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Session I: Aligning Expectations and Effective Communication

Oct. 11, 2024, 12 – 1:30pm, Conf. Rm. L (North), Prentice Women's Hospital, Chicago
Oct. 18, 2024, 12 – 1:30pm, Norris Student Center, Evanston

Session II: Fostering Independence and Promoting Professional Development

Nov. 15, 2024, 12 – 1:30pm, Virtual

Session III: Assessing Understanding and Cultivating Ethical Behavior

Dec. 6, 2024, 12 – 1:30pm, Virtual

Session IV: Equity and Inclusion

Jan. 10, 2025, 12 - 1:30pm, Chicago (location TBD)
Jan. 24, 2025, 12 - 1:30pm, Evanston (location TBD)

Session V: Defining and Articulating Your Mentoring Philosophy and Plan

*Prerequisite: Completion of sessions I-IV required prior to session V.

Feb. 21, 2025, 12 – 1:30pm, Evanston (location TBD)
Feb. 28, 2025, 12 – 1:30pm, Chicago (location TBD)

**Office of the Provost
Advancing Mentoring
Excellence Program**

TABLE OF CONTENTS

I. FOSTERING INDEPENDENCE

II. PROMOTING PROFESSIONAL DEVELOPMENT

RESOURCES

Information on counseling and other types of support can be found at:

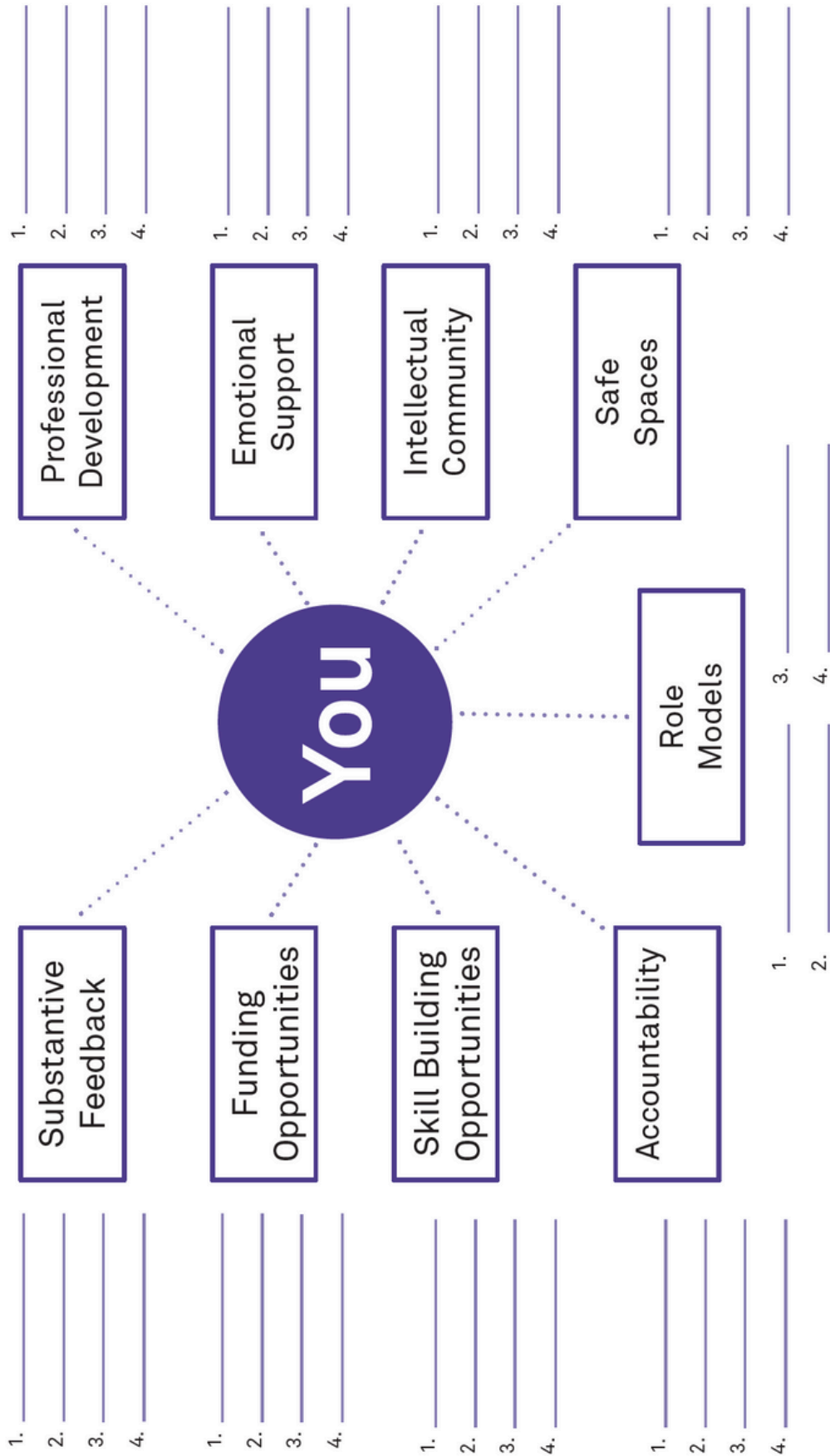**Mentorship Resources: Office of the Provost - Northwestern University**

This webpage provides a thorough—though not exhaustive—list of resources for mentoring, well-...

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I. Fostering Independence
Mentoring Network: Resource A

Map Out Your Current Mentoring Network

Northwestern | THE GRADUATE SCHOOL

Professional Development

Emotional Support

Intellectual Community

Safe Spaces

You

Role Models

Substantive Feedback

Funding Opportunities

Skill Building Opportunities

Accountability

1.
2.
3.
4.

Mentoring Network: Resource B

NAME	Substantive Feedback	Sponsorship	Access to Opportunities	Accountability for What Really Matters	Role Models	Professional Development	Emotional Support	Intellectual Community	Safe Space

Content and some format derived from National Center for Faculty Development & Diversity (www.FacultyDiversity.org) and Earth Science Women's Network (https://eswnonline.org/mentor-mapping/)

MENTORING NEED Substantive Feedback	WHAT	WH0 (EXAMPLES)
	• Classic mentoring (i.e., which journal to submit to/course to teach/activity to engage in?) • Navigating specific conflicts at your institution • Are you making good progress for your career?	• Mentor • Department Colleagues - both leadership & peers • Intellectual Community • Coach • Faculty Affairs • Near Peer Mentors

MENTORING NEED Sponsorship	WHAT	WH0 (EXAMPLES)
	People who: • Lobby for you behind closed doors • Mention your name for promotions/leadership • Suggest you be given more responsibility in a project • What do you need sponsorship for? • Who have you (or could you) sponsor?	• Senior Department Faulty • Department Colleagues • Mentors from other Institutions • Colleagues met at conferences or through professional organizations • People who have "seen you at your best," or have seen you overcome challenges

MENTORING NEED Access to Opportunities	WHAT	WH0 (EXAMPLES)
	• Making sure your network (people & organizations) alerts you to upcoming opportunities (e.g. workshops, grant calls) • Leadership Opportunities • Job Openings • Teaching/Reviewing/ Speaking Opportunities • Collaborations • Awards • Media Contacts/Coverage	• Internal Mentors • Peer Mentors/Peers • External Mentors • Previous/Past Mentors • Sponsors • Community Organizations • Listservs • Institutional Resource Centers

MENTORING NEED	WHAT	WH0 (EXAMPLES)
Accountability for what Really Matters	Someone who will: • Check in to make sure you are making progress with a given task • Give you a reality check as to what is important • Challenge your thoughts as to where to put your energy	• Departmental/Divisional Leadership (professional) • Traditional Mentor • Collaborators • Partner/Spouse/Family • Friends • Career Coach
Role Models	People who demonstrate behavior we want to emulate in different aspects of our lives: • Work-life integration • Work Ethics • Productivity • Career Choices • Skill Set	• Colleagues • Past Mentors • Internal & External Institutional Leaders • Community Leaders • Friends & Family NOTE: perhaps one person is not a ROLE MODEL in every single area
Professional Development	• Inspiration to improve yourself by gaining skills • Time Management • Conflict Resolution • Public Speaking • Personnel Management • Budgetary/Financial Management	• Internal Resources (workshops, degree programs, leadership programs, seminars, CTSAs, Human Resources, Library) • External Resources (conferences, workshops) • Coach • Professional Organizations • Online Resources

MENTORING NEED	WHAT	WH0 (EXAMPLES)
Emotional Support	• Someone you feel comfortable sharing your emotions with • Someone (or something) that helps you deal with stress • Someone who believes in you	• Trusted Colleagues • Friends • Family • Religious Community • Pets • Other

MENTORING NEED	WHAT	WH0 (EXAMPLES)
Intellectual Community (Readers)	• People whom you can bounce ideas off • Getting feedback at each stage of your work, from initial idea to finished product • People with whom you can share ideas with at all stages knowing you will get honest feedback without having to fear you will be laughed at or they will steal your ideas	• Peer Group (formal or informal) • Collaborators/Colleagues • Traditional Mentor • Divisional Presentation Opportunities • Writing Groups • NUCATS Review Opportunities • Professional Editor

MENTORING NEED	WHAT	WH0 (EXAMPLES)
Safe Space	• People you trust who will let you vent without judgment or criticism • Blow off steam, express your frustration • Help find a way to deal with the issue in a calm, composed, and unemotional way • May mediate on your behalf	• Trusted Colleagues • Coaching Program • Ombudsman • Faculty Wellness Program • Formally or Informally Created (peer) Groups • Family • Friends • Religious Community • Counselor/Therapist

Resource B: References

Chopra V, Arora VM, Saint S. (2018). Will You Be My Mentor?—Four Archetypes to Help Mentees Succeed in Academic Medicine. JAMA Intern Med: 178(2):175–176. doi:10.1001/jamainternmed.2017.6537

Glessmer MS, Adams A, Hastings MG, Barnes RT. (2015) Taking ownership of your own mentoring: Lessons learned from participating in the Earth Science Women's Network. Available online at: https://eswnonline.org/wp-content/uploads/2019/11/network_map_presentation.pdf

Kram KE, Higgins MC. A new approach to mentoring. Wall Street Journal. 2008 September 22. Available online: https://online.wsj.com/article/SB122160063875344843.html

Kram KE, Higgins MC. Building Your Developmental Network Part I. (2013). Available online: https://www.bumc.bu.edu/facdev-medicine/files/2009/12/Developmental_Network-AssessmentKramandHiggins.pdf

Montgomery, B. L. (2017). Mapping a Mentoring Roadmap and Developing a Supportive Network for Strategic Career Advancement. SAGE Open. https://doi.org/10.1177/2158244017710288

National Center for Faculty Development & Diversity Mentoring Map. (2011). Available online: https://www.google.com/url?
sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjww-vBu8PzAhX8l2oFHY1cCj0QFnoECBEQAQ&url=https%3A%2F%2Fwww.facultydiversity.org%2FPathfindersMentorMap&usg=AOvVaw26X6CFqABDB2FLdl0Z8vXw
Also available at www.FacultyDiversity.org (*with institutional membership)

Sorond F, Horowitz JM, Cameron, KA. NUCATS Series on Developing and Enhancing Mentoring Relationships: Mentor Mapping and Developmental Networks. April 8, 2021, Northwestern University Feinberg School of Medicine, Chicago, IL, USA. doi: 10.18131/g3-j84m-rc33

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II. Promoting Professional Development
Roles for the Research Mentor

Objective: Students will consider the different roles their research mentors play and reflect on which are most important to them.

Consider the different roles of research mentors listed below. Add other roles that may be missing from the list. Prioritize these roles according to your expectations, with #1 as the most important.

Role	Priority
Teach by example	
Train you in disciplinary research	
Improve your writing and communication skills	
Provide growth experiences	
Help build your self-confidence as a researcher	
Model and promote professional behavior	
Inspire	
Offer encouragement	
Assist with advancement of your career	
Facilitate networking with colleagues	
Help build the bridge between research and clinical work	
Other:	
Other:	
Other:	

Adapted from Branchaw, J.L., Pfund, C., and Rediske, R. (2010), *Entering Research: A Facilitator's Manual: Workshops for Students Beginning in Science*, W.H. Freeman & Company.

Individual Development Plan

The Individual Development Plan (IDP) encourages undergraduate researchers to set goals and identify strategies that will help them to reach those goals. It is a self-tracking tool that can be used to facilitate mentor-mentee communication and alignment of expectations.

Use the following five questions to guide development of the IDP. Annual (or more frequent) review of the plan provides opportunities to celebrate achievements, incorporate revisions and ensure progress toward goals.

WHAT ARE YOUR GOALS?

- **Ultimate goals**
  - ▶ *I will be a professor of neuroscience at a research university.*

- **Long-term (5-10 years)**
  - ▶ *I will be a postdoctoral fellow studying the genetic basis of neurological disorders.*

- **Intermediate term (2-5 years)**
  - ▶ *I will earn my Ph.D. in neuroscience.*
  - ▶ *I will contribute to the discovery of the genetic basis of Alzheimer's disease.*

- **Short-term (1-2 years)**
  - ▶ *I will earn my BS degree in genetics.*
  - ▶ *I will publish my undergraduate research project in a peer-reviewed journal.*

- **Immediate (6 months-1 year)**
  - ▶ *I will earn an A in biochemistry class.*
  - ▶ *I will learn brain slice immunohistochemical staining techniques.*
  - ▶ *I will participate in a summer research program to experience another university.*

WHAT COMPETENCIES AND SKILLS WILL YOU NEED TO SUCCESSFULLY REACH YOUR GOALS? (SEE LIST AT THE END OF THIS DOCUMENT FOR SPECIFIC IDEAS).

- Disciplinary knowledge
- Research and technical skills
- Professional and interpersonal skills
- Management and leadership skills

WHAT ACTIVITIES AND EXPERIENCES WILL YOU ENGAGE IN TO GAIN THE COMPETENCIES AND SKILLS?

- Taking classes
- Tutoring, study groups
- Technique training
- Research experiences
- Scientific meeting attendance
- Professional development workshops

HOW WILL YOU ASSESS YOUR PROGRESS IN MASTERING THESE COMPETENCIES AND SKILLS?

- Mastery of coursework
- Mentor/instructor feedback
- Successful experimental outcomes
- Peer review

WHO WILL HELP YOU REACH YOUR GOALS AND HOW?

- Teachers
- Mentors
- Peers
- Family members

GOALS	COMPETENCIES & SKILLS	ACTIVITIES & EXPERIENCES	ASSESSMENT OF PROGRESS	SUPPORT PEOPLE & THEIR ROLES
Long-term 1. 2. 3.				
Intermediate 1. 2. 3.				
Short-term 1. 2. 3.				
Immediate 1. 2. 3.				

Examples of Skills

Research & Technical	Professional & Interpersonal	Management & Leadership
Critical Reading (scientific literature)	Reliability & Follow-through	Time Management (meeting deadlines)
Experimental Design	Communication (oral & written)	Prioritizing & Organizing Work
Experimental Techniques	Writing (manuscript, grant, fellowship)	Leading & Motivating Others
Computer Skills	Teaching	Research Project Management
Documentation/ Laboratory Notebook	Mentoring	Budget Management
Problem Solving & Troubleshooting	Collaborating & Working in Teams	Supervising/ Managing People
Data & Statistical Analysis	Giving/Receiving Constructive Feedback	Delegating Responsibility
Critical Analysis	Collegiality	
Responsible Conduct of Research	Networking	
Identification of New Research Directions & Next Steps		

IDP Worksheet Example

An Individual Development Plan (IDP) is a professional tool that outlines objectives you and your mentor/supervisor have identified as important for your professional development. A comprehensive review of your career goals and objectives identified at the beginning of your appointment and during your semiannual appraisal provide constructive feedback from your mentor/supervisor that can help you become an independent investigator.

Career Goals/Objectives	Educational Activities	Research Projects/ Products/Dates
Goal One: Objective 1. 2. 3.		
Goal Two: Objective 1. 2. 3.		
Goal Three: Objective 1. 2. 3.		

Describe the plan you and your mentor have for your transition from your current position to the next position:

Additional comments:

Career Next Steps: Factors to Consider

Objective: Students will consider what factors are important to them when selecting a graduate training program, a professional school program, or a job.

Cut out the boxes and rank the factors in order of importance to you.

Opportunity to work with a specific advisor, mentor, physician, or teacher	Coursework requirements
Climate of the training environment	Location
Relative value of teaching and research training	Alignment of personal goals with the offerings/opportunities
Reputation of a specific advisor, mentor, or coworker	Funding
Reputation of the department, office, program, or institution	Happiness of other graduate/medical students/coworkers in the program
Range of academic opportunities to engage in beyond graduate study	Feeling of inclusivity - seeing there are others like you
Type of preliminary/qualifying exam	Type of curriculum (e.g., case-based, traditional, lecture, or clinical)

Adapted from Branchaw, J.L., Pfund, C., and Rediske, R. (2010), *Entering Research: A Facilitator's Manual: Workshops for Students Beginning in Science*, W.H. Freeman & Company.