, build industry contacts. Gain experience presenting your work to people in industry.

- Exploration: Attend career presentations sponsored by your department. Learn about careers alumni/ae have pursued.
Late Stage
(after comprehensive exams, analyses, writing, job search)

- Plans for the future?
- Job market? (“Where’s the payoff for all this work!”)
- Consider expanded Career Opportunities
- Sense of no “real world” skills
- Balance-professional & personal
Final Stage Of Dissertation (Late Stage)

Ph.D. Career Services

- Interviews:
  - Arrange a mock interview to polish your interview skills
  - Use the My Spartan Career system to arrange on campus interviews.
Dissertation: Late Stage

ACADEMIC CAREER:
- Exploration:
  - Begin researching postdoctoral options (apply 6-10 mo. in advance).
  - Participate in the hiring process for any new candidates for faculty positions in your department. Attend their job talks.

- Mentoring: Ask your advisor for advice about pursuing an academic career. Discuss your career plans with your advisor.

- Writing: Develop your publications.

- Expanded CAREER OPTIONS: Networking: Seek faculty contacts who have connections with industry.
Final Stage of Dissertation: Late Stage

- **ACADEMIC CAREER:** Mentoring: Seek faculty advice and support (recommendations).

- Interviews: Actively pursue first interviews for faculty positions at academic conferences (fall-winter of final year).

- **Expanded CAREER OPTIONS:** Exploration/ Networking: Attend industry seminars sponsored by your department.

- Interviews: Participate in any department recruiting activities (with industry employers).
Teaching and Learning/Teaching Assistant Program (Mid-late stage)

Academic Careers

- Develop Teaching Philosophy and Portfolio
- Interviews: Polish your job talk skills.
MSU Writing Center
Late/Final Stage

- Seek advice on publications.
- Ask for critique of cover letters for academic or industry jobs.
Student Clubs/Organizations
Science and Engineering Clubs
Council of Graduate Students

Coursework/early
- Exploration: Attend talks on various fields.
- Networking: Meet peers from many departments

Quals/Mid
- Attend events on many career topics. Networking
- Develop your network of employer contacts by attending various events.
- Network with students who have done internships and/or interviewed in various fields (e.g. learn about case interviews). Exploration/Networking
The light at the end of the thesis.

Can you see it?

Jorge Cham @ The Stanford Daily
Graduate Student Motivational Level

I will be an agent of change!

Jorge Cham © The Stanford Daily
Degree Completion & New Career Opportunities!

- Competencies
  - Communication Skills
  - Job Search Strategies

- Professional Themes
  - Planning
  - Resilience
  - Engagement
  - Professionalism

- How to: ?
  - MSU Workshops & Activities
    - Writing CV & Cover Letters
    - Securing Academic Positions at 2-, 4-yr Institutions
    - The Academic Job Search
    - Responsible Conduct for Research
    - CCTP
    - Talking About Teaching
    - From Graduate Student to Professional
    - Lilly Workshops
  - Degree Completion & New Career Opportunities!
Many Companies Initiating formal Ph.D. Hiring Practices

Two Examples:
- Consulting
- Finance

Looking for engineers
Ph.D. Recruiter from Boston Consulting: What we look for in prospective candidates

- 40% IQ - Analytic acumen
- 50% EQ - Social and emotional acumen
- 10% Clarity of purpose (Does it make sense why you are applying)
Social and emotional intelligence

Ways to develop:

- Clubs/organizations
- Robotics competition
- Supervising undergraduates,
- Teaching Assistant
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<td>Navigating the Ph.D.: A Writing Workshop</td>
<td>Career Selection and Professional Development: Professionalism and Professional Development for Success</td>
<td>The Teaching Assistant Program: Orientation Responsible Conduct of Research</td>
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<tr>
<td>Mid</td>
<td>Ph.D. Job Search Series: Networking</td>
<td>Dissertation Writing Workshops</td>
<td>Career Selection and Professional Development: Translating Academic Success into Expanded Career Opportunities</td>
<td>Responsible Conduct of Research The Teaching Assistant Program: Workshops Grant Writing Workshop: VPRGS</td>
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<tr>
<td>Late</td>
<td>Dissertation Formatting Ph.D. Job Search Series: CVs, Interviewing Skills</td>
<td>Conflict Resolution</td>
<td>Career Selection and Professional Development: Securing Academic Positions at 2- and 4-year Institutions</td>
<td>Certification in College Teaching</td>
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PREP: Planning-Resilience-Engagement-Professionalism

Welcome to the Career and Professional Development Resources at MSU that focuses on four professional skills that are key to career and professional development.

PREP focuses on four professional skills that are key to career and professional development: Planning throughout the graduate career to identify and successfully achieve career goals; developing Resilience and tenacity to thrive through personal and professional stages; practicing active Engagement in making important life decisions and in acquiring the skills necessary to attain career goals; and attaining high standards of Professionalism in research and teaching.

To begin choose one of the following stages: Early | Mid | Late
## Early

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*Planning, Resilience, Engagement, Professionalism*
Why Graduate School?

Should I Go to Graduate School?
Graduate School in Your Future?
Is Graduate School For Me?
An Unvalidated Graduate School Potential Test
Advice for Undergraduates Considering Graduate School
Should I Go to Graduate School?
Notes on the PhD (And Some Questions to Yourself)
Questions to Ask to Determine Your Goals and What the PhD is All About
A Very Different Degree
What is Graduate School?
A Graduate School Primer
Mike Gleicher's Graduate School FAQ

http://career.berkeley.edu/Grad/GradForMe.stm
Programs Offered and Who Attends?
(by Graduate School Staff & Guest Speakers)

**Graduate Students from more than 40 depts.**  
2006-07

- Conflict Resolution  
  (faculty, graduate students-MSU, elsewhere)  
  624

- Teaching Assistant Program  
  655

- Responsible Conduct of Research  
  138

- Ph.D. Job Search Series  
  912

- Career Selection and Professional Development  
  376
  2,705
Exploring: Consulting

**Exponent** (formerly Failure Analysis) - A leading engineering and scientific consulting firm.
Self-Management with PREP:

Managing your professional preparation and development
How to: 
Becoming your Own Manager

5 Strategies for Success

1. Take responsibility and ownership for your success.
2. Know available resources
3. Think ahead
4. Have a plan!
5. Identify (and deal with) obstacles
Career Planning

- Explore career options (academic & non-academic)
- Strategize to gain experience, knowledge, and competitive edge
  - Take specific courses
  - Conduct informational interviews/Field Research
  - Attend workshops
  - Teaching, work, or internship experience
  - Network!
Final Thoughts

- You are the manager of a complex project
- You are not alone—numerous resources to support you
When students begin to plan fully to achieve their goals and to exercise their strengths, the effect is synergistic—they get more done and are more connected to the community for support.
Upcoming Workshops and Conferences

- From CV to Resume, March 19, 5-6:30pm, Student Services Building, Room 6.
- Mastering the Interview, March 26, 5-6:30, Student Services Building, Room 6.
- Translating Academic Success into Expanded Career Opportunities in Agencies, Industry, Academia, and Non-Government Organizations April 5, 2008, Kellogg Center

For other PREP Related Workshops see:
http://grad.msu.edu/stuwork.htm