Career Transition Support

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Introduction

We hope the following will provide useful information and perspectives to help you with a career transition, including transitions that are unexpected or unwelcome. These transitions can be difficult. While they can have commonalities, everyone's circumstances and resources have unique aspects. The information below cannot possibly take the place of the support, time for careful discussions, and insight from those who know you best. However, we provide these thoughts so that may provide a starting point for addressing your own decisions.

The need to consider a career transition away from, or reducing involvement in, bench science can occur to anyone at any career stage and at any age. In the best circumstances, this is a new opportunity to take on an additional or alternate role, generally to positions that involve more management and less time in or directly engaging in the work of a lab. In academia, examples are heading an educational program, becoming a chair or dean; in industry or government, managing teams of researchers, program management, or policy positions. Undesired circumstances can also drive the need for change: these can include loss of funding, tight job markets, and downsizing of the institution. Unfortunately, in our society, job insecurity has become more common, and is increasingly a systemic problem in the view of some observers who study labor trends. Importantly, these two circumstances differ significantly: one is a sought-after change, the other is imposed by circumstances or forces partially or completely beyond your control. They also differ because one is, or feels like, an affirmation of your knowledge, skills, abilities and work to date. The other may feel like a repudiation of all of these [1-2]. In either case, it is best not to let either "go to your head." Your emotional reactions are important, valid, and need to be addressed, but they should not be the only, or even a major, guide of your decision to stay or leave direct engagement in research work. Try to remember that your job is only part of who you are, and one piece in having an interesting and successful life. This is certainly hard. In either circumstance, you will benefit from support and counsel from others at all stages of decision-making and implementation. The loss of opportunity will require addressing the very normal feelings of "imposter syndrome," self-worth, anger, and grief. And surprisingly, this also can occur with "positive" changes. According to Rudyard Kipling's poem "If," it is best "…If you can meet with Triumph and Disaster, And treat those two impostors just the same…."

There is much information online and in print about how to find the next job and how to make these decisions. The topics are generally in two broad categories: future lifestyle and finances. While few are directed specifically to scientists, they still can be useful for thinking about the transfer of skills, and interests and professional goals [3].

The goal here is to provide information, questions to consider, observations, and to highlight topics specifically related to career transitions by scientists. This is based on our own experiences and those of our colleagues.

Major Topics

I. Important Questions

To begin thinking about a career change, ask yourself important diagnostic questions. For example: Are you still having fun and getting satisfaction from doing science? Would you still accomplish your scientific and personal goals in a different laboratory-centric position? Do your circumstances and desires still allow you to make whatever life changes are needed to continue to be a laboratory-centric scientist? Do you still have the physical and mental ability to do "the job" as well as the ability to do (all the) other duties?

Important factors impacting these questions include (a) Institutional relationships – good, bad, ugly (includes funding, staffing, infrastructure support); (b) Health status – your own, family members (older and younger); (c) Life balance and energy – are you still capable of working and doing all the enjoyable things you did outside of work? (Even if these are more science-related, *e.g.,* journal review etc.) What about hobbies, time with friends and family, travel, sports, etc.?; (d) Financial circumstances – impact on you and your family?

These questions are not easy to answer; they require thought and effort to answer honestly to yourself and to others.

II. If You Decide to Stay in Laboratory Research

This is possibly the least complicated choice resulting from asking yourself the above questions. After all, it follows the career path you have been planning for and trained for, and have received the most information and advice on how to accomplish. But it can be hard to implement, especially in difficult hiring and funding climates. For graduate students and postdocs, there is abundant advice for typical career progressions (*e.g.*, see Jon Yewdell's "How to succeed in science: a concise guide for young biomedical scientists" [4]).

However, the next two sections have especially relevant thoughts for those considering a change. "If You Decide to Leave the Bench" can be helpful as to what type of work you desire in

your next position. “What Needs to Be Done, and How?” includes tasks that involve any change out of a current research position.

III. If You Decide to Leave the Bench

Society tends to understand the importance and difficulty of transitioning away from a career that has required years of training for professional athletes and performance artists, but less so for other professionals, including scientists.

This decision may be the most difficult result from answers to the questions posed in Section I. The fundamental problem is how to stop actively doing laboratory science, which likely has been the driving interest and most interesting, satisfying, and valuable use of your time and effort for many years, if not decades. And, it is central to your identity and means to make satisfying contributions. Most of your life has been engaged in acquiring the education, skills, and opportunities to actively engage in a demanding profession. And now you are considering leaving the bench, and going on to build an as yet incompletely determined or experienced set of replacements that may or may not turn out to be as interesting or fully satisfying.

An important goal, insofar as possible, is to determine whether and how to continue to make good use of your training. When thinking about what is next, the skills and aspects of laboratory work that were most satisfying can be helpful guides to future pursuits. Existing passions, hobbies, or things you always wanted try is another guide. And if your future is one in which you are not directly engaging in science-related pursuits, what knowledge, skills, abilities and experiences are transferable to new professions?

Time permitting, you should consider whether there are items or skills that would be good to acquire, purchase, or research (while still in the present position) that will help in the future. This is because there can be easier access to points of contact – vendors, colleagues’ information or help, and institutional resources (libraries, seminars, etc.) – while still in the current position. Also, are there items, especially if costly, that would be best purchased at your present salary.

IV. Dealing with the Personal, Professional, and Financial Impact of a Life-Changing Decision

The impact of your decision can range from “Cannot come too soon,” to “Ready to go or move on to something new,” to a “major loss” (feeling [nearly] equivalent to death). It is normal for these emotions to be very mixed; for example, you may be very glad to be rid of an untenable responsibility or difficult personal interactions, but you may grieve the loss of self-identity as a Scientist or Educator.

If the latter perspective, the “stages of grief” may be relevant – and you may be surprised if it does or does not apply to you – or, when it does (immediately or delayed). Most scientists are not good at recognizing this or acknowledging this to themselves or others, so do not be dismayed if it does apply.

It may be important, or even essential, for you to identify mentor(s), colleague(s), friend(s) or a family member(s) who can really understand the importance of your decision who will listen and

advise. Ideally, this would be someone who will appreciate that for many scientists it is not just leaving a satisfying job, but a lifestyle central to their identity for most of their life to that point in time.

Consider consulting professionals who can provide insight into life transitions relating to personal goals and/or finances. It is important to review your current financial situation and plan for the near and long terms insofar as possible. If you can do so, consult a financial planner. If the transition is sudden and changes are immediate, investigate if there is financial advice provided through your institution or community services. If you have more time, take any financial training or seminars offered by your institution or others (community colleges, etc.). Of course it is preferable to have an extended period for planning or to have begun planning well in advance of any career transitions, allowing you to consider alternatives and the impact of the timing of your decisions. But if not, try not to waste effort on "should have," but instead find the best immediate advice and planning you can. If necessary, seek help from friends, family, colleagues and professional counseling to address the non-financial impacts (*e.g.*, moving; time for child care; time available to spend with friends and family) of these financial changes.

V. What Needs to Be Done, and How?

Below are things that need to be addressed, whether the career transition is to another research position, a different science-related job, or a totally new direction.

The time available will determine how much of the following can be addressed. Each transition is different, and the importance and priority will differ. It is likely that, unless you have been involved in the details of a colleague's career transitions, there are details that you have not considered, process details still to be learned, and you will underestimate the time to accomplish what needs to be done. Once you have determined (or have imposed by others) the time available, then prioritize the following tasks – do those you can address as best as you can.

- **It is critical to identify and take/make copies of important employment documents. Document your employment, accomplishments, specialized roles/committee appointments, performance evaluations, and financial records.**
- Tell supervisors, colleagues (departmental, institutional, and collaborators), and lab members that you are leaving. Consider the most appropriate, effective, and kind timing, location, and approach for each of these different groups.
- Projects, Funding and Collaborations – determine which ones to retain, pass to others, close out, or finish prior to departure. All these outcomes will take time to decide on a plan and implement. All are complex both personally and professionally; what follows is intended to be an overview and a starting point.
    - Ideally, you will have the opportunity and time to plan your transition, but if not, there still are administrative actions you will need to address. If you are not leaving the bench, you may be changing institutions or restructuring time to have a co-PI or collaborator take on a larger role or transfer a project to a member of your lab. If you are leaving the bench but still have active grants, consider if you want to pass them on to collaborators, or if possible, use as "dowries" for current or former trainees to

establish/build their own research programs. If the grants are not retained by you, you will need to identify prospective PIs or co-PIs who will be able to be responsible for all aspects of the project. Or, you may be ending the project. In all these cases you will need to work with the sponsor and your institution to receive approval of your plan and support and guide you through the administrative actions that allow the transition to legally occur. The reason is "your" grant from the government (or other sources) was actually made to your institution; therefore they have administrative responsibility for it. This is also true for most other funding mechanisms such as co-operative agreements and contracts. Typically, institutions and sponsors are interested in working with you to see that the work is continued and the project successfully completed. However, that is not a given, may not be possible, or may not be approved. Ultimately it is the decision of primarily the granting agency, and then of your institution. Therefore, coordinating with your leadership, Department Chair, and Grants Administration (or equivalent) will be crucial to determining what is desirable and possible. Ideally, they will work with you (even if your timeline is limited) on what you need to do prior to departure to meet the necessary legal obligations and professional expectations (hopefully burning no bridges).

    - The most complex situation will be transferring projects to others and/or other institutions. Additional complexity will be added if you are transferring the grant or hope to protect existing personnel and/or transfer of equipment. If your funding is entirely intramural, it is likely that all the necessary actions can be addressed internally through your leadership. For NIH or NSF funds to be transferred to another PI, another institution, or both, and/or there is early termination of the project, it will be more complicated. You and your institution will need to file the legally-required paperwork to first receive approval, and then make the planned changes. In brief, for a successful transfer, the sponsor needs timely notification, and the sponsor and institution(s) involved must review and approve the requests for the new PI, budgets, new institution, transfer of funds, and disposition of existing personnel and equipment. The links cited [5] are a starting point for the NIH and NSF processes, requirements and forms. For other sponsoring foundations or agencies, you should contact them.

- Data and publications – complete manuscripts, pass to others for completion, archive, take for later use (if permissible), or destroy if required. Identify an area in your office and lab where data such as lab books and inventories are kept so that they are easily identifiable if you are required to leave on short notice. Will publications be completed before the final day, or afterwards? Who will deal with journals, correspondence, and how will page charges be covered?
- Intellectual Property – are any of your discoveries patentable? If so, what is the process of protecting your institution's rights to this material – and your own? Be aware that you may be able to receive royalties if your work is commercialized, or at least make sure that your institution will receive future benefits.
- Literature access – if you need this, how will this be accomplished?

- Samples – pass to others, or destroy. Make sure to document the fate of any patient files, samples, or other biohazardous material. This will take longer than you think! Coordination with institute or regulatory oversight will be needed. If you have biological samples, animals, or human subjects, materials (medical charts, survey responses, etc.) that you are forced to abandon, prepare a rough inventory and email it to the relevant oversight committees as soon as possible (*e.g.*, location of materials, etc.). Do not assume your colleagues will know how to handle them.
- Give up – space, credentials, leadership roles. What part of the process is set by institution or regulatory or legal requirements? Determine whether you can/want to retain any, and how to do that. If your institution allows emeritus/a status (which often comes with perks such as ongoing access to libraries, parking, etc. – even email!), are you eligible and how do you apply for it?
- Other documents – pass to others, archive or destroy. Check institutional or regulatory requirements on what is allowed. Sort and determine which documents need to be shredded, *e.g.*, those with personal identification, so-called personal identifiers information (PIIs) (social security number, job applicant information, lab members' information etc.), non-disclosure information, and professional ethics and customarily sensitive material (manuscript reviews, others' grants, project discussions notes, memos with others, etc.). Other non-sensitive material should be recycled.
- Consider whether you have physical items, documents, and/or photographs that would be of interest to historians at your institute, museums (specialized, local, national, international), professional societies, The Wayback Machine, or other electronic/internet repositories.
- Consider whether you have physical items, documents, photographs, unpublished data or other works that you want to keep for use or treasure. Determine if permissible to take, and/or if arrangements need to be made to do so.
- Identify personal items in your office that you may wish to keep – *e.g.*, label books or decorations/artwork bought with personal funds with your name and "personal copy/item."
- Update your CV. If you do not have a LinkedIn account, start one under your professional name to allow you to be tracked if you will lose access to your email.
- Investigate access to your former work site(s) – Needed? Possible? Permissions, paperwork prior to leaving (including leaving your contact information with administrative points of contract).

As best you can, determine what needs to be done, the order, and estimated time for these tasks. As noted above, it takes longer than you think. Conversations take time (getting responses from others can be slow). Sorting takes time. You may need time to reflect on documents and actions as this is your professional history. Realistically (see above) you cannot just take everything in file drawers and put them in a recycling bin, shredder, or dumpster (or for e-records hit delete), even if you are very tempted to do so. Likewise, you probably cannot just unplug a freezer and walk away. If possible, ask others how much time they needed or ask colleagues what they observed about others.

VI. Deciding What's Next

The following is designed to provide suggestions of how to stay involved in science if the career transition results in your primary professional activity no longer significantly involving bench science.

The fundamental challenges are determining what to do and adjusting to this new future.

The most important question is do you want (or, are you able) to remain in contact / engaged in science, or leave it all behind?

Recognize in many respects you will always be a scientist. Your training and experience will always be part of your approach to problem solving, how you view the world, your interests, and values. That is a good thing and much needed wherever and with whomever you find yourself.

Instruction

- Part time teaching at an institution (including at one new to you) such as a small college, community college, local school.
- Involvement in society educational initiatives, non-profit, tutoring, and/or podcasts.
- Help support a lab, especially early career stage scientists (particularly if you will have emeritus status or equivalent). Consider planning and making arrangements with specific lab(s) in advance.

Science Volunteer

- Science Advocacy – Organizations, professional societies, community-based engagement (such as K-12 outreach), Op-Ed authorship (traditional or online) or supporting those who do these already.
- Scientific society support.
- Citizen scientist – formal programs (*e.g.,* Cornell bird census), local environmental groups.

Conclusion

Career changes are always stressful, even when desired. Unwanted ones typically are more stressful. Almost no one has a "straightforward" career or follows the path and sequence of professional activity they planned at early career stage. In a sense, careers are like experimental work. Unexpected things happen that require a new unanticipated direction. Ideally you have been able to hear (at ASV meetings, and/or during seminars and conversations at your home institution) excellent information from prominent ASV members about the unexpected twists and turns they experienced. We hope the above will provide a basis for you to make the best decisions available to you in your current circumstances.

Acknowledgments

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References

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2. “What Donald Trump’s science funding cuts mean for young researchers.” May 14, 2025. https://the1a.org/segments/what-donald-trumps-science-funding-cuts-mean-for-young-researchers/

3. Bolles, R.N. (2022). *What Color Is Your Parachute? Your Guide to a Lifetime of Meaningful Work and Career Success*. (Ten Speed Press).

4. Yewdell, J.W. (2008). “How to succeed in science: a concise guide for young biomedical scientists. Part I: taking the plunge” and “Part II: making discoveries.” Nat. Rev. Mol. Cell Biol. 9:413-416 and 9:491-494.

5. See the following NIH and NSF websites (current as of 2 June 2025) for details:

NIH

https://www.niams.nih.gov/grants-funding/post-award-grants-administration/change-grantee-institution-transfers

https://www.era.nih.gov/recipients/submit-relinq-statement.htm

https://www.era.nih.gov/recipients/seek-prior-approval-for-withdrawal-of-grant/request-change.htm

https://www.era.nih.gov/recipients/seek-prior-approval-for-withdrawal-of-grant

NSF

https://www.nsf.gov/awards/request-a-change

https://www.nsf.gov/policies/pappg/24-1/ch-7-award-administration#ch7B2