Managing Your Research Career

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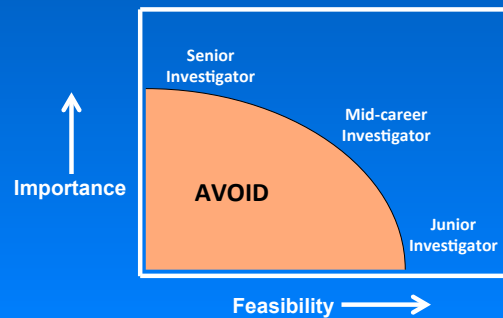
UCSF Faculty Development Day
September 10, 2013

Outline

- Writing papers
- Obtaining funding
- Managing time
- Obtaining CHR or IACUC approval
- Building a research team

Writing Papers

- Carve out writing days, times and even places
- Shed perfectionistic tendencies
- Collaborate with peers, postdoctoral fellows
- Diversify projects: low-risk and high-risk
- Carefully choose research topics

Carefully Choose Research Topics

Authorship (order of importance)

1. First author

2. Last author

    Clarify up front, preferably in writing

3. Second author

4. Penultimate author

5. Middle authors
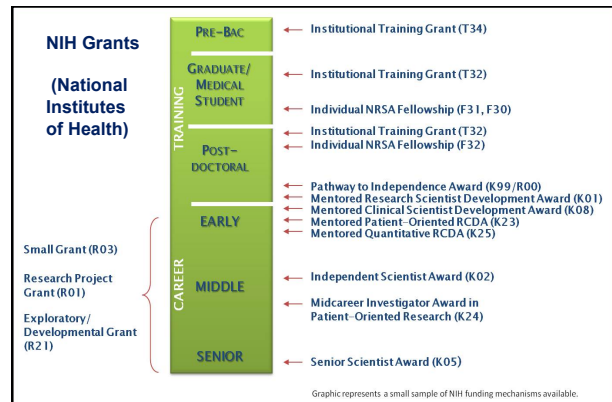
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Slide 1

Rigorously peer-reviewed grants demonstrate investigator independence and recognition

1. US government research grants (NIH, DOD, VA)
2. Foundation or society grants (e.g., American Cancer Society, American Heart Association)
3. Investigator-initiated research funded by industry
4. Industry-sponsored research funded by industry

Slide 2

NIH Grants

(National Institutes of Health)

TRAINING	PRE-BAC	← Institutional Training Grant (T34)
	GRADUATE/ MEDICAL STUDENT	← Institutional Training Grant (T32)
		← Individual NRSA Fellowship (F31, F30)
	POST-DOCTORAL	← Institutional Training Grant (T32)
		← Individual NRSA Fellowship (F32)
CAREER	EARLY	← Pathway to Independence Award (K99/R00)
		← Mentored Research Scientist Development Award (K01)
		← Mentored Clinical Scientist Development Award (K08)
		← Mentored Patient-Oriented RCDA (K23)
		← Mentored Quantitative RCDA (K25)
	MIDDLE	← Independent Scientist Award (K02)
		← Midcareer Investigator Award in Patient-Oriented Research (K24)
	SENIOR	← Senior Scientist Award (K05)

Small Grant (R03)
Research Project Grant (R01)
Exploratory/ Developmental Grant (R21)

Graphic represents a small sample of NIH funding mechanisms available.

Slide 3

Career Development Grants

- UCSF programs: http://accelerate.ucsf.edu/funding
- NIH (K awards, Minority or R01 Supplements)
- VA Research & Development: http://www.research.va.gov/funding/
- Foundations: http://foundationcenter.org; http://www.cof.org/
- Societies: usually disease-specific
- Industry: www.pfizerfellowships.com/Partnerships.aspx

Slide 4

http://accelerate.ucsf.edu/funding?/career-development-awards

Grant Writing Guidance

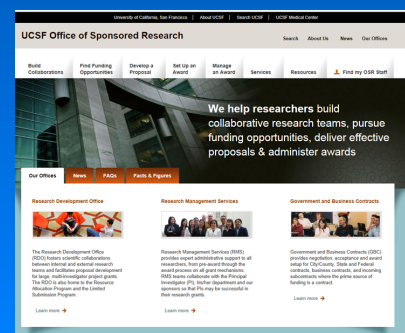Examples of successful research proposals and expert advice on how to navigate and write grant applications.

- K Proposal Library (K08, K23, K24, K99)
- Writing NIH Mentored K Award Applications
- T32 Proposal Library
- Data Safety Monitoring Protocol Library
- Biostatistics Consultation Services in Statistical Grant Writing

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Research grants

- UCSF intramural grants – http://rap.ucsf.edu/grants/
- Patient-Centered Outcomes Research Institute (PCORI)
- Agency for Health-Care Research and Quality (AHRQ)
- Health Resources and Services Administration (HRSA) http://www.hrsa.gov/grants/index.html
- National Science Foundation (http://www.nsf.gov/)
- DOD – http://cdmrp.army.mil/funding/reftable.shtml
- Industry (Investigator-Initiated Research programs)

Slide 6

New Office of Sponsored Research Website

http://osr.ucsf.edu/

UCSF Office of Sponsored Research

We help researchers build collaborative research teams, pursue funding opportunities, deliver effective proposals & administer awards

General Funding Resources

• PIVOT – http://pivot.cos.com/) from the new UCSF OSR website, sign-up for training or just set-up free automated search in your area of interest
• Foundations – www.fdncenter.org; www.cof.org
• Federal government opportunities – www.grants.gov
• Grantmakers in health – www.gih.org
• Grateful patients (via development office)

Grants administration

Pre-award	**Post-award**
• Budgeting	• Hiring and purchasing
• Letters of support	• Budget projections
• Paperwork/signatures	• Progress reports
• Biosketches and other support pages	• Agency correspondence
• Uploading documents	

Other extremely useful grant-writing resources

• **http://grants.nih.gov/training/resources.htm**
• **http://www.niaid.nih.gov/researchfunding/Pages/default.aspx**
• **http://grants.nih.gov/grants/grant_basics.htm**
• **http://grants.nih.gov/grants/grant_tips.htm**
• **http://grants.nih.gov/grants/oer.htm**
• **http://grants.nih.gov/grants/sitemap.htm**
• **http://grants.nih.gov/grants/useful_links.htm**

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• **Managing time**
• Obtaining CHR or IACUC approval
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Managing Time

	Urgent	**Not-urgent**
Important	A	B
Not important	C	D

Time is your most valuable resource

• Always more to do than time available
• No one else will protect your time
• Time spent on one thing = time not spent on another
• Think about whether you would want to do this tomorrow (not in the distant future)
• Remember: you will feel just as busy later
• Hire help whenever possible

Obtaining CHR or IACUC approval

- Committe on Human Research:
  www.research.ucsf.edu/chr/index.asp

- Insitutional Animal Care and Use Committee:
  www.iacuc.ucsf.edu/Misc/awFaq.asp#whatis

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Building a Research Team

- Co-Investigators at UCSF
- Collaborators outside of UCSF
- Pre-doctoral students (medical/dental/nursing/pharmacy)
- Post-doctoral fellows
- Volunteers
  - Foreign medical graduates
  - Undergraduates (SF State, City College, USF)
  - Pre-medical post-baccalaureate students
  - Graduate students (SF State, UC Berkeley)
- Don't forget - Mentors

Q & A

Tidbit from Q&A

- Time Management
  - Set time aside for writing
  - Set blocks of time to think
  - Turn off email

Tidbit from Q&A

- Writing
  - Discuss authorship and corresponding author early, and send an email to confirm. But note that authorship can change if someone does not do their share.
  - Drafts are drafts; they can be rough when you show them to colleagues for input
  - Set time aside for writing
  - Different methods as to how to help a trainee to write a paper; depends on the trainee
    - Prep an outline
    - Prep a timeline
    - Have them write specific sections
    - Have them prepare an Abstract
    - Have them give a presentation of the work for the proposed paper
    - Sketch out the figures

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Tidbit from Q&A

- **Writing cont'**
  - **Prepare figures at manuscript quality as you're going along**
  - **As PI, set the specs for figures and data presentation in the lab – what software package, what style, what colors for controls vs. samples**
  - **Take Mimi Zeiger courses on campus**

Tidbit from Q&A

- **Grants/Funding Management**
  - **Make a realistic 5 year plan**
  - **Diversify your funding portfolio**
  - **Remember that grants need to be tailored to an agency and to the RFA/ FOA; this means that it is a bit of a marketing piece.**
  - **Be careful when considering hiring new people too soon, using small grant awards**
  - **Some ideas are not fundable for reasons that aren't based in science**
  - **Sign up for training to use the Pivot funding opportunity database search tool (through RDO)**
  - **Great when one grant can easily provide pilot data for next grant**

Tidbit from Q&A

- **Other**
  - **Innovation & Technology Alliance (ITA) offers workshops on entrepreneurship; QB3 and CTSI also offer resources to help with understanding the business aspects**
  - **Build a strong mentor network that has diversity of discipline and experience.**