

# Non-NIH Funding

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• No financial conflicts

- Research funding from VA HSR&D
  - I01 HX002447

• I do not have/have not had funding from all the sources I will be discussing

#### Money is the Root of All Evil



- Maybe not...but, typically you do need it to:
  - Develop a successful and productive research program
  - Represents a benchmark denoting independence as an investigator
  - Study section participation

• Once your start-up funds are gone, where should you turn next?

#### The Money Tree, of Course!



**Federal** 

Experience Timing Patience

Determination Persistence -Creativity

Choice of job Negotiating





# Research Dollars Don't Grow on Trees— Show me the Money!



- You are going to hear a lot of 'No'
  - Part of the process, so don't be discouraged
  - Dimick'ism—Learn to love to fail
    - View each failure as an opportunity to move you closer to a path to success
- Getting funding requires time, effort, dedication
  - There is no such thing as protected time if you don't protect it and protect it fiercely
  - Start good habits for yourself early

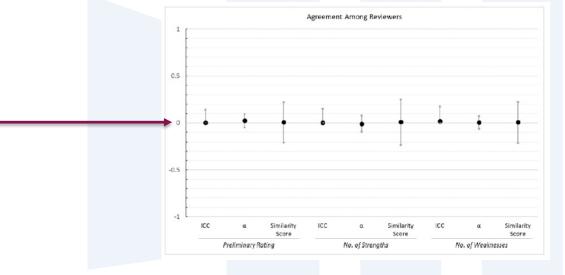
#### The Randomness of Grant Funding



# Low agreement among reviewers evaluating the same NIH grant applications

Elizabeth L. Pier<sup>a,b,1</sup>, Markus Brauer<sup>c</sup>, Amarette Filut<sup>a</sup>, Anna Kaatz<sup>a</sup>, Joshua Raclaw<sup>a,d</sup>, Mitchell J. Nathan<sup>b</sup>, Cecilia E. Ford<sup>a,e,f</sup>, and Molly Carnes<sup>a,g</sup>

Correlation of 0 means, "...two randomly selected rating for the same application were on average just as similar to each other as two randomly selected rating for different applications



#### **Know Your Audience and Yourself**



#### • <u>Audience</u>

• Funding sources will vary depending on the type of research you do

#### • Yourself

- How strong is your idea?
- How do you look on paper?
- PI vs Co-I vs Collaborator?

#### Look Far and Wide

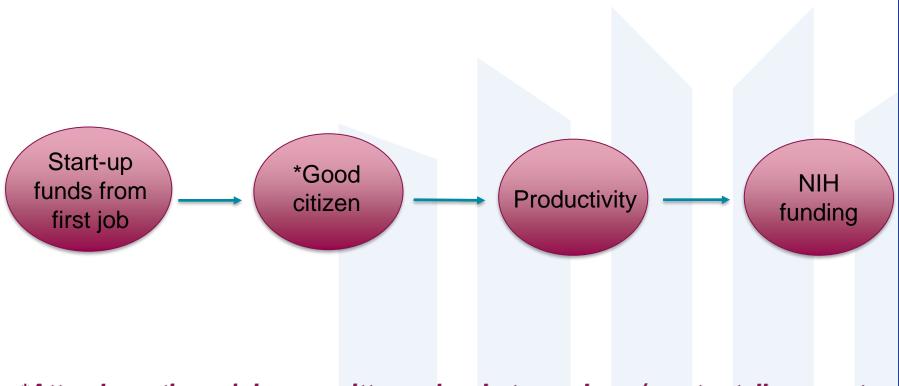


- Home department
- Hospital/Health System
- Regional societies
- National societies
- Private Foundations/Associations
- Industry
- Federal



#### The Ideal Path to Get There

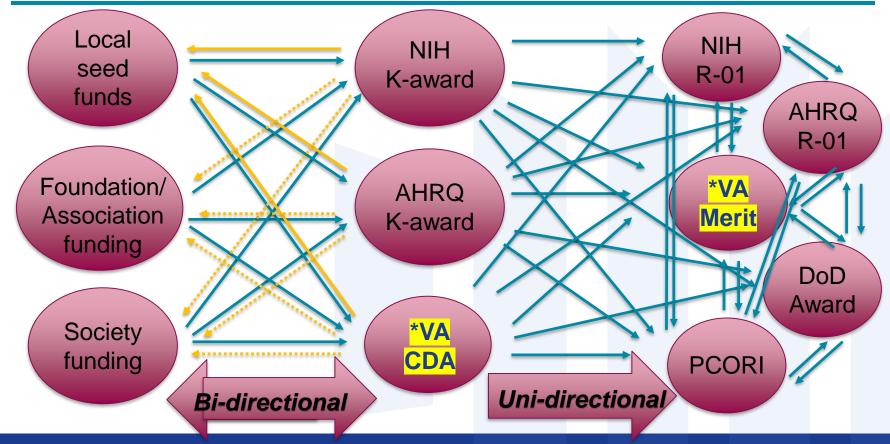




\*Attend meetings, join committees, do what your boss/mentor tells you, etc.

#### Whatever Path Gets you There







# Non-Federal funding



- Plan ahead
  - If starting a new job or moving, NEGOTIATE
- Look to Centers within your institution
  - For example, Cancer Centers often have \$\$\$\$
- Many departments or hospitals may offer seed award programs
  - Less competition and can be relatively easy money
  - Some may even allow applications for bridge funding

#### Industry



- Look on company websites of products you use
- Ask device reps and pitch your idea
- Talk to senior partners/colleagues who have successfully navigated these partnerships
  - In particular as pertains to IP
- This may not be 'free money'
  - Ensure you have control of the data and the science
  - Understand what strings might be attached

#### Societies



- A number of different choices
- Think outside of surgery if relevant to your work
  - e.g.: American Cancer Society; American Society of Clinical Oncology
  - Make sure your work is a good fit
- Most provide a relatively small pot of money (\$25-50K over 1-2 years) and only direct costs
  - Good way to start establishing a track record
  - Some may provide supplemental funds for K-awardees

#### Foundations



 Many, many, many, many, many.....many, many, many, many different foundations







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NORD National Cryanization for Same Disorders

#### American Behçet's Disease Association - NORD (National ... https://rarediseases.org > ... > Find a Patient Organization •

The American Behçet's Disease Association (ABDA) is a voluntary, non-profit ... toward funding research on this rare autoimmune disease that affects men, ...

#### **Research Grant Program**

ANNOUNCEMENTS

Cholangiocarcinoma Foundation Awards \$365K in Research Fellowship Grants

Q

Tools

NORD's Research Grant Program provides seed grants to academic scientists for translational or clinical studies related to development of potential new diagnostics or treatments for rare disease. In at least two cases, NORD grants have resulted ultimately in FDA-approved treatments for patients.

#### Foundation funding



- Many will be more money and potentially longer duration of support compared to societal awards
  - Some may be prestigious
- Type of research supported can vary
  - Make sure topic of your work is in line with the foundation's mission and interests
- Ensure your eligibility as some grants may be for specific phases of your career
- Google

#### **Regional and State funding**



arai and Medically

- Cancer Prevention & Research Institute of Texas
  - Established in 2007 by state statute with \$3 billion in research funds to allocate

Topical Esomeprazole for Radiation-Induced Dermatitis — \$199,500 Dr. Robin Parihar, assistant professor of pediatrics – hematology/oncology Targeting Cancer Associated Fibroblasts with Anti-IL-11 Secreting CAR T Cells — \$199,920

Dr. Steve Ludtke, professor of biochemistry and molecular biology

New Capabilities for Cancer Research in the TMC CryoEM Cores - \$5,381,089

Novel Endoscope-cleaning Port for Minimally Invasive Cancer Surgery — \$1,349,759

Prevention in a Medically Underserved Pediatric Population — \$1,287,834 Recruitment of First-time Tenure-track Faculty Members

\$6 million (Recruitment of faculty is currently underway)

Dr. Jane Montealegre, assistant professor of pediatrics – hematology/oncology and deputy director of the Office of Outreach and Health disparities at Baylor's Dan L Duncan Comprehensive Cancer Center

Expanding a Community Network for Cancer Prevention to Increase HPV Vaccine Uptake and Tobacco

**Core Facility Support Awards** 

Dr. Bryan Burt, associate professor of surgery

**Underserved Populations** 

Early

Expansis

• Multiple different funding mechanisms





# Federal funding

#### Federal



- NIH isn't the only show in town
  - AHRQ
  - PCORI
  - Department of Defense
  - VA
    - Caveat—You have to be a VA employee

## AHRQ



- Mission
  - "To produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within the US Dept of HHS and with other partners to make sure that the evidence is understood and used."
- Caveat of AHRQ funding
  - Indirect costs are deducted from the approved budget
    - Approved budget \$250K
    - Institutional indirect rate 50%
    - Funding available for your research = \$250K x 50% = \$125K

## AHRQ awards



- Funding mechanisms generally mirror those of NIH, but main focus is HSR/outcomes/health systems
- F- and K-awards
  - Trainees and career development awards
- R-awards
  - R03 and R21 are great mechanisms for 'seed' funding
    - No preliminary data required
    - R03—Small Grant Program
      - 2 years for up to \$50K per year
      - Limited cost/scope using accepted methods
    - R21-Exploratory/Developmental Research Grant Award
      - High risk, high reward
      - 2 years for up to \$275K

#### PCORI



#### • Mission

- "To help people make informed healthcare decisions, and improve healthcare delivery and outcomes, by producing an promoting high-integrity, evidence-based information that comes from research guided by patients, caregivers, and the broader healthcare community."
- Patient and stakeholder engagement
  - Not just a standard grant proposal
- These grants can provide MUCHO DINERO!!

#### What PCORI is/isn't Looking for



- Fund *patient-centered questions* about health and health care
  - Inform decisions by patients, caregivers, clinicians, and other stakeholders
  - Benefits/harms of patient- and system-level interventions
  - Researchers partner with patients and other stakeholders throughout the project
- Main funding body for comparative effectiveness research
- Don't fund:
  - Studies to develop/validate an instrument
  - Cost-effectiveness analysis or comparisons focused on relative costs of care (statutory requirement)
  - Projects that do not include patients or other healthcare stakeholders throughout the research process

### Examples of PCORI Funded Projects

- "Comparing Intensity of Follow-Up Tests after Surgery for Colorectal Cancer"
  - Clinicians, patients, and patient advocacy groups involved
  - \$1.8 million over 6 years
- "Can Nurse and Patient Education Reduce Missed Doses of Medication to Prevent Blood Clots in Hospitals?"
  - Patients and caregivers and other stakeholders involved
  - \$1.5 million over 4 years
- "Comparison of Surgery and Medicine on the Impact of Diverticulitis (COSMID) Trial"
  - Input from clinicians, patients, and professional societies
  - \$9.8 million over 7 years

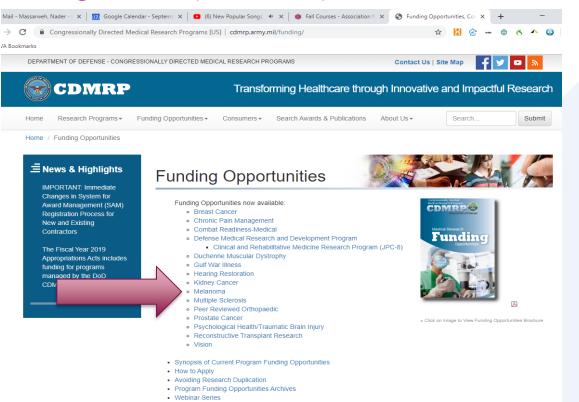
#### DoD



- Mission
  - "Conduct research, development, testing, and evaluation (RDT&E) in support of its (DoD's) mission requirements."
- Receives ~40% of all federal dollars appropriated for R&D
- Specific areas of interest for funding
  - cdmrp.army.mil/funding/

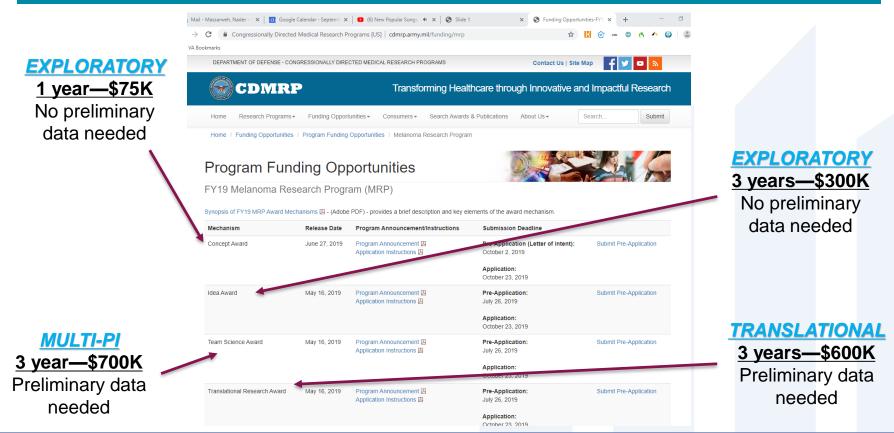
#### Congressionally Directed Medical Research Programs (CDMRP)





#### **CDMRP** funding opportunities





# VA Office of R&D



#### • Mission

- *"Advance the healthcare of Veterans."*
- Different arms
  - Biomedical Laboratory R&D
  - Clinical Science R&D
  - Health Services R&D
  - Rehabilitation R&D
  - VA Cooperative Studies Program (CSP)
    - Funds national clinical trials

#### VA funding mechanisms



- Pilot Projects
  - 1-2 years \$80-100K per year
- Career Development Award (VA K-award equivalent)
  - ~25-40% funding rate
- Merit Review (VA R01 equivalent)
  - Up to \$1.2 million over 4 years
  - ~20% funding rate



# A Case Study– My Own Experience

#### Year 1



- July 2014
  - Joined Baylor faculty
  - Negotiated start-up funds through the Dan L Duncan Cancer Center
    - \$50K per year x 3 years
- Fall 2014
  - Applied for seed award through MEDVAMC
    - \$22K for 1 year

# Year 2 and 3



- Applied for societal awards
  - SUS (No)
  - ASA (No)
  - AVAS (No)
  - ACS x2 (No x 2)
  - AAS x 2 (No x 2)
    - But, I did get an interview the second time around!

#### Year 3



- Applied for VA HSR&D CDA
  - Letter of intent disapproved (Same as a 'No')

- Applied for AHRQ R-03
  - Awarded

- Applied for VA HSR&D Merit
  - Reasonable score with favorable comments

Years 4 and 5



- Resubmitted VA HSR&D Merit
  - Awarded

• Invited to NIH BCHI Study Section

• Submitted VA HSR&D Merit and planning to submit NIH R-01

#### Take home messages



- Goal early on is to get your research program up, running, and productive
  - Money is money
    - Worry less about NIH dollars, especially early on
- Ask for advice, help, and support from successful investigators
  - Include successful investigators on your early submissions as Co-I's and Collaborators
    - Specify if any are your mentor(s)
- This is a process that requires time and thick skin