Managing Your Research Career: Basic and Translational Sciences

Peter Hunt Mercedes Paredes Shaeri Mukherjee Faculty Development Day Sept 14, 2021

WELCOME TO LIFE AS UCSF INVESTIGATORS



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Getting Started: What I Wish I Knew

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Managing your startup funds

Startup funds represent your major source of money for the first 2-3 years Spend Wisely!

With startup money you may have to:

- 1. Buy equipment
- 2. Pay part of your salary
- 3. Pay for staff, student, postdoc salaries
- 4. Pay for reagents
- 5. Pay for instrument user fees
- 6. Pay for maintenance contracts
- 7. Pay for renovations (maybe)

Salary covered in years 1 and 2 (\$110,000+ per year= >\$220,000)

Hires: 2-3 RAs or postdocs--\$60,000/year each (salary + benefits) That is already >\$150,000K + \$220,000 for years 1 and 2

Remaining purchases: Purchases -\$150,000 for big equipment UV spec, FPLC, centrifuges, PCR machine, glassware

- Don't overspend
- Better to have a lab full of people and sparse in equipment

Setting up your laboratory-equipment and reagents

- Establish relationships with critical vendors
- Negotiate price, accessories, delivery date remember...some instruments take time to deliver
- Assure that space is available and appropriate for a given purchase
- Think about service contracts
- Who are your neighbors? Can you share equipment/copurchase?
- Understand the basics of the university procurement system

Getting people in your laboratory

- First, Determine your true needs
- What will be the initial focus of the laboratory?
- Who will train the members of the laboratory?
- What is the "talent pool" like?
- Don't be flattered!

Staffing is the most important aspect of starting a lab Three categories:

- graduate students (undergraduates)
- postdoctoral researchers
- technical staff

Invite for an interview--NEVER hire someone sight-unseen

Getting people in your laboratory

- Structure the interview day (not too much)
- If post-doc or senior scientist: candidate should present a seminar
- Judge their scientific approach and their skill set
- Their ability to think critically, answer questions
- □ Why do you want to work in my lab?
- □ What are your career goals?
- □ What projects have you led?
- Their personality—how do they interact? Answer/respond to difficult questions?
- Candidate should meet with individual lab members

Managing your lab: personnel

- Have clear expectations.
- Be available for your growing group and provide mentorship, especially to students.
- In addition to frequent informal interactions, have regular individual or subgroup meetings and group meetings.
- For postdocs and staff scientists, if notable performance concerns arise, consult HR immediately. Document.

Managing your lab: finances

Budgeting is critical.

Arrange regular meetings with your post-award analyst.

Ask for help in developing budget (pre-award, mentors).

Encourage your students and postdocs to apply for fellowships (there are many benefits irrespective of funding outcome).

Managing your lab: authorizations and protocols

Authorizations (Ground Rules):

BUA: Biological Use Authorization IACUC: Animal Protocol CSA: Controlled Substance Authorization CUA: Chemical Use Authorization RUA: Radioactivity Use Authorization IRB: Institutional Review Board (protecting human subjects)

- Meet the officers personally to establish a rapport and review the submission process.
- Ask colleagues for examples for boilerplate language.
- Do it yourself the first time, then delegate.

Mentoring and being mentored

SHAERI MUKHERJEE

9/14/21 FACULTY DEVELOPMENT PANEL

Why care?

1) Mentoring

-productivity

-well-being

-recruitment

-not a thankless job, priceless satisfaction

-future of science

2) Being mentored -*saves time* -*creates opportunity* -*record for advancement* -*less lonely*

Mentoring: key lessons

- -Establish good practices starting Day 1
- -You are no longer just another person in the lab (your words will likely have more impact than any other member of the lab).
- -A good mentoring style that works for one successful PI, might not work for you (recognize your own strengths and weaknesses, before others).
- -Match projects with people not positions
- -Hope for best; prepare for worst (you may have to fire someone)

What has worked for my lab:

Weekly check-ins

Transparency with reference letters

Transparency about projects for postdocs who wish to stay in academia

COVID-specific strategies: zoom check-ins, be creative about tasks/growth areas, help them help each other, give them permission to take a break, shorter timelines for milestones

Be open about possible collaborations

Pro-tip: **they are not like you.**

CliftonStrengths Workshop

People are different



The CliftonStrengths assessment is a Webbased assessment of normal personality from the perspective of Positive Psychology.

Achiever

SHARED THEME DESCRIPTION

People who are especially talented in the Achiever theme have a great deal of stamina and work hard. They take great satisfaction from being busy and productive.

Strategic

SHARED THEME DESCRIPTION

People who are especially talented in the Strategic theme create alternative ways to proceed. Faced with any given scenario, they can quickly spot the relevant patterns and issues.

Harmony

SHARED THEME DESCRIPTION

People who are especially talented in the Harmony theme look for consensus. They don't enjoy conflict; rather, they seek areas of agreement.

Being mentored

Find a peer group (4-5)

Find both internal and external mentors (doesn't need to be your formal mentoring committee)

Customize based on their strengths

Grants: chalk talk your aims, PIs who are mid-career/not in your field, program officers are actual people you can talk to, talk to your lab

Have regular meetings with your chair (\geq annual)

Don't compare yourself with your peers

Feel secured in your own path, develop belief in yourself. Some days are harder than others.

Trust your instincts

try to have fun with it

The Balancing Act



Peter W. Hunt, MD

Professor, Division of Experimental Medicine ZSFG

Understand the expectations of your position

Be strategic

Communicate

Understand Expectations for Promotion

- Financial and scientific independence
- National reputation (for Associate promotion)
 - Requires establishing a clear "identity" as a researcher
- Specific expectations of your Department / Division:
 - Teaching / mentoring
 - Dpt/University Service (increases with advancement)
 - Diversity, Equity and Inclusion
- Get advice
 - Mentors
 - Division Chief/Dpt Chair (annual review)

Primary Research vs Collaboration

- Traditional advice: Focus, focus, focus!
 - Benefits: quicker time to first R01, establish identity
 - Drawbacks: all eggs in 1 basket (scientifically & financially)
- Collaboration can be very good!
 - Benefits
 - Novel scientific opportunities / alternative directions, new ideas
 - Bring in additional resources and <u>diversify</u> funding portfolio
 - Increase networking / build reputation through collaboration
 - Drawbacks
 - Spread too thin, delays in advancing 1° research agenda
 - Competing demands on time

Advice on Balancing Collaborations

- Be <u>strategic</u> by engaging in collaborations that
 - Reinforce & enhance rather than distract from your identity
 - Provide scientific opportunities for growth
 - Network you with key leaders in your field
 - Provide you with sufficient resources to do the work
- <u>Communicate</u> proactively with colleagues
 - Discuss up front what you and your collaborator need
 - Resources, data, authorship expectations (including mentees)
 - Be up front about competing demands
 - We're all busy people, most people will (or should) understand
 - Set realistic expectations, communicate proactively if delayed
 - Maintain engagement: meetings to discuss data, brainstorm, etc

Clinical Responsibilities

Benefits

- Get ideas from observations in patients
- Develop relationships with clinical colleagues who might be able to partner with you in research (refer patients, etc).
- Inspire young physician-scientists in training
- Maintain professional skills
- Some additional salary support
- Drawbacks: Time!
- Advice
 - Limit clinical work to that which <u>enhances</u> your research
 - Coordinate schedules long in advance to avoid major clinical commitments around known grant deadlines, etc.
 - Be up front with your Division Chief/Dpt chair RE your needs

Teaching

- Benefits:
 - Exposure to potential trainees
 - Networking within University
- Drawbacks: Time!
- Advice:
 - Avoid signing on to teaching commitments that require developing completely new material
 - Steer toward teaching that draws on material that you already have prepared or can easily repurpose

University and Professional Service

- University service should be limited at Assistant level
 - Possible exception: when it enhances your <u>identity</u> as a researcher
 - When promoted, seek service activities from which you can learn something useful or address issues important to you
- Study section service (local, NIH, or foundations)
 - A time commitment, but you can learn a lot about writing <u>successful</u> grants by seeing how they are evaluated by study sections.
- Reviewing papers
 - Can learn a lot by this process and develop your reputation in the field
- National organizations
 - When it synergizes with your career goals and identity
- When doing service, be a good citizen.
 - As a reviewer, treat the submitter how you would want to be treated

Maintain a Healthy Life Outside of Work

- Too much work can be unhealthy / overly consuming
 - Set limits for yourself
 - Your partner/family may help set limits for you!
- You will be more effective in work if you are happy outside of work.
- Just as you prioritize what reinforces your <u>identity</u> as a researcher, prioritize your identity as a person.
 - Make time and be present for your partner and family
- Maintain things that enrich your life outside of work
 - "Beethoven in the Attic"



The Impact of COVID19

