Improving Mentoring at All Levels to Enhance Postdoc Career Development and the Diversification and Growth of the Scientific Workforce

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National Postdoctoral Assn Annual Conference
April 13, 2019
OVERVIEW

Dreams

Journeys

Roadmaps

YOUR CAREER
What Do You Want To Be When You Grow Up?

Where Do You See Yourself in 5 Years?
Reflection Questions

How prepared do you feel to pursue a career?
How positive do you feel about your current career choice?
How certain do you feel about your career choice?

How much did/does your primary mentor help you think about your career development?

Have you ever participated in career counseling/sought career services during your doctoral or post-doctoral training?
Increased access to information does not appear to translate to increased career certainty

(Gibbs, McGready, Griffin, 2017)
Racial and ethnic identity shape career development processes and outcomes of all individuals

- Career decision-making self-efficacy
- Career interests, career consideration
- Traditionality of career choice

(Byars & Hackett, 1995; Flores & O’Brien, 2002; Gloria & Hird, 1999; Gushue & Whitson, 2006; Tang, Fouad, & Smith, 1999)

Aspirations are shaped by cultural identities such that we form goals partially based on what we perceive “people like me” do; identity-based goal formation
Mastery of Technical and Disciplinary Knowledge in Field

Faculty Mentor/Research Advisor

Know What Skills

= = =

Career Dev

(Byars-Winston, 2014)
Hours of Disciplinary Training

- ~ 5 years to complete a Ph.D.
- **Know What Skills**: 20hrs x 4/wk = 80/mo x 12mo = 960 x 5yrs
  = 4800hrs

- Post-doc: 40hrs x 4/wk = 160/mo x 12/mo = 1900hrs per year
Malcolm Gladwell’s (2008, *Outliers*) 10,000hr Rule: “Deliberate Practice” to excel

- Domain dependent: deliberate practice predicts success best in fields with super stable structures—rules never change (e.g., tennis, chess, classical music). One can study or practice to become the best in contexts with stable rules.
Mastery of Technical and Disciplinary Knowledge in Field

Mastery of Tacit Skills Needed to Craft Career That Fits One’s Needs & Wants

Faculty Mentor/Research Advisor

Know What Skills

Know How Skills

Career Dev

Interventions

(Byars-Winston, 2014)
Hours of Disciplinary Training

~ 5 years to complete a Ph.D.

- **Know What Skills:**
  - PhD completion = 4800hrs
  - Post-doc: 1900hrs per year

- 4hr mentoring/advising contact per month x 12 months
- 48hrs x 5 years of training = 240hrs
- ~10% of 240 on career path discussions = 24hrs

Consequence: Prepared for Work, But Not a Career
What Is Needed?

- Career Readiness
- Career Resilience
Career Readiness

- Career readiness, also known as career maturity, is successful coping with developmental tasks and required decisions associated with one’s life stage.

- Career Decisions – isolated events occurring at specific time points

- Career Readiness – process of continual development with attitudinal and cognitive dimensions needed to reach and act on career decisions for successful transition into the workplace
Career exposure  →  Career readiness  →  Career awareness  →  Life-long career management
<table>
<thead>
<tr>
<th>Career Readiness Factor</th>
<th>Primary Tasks</th>
<th>Related Career Readiness Question</th>
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<tbody>
<tr>
<td>1. Career identity</td>
<td>Knowledge of one’s goals, interests and talents (i.e., skills and abilities)</td>
<td>“What career pathway(s) suits me at this time?”</td>
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<td>2. Career exploration</td>
<td>Gathering career information and expanding career possibilities</td>
<td>“What biomedical research and research related careers exist?”</td>
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<td>3. Career planning</td>
<td>Gaining knowledge of necessary actions to pursue career goals</td>
<td>“What does it take to work in those careers?”</td>
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<td>4. Career decision-making</td>
<td>Narrowing career options, weighing career information and alternatives</td>
<td>“What career pathway can I commit to at this time?”</td>
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Self-Assessment

• Who Am I? Career-Identity
  • Self-knowledge, clear stable picture of ones’ interests, skills and abilities

Exploration

• Where Am I Going? WOW Info
  • Occupational knowledge—what are available career paths. What does it take to work in each career path?

Career Planning

• How Do I Get There? Career Planning
  • Mentoring, IDPs, WISCareers

Career Readiness

• Career resilience
  • Career SWOT Analysis
Career Resilience Is…

“the ability to adapt to changing circumstances, even when the circumstances are discouraging or disruptive“ (Collard, 1996)

AND IMPLIES

Career self-reliance – agency in one's career and growth while maintaining commitment to larger purpose and vision (individual career management)

• bounce back from adversity
• adapt to change
• resume your career identity in spite of career setbacks
Steve Jobs

‘I didn’t see it then, but it turned out that getting fired from Apple was the best thing that could have ever happened to me. It freed me to enter one of the most creative periods of my life… Sometimes life hits you in the head with a brick. Don’t lose faith.’

on being fired from Apple in 1984
Career Ladder?
NIH Biomedical Workforce Working Group (2012)
Wayne Gretzky

"I skate to where the puck is going to be, not where it has been."
Success often comes from the unexpected
Randomness is everywhere but we can make it work for us
“Get ready to pivot if opportunities present themselves and double down if you see a window of opportunity”
2007 - 2018

Rebuilding, reimagining from a post-doc/staff position
NIH R01 on first submission (successfully renewed 2014)
New faculty appointment w/ unanimous tenure review
Publications in top journals, including Science
2011 White House/Presidential award
2014 UW Madison Outstanding Woman of Color Award
2015 Fellow Status American Psychological Association
Appointment to National Academies Board; Chair Commissioned Study
National Research Mentoring Network-Lead of Culturally Aware Mentoring
Visiting Professorship, University of Pretoria South Africa
Promotion to Full Professor
My “Dream” for Postdoctoral Career Development

1. Career Readiness Badging
   Consisting of: career readiness course; facilitate career transition self-efficacy, increase and diversify use mentors as career resources.

2. Trained cadre of career counselor professionals prepared to facilitate career development in research fields.
   Partnership between the NPA and the National Career Dev Assn.

3. Increased Use of Mentoring Networks, Mentor Awareness of Career Dev Facilitation
What Do You Want To Be When You Grow Up?

Where Do You See Yourself in 5 Years?
It starts with a dream.

Add faith,
and it becomes a belief.
Add action,
and it becomes a part of life.
Add perseverance,
and it becomes a goal in sight.
Add patience and time,
and it ends
with a dream come true.

By Doe
Zantamata

happinessinyourlife.com
Thank You