Research Development

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T32 Administrative Team

- Mike McCandless: Handles appointments and funds for T32
- Amber: Helps residents put together budgets for grants and then administers the funds.
- Beverly: Helps with other aspects of grants, compiles T32 progress report each year
T32 Administrative Items

- The T32 has a payback requirement:
  - a. Full-time position with biomedical or behavioral health-related research, health-related teaching, and/or health-related activities as primary activity.
  - b. Other position(s) where biomedical or behavioral health-related research, health-related teaching, and/or health-related activities averages at least 20 hours per week of a full work year.

NIH may send a reminder letter that only mentions part of the second one. Don’t panic! Go to the form. Submit the form. On time.

T32 grant stuff

- NIH is requiring trainees to sign up for ORCID (Open Researcher and Contributor ID) ID’s.
- Log into NIH eRA Commons, go to your Personal Profile. Just under your name and your listed eRA Commons roles, you will find a link to create your ORCID id. Following that link to ORCID.org, you will be able to register and link your Commons account to your ID. See steps and screenshots in the ORCID topic in the eRA Commons online help.
- Hopefully this helps with reporting T32-supported publications, e.g.
T32 stuff

- Speaking of which....
- All publications containing research supported by the T32 must
  - List the T32 in the Funding section of the paper (when submitted)
  - Get submitted to PubMedCentral for open-access requirement when published. This is essential to continue funding. I can help with this.

Theme reveal

Larry the Lemon Tree, or how to go from seeds to fruit
Who needs a grant?

- Anyone who wants to do research in the medical fields
- Your salary may well be contingent upon grants, as well as your position
- Even if your salary is covered, you need to pay for research staff, scans, electronics, statistics, subject compensation, etc.
- You should all be thinking about writing grants in the next few years

Plan Ahead

- The time between submitting a grant and having the money available to you is 4 months to a year
- (which happens to be how long it takes for a lemon flower to become a ripe fruit...)
- The time to put together a grant, esp. NIH, may be several months
- You need to plan ahead, keep an eye to the future, keep the big picture in mind
### Deadline-to-Funding Timeline

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<thead>
<tr>
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<th><strong>RSNA</strong></th>
<th><strong>NIH</strong></th>
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<tbody>
<tr>
<td><strong>Due Date</strong></td>
<td><strong>Jan 15</strong></td>
<td><strong>Feb 5</strong>, <strong>June 5</strong>, <strong>Oct 5</strong></td>
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<tr>
<td><strong>Start date</strong></td>
<td><strong>July 1</strong></td>
<td><strong>Dec 1</strong>, <strong>Apr 1</strong>, <strong>July 1</strong></td>
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<tr>
<td><strong>Earliest start date</strong></td>
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Want to write your own grant?
First you need to develop a healthy plant!

Start NOW to sow your seeds

- Build your expertise
- Do preliminary work
- Get publications
- Develop working relationships with experienced researchers
- Get experience by helping someone else with their grant
Why work on someone else’s grant?

- Get familiar with the components
- See how the process works (or doesn’t!)
- Get to read someone else’s grant
- Get brownie points!
  - Pick already-funded researcher
  - Ask to see the reviews when they arrive

Common Funding Sources
PRIVATE

- Corporations
- Foundations
  - American Cancer Society
  - American Heart Association
  - American Association for the Study of Liver Diseases
  - American Brain Tumor Association
  - WW Smith Foundation
Common Funding Sources

PROFESSIONAL SOCIETIES

- Radiological Society of North America (RSNA)
- American College of Radiology (ACR)
- Association of University Radiologists (AUR)
- American Society of Neuroradiology (ASNR)
- Society for Interventional Radiology (SIR)
- Society of Nuclear Medicine (SNM)
- American Institute of Ultrasound In Medicine (AIUM)

FEDERAL

- Federal
  - NSF
  - Dept of Defense
  - NASA
  - Nat’l Library of Medicine
- NIH
  - R01: basic research grant
  - R03: small grants
  - R21: Exploratory/developmental
  - SBIR/STTR: small businesses
  - T32: National Research Service Award postdocs
  - K awards: career dev’t
Good grants for beginners:

**Beginner level**

- Penn-internal grants
  - ITMAT (Institute for Translational Medicine and Therapeutics) $20,000 for junior investigators
  - Pro-dev (project development) grants from Radiology
  - University Research Foundation, McCabe Award (junior faculty)
  - Occasional others, e.g. cancer, MSK, Lung Center, etc.

Good grants for beginners:

**Beginner level**

- Professional societies and foundations often gear more toward beginning investigators.
- Smaller less-experienced applicant pool.
Good grants for beginners: 
Beginner level

- **RSNA Resident/Fellow grants**
  - $30-50,000
  - Recipients will devote a minimum of 50% of their time in the approved research project under the guidance of a scientific advisor/mentor.
  - **Deadline Date:** January 15, 2020

- **Society for Interventional Radiology**
  - Radiology Resident Research Grant
  - Designed to foster an interest in research
  - The deadline to complete the new pre-review is Oct. 15, 2019. Final due Jan 15, 2020.

- **Society for Thoracic Radiology**
  - Preference will be given to Residents, Fellows, and Junior Faculty (within 5 years of completion of fellowship.)
  - **Deadline:** September 22
Good grants for beginners:

Beginner level

- American Society of Neuroradiology
  - Scholar Award in Neuroradiology Research (jr faculty, $60,000)
  - Letter of intent due: November 5, 2018
  - Grant due: January 21, 2019

Intermediate level

- Foundations
  - Komen—breast imaging
  - American Cancer Society
  - American Heart Association
  - American Lung Association
Good grants for beginners: Intermediate level

- NIH
  - R21 Exploratory/Developmental (Pilot) Awards (2 yrs)
  - K awards (career development)
    - 5-year award
    - Include education, research, mentoring
  - DP awards (Director's Program)
    - Early Independence Award
    - New Innovator Award

Resources for finding funding

- Search online
- Contact me
  - Beverly Collins 215-615-0429, beverly.collins@pennmedicine.upenn.edu
- Ask your mentor(s)
- Ask junior faculty in your area
Getting Started

- Read about the funding agency
  - Web page
  - Read grant guidelines carefully
  - Previously-funded grants
  - Reviewers, if available

Learn as much as you can about who will be making the decisions about your proposal, what they are interested in, etc.

Getting Started

- Many foundations require a preliminary letter or short description of project, from which they will decide whether to ask for a full proposal. Plan ahead for this.
- If not, it may be worthwhile to call or write with a description of your project to see whether they might be interested, before preparing a proposal. This also gives them some chance to learn of or about you and to get excited about your project. [not just for beginners!]
The Review Committee

- Typically made up of experienced researchers in the field

Be familiar with the Review Criteria

NIH
Overall Impact
Significance
Innovation
Approach
Investigator(s)
Environment
NIH Success Rates

In 2018, success rate for research grants was overall 20%
Funding rates vary by institute

NCI: 11% 10,282 -> 1,162
NIBIB: 16% 1,523 -> 256
NIA: 29% 3,240 -> 937
But...

- NIH does give a handicap boost to new investigators (10 years after end of training)
- RSNA funding has higher rates (at least for Penn applicants!)
- Starting small and working your way up is a good strategy for success
Budget

Amber Nestor
Grant Manager

- Contact – 6-8 weeks prior to due date
- Send guidelines/funding announcements for review
- Budget must be finalized 10-14 business days prior to due date
Budget and due dates

- PSOM Research Services requires NIH grants to be submitted for Pre-Review 5-7 business days prior to the due date
- Once Pre-Review is complete, your proposal must be routed to central Research Services
- Your science must be in FINAL format 3-5 business days prior to the due date - NO EXCEPTIONS!!
- Your proposal will be submitted by Radiology’s Pre-Award contact in central Research Services

What should be included?

- Personnel: % effort for each investigator
- Imaging: how many of what kinds of scans
- Supplies, equipment, animals, etc.
- Travel, for presenting results
- I can help with this if you are unsure!!
What else do you need to do?

- Budget justifications – if these are required, they must have detailed information about what you’re asking for! I can send samples of justifications if you are lost!
- Pay close attention to due dates for grants – specifically NIH grants!

Congrats! You’re funded... now what?

- All funds come through Radiology
- No pre-award costs are allowed, unless noted in the NOGA or award letter
- Spending cannot occur prior to start date of grant
- Account numbers are issued once the grant is awarded.
Finally....

- Please DO NOT submit grants on your own!! Every grant that you apply for must have institutional review.
- Some sponsors require signature pages
- NIH requires submission be done by an authorized University official!

People in department

- Beverly Collins: grant funding, proposal development
- Amber Nestor: budget development, funds management
- Erin Schubert: protocol development
- Kathleen Thomas: research coordinator requests
- Bill D’Arcy: Business Administrator for grants, pre- and post-award