# Maintaining Effective Mentoring Relationships

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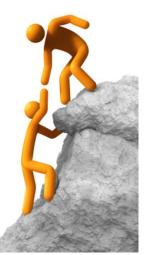


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# Objectives

- To review mentoring hits and misses.
- To define the mentoring relationship.
- To develop a rationale for mentoring best practices.
- To describe key elements of effective mentoring.
- To take advantage of mentoring opportunities.



# Mentoring Stories



# On Being a Mentor

- Wise and trusted counselor or teacher
- Influential senior sponsor or supporter
- Role model
- Coach



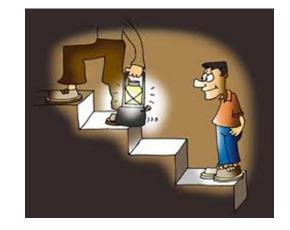
## **Mentoring Competencies**



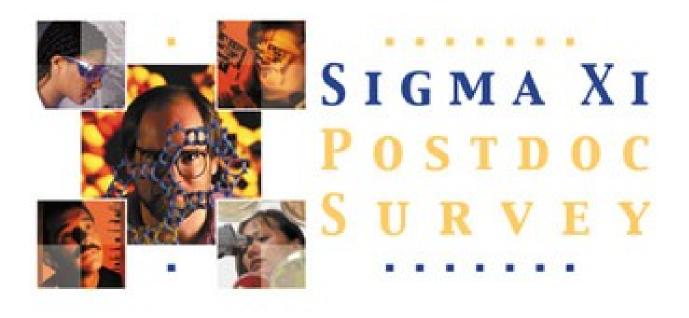


## Good Mentor Traits

- Knowledgeable
- Available
- Listens "Tell me more."
- Strong advocate for you



- Provides guidance for your career path (not theirs)
- Builds networks
- Provides funding and resources
- Creates space for your own scientific niche



Davis, G. 2005. Doctors without orders. American Scientist 93

# Sigma Xi Postdoc Survey

- Web-based survey conducted in 2003
- Contacted 22,400 postdoctoral fellows at 47 institutions (~ 40% of all postdocs in the US)
- Overall response rate of 38%
- Funded by the Alfred P. Sloan Foundation and the Wertheim Fund

### Sigma Xi Postdoc Survey Demographics

#### Gender by Field

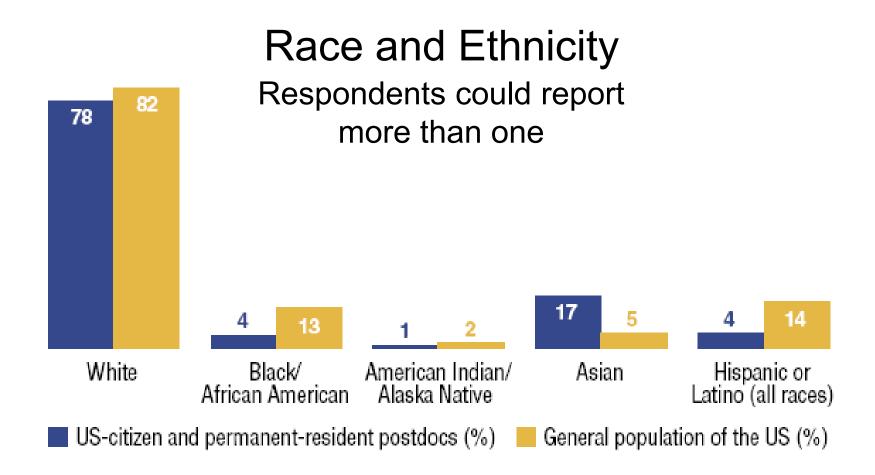
 54%
 46%

 46%
 40%

 Life/Health Sciences
 Physical Sciences/ Engineering
 Social Sciences/ Humanities

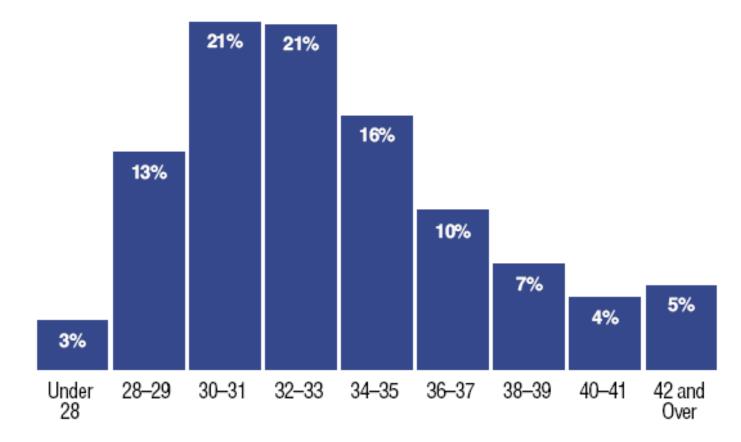
 Male
 Female

### Sigma Xi Postdoc Survey Demographics



### Sigma Xi Postdoc Survey Demographics

#### Age Distribution



### **Measures of Working Conditions**

- Salary
- Independent funding (fellowship)
- Benefits

- Insurance, retirement, child care

- Structured oversight
  - Individual development plans (IDPs), formal reviews, policies, appointment letters
- Transferrable skills training
  - Lab management, grant writing, teaching, negotiation, conflict resolution

# Salary

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	Highest 25%	Lowest 25%
Percent satisfied with training*	71%	68%
Advisor grade (A = 4.0)	3.0	3.1
Percent reporting conflicts	16%	13%
Papers submitted per year	1.2	1.2
		*, <i>p</i> < 0.05

### Independent Funding

	Fellowship	Other
Percent satisfied with training*	74%	70%
Advisor grade (A = 4.0)	3.0	3.1
Percent reporting conflicts	14%	14%
Papers submitted per year	1.1	1.2
		*, <i>p</i> < 0.05

### Benefits

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	Highest 25%	Lowest 25%
Percent satisfied with training*	76%	62%
Advisor grade (A = 4.0)	3.2	2.9
Percent reporting conflicts	11%	18%
Papers submitted per year	1.3	1.2
		*, <i>p</i> < 0.05

### Structured Oversight

#### High structure Low structure

Percent satisfied with training	80%	60%
Advisor grade (A = 4.0)	3.4	2.7
Percent reporting conflicts	9%	21%
Papers submitted per year	1.4	1.0
		< 0.0001 all variables

p < 0.0001, all variables

# **Transferable Skills Training**

	High training	g Low training
Percent satisfied with training	83%	56%
Advisor grade (A = 4.0)	3.4	2.7
Percent reporting conflicts	10%	17%
Papers submitted per year	1.3	1.1
		p < 0.02, all variables

# Postdoc Survey Punchline

- Structured oversight and transferable skills training strongly influence postdoc satisfaction and productivity
  - Commitment documents
  - Individual development plans
- Effective leadership can enhance team esprit and boost team output

# Mentoring Principles

## Who is the mentor?

- Mentors
  - Research mentor
  - Division director
  - Department chair



- Mentoring committees
- Content experts

# Mentoring Responsibilities

- Establishing expectations Most important mentoring responsibility
- Appointment letters
- Compacts (AAMC)
- Individual development plans

### Individual Development Plans

#### Aligning expectations

Promoting professional development

Fostering independence



### **Three Components of Feedback**

- What is especially effective?
- Where are the opportunities for improvement?
- What is the plan going forward to achieve the desired goal?



### **Research Team Organization**

- One-on-one meetings and working groups
- Lab meetings and journal clubs
- Seminar speaker meetings
- Collaboration in hiring and grant writing
- Annual breakfast meetings with each member of the research team (review IDPs)
- Annual "State-of-the-Lab" address



### **Promoting Diversity and Inclusion**



# Seven Mentoring Phrases

- 1. Thank you.
- 2. I need your help.
- 3. I have an idea that might interest you.
- 4. I want to see more of that from you.
- 5. I have 5 minutes, but if you need more, let's schedule a meeting.
- 6. I am sorry.
- 7. I am proud of you.



# Good to Great Jim Collins

# Two key attributes of the very most effective leaders

- 1. Bring incredible passion to the task
- 2. Don't care who gets the credit for success

### Mentoring Effectiveness Takeaways

- Mentoring improves training quality and trainee productivity.
- Adherence to general principles will enhance mentoring effectiveness.
- Feedback and coaching are essential components of mentoring.
- Practice makes perfect (or at least much better!).



