The office of career & professional development presents:

Career Assessment Worksheet

For Life Science Graduate Students & Postdoctoral Trainees

This worksheet will take you through structured steps that will help you (1) explore what career path(s) might be a good fit for you, or (2) confirm that your "Current Career Goal" (if known) will indeed be a good fit. Going through this process will help you specifically articulate why your chosen career path is a good match for you, which will help when writing components of your job application package and interviewing for the job.

Through this Career Assessment Worksheet you will first define your unique career-related skills, values and interests. Then you will begin to examine possible career paths for PhD-level life scientists, considering each as a potential "fit" for your skills, values and interests. You may need to conduct some additional research to learn about various career path possibilities before you can assess this fit. Finally, you will identify any additional training or intermediate positions that you will need to complete in order to ultimately reach your "Current Career Goal."

This document does not contain answers. But it does contain tools that you can use to do your own career exploration. Career exploration may be a multi-day or multi-month process involving a variety of steps. Be sure to include these steps in your annual Individual Development Plan (IDP), in the table called "Career Development Projects."

When done with this worksheet, you should complete your annual IDP!

Table of Contents for this Career Assessment Worksheet

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STEP 1: SKILLS ASSESSMENT

Use the "Skills Assessment Worksheet" below to evaluate your strengths and weaknesses in various skills areas. *Consider giving a blank copy of this form to a mentor or trusted colleague, to obtain their input on which skills areas you excel at, and where you need improvement.* Your evaluation and that of your mentor/colleague will be helpful later in this process as you think about what skills you are naturally talented at, and which may be disconnects with your future goals.

This "Skills Assessment Worksheet" is identical to that found in Part 2 of the IDP.

Skills Assessment Worksheet for Researchers
Assess your strengths and weaknesses in the following skill areas:

4 = Highly proficient
1 = Drastic improvement needed
NA = Not applicable

Research Skills					
	Critical evaluation of data and scientific literature	NA	1	2	3	4
	Experimental design	NA	1	2	3	4
	Problem solving/troubleshooting	NA	1	2	3	4
	Statistical analysis	NA	1	2	3	4
	Computer skills	NA	1	2	3	4
	Creativity/developing new research directions	NA	1	2	3	4
	Skills specific to your field (see prompts below)	NA	1	2	3	4
Professional Skills					
	Oral presentation skills	NA	1	2	3	4
	Manuscript writing skills	NA	1	2	3	4
	Grant/fellowship writing skills	NA	1	2	3	4
	Teaching skills (in a classroom)	NA	1	2	3	4
	Teaching skills (one-on-one)	NA	1	2	3	4
	Identifying mentors and utilizing them effectively	NA	1	2	3	4
	Mentoring others	NA	1	2	3	4
Time Management	NA	1	2	3	4
	Meeting deadlines	NA	1	2	3	4
	Establishing priorities within your schedule	NA	1	2	3	4
	Working efficiently	NA	1	2	3	4
	Organizing skills	NA	1	2	3	4
	Flexibility and multitasking	NA	1	2	3	4
Interpersonal Skills					
	Positive relationships with colleagues	NA	1	2	3	4
	Reliability; following through on commitments	NA	1	2	3	4
	Communicating effectively in written correspondence	NA	1	2	3	4
	Communicating effectively in conversation	NA	1	2	3	4
	English proficiency – spoken and/or written	NA	1	2	3	4
	Ability to give and receive constructive feedback	NA	1	2	3	4
	Networking/meeting new colleagues	NA	1	2	3	4
Management and Leadership Skills					
	Data and resource management	NA	1	2	3	4
	Developing/managing budgets	NA	1	2	3	4
	Running a meeting	NA	1	2	3	4
	Establishing priorities for a team	NA	1	2	3	4
	Delegating responsibility					
	Leading and motivating others	NA	1	2	3	4
	Supervising/managing people	NA	1	2	3	4
	Working within an organization	NA	1	2	3	4

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List some *specific laboratory/research techniques* that you are **highly proficient at**, which could be valuable in a future career path.

List some *specific laboratory/research techniques* that you **need to drastically improve** in order to be successful in your current position or future career path.

List some *specific knowledge areas* that you **already specialize in**, which could be valuable in a future career path.

List some *specific knowledge areas* where you **need to drastically improve** your understanding in order to be successful in your current position or future career path.

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STEP 2: VALUES CLARIFICATION

Take inventory of your career-related values. What is most important to you?

Your career-related values are the factors or outcomes of your work that are most important to you. Even if you feel confident about your future career goals, it's a good idea to periodically assess your career related values. *If you are clear about your most important values, you are more likely to make career choices that are congruent with those values.* The exercise below will help you become more clear about your most important career-related values.

The following list describes a wide variety of career-related values.   Review each item on the list, reading each definition, and rate the degree of importance that you would assign to each item for yourself, using the scale below:

4 = *Very important* to me in my future career
3 = *Important* to me in my future career
2 = *Somewhat important* to me in my future career
1 = *Not important at all* to me in my future career

RANK	VALUE	DESCRIPTION
	Help society:	Do something to contribute to the betterment of the world I live in.
	Help others:	Be involved in helping other people in a direct way either individually or in small groups.
	People contact:	Have a lot of day-to-day contact with people as a result of my work activities.
	Teamwork:	Work in collaboration with others or as part of a team.
	Affiliation:	Be recognized as a member of a respected organization.
	Friendships:	Develop close personal relationships with people as a result of my work activities; or have a job that allows time to maintain close friendships outside of work.
	Competition:	Engage in activities that pit (or rank) my abilities or achievements against the abilities or achievements of others.
	Make decisions:	Have power to decide courses of action, policies, etc.
	Work under pressure:	Work in situations where time pressure is prevalent and/or the quality of my work is judged critically by supervisors, customers or others.
	Power and authority:	Control the work activities of other people.
	Influence people:	Be in a position to change attitudes or opinions of other people.
	Work alone:	Work on or complete projects by myself, without any significant amount of contact with others.
	Knowledge:	Engage myself in the pursuit of knowledge, truth and understanding; intellectual stimulation.
	Intellectual or expert status:	Be regarded as a person of high intellectual prowess or as one who is an acknowledged expert in a given field.
	Creativity:	Create new ideas, programs, organizational structures or anything else not following a format previously developed by others.
	Aesthetics:	Be involved in studying, appreciating the beauty of things, ideas, etc. or in creating that beauty.
	Supervision:	Having a job in which I am directly responsible for the work done by others.
	Stability:	Have a work routine and job duties that are largely predictable and not likely to change over a long period of time.
	Change and variety:	Have work responsibilities which frequently change their content and setting; avoidance of routine.
	Precision work:	Work in a situation where there is very little tolerance for error.

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	Security:	Be assured of keeping my job and a reasonable financial reward.
	Fast pace:	Work in circumstances where there is a high rate of activity and work must be done rapidly.
	Recognition:	Be recognized (by individuals or co-workers or the public or bosses) for the quality of my work.
	Excitement:	Experience a high degree of (or frequent) excitement in the course of my work.
	Adventure:	Have work duties that involve risk-taking or trying new things; could be a position that allows a lot of travel.
	Profit-gain:	Have strong likelihood of accumulating large amount of money or other material gain.
	Earning potential:	Monetary rewards will be such that I am able to purchase those things I consider essential as well as the luxuries of life that I wish to have.
	Independence:	Be able to determine the nature of my work without significant direction from others; not be required to do what others tell me to do.
	Moral fulfillment:	Feel that my work is contributing significantly to, or is in keeping with, a set of moral standards that I feel are very important.
	Location:	A place to live (town, area) which is conducive to my lifestyle and affords me the opportunity to do things I enjoy most.
	Community:	Live in a town or city where I can get involved in community affairs.
	Physical challenge:	Have a job that makes physical demands which I would find rewarding.
	Time freedom:	Have work responsibilities that I can work at according to my own time schedule; flexible work schedule or no particular work schedule.
	Status:	The position I have carries respect with my friends, or my family, or some community of people.
	Advancement:	A job that provides the opportunity to work hard and make rapid career advancement.
	Challenging problems:	The position does not have to be "essential to the survival of the human race" but it should provide challenging problems to solve and the avoidance of continual routine.
	Creative expression:	Opportunity to express in writing or verbally my ideas, reactions, and observations concerning my job and how I might improve it.
	Job tranquility:	To avoid pressure and the "rat race".
	Work/life balance:	A job that allows me to achieve balance between time spent at work and time spent doing other activities.
	Family friendly:	A job that allows me to balance family and work without threatening my promotion or advancement.
	Work on the frontiers of knowledge:	Do work In an environment that allows you to be at the cutting edge your field.
	Exercise competence:	An opportunity to involve myself in those areas in which I feel I have talents greater than the average person.
	Marketability:	Work in a high-demand area or develop a high-demand skill set so that I will have an easy time finding my next job.

Circle or highlight the work-related values that are ranked as "4's".

STEP 3: INTERESTS INVENTORY

Even if you feel confident about your future career goals, it's a good idea to periodically assess your career related interests. Why? Because *people enjoy their work most when they are doing tasks or learning about areas that they find interesting and engaging.*

If you had the *ideal job*, what *tasks or activities* would you *enjoy* doing? (Rank on a 4-point scale.)

    4 = I would enjoy doing *much* of this in my future career
    3 = I would enjoy doing this *regularly* in my future career
    2 = I would enjoy doing this *periodically* in my future career
    1 = I would prefer to do *none* of this in my future career
    ? = I don't know

_____ Designing experiments

_____ Performing experiments

_____ Analyzing experimental results

_____ Developing new scientific projects/directions

_____ Writing grant proposals

_____ Writing scientific manuscripts

_____ Writing research reports or other short business-related correspondence

_____ Writing position papers or policy papers

_____ Creating presentations

_____ Representing data in figures/illustrations

_____ Giving presentations of my research

_____ Thinking about science

_____ Discussing science with others

_____ Attending conferences or scientific meetings

_____ Teaching in a classroom setting

_____ Mentoring or teaching one-on-one

_____ Developing curricula

_____ Teaching others how to be better educators

_____ Explaining science to the public or to non-scientists

_____ Responding to work-related email

_____ Developing collaborations

_____ Negotiating agreements

_____ Analyzing financial data or budgets

_____ Assessing business trends and strategies, entrepreneurial ideas

_____ Working in committees and small work groups

_____ Networking with others in lab or out of lab

_____ Travel (work-related)

_____ Organizing things, creating systems in the workplace

_____ Programming/scripting, working with computers

_____ Volunteering in the community

_____ Serving on university committees

_____ Planning or organizing events

_____ Leading or supervising others

_____ Reading papers in my field

_____ Learning about other fields

Of the tasks that you scored with a "3" or "4", circle or highlight the top 3-5 of these.

Scientifically, what *fascinates* you? Are there other knowledge areas/scientific fields you would like to have as a part of your future career?

Are there *non-scientific areas* that you find interesting and engaging? What *passions or pursuits* do you wish played a larger role in your life?

STEP 4: UNDERSTANDING HOW YOUR SKILLS, INTERESTS, AND VALUES WORK TOGETHER

It is important to **consider your skills, interests and values all together** when setting your short- and long-term career goals!   Too many scientists set a career goal based only on what they're good at (skills) or based only on the field that they found fascinating to study (interests) many years ago. But many career counselors agree that you are most likely to make a satisfying career choice when you have a clear understanding of how your skills, interests and values work together.

So…do all of YOUR identified skills, interests and values make sense when considered together? If not, can you identify inconsistencies between these components, which might cause trouble for you in the future? To consider this issue more deeply, respond to the questions below and then move on to Step 5 where you will begin to connect your skills, interests and values to potential career paths.

a. Comparing your skills and interests.
Compare the list of SKILLS you identified in Step 1 against your list of INTERESTS in Step 3.
- Do your INTERESTS and your SKILLS seem consistent with each other?
- Are you developing skills in the areas that interest you?
- If you are currently on the academic faculty research track, are your skills and interests consistent with your understanding of what's required to succeed along that path?

> If you answered "no" to any of the above questions, then you should consider the implications of any inconsistencies between your skills and interests. List below the skills and interests that don't seem consistent with each other. Then list the potential implications of each inconsistency.

Examples of Skills-Interest Disconnnects

Example 1:
Fred is fascinated by a certain scientific area (interests) but has "bad lab hands" in that area (skills). Implications might include an inability to produce data in that area, which will negatively impact ability to publish and get funding. Perhaps Fred should consider pursuing a path that allows him to apply new bench skills to his fascinating field.

_____

Example 2:
Jenny is highly proficient at carrying out experiments using a particular "hot" technique (skills) but finds the whole process of learning about science painfully boring (interests). Implications might include an inability to keep up with her field over time. Or if she persists in pursuing her current career path, she may experience burnout because her work is not engaging.

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b. Comparing your skills and interests against your values.
Compare the most important VALUES you listed in Step 2 against your lists of SKILLS and INTERESTS.

- Do your VALUES seem consistent with your INTERESTS and SKILLS?
- If you are currently on the academic faculty research track, are your career-related VALUES consistent with your understanding of what's required to succeed along that path?

> If you answered "no" to any of the above questions, then you should consider the implications of any inconsistencies between values, interests and skills. List each inconsistency below. Then list the implications of each inconsistency.

Examples of Inconsistencies between Skills, Interests and Values

Example 1:
George identifies that it would be important for him to direct or control the work of others ("power/authority" value). Also "leading/supervising others" was listed as one of the interest areas he would like to do much more of. However, George's Skills Assessment identified "getting along with others" where he needed improvement. He should identify this "values-interests-skills disconnect" and realize that unless he improves his interpersonal skills, he will have career-limiting challenges in pursuing the kinds of leadership positions he aspires to in the future.

_____

Example 2:
Betty identifies "family friendly" as a most important value, allowing her to balance work and family/friends. But she also observes that all of her top-rated skills ("designing experiments", "creating new research ideas", "grant writing", "leading others") are consistent with the skills required for success in a PI position, a job known to require sacrifice of personal time during the early years. This postdoc might identify the "values-skills disconnect" and decide to examine her interest lists to see if other career path ideas emerge, or she might consider strategies for improving her work efficiency as a future PI.

STEP 5: HOMEWORK – LEARNING ABOUT CAREER PATH OPTIONS FOR PHD-LEVEL SCIENTISTS

If you would like to find out more about the range of career options available to those with terminal degrees in the sciences (PhD or MD), here are some resources that you might want to review. As you explore these resources, think critically about how your skills, values, and interests fit the descriptions of the career paths available.

> **Resource #1:** career.ucsf.edu → Life Sciences → Job Search
> Here you will find resources to help with your career exploration.
>
> **Resource #2:** www.sciencecareers.org will provide the most up-to-date articles describing various career options for scientists.
> Click on "alternative careers" near the bottom of the left side menu. Then look for "Feature Index" listings, which are groups of articles organized around career paths, such as "Feature Index: Scientists as Medical Writers", etc. More than 30 "Feature Index" listings exist, each representing a different career path available to PhD-level scientists.
>
> **Resource #3:** Job postings.
> Once you begin to identify some career path options that may be a good match for your skills, values and interests, visit major job hunting websites and read *multiple* job postings for each of those positions. Do the job descriptions sound interesting? Do the "required qualifications" listed in the job postings match your skills? Do the job postings give you any hints about how your values will match this career path?
>
> **Resource #4:** Books describing career paths for scientists.
> Many of these books are available used on amazon.com or may be available on loan through your campus career center. At UCSF, see career.ucsf.edu/library.html
>
> In particular, you may want to check out:
>
>> *Career Opportunities in Biotechnology and Drug Development,* by Toby Beth Freedman
>>
>> *Careers in Science and Engineering: A Student Planning Guide to Grad School and Beyond*, published by the National Academy Press
>>
>> *Put Your Science to Work*, by Peter Fiske
>>
>> *Jump Start Your Career in BioScience*, by Chandra B. Louise
>>
>> *How to Get a Tenure-Track Position at a Predominantly Undergraduate Institution: Advice for those in the scientific fields*, published by the Council on Undergraduate Research
>>
>> *Leaving the Ivory Tower: Alternative Careers in Science*, edited by Cynthia Robbins-Roth
>>
>> *Nontraditional Careers in Science*, by Karen Young Kreeger
>
> **Resource #5:** Attend career exploration events.
> On many campuses, the student governments, postdoc associations or campus career center offer a variety of events highlighting scientists who have succeeded in academic and non-academic careers. At UCSF, check the OCPD website calendar. Also, large scientific conferences frequently have concurrent career development workshops and "alternative careers" seminars.
>
> **Resource #6:** Set and achieve networking goals at social events and conferences.
> Before you attend a conference, scan the roster of other attendees, and set goals for meeting some of these scientists. Attend conference sessions focused on "best teaching practices" if you are interested in careers at a primarily undergraduate institution; or science policy sessions if you are interested in policy. Meet other attendees or introduce yourself to speakers. Attend

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networking socials on campus, organized by your local scientific association chapter, or at conferences. When you meet people, ask them about their careers; tell them about your interests and/or questions—they may be able to introduce you to someone who can help. Bring business cards (graduate students and postdocs can use these, too!) so that you can easily exchange contact information.

Resource #7: <u>Informational Interviewing.</u>
Make appointments with scientists who have followed your career path of interest to meet with them to learn more about their job/company/career path. This can also be a great way to acquire new mentors (see #8 below). For sample informational interview request letters, sample informational interview questions, and sample informational interview thank you letters, go to <u>career.ucsf.edu</u>. Click on "Life Sciences", then "Samples/Resources", then "Going on the Job Market".

Resource #8: <u>Identify and recruit mentors to provide advice and guidance.</u>
If there are scientists who you have met via networking and who you connected with, you may want to develop a stronger mentoring relationship with them. They may not only provide advice for how to prepare for a career path and find a job, but they may also be able to connect you with others in the field (helping you broaden your network), notify you of job openings they know of when you're ready to start looking for a job, or even act as a reference in your job search.

Resource #9: <u>Meet with a career counselor.</u>
If you are a student, postdoc, or alum of UCSF and need help with any of these resources or would like to discuss your career options in person, we at the Office of Career and Professional Development are happy to meet with you. You can request an appointment with an OCPD counselor by visiting our website. Go to <u>career.ucsf.edu</u> → Life Sciences → Appointments.

STEP 6: MATCHING SKILLS, VALUES, AND INTERESTS TO CAREER PATH OPTIONS

Many career counselors agree that the most satisfying *career path* choice allows you to make the best use of your *skills* in a position that is consistent with your most important *values* and is in a field that *interests* you.

On the next page is a list of career paths commonly pursued by PhD-level scientists.

1. For each career path category, score how well the career path matches with your **skills**. (See Step 1 in this worksheet.)

2. Then, for each career path category, score how well the path matches your **values**. (See Step 2 in this worksheet.)

3. Finally, for each career path category, score how well the path matches your **interests**. (Step 3 in this worksheet.)

> For questions 1-3 above, rank on a 5-point scale:
>
> 5 = Career paths in this category match **very well** with my skills/values/interests.
>
> 4 = Career paths in this category match **fairly well** with my skills/values/interests.
>
> 3 = Career paths in this category match **somewhat** with my skills/values/interests.
>
> 2 = Career paths in this category match **poorly** with my skills/values/interests.
>
> 1 = Career paths in this category **do not** match with my skills/values/interests.
>
> ? = Don't know enough about this category

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Skills	Values	Interests	Career Path Categories:
			a. **Principal investigator of a lab in a major research-intensive institution**
			b. **Other research-intensive careers in academia**: senior bench scientist or lab manager in a larger lab, director of a multi-user research facility within an academic institution
			c. **Research-intensive career paths in biotech/pharma**: bench researcher, managing research teams or research facilities
			d. **Bench science careers in government:** bench researcher (e.g., at NIH, EPA, DOE, USDA), or forensic science (intelligence agencies, federal/state dept. of justice)
			e. **Careers in academia with heavy emphasis on teaching along with research**: faculty at a 4-year college, masters-granting university, or doctoral-granting university whose job includes both research and major teaching responsibilities.
			f. **Teaching-intensive careers in academia**: faculty in community college, university lecturer, course director
			g. **Science education for the general public**: working at a science museum, public outreach for science-based organizations, training and development with groups in business or industry settings
			h. **Science education for schools/universities**: curriculum development, science education researcher, K-12 teacher or science specialist, education program administration or leadership
			i. **Healthcare-related careers**: public health agency, genetics counseling, medical informatics/biostatistics
			j. **Writing-related careers**: science writing, medical writing, technical writing, editing, science journalism, publishing, other communications
			k. **Policy-related careers**: science policy in public sector, science policy in private sector (think tanks, etc.), educational policy, management of science services or societies, working at a foundation or research-funding agency
			l. **Intellectual property-related careers**: patent agent, patent attorney, technology transfer
			m. **Careers related to the business of science**: management consulting, business development in a biotech company, venture capital, biotech entrepreneurship, market research, investment banking, technical sales, technical support
			n. **Careers related to the sales, marketing and support of science-related products:** medical science liaison, technical sales, technical support
			o. **Careers related to drug approval and production**: regulatory (FDA or within a company), clinical research/trials management, process development (e.g., scaling up drug production), quality control
			p. **Other career**:_____

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4   Are there one or more career path categories that provide an excellent match for your skills *and* your values *and* your interests? If so circle or highlight these career categories on the table. These are the career path categories that you need to learn more about.

5.   Are there any career paths where you have a high score for two areas (skills or interests or values), but a moderate or low score in one of the other areas? If so, you may want to learn more about these career paths before discounting them—see STEP 5 in this worksheet.

STEP 7: IDENTIFYING YOUR CURRENT CAREER GOAL

In order to create an Individual Development Plan that will best prepare you for finding success in your future career (as well as in your training), it is important to identify your current career goal. If you plan to spend time this year exploring more career paths, then keep these various career paths in mind as you move ahead through this worksheet.

1.   YOUR **"CURRENT CAREER GOAL"**: If you had to choose now from the list above, *what career path or career path category would you choose at this time*? _____
_____

2.   How confident are you in your choice of this career path?
     a.   I am very confident in this career choice.
     b.   I am fairly confident in this career choice.
     c.   Honestly? I'm just guessing. Other career paths I'm also still considering are: _____
_____

STEP 8: IDENTIFYING YOUR NEXT STEP CAREER GOAL

Before you can attain your "Current Career Goal", you may be required to spend time in one or more transitional positions. Or you may be required to obtain one or more qualifications or training experiences. You need to identify any necessary transitional steps before you complete your IDP. The step you will take next, after your current position, is called your "Next Step Career Goal".

1. Map out a viable route, including intermediate steps, to attain your stated Current Career Goal.
    (Example: Student → Postdoc → Faculty → Chair → Dean)
    (Example: Student → Management Consultant → MBA Degree → Venture Capitalist)

    If you're not sure what this route would be, do more research into what is required to attain your stated Current Career Goal. (see STEP 5).

2. Do you plan to do additional **training** as a next step to prepare for your career goal?   Yes / No

    If you're not sure what training might be required, do more research about your Current Career Goal (see STEP 5).
    Describe the additional training:

        Academic postdoc
        Industry postdoc
        Additional degree: _____
        Additional courses: _____
        Internship: _____
        Other: _____

3. Are additional transitional **experiences** required in order for you to create a resume that qualifies you for your Current Career Goal? If so, list them below. If you're not sure what transitional experiences might be required, do more research into what is required to attain your stated Current Career Goal. (see STEP 5).

4. Based on your answers to (1) and (2) and (3) above, what is your "NEXT STEP CAREER GOAL"? (the next step you will take, a goal you aim to attain within 1-6 years) _____

5. As you move toward this goal, who will be your primary mentor? _____

    Who are other mentors you can utilize? _____

    Are there other types of mentors who could help you? _____

STEP 9: COMPLETE AN INDIVIDUAL DEVELOPMENT PLAN (IDP)

Now is a good time to complete an IDP. The IDP process will help you put together a plan and manage your time effectively over the next year so you will get closer to reaching your goals. If your goals include exploring career options or utilizing any of the resources listed in STEP 5, be sure to include these in your IDP in the table called "Career Development Projects."