# Managing Your Research Career: Basic and Translational Sciences

Peter Hunt Mercedes Paredes Marisa Medina Faculty Development Day Sept 21, 2022

#### WELCOME TO LIFE AS UCSF INVESTIGATORS!



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# Getting Started: What I Wish I Knew

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# Jamboard

Share who have been your lab heroes

### 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

Marisa Medina
9/21/22
Faculty Development Panel

Adapted from Shaeri Mukherjee

# Why care?

#### Mentoring

- productivity
- well-being
- recruitment
- not a thankless job, priceless satisfaction
- future of science
- advancement

#### Being mentored

- navigating systems
- productivity
- well-being
- creates opportunity

# Types of mentors

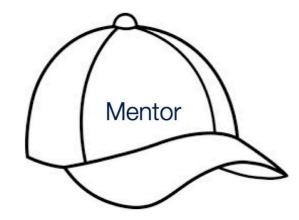
- Research
- Career

- Best if these are NOT the same individual
- Best to have multiple (mentorship team)

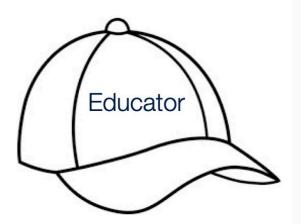
#### The challenge for every PI: Balancing multiple roles, wearing multiple hats



- secure funding
- publish
- keep up with scientific literature
- career advancement
- supervise lab members
- hire new lab members
- manage conflicts
- run the lab



- guiding trainees
  - rotation projects
  - thesis project
  - critical thinking
  - independence
  - navigating academia
  - career planning
- role model / advisor
- sponsor



- teaching courses
- training lab members
- serving on quals/thesis committees
- admissions committees

You are a special kind of mentor: a Research Mentor (A *super* mentor, combining mentor, educational and supervisory tasks)

# Jamboard

Share a tip on how to manage a new postdoc

### Mentoring: key lessons

- Establish good practices starting Day 1
  - Setting expectations
  - Individual development plan
- You are no longer just another person in the lab
  - your words will likely have more impact than any other member of the lab
- Develop a mentorship style that works for you
  - Recognize your own strengths and weaknesses
  - Be specific to your mentee
- Match projects with people not positions
  - What is the mentee interested in learning?
  - Are you willing to give up that research project?
- Hope for best; prepare for worst (you may have to fire someone)

Pro-tip: they are not like you.

# People are different

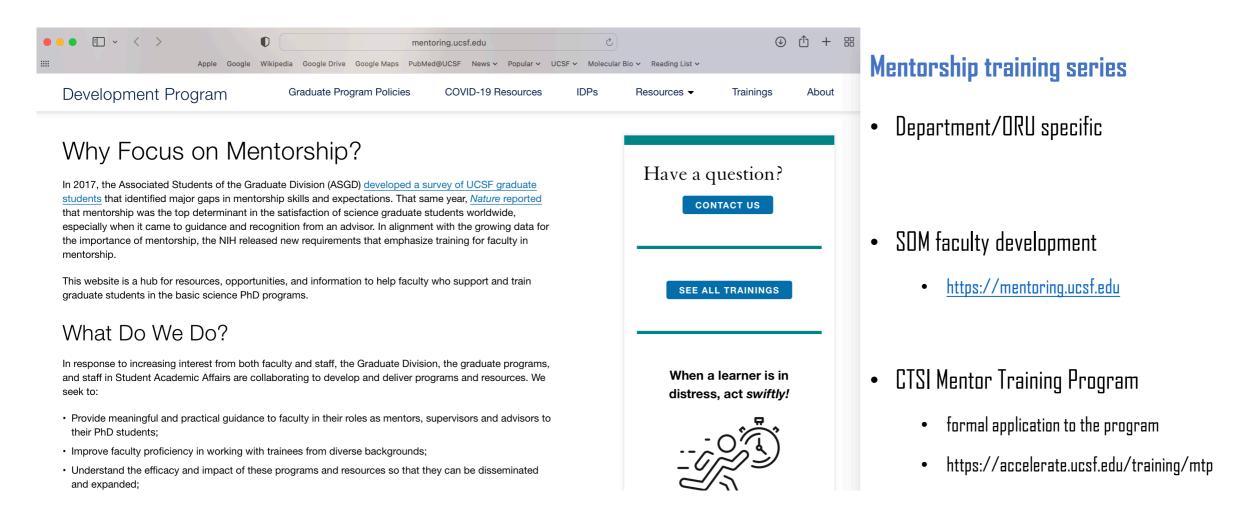
- Personality tests
  - Myer Briggs Test
- Strengths finders
  - Clifton Strengths Workshop
- Values and motives
  - Hogan assessment

Working style?

Specific needs?

Key motivators?

### Opportunities to improve mentorship skills



# Being mentored

- Find a mentorship team peers + more senior individuals
  - Internal and external mentors (doesn't need to be a formal committee)
  - Customize based on your needs/their strengths
- Grants: chalk talk your aims to as many (varied) scientists as you can
- Have regular meetings with your chair (≥ annual)

# Jamboard

What mentorship groups are you a part of?

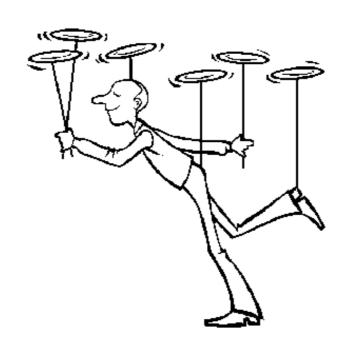
What mentorship resources do you use?

### Feel secured in your own path

- don't compare yourself with your peers
- some days are harder than others
- develop belief in yourself and trust your instincts

try to have fun with it

# The Balancing Act



Peter W. Hunt, MD
Professor, Division of Experimental Medicine ZSFG



### **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 diversify 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 strategic by engaging in collaborations that
  - Reinforce & enhance rather than distract from your <u>identity</u>
  - Provide scientific opportunities for growth
  - Network you with key leaders in your field
  - Provide you with sufficient resources to do the work
- Communicate 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

