# Managing Your Research Career: Basic and Translational Sciences

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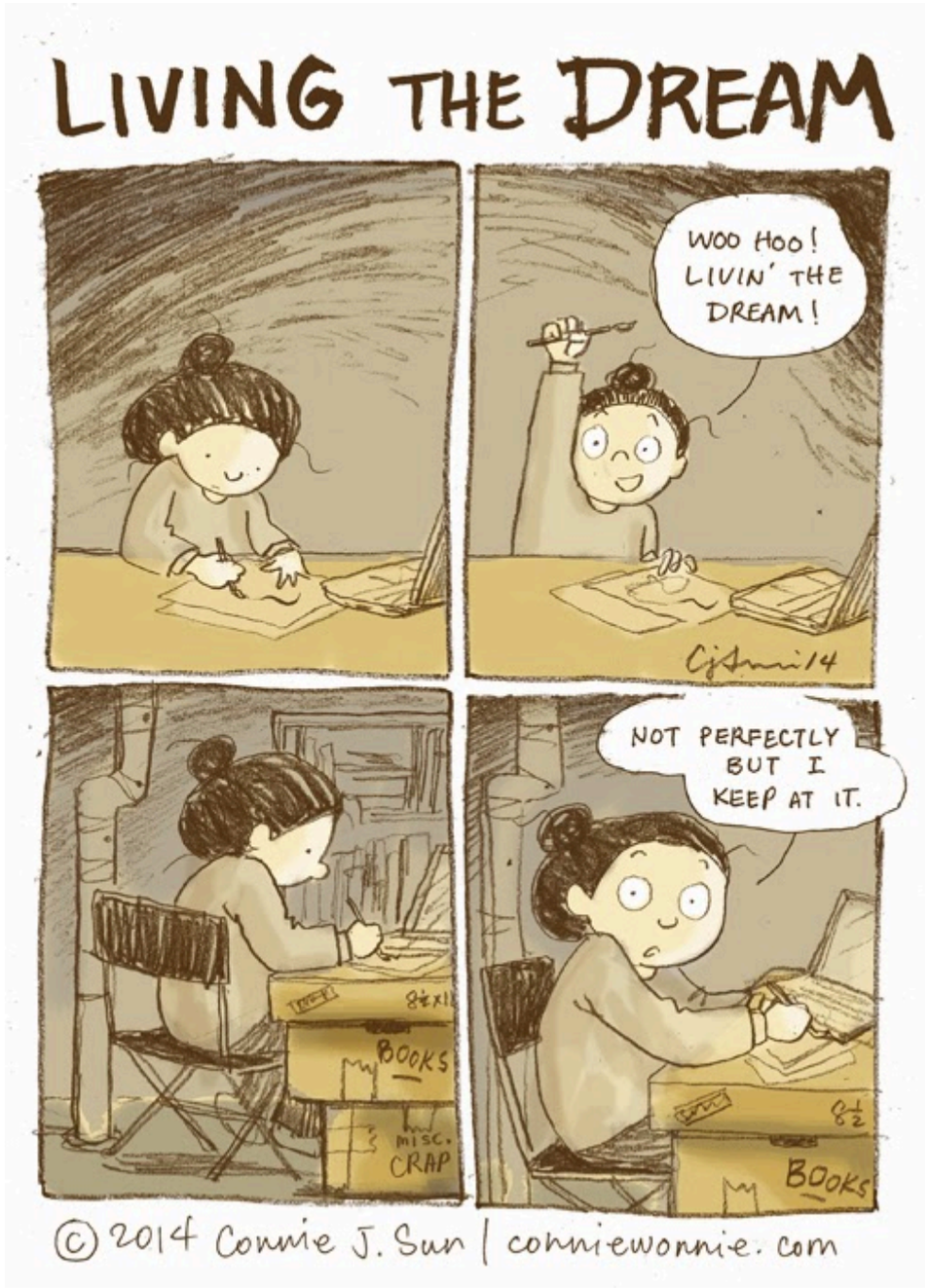
Faculty Development Day
Sept 16, 2020




# Getting Started: What I Wish I Knew

**Mercedes Paredes MD, PhD**
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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

**Recruiting Graduate Students**

- Get yourself known: give a seminar, attend retreats, help teach a graduate class
- use rotation system as way to get your laboratory known
- choose wisely
- make your expectations clearly known
- lead by example--first graduate students are often the key to success
- build slowly

# Getting people in your laboratory

**Recruiting Postdoctoral Fellows:**
• start looking immediately
• ads **don’t work**
• go to conferences/meetings to get yourself known
•would you postdoc for you? Remember that we live in the Bay Area…

Good postdoc(s) is the key to early career success

- Check references, best from people you know and trust
- Call--people often tell you the truth over the phone.
- Request 2-3 letters of recommendation

# Getting people in your laboratory

**Hiring technicians, lab manager, etc (your staff)**

• Think hard about this…..they are real employees
• What tasks will you have them do?
• Define the job precisely.
• What are the advantages/disadvantages?
The SRA versus Junior Specialist

**Undergraduates**

- UC Berkeley and San Francisco State University
- Summer research programs
- Do you have the bandwidth or a lab member with the time to mentor?
- What is the appropriate project?

UC Berkely URAP program, https://urap.berkeley.edu/
work-study program https://financialaid.berkeley.edu/work-study

# 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

# Offering a position in your lab

- Term of employment—what is the position?
- Salary--usually set by university--use NIH guidelines and get HR involved early
- Usually University has an official wording of an offer letter-check with your HR and get them involved early
- Visa issues for foreign fellows….usually J-1
- Contact others who have interviewed and tell them politely that you will not be offering them a position

# 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.

# Managing your lab: Support

Your mentors and colleagues

Diversity, Equity, and Inclusion Training
https://differencesmatter.ucsf.edu/when-and-how

The National Center for Faculty  development and diversity
https://www.facultydiversity.org/home

Howard Hughes
https://www.hhmi.org/science-education/programs/making-right-moves

# Mentoring and being mentored

SEEMAY CHOU

9/16/20

FACULTY DEVELOPMENT PANEL

# Why care?

**1) Mentoring**

*-productivity*

*-well being*

*-recruitment*

*-future of science*

**2) Being mentored**

***-saves time***

***-creates opportunity***

***-living record  for advancement***

***-less lonely***

# Mentoring

Culture and structure are interdependent but different

# Mentoring: key lessons

- Establish good practices starting Day 1

- You are no longer just another person in the lab

- Structured feedback; make sure you respond

- They have complex lives; you are not their therapist

- Match projects with people not positions

- Hope for best; prepare for worst (you may have to fire someone)

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**i.e. my first technician**

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# What has worked for my lab:

Collect data - anonymized polls (slack, zoom)

Weekly check-ins (every other at more advanced stage)

Biannual check-ins (be both prescriptive and open-ended)

Transparency with reference letters

*Some* transparency about what's on your mind

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

Consider partnering with another lab

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

# Pennle are different : Clifton Strengths Workshop

| EXECUTING | | | | | | | | | INFLUENCING | | | | | | | | RELATIONSHIP BUILDING | | | | | | | | | STRATEGIC THINKING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Achiever | Arranger | Belief | Consistency | Deliberative | Discipline | Focus | Responsibility | Restorative | Activator | Command | Communication | Competition | Maximizer | Self-Assurance | Significance | Woo | Adaptability | Connectedness | Developer | Empathy | Harmony | Includer | Individualization | Positivity | Relator | Analytical | Context | Futuristic | Ideation | Input | Intellection | Learner | Strategic |
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# 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 ( ≥ annual)

Know difference between mentorship and sponsorship

Trust your instincts

try to have fun with it

# The Balancing Act

**Peter W. Hunt, MD**

**Professor, Division of Experimental Medicine**
**ZSFG**

# Often need to balance:

- Your Lab’s Primary Research Agenda
    - Funding
    - Papers
    - Mentoring
- Collaborative Research
- Travel to Professional Meetings / Networking
- Clinical Responsibilities
- Teaching Responsibilities
- Departmental, University, and Professional Service
- Having a Life Outside of Work!

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)
    - Get advice from mentor(s) on balance
    - Talk to your 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 1º 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 of your program
  - Network you with key leaders in your field
  - Provide you with sufficient resources to do the work AND opportunities for additional grant support
- 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 when delayed
  - Maintain engagement: meetings to discuss data, brainstorm, etc

# Travel to Meetings (or Give Seminars)

- Benefits
  - It is important to “be seen” to develop reputation
  - Networking opportunities
  - New ideas from scientific meetings or informal discussions
  - Ask questions at poster sessions, talks
  - Schedule meetings with current and potential collaborators
- Travel not always possible – even without a pandemic!
  - $ to travel
  - Less supervision in lab (can mitigate with a good lab manager and communication)
  - Demands out of work may make travel impossible (family responsibilities, etc)
  - Follow up with colleagues after scientific meetings by email

# Clinical Responsibilities

- Benefits
  - Get ideas from observations in patients (bi-directional translational research)
  - 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
  - Focus on establishing your identity and independence
  - Possible exceptions: when the service enhances or reinforces 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”