

# **Managing Your Research Career: Basic and Translational Sciences**

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# LIVING THE DREAM



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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/co-purchase?**
- 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

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)

# 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

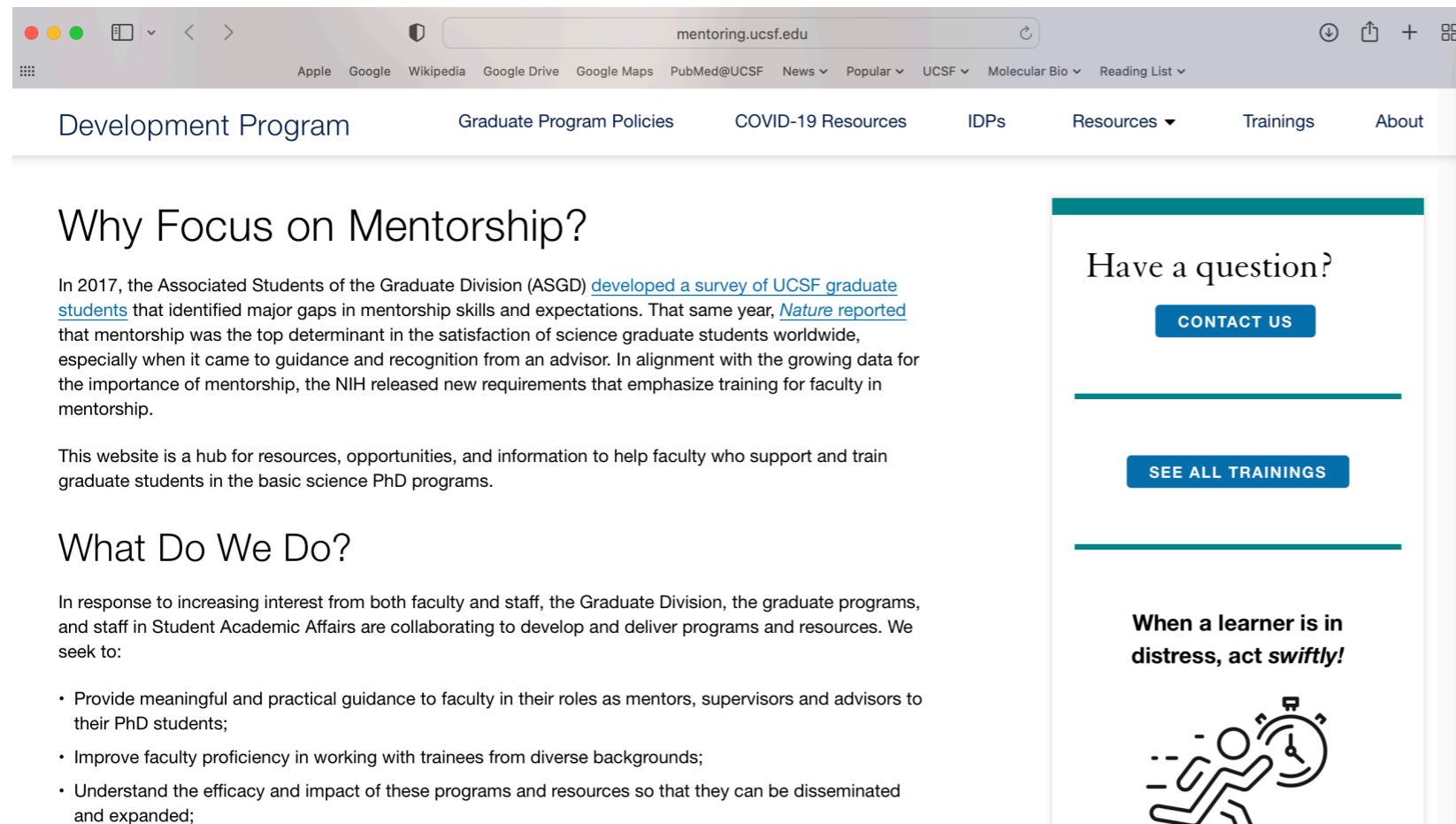
Working style?

Specific needs?

Key motivators?



# Opportunities to improve mentorship skills



The screenshot shows the website [mentoring.ucsf.edu](https://mentoring.ucsf.edu). The navigation bar includes: Development Program, Graduate Program Policies, COVID-19 Resources, IDPs, Resources, Trainings, and About. The main content area is divided into two columns. The left column has the following sections:

- Why Focus on Mentorship?**

In 2017, the Associated Students of the Graduate Division (ASGD) [developed a survey of UCSF graduate students](#) that identified major gaps in mentorship skills and expectations. That same year, [Nature reported](#) that mentorship was the top determinant in the satisfaction of science graduate students worldwide, especially when it came to guidance and recognition from an advisor. In alignment with the growing data for the importance of mentorship, the NIH released new requirements that emphasize training for faculty in mentorship.

This website is a hub for resources, opportunities, and information to help faculty who support and train graduate students in the basic science PhD programs.
- What Do We Do?**

In response to increasing interest from both faculty and staff, the Graduate Division, the graduate programs, and staff in Student Academic Affairs are collaborating to develop and deliver programs and resources. We seek to:

  - Provide meaningful and practical guidance to faculty in their roles as mentors, supervisors and advisors to their PhD students;
  - Improve faculty proficiency in working with trainees from diverse backgrounds;
  - Understand the efficacy and impact of these programs and resources so that they can be disseminated and expanded;

The right column features a call-to-action box with the following elements:

- Section: **Have a question?**
- Button: **CONTACT US**
- Section: **SEE ALL TRAININGS**
- Section: **When a learner is in distress, act *swiftly!***
- Image: An icon of a person running towards a clock, symbolizing urgency.

## Mentorship training series

- Department/ORU specific
- SOM faculty development
  - <https://mentoring.ucsf.edu>
- CTSI Mentor Training Program
  - formal application to the program
  - <https://accelerate.ucsf.edu/training/mtp>

# 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 ( $\geq$  annual)

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

# Incorporating diversity, equity, and inclusion into your basic/translational research program

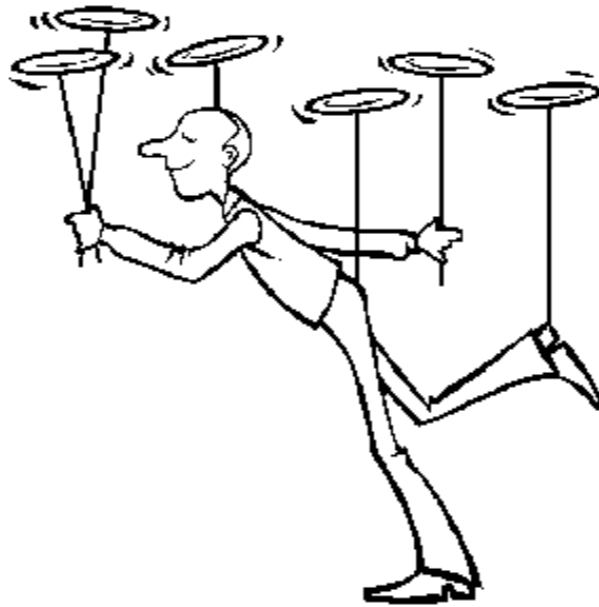
Akinyemi Oni-Orisan, PharmD PhD

Department of Clinical Pharmacy  
Institute for Human Genetics

# Incorporating DEI into your basic/translational research program


- Take a deep dive into the history of your research area
- Strive to eliminate biases in your field
- Develop transdisciplinary collaborations to solicit unique perspectives
- When hiring, ditch the “culture fit” in favor of the “culture add”
- Create an inclusive environment in your lab
- Connect with your lab on a deeper level
- Leverage your team’s lived experience to advance your science
- Access continued DEI education/training for you and your team

# 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 diversify funding portfolio
    - Increase networking / build reputation through collaboration
  - Drawbacks
    - Spread too thin, delays in advancing 1<sup>o</sup> research agenda
    - Competing demands on time

# Advice on Balancing Collaborations

- Be strategic 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
- 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 enhances 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 identity 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 successful 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 identity 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”

## Faculty and staff resources

### Mentoring resources:

[http://academicaffairs.ucsf.edu/ccfl/faculty\\_mentoring\\_program\\_resources.php](http://academicaffairs.ucsf.edu/ccfl/faculty_mentoring_program_resources.php)

### Faculty and Staff assistance program:

<https://hr.ucsf.edu/hr.php?org=c&AT=cm&S=Faculty+and+Staff+Assistance+Program>

### List of *confidential* resources:

<https://careadvocate.ucsf.edu>

<https://ombuds.ucsf.edu/>

### Helpful *FAQ about sexual violence prevention and responses*:

<http://shpr.ucsf.edu/frequently-asked-questions>

Title IX Office: <https://sexualviolence.ucsf.edu/complaints>

### Diversity, Equity, Inclusion faculty training sessions:

<https://differencesmatter.ucsf.edu/diversity-equity-and-inclusion-champion-training>

### UCSF Graduate Division Diversity Resources

<https://graduate.ucsf.edu/diversity>

### Mental Health Resources

The Cope program (<https://psychiatry.ucsf.edu/cope>)

## **Student resources**

**primary resource for graduate students:**

**[Student Health and Counseling Services: https://studenthealth.ucsf.edu/](https://studenthealth.ucsf.edu/)**

**Free counseling for medical students:**

**<http://meded.ucsf.edu/wellbeing>**

**To *report concerns* about the learning environment:**

**<http://tiny.ucsf.edu/safe>**

**List of confidential resources:**

**<https://careadvocate.ucsf.edu>**

***Other confidential reporting options:* see the Confidential Reporting section on the UCSF medical education Educational Evaluations website**

***Relevant policies* on the Medical Student Experience website:**

- o Medical Student Mistreatment Policy**
- o Duty Hours on Clinical Rotations Policy**