

EPI258: Grant Writing Workshop

Week 3

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Erin Van Blarigan, ScD

Associate Professor

Dept. of Epidemiology and Biostatistics

UCSF

Slides updated from: Judy Hahn, PhD

Plan for Today

- Overview of NIH
- Research Strategy - Specific Aims

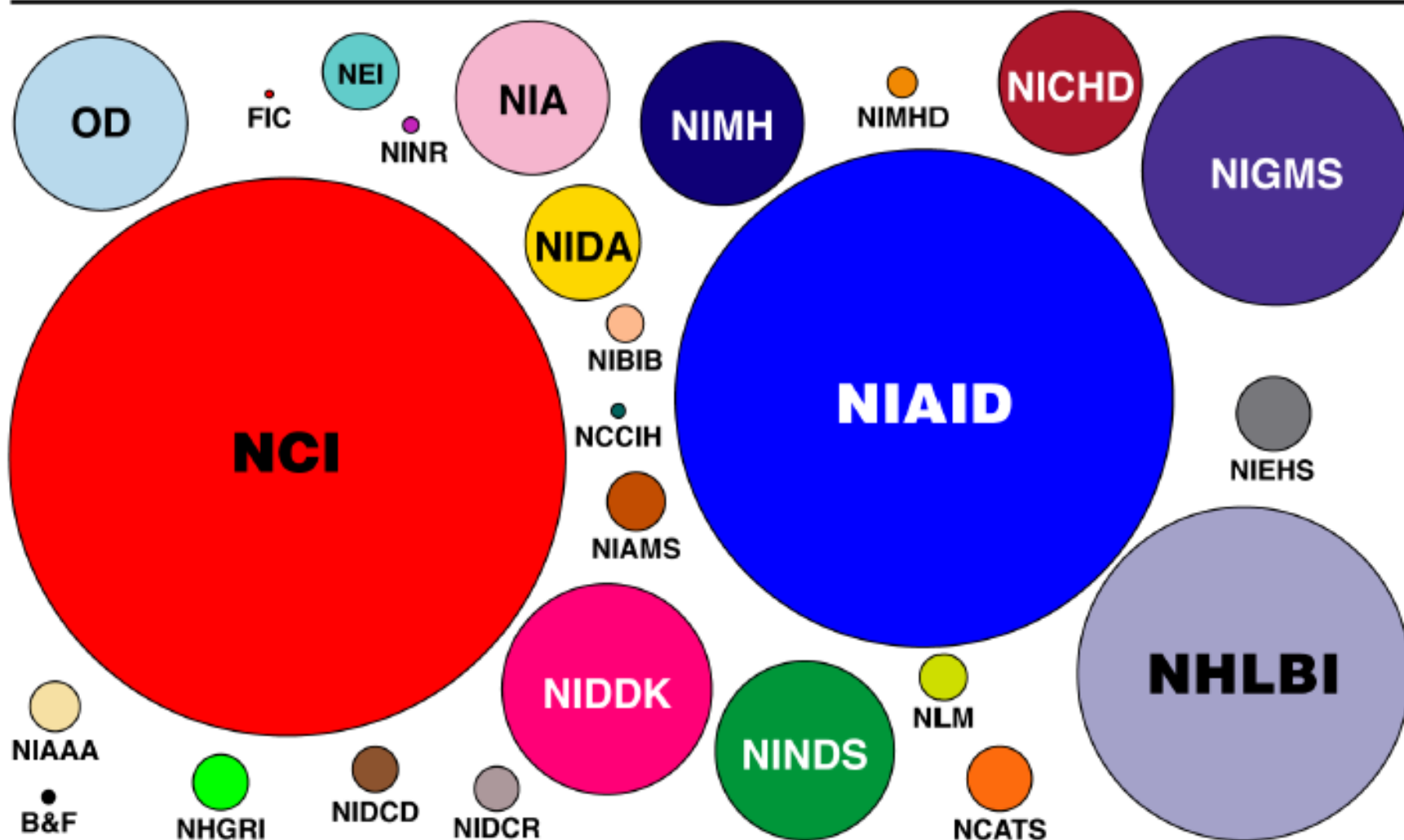
Break

- In small groups, present and discuss successful grants' Specific Aims

NIH Institutes

- 27 Institutes and Centers: <http://www.nih.gov/icd/>
 - Each institute has a director:
<http://www.nih.gov/icd/icdirectors.htm>
 - Each institute has different funding priorities & centers within the institute
 - Institutes fund applications that advance their missions and achieve their funding priorities
- Examples: National Institute of Alcohol Abuse and Alcoholism (NIAAA); National Cancer Institute (NCI)

National Institutes of Health



Example: NIAAA

Institute	http://www.niaaa.nih.gov/
Director	http://www.niaaa.nih.gov/about-niaaa/our-staff/directors-page
Funding Priorities	http://www.niaaa.nih.gov/about-niaaa http://www.niaaa.nih.gov/research
FOAs	http://www.niaaa.nih.gov/grant-funding/funding-opportunities
Who to contact	Check the “resources for applicants” and the FOA for contact info http://www.niaaa.nih.gov/grant-funding/application-process/niaaa-contacts-training-and-career-awards

NIH Institute:

What is the best fit for you?

- Where is your Mentor's/Sponsor's funding from?
- Where would you like to build a research career?
- Could your grant fit in 1 or more institutes?
 - If yes to above question, is one institute more/less competitive? Has more/less money?
- Check out currently funded projects in the research area/institute you are interested in:
 - <http://projectreporter.nih.gov/reporter.cfm>
- Ask the institute – contact the program officer for the award mechanism you are considering applying to

Know your Institute's funding priorities

- Review the Institute's website to find out about:
 - Current funding opportunity announcements (FOAs)
 - Current funding opportunities of *highest priority*
 - Future funding opportunities
 - Many institutes announce new “concepts in development” and “potential opportunities” on their websites

NIH Institutes: Funding Opportunities

- Funding Opportunity Announcement (FOA)
“A publicly available document by which a Federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds”
<http://grants.nih.gov/grants/guide/description.htm>
- FOAs may be known as:
 - Program Announcement (PA)
 - Requests for Application (RFA)
 - Notice of Funding Availability (NOT)
 - Request for Proposal (RFP)

Funding Opportunities cont'd

- **Program Announcement (PA):** Identifies areas of priority and/or emphasis on particular funding mechanisms for a specific area of science.
 - **PAR:** A PA with special **receipt, referral and/or review** considerations
 - **PAS:** A PA that includes specific **set-aside funds**
- **Request for Application (RFA):** Identifies a narrowly defined area that one or more NIH institutes have set aside funds for awarding grants
 - Usually has a single receipt (received on or before) date
 - Usually reviewed by a Scientific Review Group convened by the issuing awarding component
- **Notice of Funding Availability (NOT):** Announces policy and procedures, changes to RFA or PA announcements, RFPs and other general information
- **Request for Proposal (RFP):** Solicits contract proposals; usually has one receipt date

FOAs: Notices

- NOTs

<https://grants.nih.gov/funding/searchguide/index.html#/?type=notices>

- Sometimes include intent for publish a RFA!
- Ex: Notice of Intent to Publish the Reissuance of RFA-OD-18-002 "Tobacco Regulatory Science (R01 Clinical Trial Optional)" <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-19-062.html>

NIH Funding: Types of Grants

- Pre-doctoral
 - F31; R36; F00/K99; administrative supplement
- Post-doctoral
 - F32; T32
- Early Career
 - Ks (K01, K08, K23, K99/R00)
- Mid-late career
 - R-grants (R21, R34, R01); U01; P30; other K-grants (K05, K24)

NIH Funding: Due Dates

Check the FOA for your specific grant each time.

Description	Standard Due Dates
F-series	April 8 th (cycle 1), August 8 th (cycle 2), December 8 (cycle 3)
K-series	February 12 th , June 12 th , October 12 th
R01	February 5 th , June 5 th , October 5 th
AIDS applications (all activity codes)	May 7 th , September 7 th , January 7 th

<https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm>

NIH Funding: Review Dates

Description	Cycle 1	Cycle 2	Cycle 3
	January 25- May 7	May 25- September 7	September 25 – January 7
Scientific Merit Review	June-July	October- November	February-March
Advisory Council Review	August or October	January	May
Earliest Start Date	September or December	April	July

Contact an NIH program officer

- Assess the enthusiasm of the institute about your research area / potential application
- Inquire about topics of interest to the Institute → This includes existing and new priorities the Institute may be interested in even though they haven't yet published an RFA or PA

Program officers

Check your grant mechanism website for the current NIH contact (program officers--aka "Scientific Program Contact")

F31 contacts:

https://grants.nih.gov/grants/guide/contacts/parent_F31.html

K01 contacts:

https://grants.nih.gov/grants/guide/contacts/parent_K01.html

K23 contacts:

https://grants.nih.gov/grants/guide/contacts/parent_K23.html

NIH Research Proposal Sections

SPECIFIC AIMS

NIH Proposal Research Sections

- Abstract – 30 lines
- Narrative – 2-3 lines about public health impact in lay terminology
- Specific Aims – 1 page
- Research Strategy – 6 pages (12 for R01's)
 - Significance
 - Innovation (not needed for F grants)
 - Approach
- References – separate, no page limit

NIH format: single spaced, 11-point font, .5-inch margins

Other Proposal Components

- Training goals/activities – several sections to be discussed in more detail (Weeks 6 & 8)
- Biosketches – you, your mentor/sponsor, co-mentor(s)/co-I's
- Budget – work on with RMS
- Budget justification – work on with RMS
- Letters of Support
- Letters of Reference – confidential letters submitted separately by persons who are NOT named on the grant
- Training in the Responsible Conduct of Research
- Human Subjects

Specific Aims

Introductory paragraph: Big picture down to narrower picture and knowledge gap

- What is the big public health problem?
 - Colorectal cancer is 2nd leading cause of cancer death in US
- What is the more narrow public health problem?
 - Healthy lifestyle associated with better survival
 - <10% of people with colorectal cancer follow national lifestyle guidelines for cancer survivors
- What is known/what is the knowledge gap?
 - Multi-component interventions can improve diet and exercise, but are costly
 - The individual and joint effect(s) of existing intervention components are not known

Specific Aims

Who/what/why

- What is the long-term goal of the research?
 - To improve outcomes among colorectal cancer survivors through lifestyle interventions
- What is the short-term goal?
 - To optimize a remotely delivered lifestyle intervention for cancer survivors
- What is the central hypothesis?
 - A scalable lifestyle intervention that improves diet and exercise behavior will lower risk of CRC recurrence and mortality and improve public health.
- Rationale: How this research will close the gap
 - The Multiphase Optimization Strategy Framework allows us to “look inside the black box” and identify an optimized intervention

The Specific Aims page

- The aims (Aim 1, Aim 2, Aim 3)
 - Include testable hypotheses or steps needed before you are able to test the hypothesis (ok for training/pilot awards)
 - Developing or piloting an intervention is not a testable hypothesis, but does inform your central hypothesis that you will eventually test
 - Stand alone RCTs, even pilot RCTs, are NOT allowed on F grants
 - Aims should stand alone – one aim cannot be dependent on the success of the previous aim
- Payoff paragraph
 - How this will move the field forward?
 - What are the next steps after this project?
 - *How will this grant help your training and career development?*

The Specific Aims page

- Work on this over and over.
- It will be what most reviewers read.
- You can also use drafts to get input from mentors, colleagues, etc.

Checklist of specific aims pages

- ☐ Attention grabbing opening sentence
- ☐ Current knowledge
- ☐ Gap in knowledge/unmet need
- ☐ Long-term goal
- ☐ Objective of the application
- ☐ Central hypothesis + rationale
- ☐ Aims
- ☐ Payoff
 - ☐ Expected outcomes
 - ☐ Generality regarding positive impact

Assignment 3 due 8 am Mon 1/25

- Using your outline from Assignment 1, expand to sentences to create a 1-page draft of your Specific Aims
 - Include training goals in your Specific Aims page
 - Include 1-2 sentences that describe your study methods; include study design, study population, N, exposure, outcome.
For example: To address these research gaps, we propose a prospective cohort study of 6,000 men with prostate cancer to examine whether physical activity after prostate cancer diagnosis is associated with higher quality of life and longer survival.
 - **1-page limit**

Reading to be completed prior to class on 1/27:

- One of your classmates' Assignment 3 (Specific Aims). The document you need to read for the next class will be emailed to you on Monday 1/25 by 9a.
 - Has your colleague completed the checklist for Specific Aims pages?
 - What questions do you have?
- Please also review the scoring criteria for various types of grants:
https://grants.nih.gov/grants/policy/review_templates.htm