CAREER CLUB: SESSION 1
CAREERS FOR PHDS

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Cornell Graduate School
Careers Beyond Academia

Introductions!

- Name
- Expertise
- Career aspiration

- We'll start:

Stages of Career Exploration

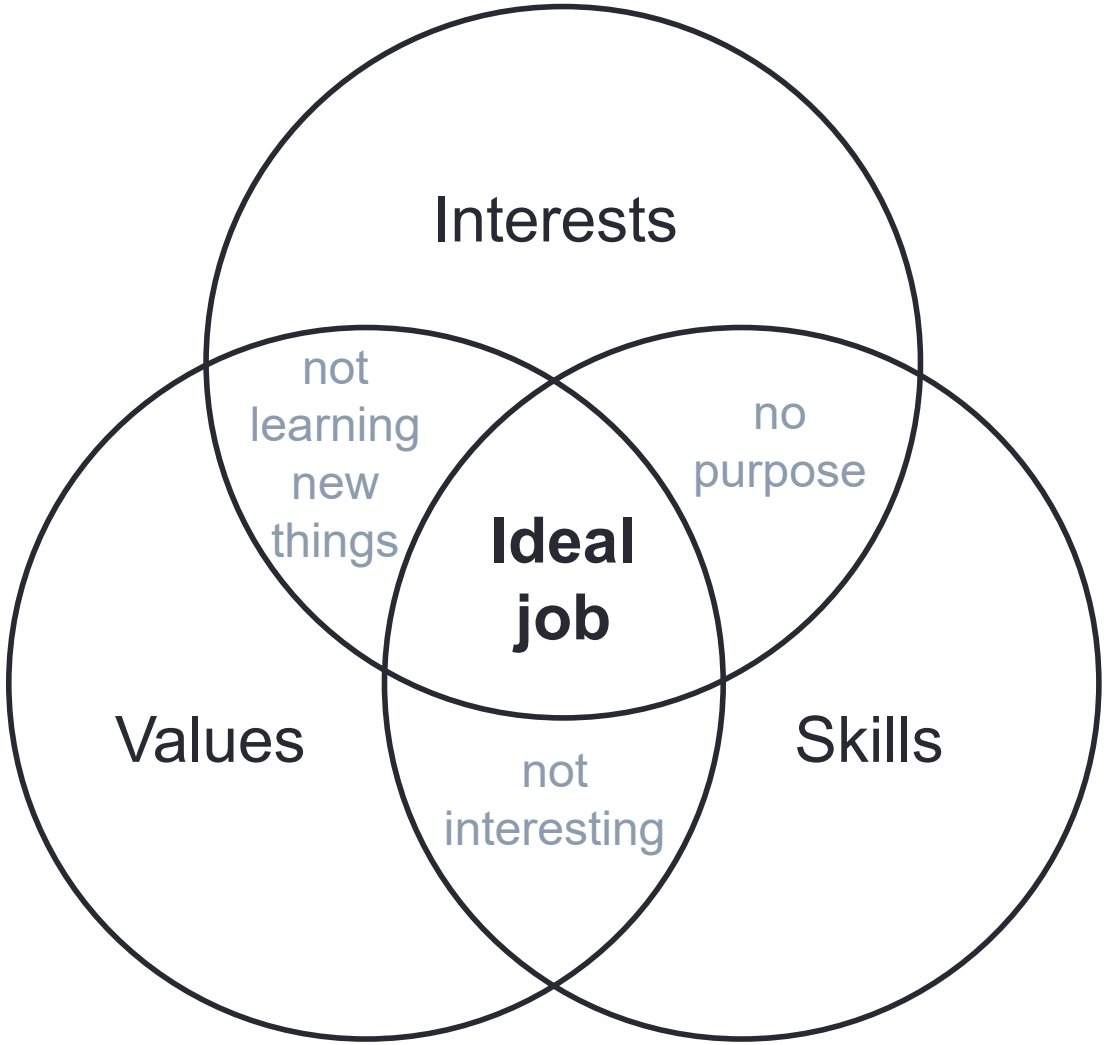
Understand yourself

Self-assessments

Skills/Values/Interests
myIDP

Adapted from: Lori Conlan, NIH OITE

Interests, Skills, Values



Identifying Interests: Worksheet 1

Examine the interests/skills listed in each of the six typology sections below and rank each section from 1 – 6 in order of preference, according to your enjoyment of the majority of the tasks. (1 = HIGHEST; 6 = LOWEST).

PRACTICAL Technical Systematic Application	SCORE	INVESTIGATIVE Research Discovery Curiosity	SCORE
Conducting experiments, collecting data Using mathematical/statistical tools Equipment and methodologies Instrumentation knowledge & understanding Applying specialist technical skills Practical and physical experimental tasks Collecting samples, taking measurements Taking responsibility for lab resources, incl. cell, animal and plant care/maintenance.		Making new discoveries Interpreting results and data Conceptualising and designing investigative research projects to test a hypothesis Thinking up new theories/processes Learning about new research Researching/reviewing literature Researching/Reviewing research literature Writing and reviewing research articles	
ENTERPRISING Inventive Resourceful Leadership	**SCORE**	**SUPPORTIVE** Advising Instructing Cooperating	**SCORE**
Preparing and conceptualising grants Promoting and 'selling' your ideas Setting up new projects Thinking 'big picture' and having new ideas Coordinating/leading projects Technology transfer/IP opportunities Establishing new collaborators Freelance consultancy work Marketing and promoting research		Helping and supporting others Supervising/mentoring Teaching/tutoring Demonstrating in undergraduate practicals Liaising with people (eg colleagues, peers, collaborators, editors, students) Networking at conferences Being involved in/organising events that bring people together	
CREATIVE Artistic Imagination Design	**SCORE**	**ADMINISTRATIVE** Executive Management Organisation	**SCORE**
Imaginative data presentation Technical/research design innovation Artistic realisation (visual, performance etc) Popularising science to the public Creating imaginative designs Theatrical and dramatic presentation Writing press stories, media engagement Writing general interest science articles Blogging and other social media		Organising experimental schedules Keeping records of data and/or budgets Working to deadlines Managing finances Organising workload and prioritising tasks Serving on committees Writing reports Editing manuscripts Marking and assessing student essays	

Typologies ranked in order of preference, e.g.

RESULTS	1: I	2: P	3: A	4: S	5: E	6: C

RESULTS	1:	2:	3:	4:	5:	6:

Refer to your top three typology rankings above and examine the corresponding typology sections below which contain a list of suggested jobs that match the associated interest/skills.

PRACTICAL	INVESTIGATIVE
Technical Manager/technician Clinical laboratory scientist Laboratory manager Specialist scientist: toxicologist, forensics, pharmacologist, manufacturing, product/process Applied scientific research Data/information manager Specialist scientific services, e.g. statistician, Bioinformatician, IT services Health & Safety officer/Quality assurance Practical physical careers (eg warden, agriculturalist, farmer, field worker)	Researcher (Industry) Researcher (Government institute) Researcher (university) Academic/professor/group leader Research analyst Market researcher Researcher (media/policy) Think Tank adviser Journal development manager Journal Editor/Commissioning editor Forensic Investigator Professional academic writer (papers/grants)
ENTERPRISING	**SUPPORTIVE**
University Academic/professor Research Group leader Company owner (e.g. Spin-out company) Company director/Business manager Patent Lawyer/Attorney Marketing/brand manager Sales manager Recruitment consultant Technology transfer manager Specialist consultant Commissioning editor Private equity manager	Scientific services adviser Events manager Sales representative (relationship building) Product demonstrator/adviser Researcher Support Manager General medical practitioner/vet Health care specialist e.g. nurse, physiotherapist Personal/careers adviser/coach Front-line services Educational development manager School teacher Social worker
CREATIVE	**ADMINISTRATIVE**
Engagement Officer (e.g. schools, public, media) Communications/community manager Social media communications specialist Science journalist Press and publicity officer External relations manager Science writer Medical communications Exhibitions designer Artistic careers (eg photographer, artist) Brand and designer (e.g. web, product) Copywriter	Professional academic writer (papers/grants) Regulatory affairs/pharmacovigilence Patent examiner Grants administrator Science Policy officer Conference organiser Editorial assistant Copy editor/Proof reader Administrator (e.g. university, government) Course coordinator Manager (e.g. project, office, finance) Personal assistant/ Company secretary

Potential jobs of interest

1.	
2.	
3.	

Identifying Skills

Consider both technical/scientific and transferable skills

- Analysis and Problem Solving
- Research and Information Analysis
- Technical/hands-on
- Written and Oral Communication
- Interpersonal
- Organization and Management
- Supervision and Leadership Skills
- Self-Management, Work Habits
- Inventive/Innovative

Think about skills you've acquired outside of graduate training/lab as well

Identifying Skills: Worksheet 2

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WORKSHEET 2: SKILLS

Skills Potentially Used During Your Research Experience				
Skill Category	**Specific skill**	**High or moderate proficiency**	**Enjoy using**	**Required in job**
Analytical and Problem Solving	Organize and classify information			
	Clearly define a problem and identify possible causes			
	Locate and assimilate new information rapidly and apply to a given problem			
	Design an experiment/research surveys that defines a problem, tests possible resolutions, and implements a solution			
	Develop methods to effectively sort and evaluate data			
	Visualize data, develop models to represent data			
	Consolidate/synthesize large amounts of information into a coherent argument			
	Form and defend independent conclusions based on the evidence			
	Analyze an idea and come up with counter-arguments			
	Compare results and come up with recommendations and next steps			
Technical	Use specialized equipment or techniques			
	Use databases			
	Troubleshoot specialized instruments			

Various sources, e.g. SkillScan (www.skillscan.com)

Identifying Values: Worksheet 3

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WORKSHEET 3: CAREER VALUES

Value Category	How important are the following in your career?	High	Medium	Low	Notes
Career growth	Personal advancement (opportunities for promotion)				
	Supervision (making decisions, exercise control)				
	Status and prestige (reputation derived from work)				
Work style	Autonomy (work independently)				
	Variety (frequently change work responsibilities or setting)				
	Regular and predictable routine (unchanged daily work scheduled)				
	Competitive space/environment				
	High stress and pressure (most days)				
	Fast pace (busy with frequent deadlines)				
	Risk taking (high risk/high reward)				
	Creativity (artistic or intellectual expression)				
Impact/goal/mission	Help others (contribute to betterment of world)				
	Ability to see project to conclusion (not interrupted by extraneous priorities)				
	Sufficient solutions to a problem (may not be the optimal or ideal solution)				
	Intellectual challenge (work at cutting edge of knowledge)				
	Influence people (work to change attitudes or opinion of others)				

Putting it together: Worksheet 4

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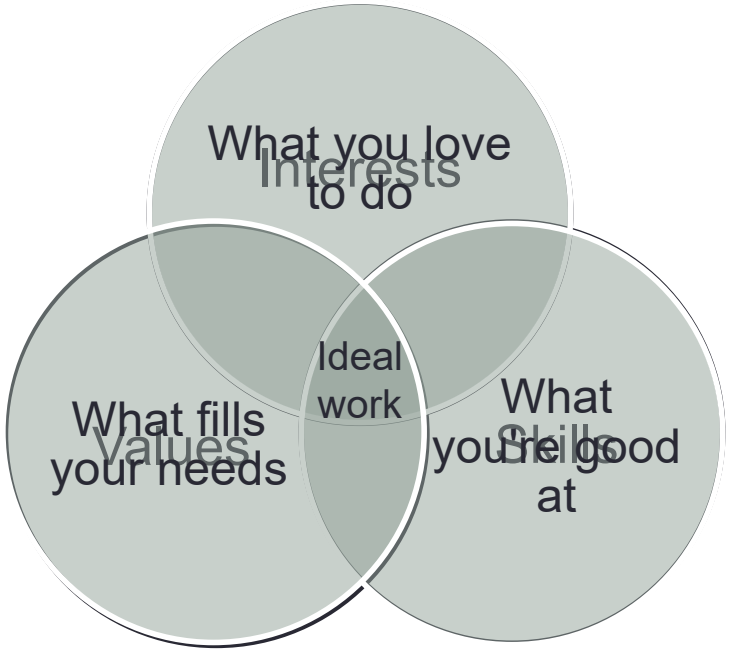
Putting it together!

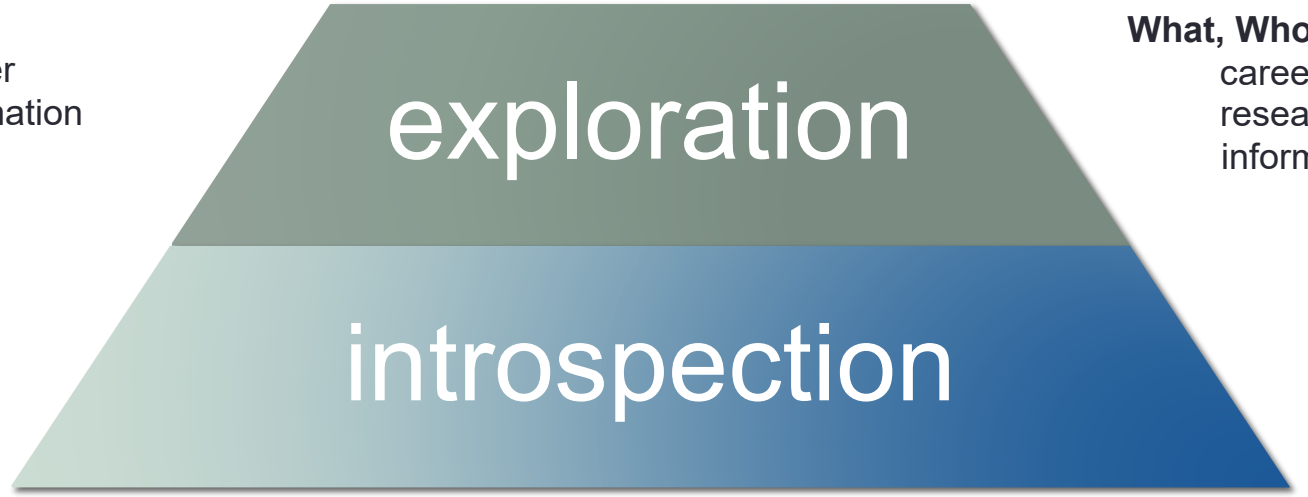
Top 3 – 5 Interests	Top 3 - 5 Skills	Top 3 – 5 Values
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.



Stages of Career Exploration

Gather information

Understand yourself



What, Who, Where
career panels
research employers
informational interviews

Self-assessments
Skills/Values/Interests
myIDP

Credit: Lori Conlan, NIH OITE

Putting it together: Worksheet 4

Putting it together!

Top 3 – 5 Interests	Top 3 - 5 Skills	Top 3 – 5 Values
1._____	1._____	1._____
2._____	2._____	2._____
3._____	3._____	3._____
4._____	4._____	4._____
5._____	5._____	5._____

Compare with Career Fit in myIDP
1._____
2._____
3._____
4._____
5._____

Investigate Career Options – e.g. Career Fit - myIDP

myIDP ScienceCareers
INDIVIDUAL DEVELOPMENT PLAN

LOG OFF | CONTACT US | MY ACCOUNT | ABOUT myIDP | *SCIENCE* CAREERS

AAAS

You have put a lot of time and effort into pursuing your PhD degree. Now it's tim
concept is commonly used in industry to help employees define and pursue thei
for postdoctoral fellows in the sciences. AAAS/*Science* joined forces with FASE
web-based career-planning tool tailored to meet the needs of PhD students and

myIDP provides:

- Exercises to help you examine your skills, interests, and values
- A list of 20 scientific career paths with a prediction of which ones best fit yo
- A tool for setting strategic goals for the coming year, with optional reminder
- Articles and resources to guide you through the process

There is no charge to use this site and we encourage you to return as often as yo

Click below to get started.

Values Assessment

Career Exploration

Consider Career Fit
Read About Careers
Attend Events
Talk to People
Choose a Career Path

Create Plan

Career Advancement Goals
Skill Goals
Project Goals

Implement Plan

Mentoring Team
Print & Export
Completion Certificate

Click anywhere in the "V
sections of the module.

Career Path
Public health related care Public health prograr
Science writing: Science, medical, or
Drug/device approval and Regulatory affairs pr
Scientific/medical testing Testing specialist in federal/state departr
Clinical research manage Clinical research proj
Support of science-relate Technical support sp
Science policy: Public affairs/govern
Clinical practice: Clinician such as ger
Sales and marketing of s Medical science liais
Intellectual property: Patent agent; patent
Research administration: Research administra officers, grants and c
Science education for no

Skills Matches for Science writing

Scientific Knowledge — your rating — expert rating

	your rating	expert rating
Broad based knowledge of science	4	4.6
Deep knowledge of my specific research area	5	3.33
Critical evaluation of scientific literature	4	4.47

Research Skills — your rating — expert rating

	your rating	expert rating
Technical skills related to my specific research area	3	1.6
Experimental design	5	2.07
Statistical analysis	3	2.33
Interpretation of data	4	3.67
Creativity/innovative thinking	4	3.4

as you learn more about each career path in later

Interests Match	Values
79%	
76%	
78%	*Consider Your Values!*
76%	
77%	
72%	
75%	
73%	
69%	
67%	
73%	
71%	

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BREAK!

Think about: “I thrive when…”

Stages of Career Exploration

acquire/practice skills

Evaluate the job/offer

resume/CV
interview practice

Job search strategy

Good fits/new skills/connections

networking
LinkedIn
review job descriptions

Gather information

What, Who, Where

career panels
research employers
informational interviews

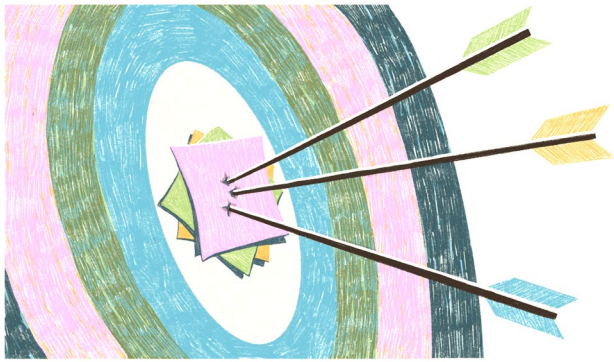
Understand yourself

Self-assessments

Skills/Values/Interests
myIDP

Credit: Lori Conlan, NIH OITE

S.M.A.R.T Goal-setting



Short-term goals should:

- **S**pecific: be identifiable a specific action or event that will take place.
- **M**easurable: have benefits that are quantifiable.
- **A**chievable: be attainable given available resources.
- **R**ealistic: require you to stretch some, but have a likelihood of success.
- **T**imely: state the time period in which it will be accomplished.

S.M.A.R.T. professional development goals

To decide if I have misconceptions about consulting and if it's for me

- Identify resources to help me learn more about consulting roles-start with myIDP
- Spend 30 minutes in 10-minute increments in the next week to research
- Practice the case interviews with a club on campus (e.g. 4RS)

Evaluate if I should work at a large or smaller entrepreneurial company

- In the next week, create a short list of 2-3 large companies and 2 smaller ones in my research field
- Using my existing contacts or LinkedIn, search for profiles of interesting roles at these companies. Find 2 I don't know.
- In the next three months, I'll interview 3 people to see what they like about their work

S.M.A.R.T Goal-setting

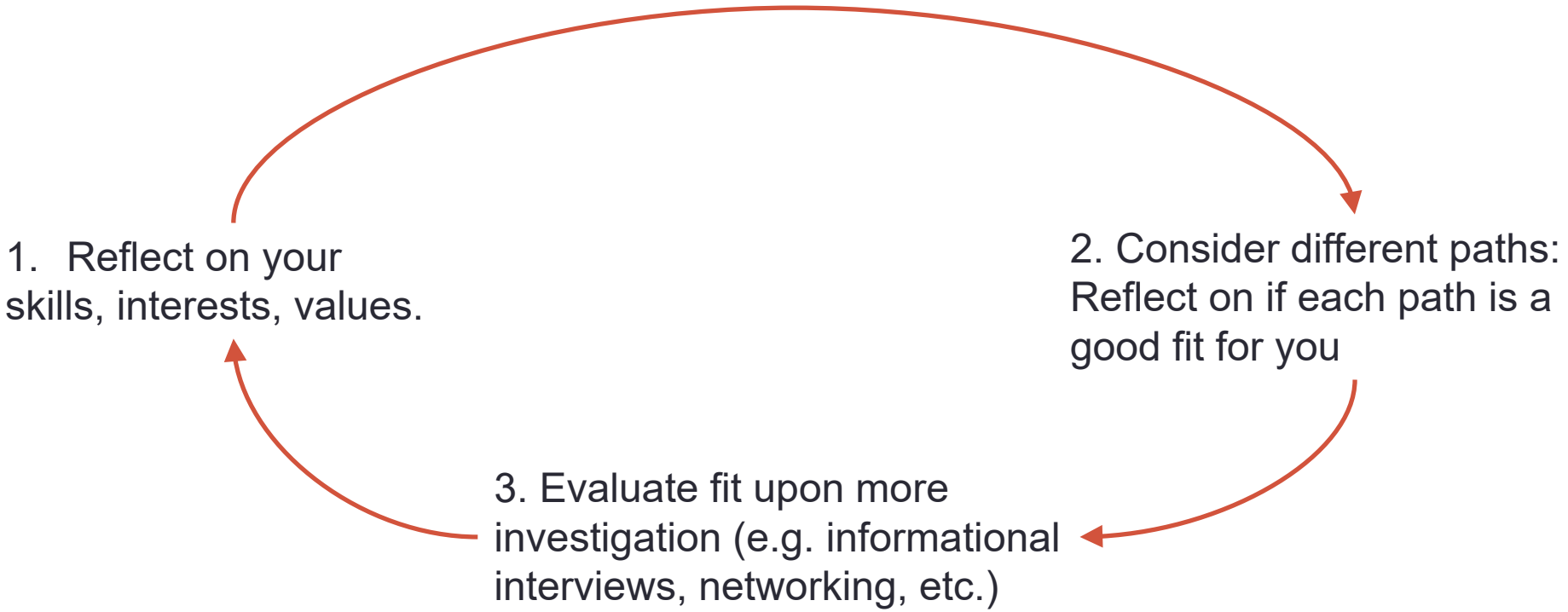
Short-term goals should:

- **S**pecific: be identifiable a specific action or event that will take place.
- **M**easurable: have benefits that are quantifiable.
- **A**chievable: be attainable given available resources.
- **R**ealistic: require you to stretch some, but have a likelihood of success.
- **T**imely: state the time period in which it will be accomplished.

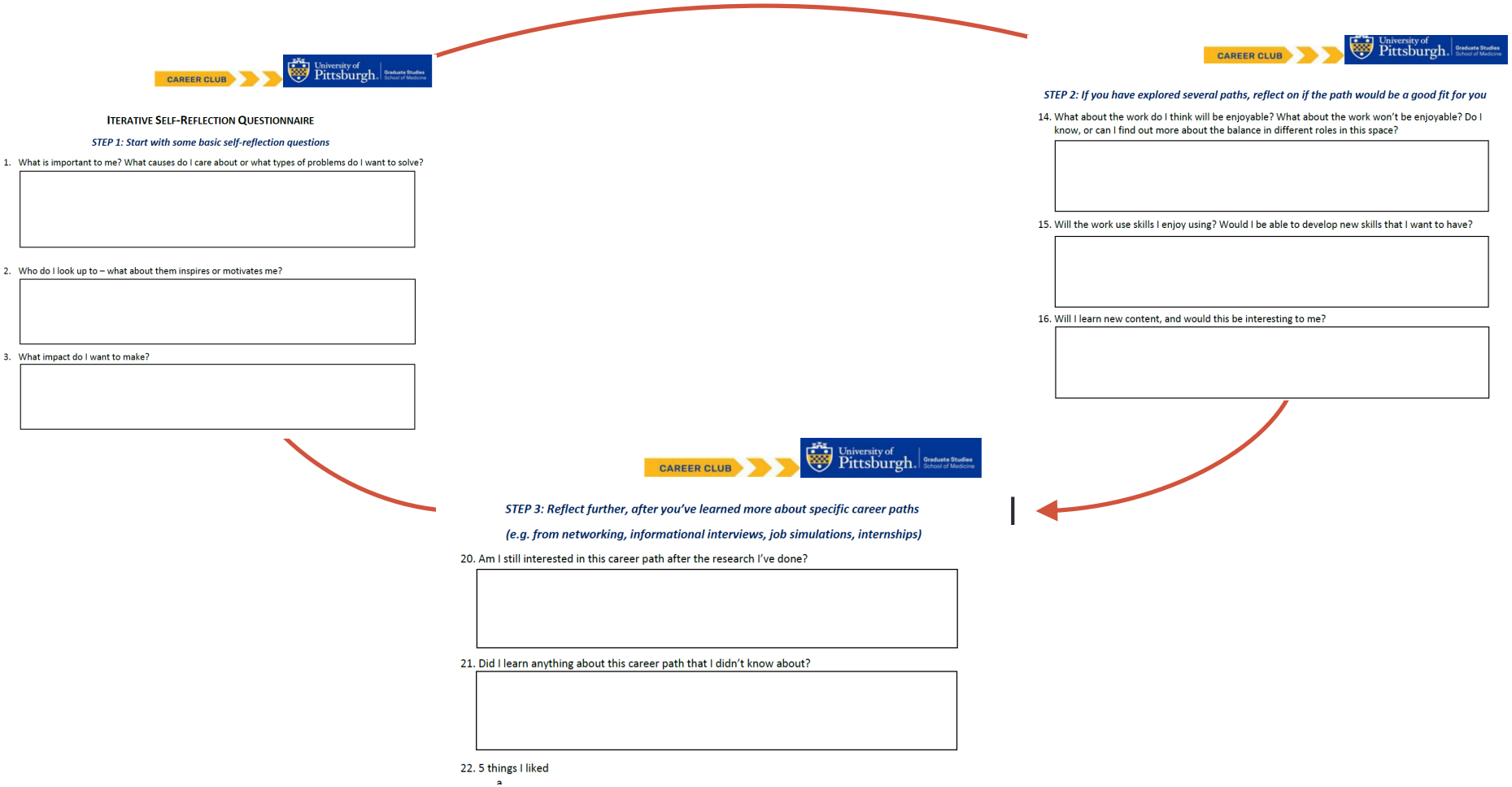
Long-term goals/plans can be less well-defined:

- Focus more on broader life/work values
- Be flexible and open-minded to account for future changes/uncertainty
- Use your short-term goals as logical steps to reach your long-term goals

Iterative process - Self-reflection



Iterative process - Self-reflection



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ITERATIVE SELF-REFLECTION QUESTIONNAIRE

STEP 1: Start with some basic self-reflection questions

1. What is important to me? What causes do I care about or what types of problems do I want to solve?
2. Who do I look up to – what about them inspires or motivates me?
3. What impact do I want to make?

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STEP 2: If you have explored several paths, reflect on if the path would be a good fit for you

14. What about the work do I think will be enjoyable? What about the work won't be enjoyable? Do I know, or can I find out more about the balance in different roles in this space?
15. Will the work use skills I enjoy using? Would I be able to develop new skills that I want to have?
16. Will I learn new content, and would this be interesting to me?

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STEP 3: Reflect further, after you've learned more about specific career paths

(e.g. from networking, informational interviews, job simulations, internships)

20. Am I still interested in this career path after the research I've done?
21. Did I learn anything about this career path that I didn't know about?
22. 5 things I liked
    a

Example Resources and Job Boards

Academic:
- Inside Higher Ed
- Higher Education Recruitment Consortium
- Science Careers

Industry:
- BioSpace
- Company websites
- LinkedIn – join Careers for Pitt Biomedical PhDs

Government:
- USAJobs

Nonprofit:
- Idealist

Also:
- Professional Societies/Associations

Resources:
- Best places to work:
  - Rankings
  - Salary levels
  - Known for advances in field
- HRC – Corporate Equality Index
- Work Values Inventory – Don Supers
- Work Economic Forum: Future of Jobs 2023: Skills in demand
- Gallup – StrengthsFinder

https://somgrad.pitt.edu/career-exploration/resources

Follow up!

Consider setting half an hour a week to do some follow up. You can:

- Update your myIDP
- Identify top career possibilities
- Reflect on why these are interesting to you
- Investigate top career possibilities
- Utilize additional resources (e.g. self-reflection questionnaires)
- Identify gaps in your knowledge or experience
- Identify questions about career options to ask at informational interviews
- Refine S.M.A.R.T goals and shape long-term goals
- Begin crafting ways to communicate your goals

Career Club Session 2: Feb 15

Conversations with mentors

- This session provides students and mentors the space and structure to have conversations about student career goals.

- Look for more details in your mailbox soon!

Connect with us!

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Questions?