Individual Development Plans

Understanding yourself to thrive personally and professionally

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BioPACIFIC MIP Summer School

August 3, 2021
1:50-3:50 pm (PT)

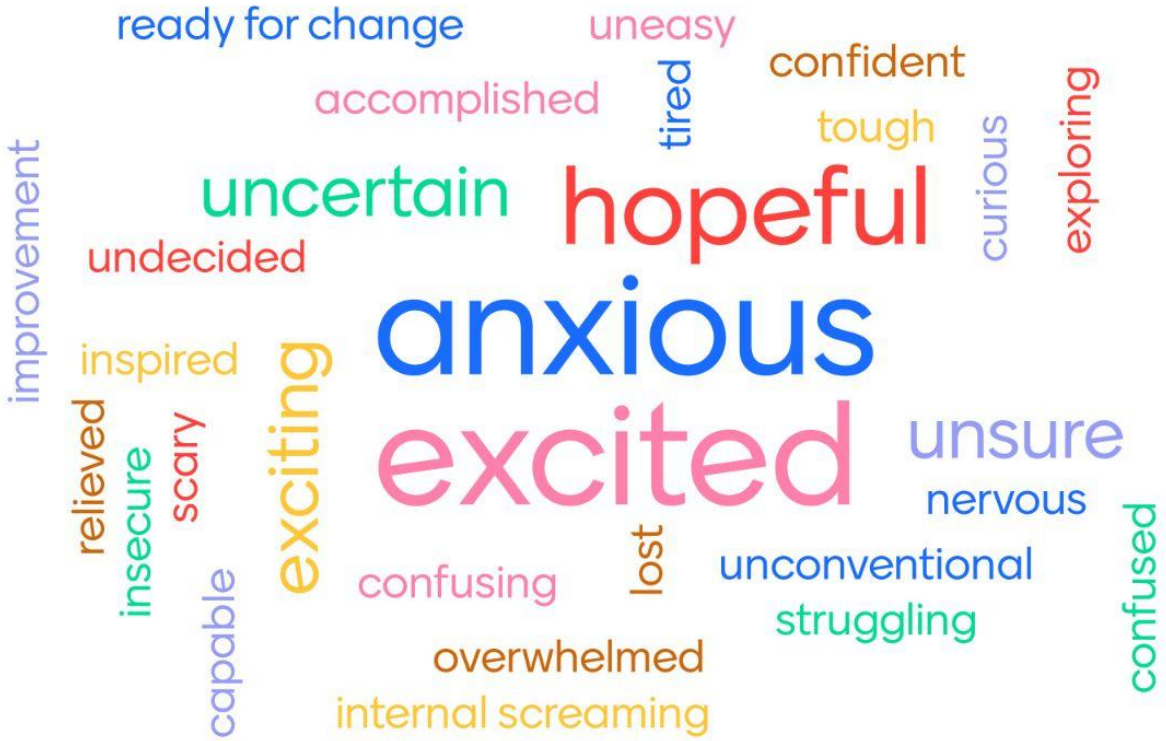
Introductions: Co-Facilitators

- **Predrag Cvetkovic**
  - Human Resources Bioscience Research, BASF
- **Stephanie Veve**
  - Human Resources Bioscience Research, BASF
- **Joshua Speros, PhD**
  - CARA – California Research Alliance by BASF
- **Steve Lee, PhD**
  - Assistant Dean of Inclusion, Diversity, and Equity at Stanford University
  - Master Facilitator with CIMER
- **Arica Lubin, PhD**
  - Associate Director, CSEP, UCSB
  - Education Co-Lead, BioPACIFIC

Introductions: Participants

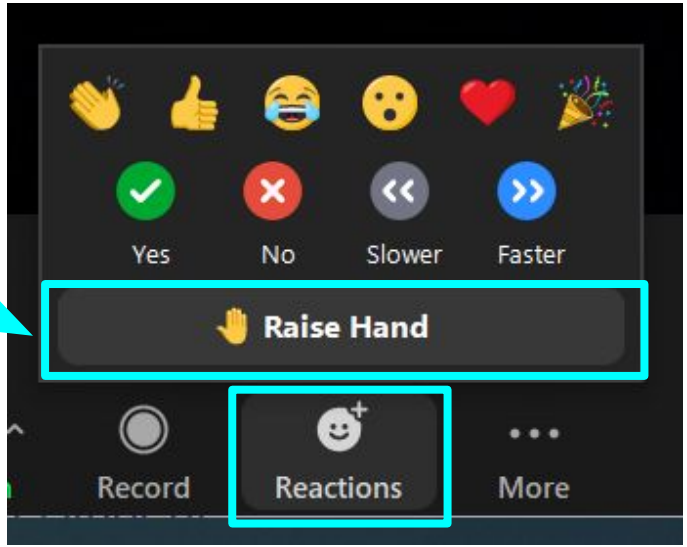
1. **via Zoom** (~10 sec each; alphabetically)
   - Name (pronouns, if you'd like)
   - Discipline
   - Year in program or appointment
   - Institution
2. **via Menti** (to create a word cloud; URL in chat)
   - Please share 3 words/phrases that describe how you feel about your career after your MS or PhD. (anonymous)
   - A list of feelings is offered (URL in chat)

Word Cloud Results



Suggestions for interactions

- If you have a question or comment, feel free to
  - use the chat window, or
  - raise your hand in Zoom.



- Please remember to mute or unmute your mic as needed.
- Please keep your video on (if possible).

What to expect

- Emphasis on process, not content
  - interactive breakout discussions
  - facilitating conversations
  - expect a lack of closure

- Practical skills and resources will be provided, but not a “12-step program to become the perfect grad student”

- Community Agreements
  - reflect and respect
  - make space, take space
  - confidentiality

Overview

Breakout discussions: Case Study
Intro to career development for STEM grad students
Individual Development Plans in industry
Self-assessment tools and activities
Closing: next steps, resources, Q&A

Case Study

Mira and her husband John were feeling squeezed by their financial situation. Both are almost done with their PhD programs, and want to start a family soon, but they are worried that they would not have enough income to live comfortably with children in the Bay area (where their extended families reside).

Recently, a sales rep visiting Mira's lab told her about a newly available Field Applications and Sales Scientist position at his company (a major microscope vendor). In their discussion, he happened to mention that she could more than double her current income in that role, so she was naturally intrigued. Mira applied for the job, got an interview, and was offered the position. With encouragement from her husband, she was about to accept the offer. But she began to have second thoughts. She wondered:

(adapted from "What do you care about?" by Lindstaedt, et al. *Science*, 12/7/2012)

Case Study

- “Sure the money is going to be nice but how will I balance childcare with the extensive travel that the job requires?”
- “I initially chose scientific research to make an impact on my field, work on cutting edge questions, and make a real difference in peoples’ lives. Will I be able to do those things in this new position?”
- “This Field Apps/Sales position has a base-salary-plus-commission salary structure. They all seemed really happy with their jobs, but they sure talked a lot about the extra hours they spent working to meet their sales goals.”
- “If I were to work in this position temporarily to get some experience and earn some money, will I be able to transition into my ideal job later? How would this temporary job look on my resume?”

Case Study

1. What would you do in this situation? Would you accept this job?

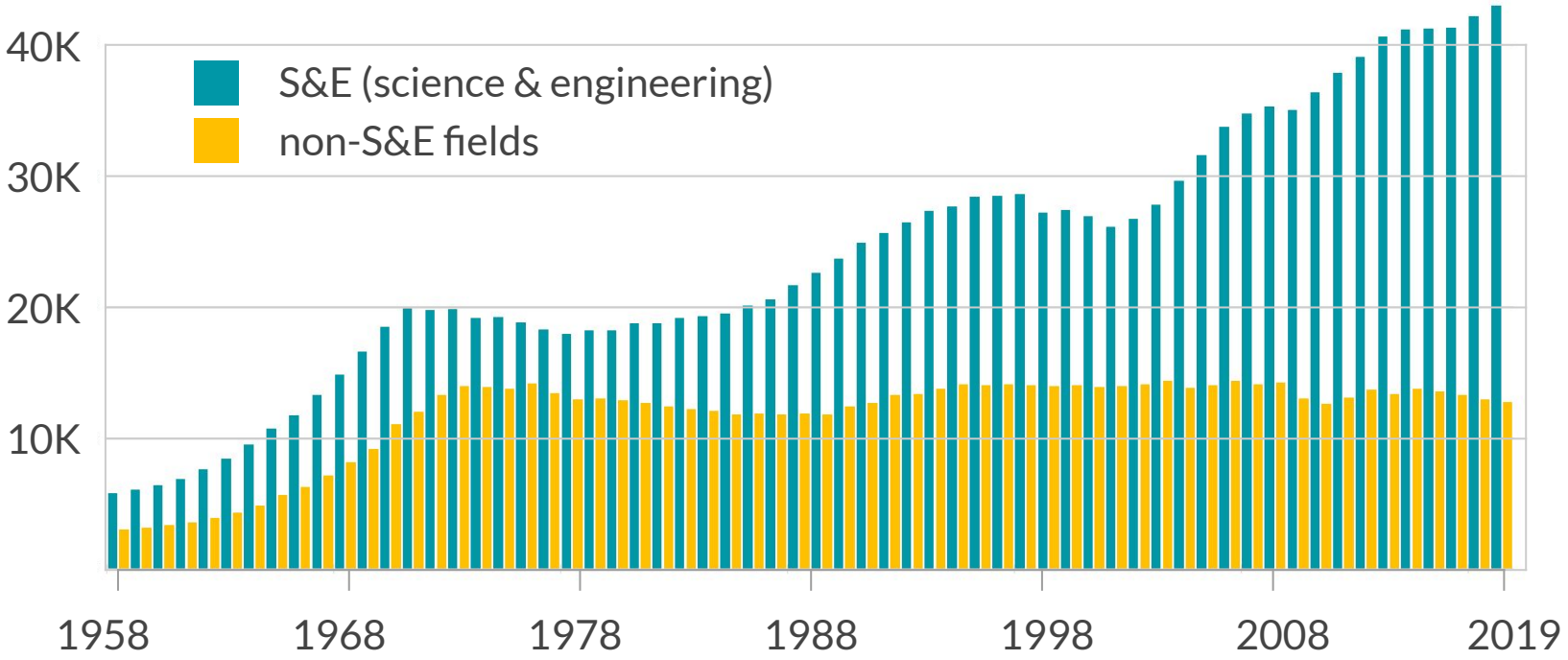
2. Think back to a past situation where you had to make a tough decision. How did you make that decision? What was your decision-making process? Are you satisfied with your process and results?

    - *Please discuss and share your responses in the Participant Workbook (URL in chat).*
    - *~10 min for this breakout session.*
    - *We'll debrief together.*

The Question

from “The Boy, the Mole, the Fox and the Horse” by Charlie Mackesy

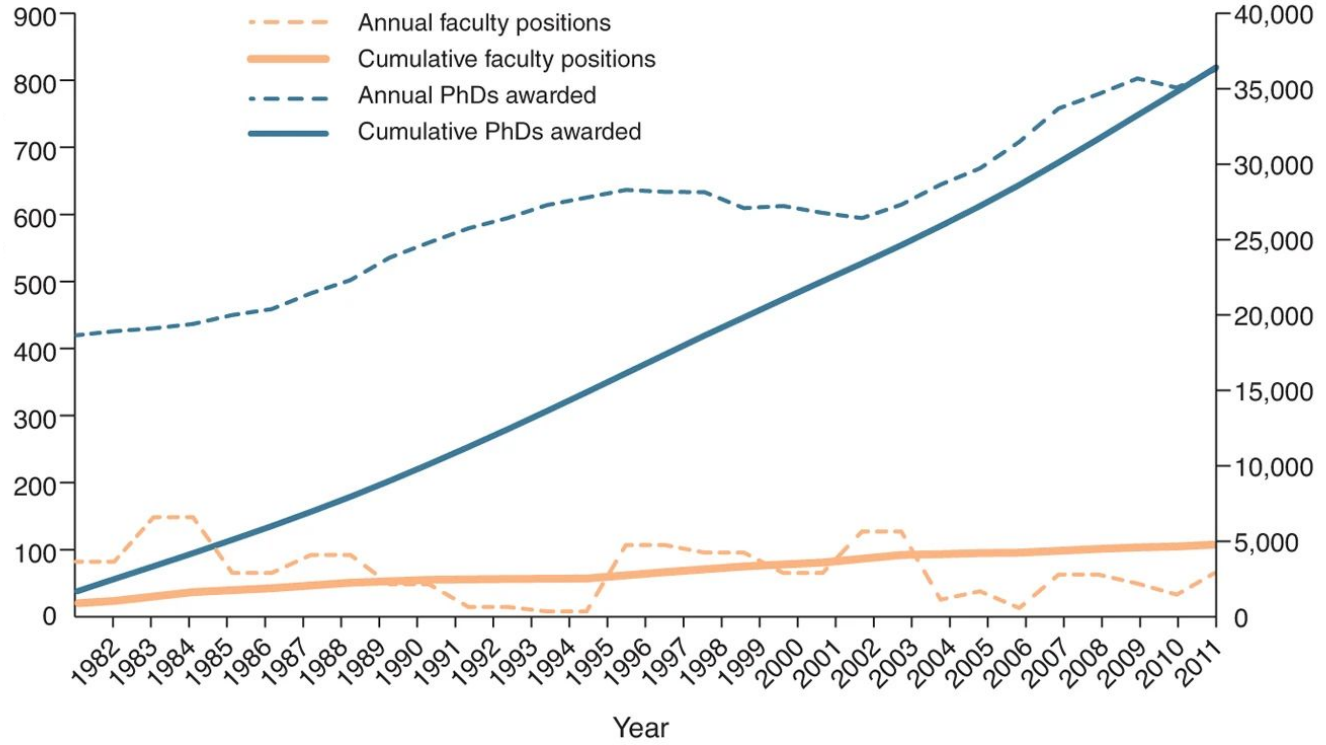
History of PhDs awarded in the U.S.



NSF Survey of Earned Doctorates 2020

History of STEM PhDs and Faculty Positions

Cumulative number in thousands (solid lines)

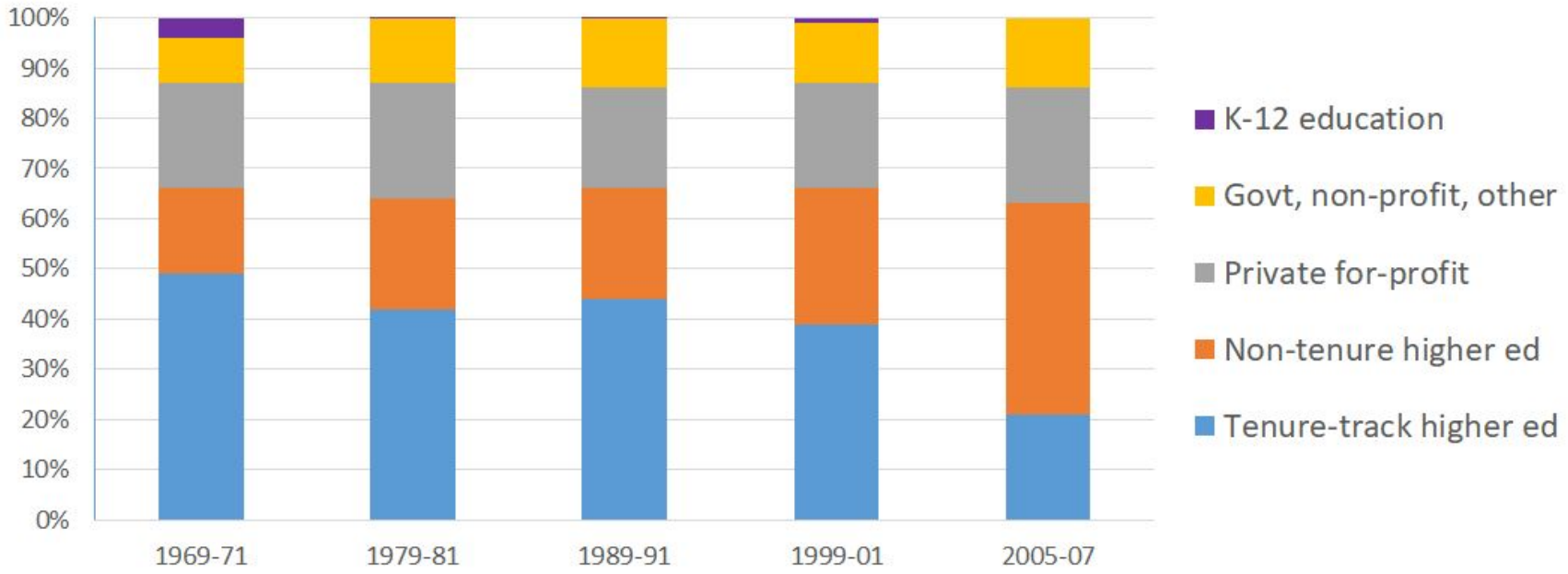


Annual number (dotted lines)

Schillebeeckx, et al, *Nature*, 2013

Career paths of STEM PhDs

UC Doctoral Alumni Survey (2014) - Life Sciences



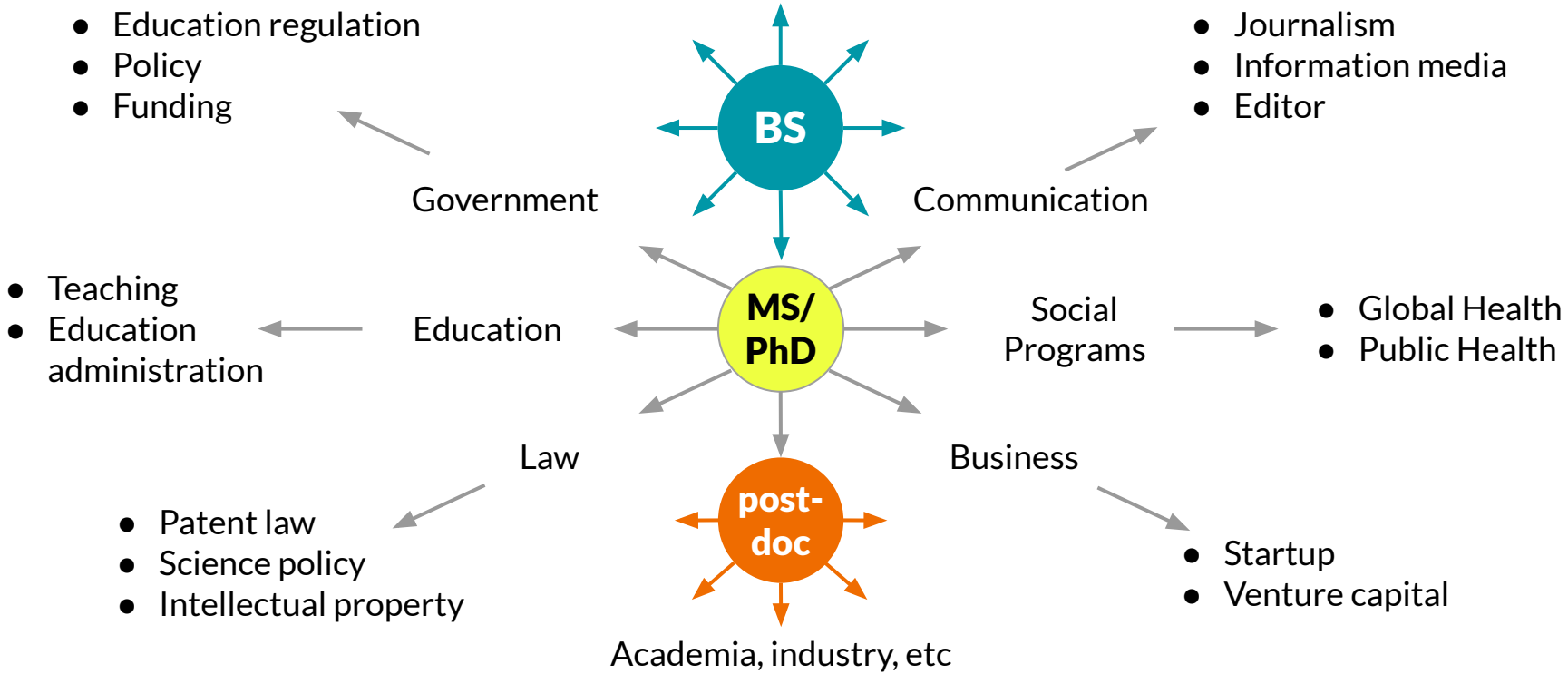
Career paths of STEM PhDs

UC Doctoral Alumni Survey - Life Sciences

	1969-71	1979-81	1989-91	1999-01	2005-07
Tenure-track higher ed	49%	42%	44%	39%	21%
Non-tenure higher ed	17%	22%	22%	27%	42%
Private for-profit	21%	23%	20%	21%	23%
Govt, non-profit, other	9%	13%	14%	12%	14%
K-12 education	4%	1%	1%	1%	0%

Career options for STEM PhDs

Keith Yamamoto (UCSF): Career "Hubs"



Career options for STEM PhDs

The Good News

You have lots of options

The Bad News

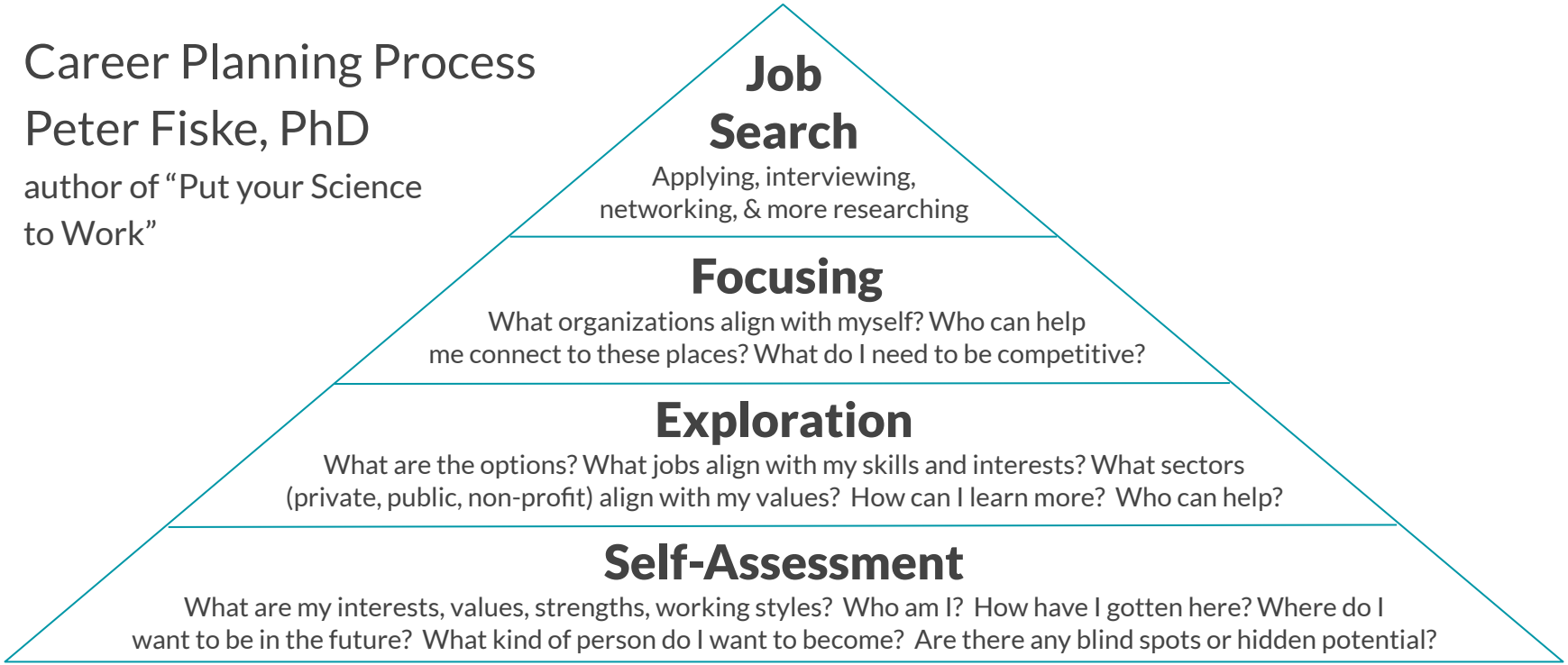
You have lots of options

Overview of Career Development

Career Planning Process

Peter Fiske, PhD

author of "Put your Science to Work"



Overview of Career Development

Career Planning Process

Peter Fiske, PhD

author of "Put your Science to Work"

Why is self-assessment so important?

Because accurately assessing yourself is really challenging

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Because accurately assessing yourself is really challenging

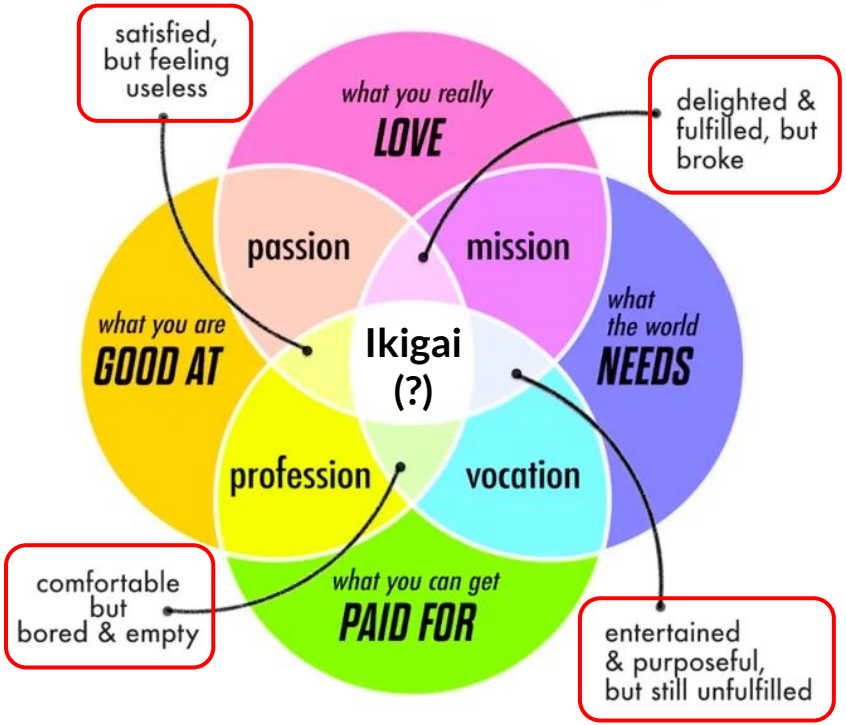
As the humorist Josh Billings once put it:

> “It ain’t what you don’t know that gets you into trouble. It’s what you know for sure that just ain’t so.”

Why is self-assessment so important?

Self-assessment is the starting point for any personal or professional development.

It's critical to gain metacognitive skills to understand how you communicate, make decisions, manage change, respond to stress and conflict, and work in teams.



Resources, Tools, and Exercises

Tools for self-assessment:

Seek to enhance your metacognitive skills

- Self-assessment instruments:
  - IDP's, e.g. myIDP, ChemIDP, Imagine PhD
  - Myers-Briggs Type Indicators
  - StrengthsFinder

- Exercises:
  - journaling
  - Seven Success Stories
  - 40-Year Vision

Resources, Tools, and Exercises

Example from BASF

Resources, Tools, and Exercises

myIDP vs ChemIDP

myIDP		ChemIDP
• most STEM fields	Disciplines	• chemical fields
• grad students & postdocs	Target Audience	• grad students & postdocs
• AAAS, UCSF, etc • 2012	Creators	• ACS • 2016

• self-assessment
  ○ skills, values, interests
• career exploration
• set goals
• implement plan
	Framework	• self-assessment
		  ○ skills, values
		• skill strengthening
		• career exploration
		• goal setting

Resources, Tools, and Exercises

Exercise: Seven Success Stories

- **Write down seven stories of you succeeding**
  - when you believed you did something well
  - that were fulfilling and exciting
  - for which you were praised, etc
- **Think broadly from any arena: professional, personal, hobbies, etc**
- **Talk to close friends to confirm stories and fill gaps**
- **Look for patterns from the multiple stories**
  - What circumstances keep popping up?
  - How did you define “success” in these stories?
  - How did you handle challenges and failures?

Resources, Tools, and Exercises

Exercise: Seven Success Stories

- This helps identify your preferred circumstances (internal & external), your values and motivation (how you define success)
- *Writing* these stories helps give wording for cover letters and emails to prospective employers
- *Verbally sharing* these stories with friends helps you prepare for job interviews
- This exercise won't necessarily tell you which specific job to pursue
- To learn more: GetFive website (URL in Workbook)

Resources, Tools, and Exercises

Exercise: Seven Success Stories

- Breakout in pairs
  - 2 minutes to think and jot down some ideas
  - Share a single success story (2 min each)
  - ~8 min total in breakout rooms

- We'll debrief all together

Resources, Tools, and Exercises

Exercise: Seven Success Stories

- Let's debrief all together
  - Did your story involve professional and/or personal circumstances?
  - Did your success story include an obstacle or failure?
  - Was it challenging to come up with a success story, or did too many pop up?
  - Were there any surprises or revelations?
  - How did you feel when sharing your success story?

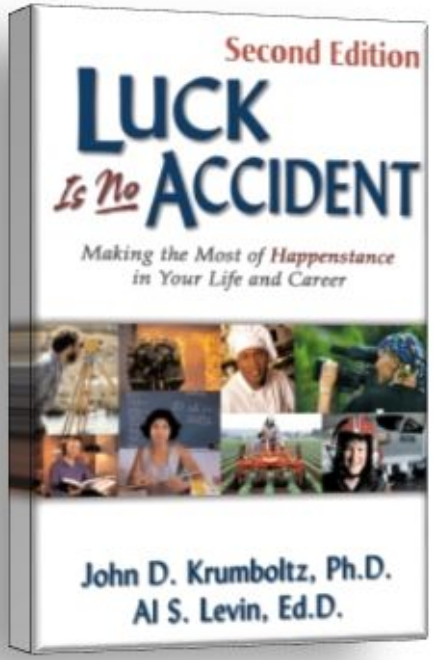
Tangent: Steve's Story

Common threads:

- Enjoy working at an academic institution
- Enjoy working with students to help them succeed
- Developing and implementing strategies to help students
- Promoting efforts in diversity, inclusion, & equity

More tips in career planning

Remember, we can't control many aspects of our career



Happenstance Learning Theory

Unplanned events more often determine life and career choices than all the careful planning we do.

Krumboltz and Levin actively encourage readers to anticipate frequent changes, to take advantage of chance events, and to make the most of what life offers.

More tips in career planning

Seek to learn with a growth mindset

Carol Dweck

Fixed		Growth
nature: ability is static		ability is developed: nurture
avoid challenges		embrace challenges
gives up early		persists
sees effort as fruitless		see it as a process
ignores useful criticism		seeks & learns from criticism
threatened by others		inspired by others

More tips in career planning

Grow your mentoring network

Actively seek mentors, peers, and mentees

"Take home" exercises: (in Participant Workbook)

- "Identifying your needs and growing your network"
- Join NRMN

NRMN
Mentoring to Diversify the Biomedical Workforce
National Research Mentoring Network

- Conduct an informational interview - see Science article

More tips in career planning

Don’t forget your values

- “What Do I Want to Be with My PhD? The Roles of Personal Values and Structural Dynamics in Shaping the Career Interests of Recent Biomedical Science PhD Graduates”
  - Kenneth Gibbs and Kimberly Griffin, *CBE - Life Sciences Education*, 2013.

- Values affirmation exercise
  - Self-affirmation interventions typically have people write about 2-3 core personal values, from a list of possible values
  - “The Psychology of Change: Self-Affirmation and Social Psychological Intervention” G Cohen and D Sherman, *Annu. Rev. Psychol.* 2014.

The Journey

from “The Boy, the Mole, the Fox and the Horse” by Charlie Mackesy

What's your next step?

- Reflect and identify one step or goal that you will pursue in the next week that will help you move forward.
- Please share your step in the Participant Workbook

Thanks for your participation!

Q&A