Faculty Development Day 2015

Managing your Research Career –

Basic Sciences

Learn about setting up a basic science lab, regulatory issues, staffing your research team, publishing your research, and balancing research with other academic demands (teaching and service).

Mike Evans *setting up a basic science lab, regulatory issues*

Tamara Alliston *staffing your research team*

Sabrina Ronen *publishing your research*

Tejal Desai *balancing research with other academic demands (teaching and service)*

…addressing your questions and concerns

Setting up a Basic Sciences Lab

Starting up Your Lab

Authorizations:

BUA: Biological Use Authorization

IACUC: Animal Protocol

CSA: Controlled Substance Authorization

CUA: Chemical Use Authorization

RUA: Radioactivity Use Authorization

Meet the officers personally to establish a rapport and review the submission process

Consult established investigators for boilerplate language

Prioritize the submissions (i.e. BUA first, then more esoteric authorizations)

Do it yourself the first time, then delegate

Starting up Your Lab

Hiring:

Consult HR to understand the rules regarding each category of employee at UCSF (SRA, postdoc, graduate student, specialist, etc)

Thoroughly vet the terms of employment, reappointment, and separation

For academic hires, solicit applications from your peers in the field first, then list advertisements online.

Call all of the candidate's references, and be direct with your questions

Be patient

Starting up Your Lab

Managing personnel:

Establish your expectations about performance before hiring

Be detailed about expectations and overall job description in the offer letter

Maintain consistent contact, either with regular individual meetings or group meetings

Document performance (good and bad) in emails

If notable performance concerns arise, consult HR immediately

Starting up Your Lab

Purchasing:

Develop a rapport with your post-award analyst

Establish regular meetings with the post-award analyst, and/or study your monthly BSRs

Contact sales representatives to learn of discounts for new investigators (Fisher, Thermo)

Reach out to your peers to identify partners for purchasing medium sized equipment

Utilize RAP to partially subsidize equipment purchases

Starting up Your Lab

Grant-writing:

Familiarize yourself with PIVOT to identify public and private funding mechanisms

Enroll in the LSO listserv to get advanced notice about Young investigator opportunities

Identify the YI awards that do not limit the number of submissions per institution (NIH DPs, NSF CAREER, DOD Exploratory or Idea Development Awards)

Utilize RAP (high success rate for pilot awards)

Ask your pre-award analyst to get redacted copies of successful applications from other UCSF investigators

Starting up Your Lab

Grant-writing:

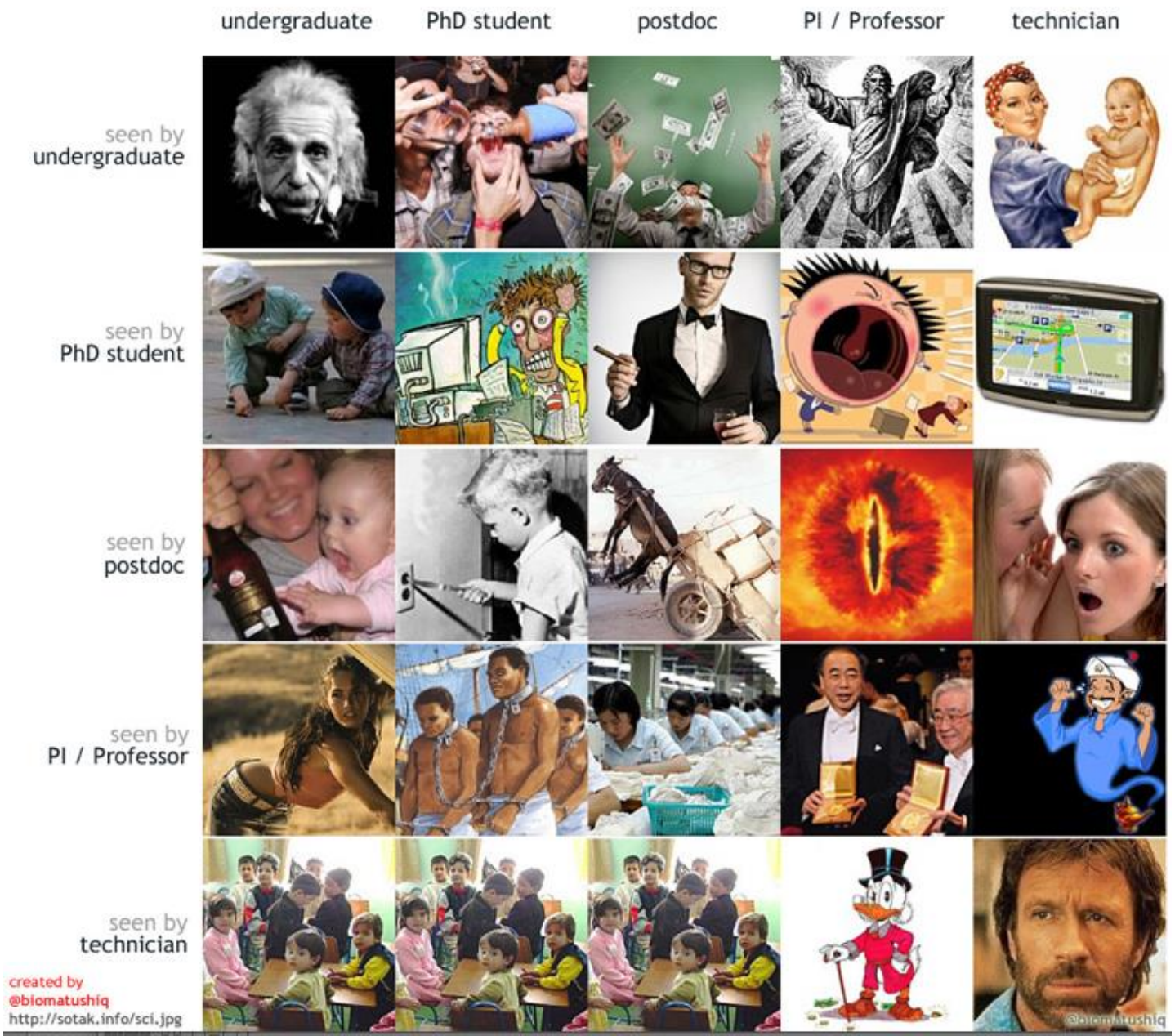
Avoid NIH R21s unless you have a large body of preliminary data

Solicit several letters of support for public RFAs

Get to know your scientific and program officers-call them for advice before submitting an application, and after receiving your score/summary statement for resubmissions

Staffing a Basic Sciences Lab

How people in science see each other



Matushiq Sotak.

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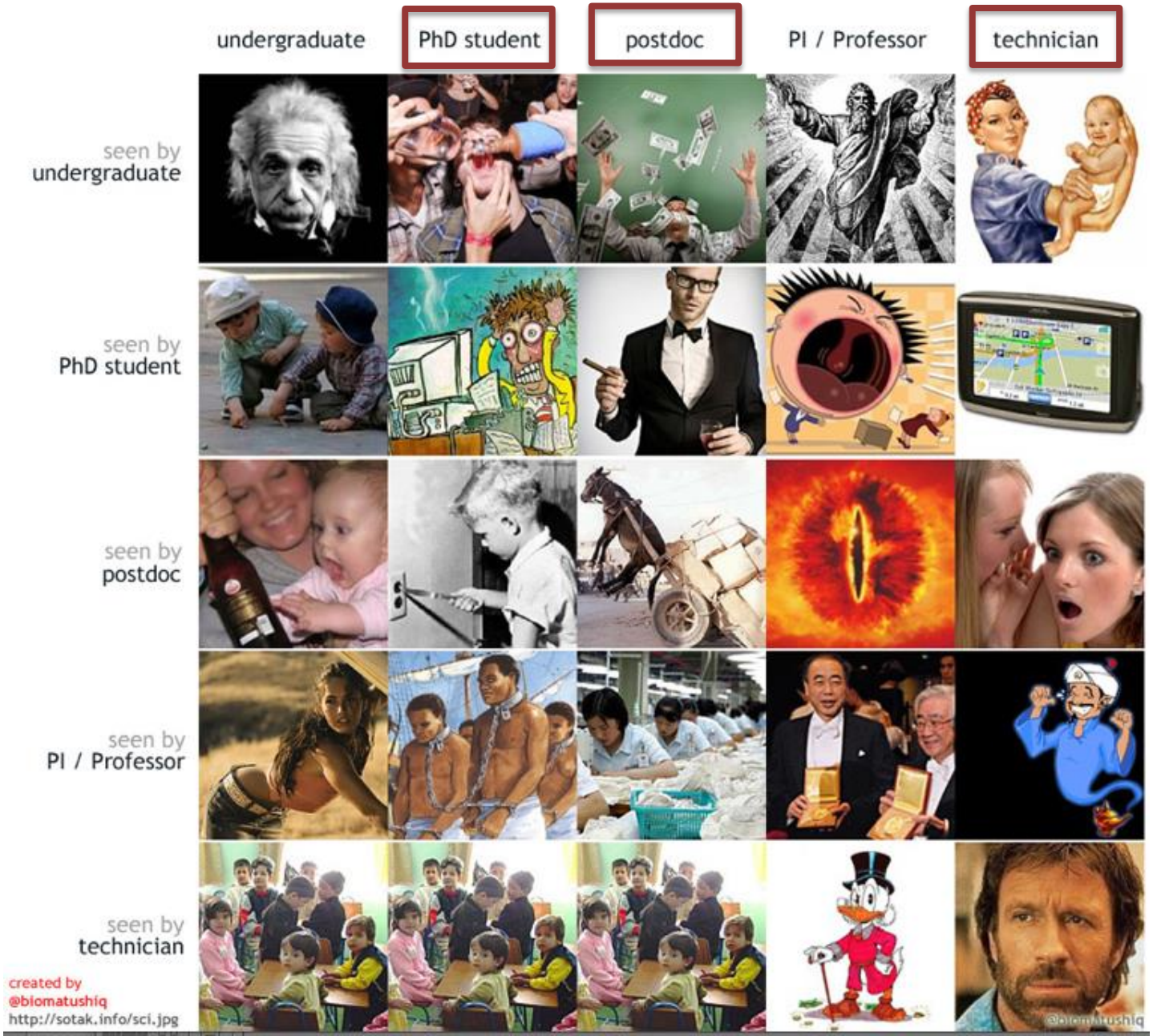


Others:

Med/Dental Students

Residents

Fellows

Volunteers

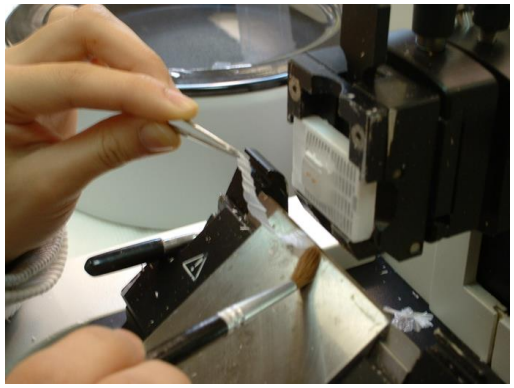
Summer Students

Lab Helper

Matushiq Sotak.

Match Needs to the Person you Hire

- Creativity vs. ‘work’
- Stage of project development
- Risk
- Intellectual leadership
- Project duration
- Funding opportunities



Staffing Considerations for New Faculty

Capacity:	Post-doc >> Tech > Student*
Access to Talent:	Student > Post-doc
Time Investment:	Student > Post-doc > Tech
Costs:	Similar, except fellowship
Flexibility:	Technician
Project Leadership:	Post-doc > Student > Tech

Hiring a Technician

Key Considerations: Service Provider vs. Project Ownership, Independence, Culture

Career Tech: Experienced, Seeks success in this role

'2 Year Tech': Recent graduate, aims to pursue advanced degree, etc.

CAREER TECH		'2 YEAR' TECH	
PRO	CON	PRO	CON
Technical Expertise	'In the system'	Motivated	Training Required
Maturity		Education	Maturity
Managerial Experience		Open-minded	Divided Focus (MCAT, Interviews)
Stability		Short-term	Turnover

Publishing your Research

When to publish?

- **Show productivity** – steady stream of publications
- **Show high impact** – probably requires a long term study probably with a larger team
- **Consider priorities of co-authors** - first author (student who needs to graduate?) and other members of the team and collaborators
- **Consider competition** – will you be scooped?
- **Consider needs of an upcoming grant** – do you want to show peer reviewed expertise, do you need to show productivity on a renewal?

Authorship?

- **Order of authorship in your lab:** you are the senior author but if there is any question around order of authorship within your team resolve this quickly and avoid tensions. Also try to make clear who is 'driving' the project (and be generous).

- **Order of authorship in a collaborations:** as much as possible try to discuss and decide upfront.

- **Manuscript with a previous mentor:** a transition period and/or continued collaborations are ok but make sure to have enough publications to show independence (new field or clear break)

Where to publish
Open access versus traditional journals?

- Open access - now available through UC's eScholarship website for all publications and is required by NIH after one year
- Cost - Open access journals always require payment, traditional journals may or may not
- Speed - now probably comparable since most journals publish online ahead of print
- Impact - variable in both cases

Balancing research with other academic demands

Balancing research with other academic demands (teaching and service)

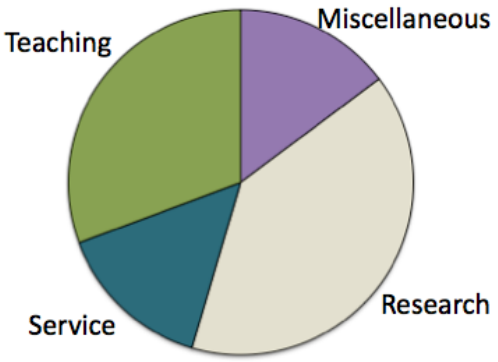
- Balance will depend on series (outstanding in all or some categories)
- Balance will evolve over time with rank and step
- Balance will (initially) depend on department

Discuss and take advice from:

Chair
UCSF mentor
Outside mentors
Colleagues

Balancing research with other academic demands (teaching and service)

During the early steps of the Assistant rank consider whether the contribution to teaching and service can be slightly more limited while the major focus is on establishing a solid well funded research program.



Consider:

Time commitment (remember prep time)

Benefits

Examples: a few lectures in class; recruiting new students

CME accredited courses; build reputation

organizing dep. seminars; exposure to new research

review seed grants; exposure to research and review

Balancing Other Aspects…

- How much to travel?
  - Being present on campus and at home but building national reputation and visibility
- Are all grants created equal?
  - Individual grants versus larger collaborative or center grants
  - Federal vs. Industry or Foundation

- LAST BUT NOT LEAST, WORK-LIFE BALANCE

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