



NIH FUNDING OPPORTUNITIES

- Leslie Cooper, RN BSN MPH PhD
- CAPTAIN, USPHS
- NIH/NCI/CRCHD
- & Mark Swieter, PhD NIH/NIDA
- Department of Defense
- Prostate Cancer Research Program Meeting
- Atlanta, GA 8/2007

Outline

- National Institutes of Health
- Overview of the funding structure and mechanisms within the NIH
- Next Steps

National Institutes of Health



Much of the biomedical research in the United States is supported by the Federal Government, Primarily the National Institutes of Health (NIH)



The NIH

- *26 institutes and centers (ICs)* with distinct disease mission and administrative autonomy
- *Common NIH mechanisms* available, but not required of ICs
- *Unique programs* offered by ICs
- *Grantees are institutions*, not individuals
- *Common review criteria and system*



The National Institutes of Health

- ***Primary mission*** - uncover new knowledge that will lead to improved health outcomes
- ***Research*** is primary activity (not service, demonstrations, or evaluations)
- ***Research training and health information dissemination*** are other key activities

Become Familiar with NIH

- Become knowledgeable about research and researcher development activities at NIH but particularly the ICs that support work related to your interest
- Read the Institutes web pages
- *Identify and get to know some key program officials at the ICs*
- Prepare a short concept paper (1-5 pages) on your research ideas. Determine the feasibility of your first choice mechanism given your research objectives, experience and resources
If no research experience, consider RO3
If using RO1, may need to collaborate
Explore the Research Supplement Program

The Grant Process: from the Inside Out

Let's Get Started

Where it all starts...



The IDEA!

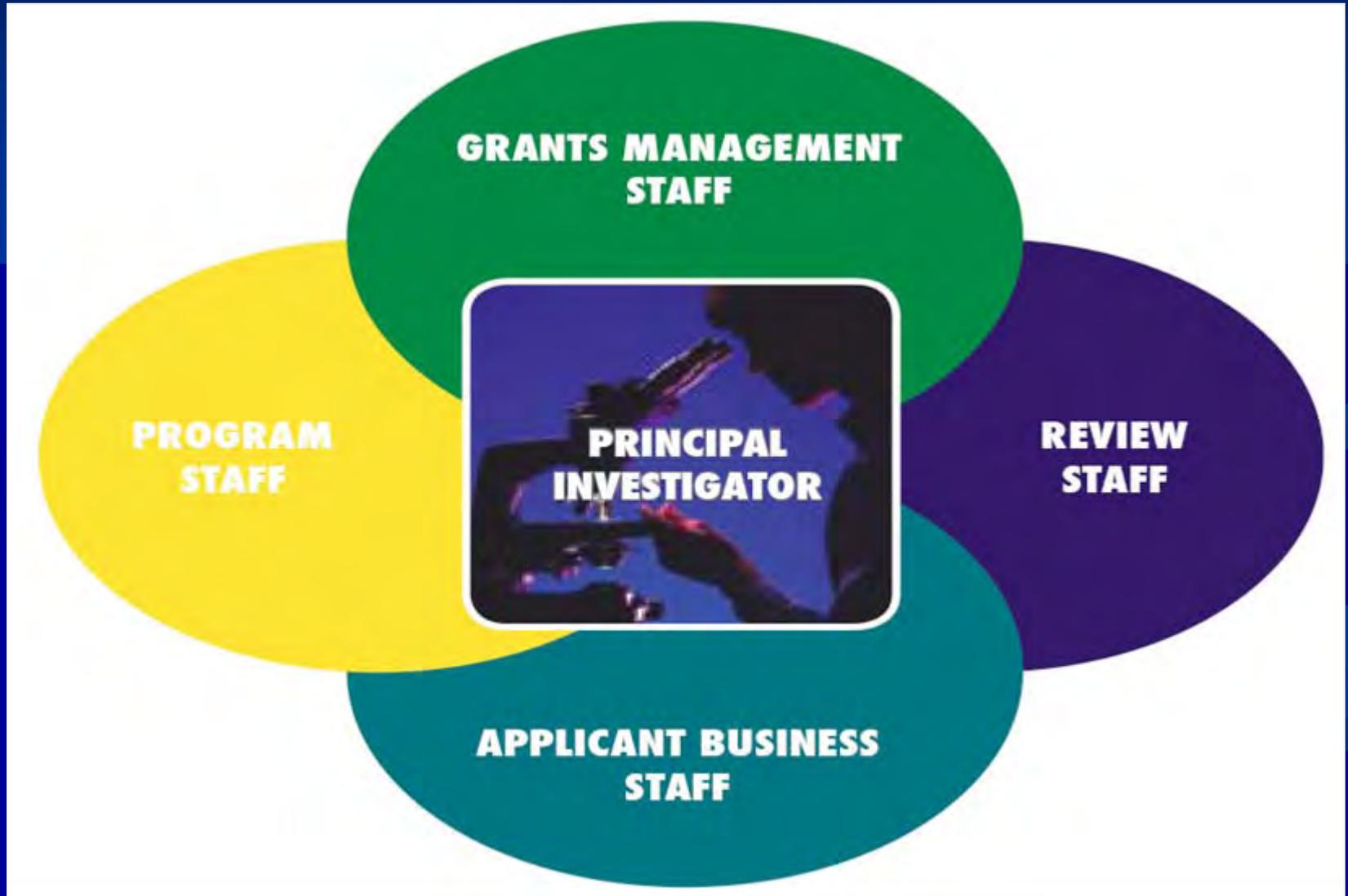
The SCIENCE

- **Select a fundamental question**
- **Transform idea(s) into an exciting story**
- **Build confidence**
- **Build enthusiasm**

Writing - General Comments

- **Have a good story**
- **Investigate a significant issue in science**
- **Use clear and plain language**
- **Propose a feasible project**
- **Build enthusiasm about project**
- **Be concerned about “packaging”**

KEY MEMBERS



Know the Alphabet Soup for the IC You are Interested In:

and

“P”s, “R”s, “U”s, “F”s, “K”s, “T”s,
and other mechanisms such as “SBIR”s

Research Project Grants

Within NCI

- Several Types of Mechanisms:
- 1. Research Project Grants (P01, R01, R03, R21, R33, R37, R41, R42, R43, R44, R55, R56, U01, U19, U43, and the U44)
- 2. Cancer Centers and Specialized Programs of Research Excellence (P20, P50, P30, U54)

Research Project Grants

Within NCI (cont)

- Other Research Grants (K01, K05, K07, K08, K12, K22, K23, K24, K25, K30, R13, R15, R24, R25, S06, T09, U09, U10, U13, U24, U56)
- Training Grants (F31, F32, F33, T32, T36)

SPECIAL MECHANISM

- **Diversity Awards** – designed to promote diversity in health related research (Postdoc, Graduate Research, Post-Bac, Post Master's, Undergraduate Students, High School Students, and Individuals with Disabilities)
- Reentry Supplements
- Travel Awards – support travel of minority students to attend American Association for Cancer Research (AACR) meetings
- And more....

Special Mechanisms

- SBIR's – R43, R44
- STTR's – R41, R42

Crude Career Development Proxy Timeline

Graduate Student

F31, F32, F33, T32, T36

Postdoctoral Fellow

F32, T32

Early

K01, K05, K07, K08, K12, K22,
K23, K24, K25, K30, R03, R21, R33,

C
A
R
E
E
R

Middle

R01

K02

Senior

K24

K05, P's, R33, R37, U's,

Read the PAs and RFAs

- Explain the purpose, eligibility, objectives
- Identify the mechanism(s) to be used
- Provide application receipt dates
- List participating ICs
- Give review criteria
- May give some background and source material

PA vs. PAR's vs. RFA

	Approach	Review	Duration	\$	Receipt Dates	Application Preparation	Amended applications
PA	Broad	Many Cmtes	Long term	No	Multiple	Applicant selects	Continuity
PAR	Narrow	Focused Cmtes	Long term	No	Multiple	Applicant selects	Continuity
RFA	Narrow	One Cmte	Short term	Yes	Single	Usually 90 days	No Continuity

Review Cycles

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

X

X

X

X

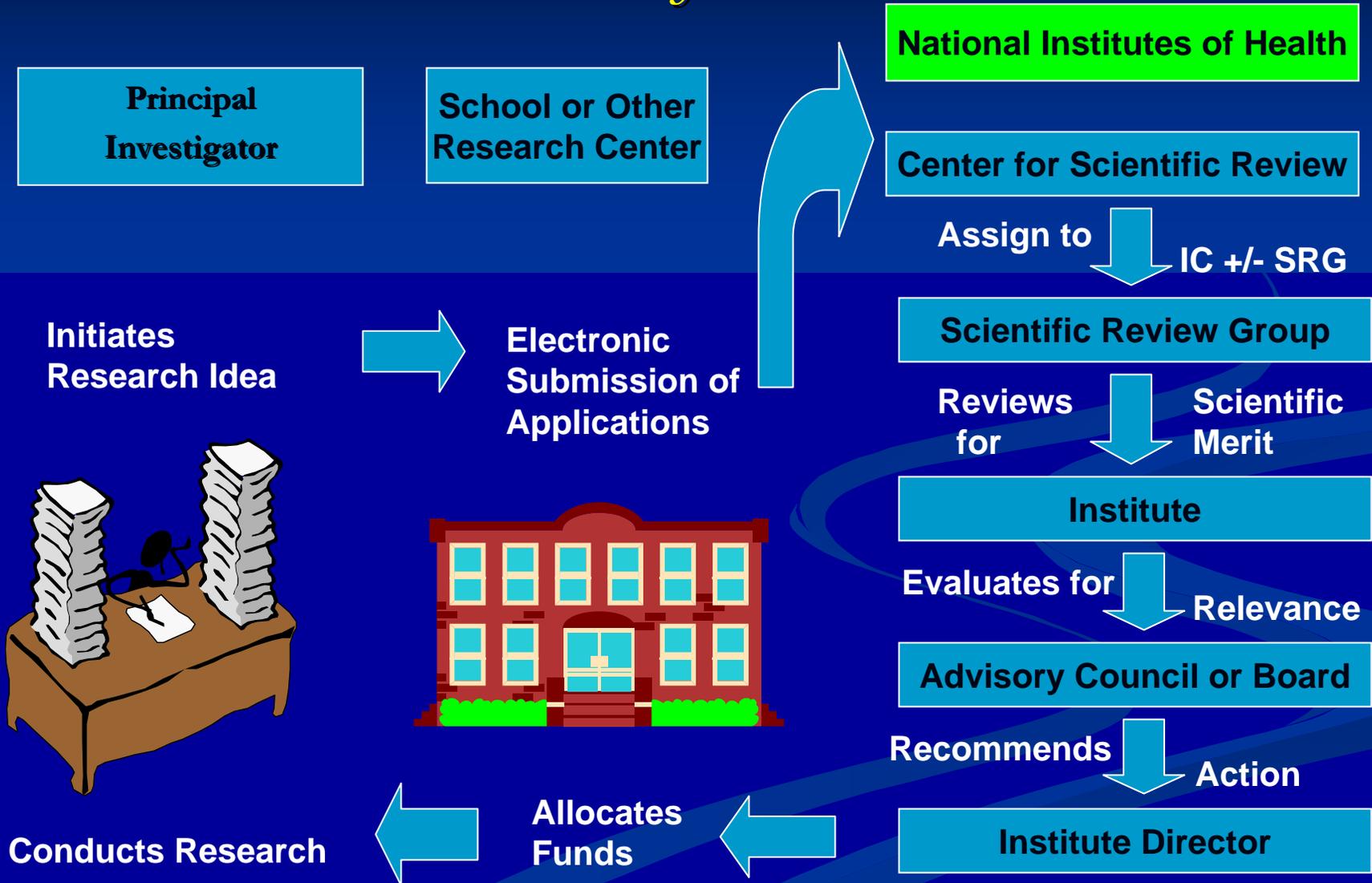
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Application Receipt Dates



Review Process for a Research Grant



Seize the Opportunities

- Know who will likely review your application
- Never submit an application without conferring with IC program official
- Very competitive, but not impossible to be funded the first time around
- Cultivate a strong support system that understands the process

Important Steps to Remember

- Identify your research question
- Review the literature
- Modify your question, if needed
- Contact a NIH staff person to begin early discussions, within the IC of interest to you
- (Optional) Submit a concept paper (<5 pages) for feedback. Modify as needed. Resubmit.
- Discuss possible funding mechanisms
- Prepare your application
- Have others to critique before submitting to NIH

Review of Research Grants

REVIEW CRITERIA:

- **Significance**
- **Approach**
- **Innovation**
- **Investigator**
- **Environment**

Review Criteria (continued)

- **Significance:** Does the study address an important problem? How will scientific knowledge be advanced?
- **Approach:** Are design and methods well-developed and appropriate? Are problem areas addressed?
- **Innovation:** Are there novel concepts or approaches? Are the aims original and innovative?
- **Investigator:** Is the investigator appropriately trained?
- **Environment:** Does the scientific environment contribute to the probability of success? Are there unique features of the scientific environment?

HELPFUL HINTS FOR YOU

- What, why, and how? What will be learned?
- Discuss ideas with Institute staff
- Read application form -
it contains useful information
- Get Help -- Mentors, Collaborators, let colleagues review and critique drafts of your application
- Be neat -- appearances count late at night
- Use proper font; observe margins, page limits -- no end runs in appendix
- Follow directions

When Preparing an Application

- Read instructions
- Never assume that reviewers “will know what you mean”
- Don’t write your application for the “Specialist”
- Refer to literature thoroughly
- State rationale of proposed investigation
- Include well-designed tables and figures
- Present an organized, lucid write-up
- Obtain pre-review from faculty who know and don’t know anything about your research field

Common Problems in Applications

- Lack of new or original ideas
- Absence of an acceptable scientific rationale
- Lack of experience in the essential methodology
- Questionable reasoning in experimental approach
- Uncritical approach
- Diffuse, superficial, or unfocused research plan
- Lack of sufficient experimental detail
- Lack of knowledge of published relevant work
- Unrealistically large amount of work
- Uncertainty concerning future directions

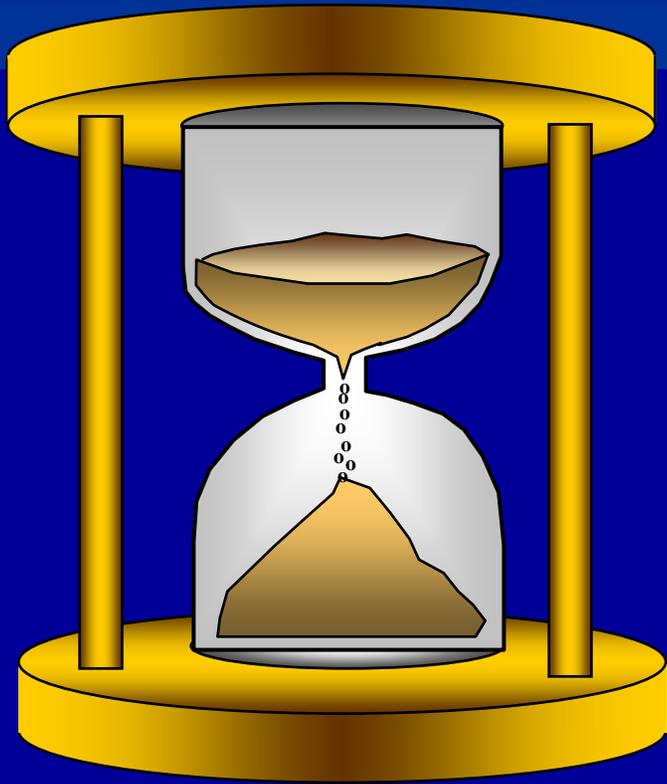
Human Subjects Research: Requirements for Grant Application

- IRB approval prior to review not required
- Plans for inclusion of gender/minorities including outreach activities
- Plans for inclusion of children in research
- Data safety and monitoring plans for clinical trials
- Failure to address Human Subjects
 - Return grant application without review
 - Lower priority score

*electronic Research Administration
(eRA) Commons*

<http://commons.era.nih.gov>

Submit and wait...and wait...



March

And wait...and wait...

- *HOWEVER, Feel Free to Contact Your PROGRAM DIRECTOR – ANYTIME*
- *WE ARE HERE TO WORK WITH YOU!!!!*

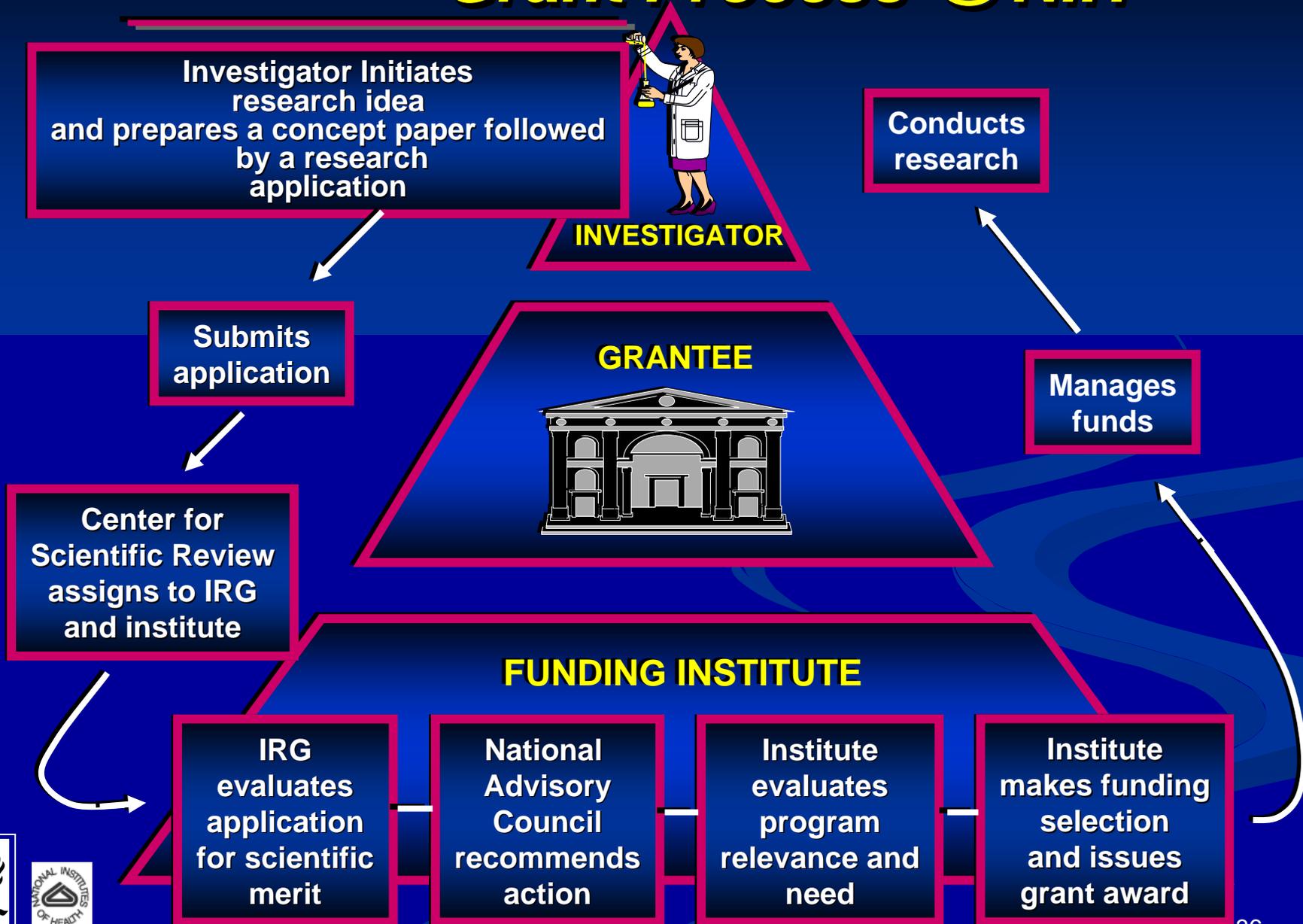
Follow-up with NIH-PD

- Review your Summary Statement
- Prepare to be funded or if needed prepare to Revise and Re-Submit



*You mean you want the revised revision of the original revised revision to be **REVISED AGAIN?!!!***

Grant Process @ NIH



Where to Find Information

- OER website (<http://grants1.nih.gov/grants/oer.htm>)
 - The NIH Guide
 - **Program Announcements (PA)**
 - **Requests for Applications (RFA)**
 - **Notices**
 - Application forms and instructions
- CSR website (<http://www.csr.nih.gov>)
 - SRG Structures and Rosters (<http://era.nih.gov/roster/index.cfm>)
- Institute websites (<http://www.nida.nih.gov>)
 - Institute-specific PAs and RFAs
 - Institute Divisions and Offices
 - SRG Structures and Rosters (<http://era.nih.gov/roster/index.cfm>)



National Cancer Institute

U.S. National Institutes of Health | www.cancer.gov

In English | [En español](#)

 SEARCH

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Definitions, names, and links
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Information, meetings, reports
- [NIH Calendar of Events](#)
Scientific meetings
- [Español](#)
Información en español

Questions about cancer?

- 1-800-4-CANCER
- [LiveHelp@online chat](#)

NCI Highlights

[NCI Launches Community](#)



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2000 & Beyond

Celebrating 70 Years of Excellence in Cancer Research

Types of Cancer

Common Types of Cancer:

- [Bladder Cancer](#)
- [Breast Cancer](#)
- [Colon and Rectal Cancer](#)
- [Endometrial Cancer](#)
- [Kidney \(Renal Cell\) Cancer](#)
- [Leukemia](#)
- [Lung Cancer](#)
- [Melanoma](#)

- [Pancreatic Cancer](#)
- [Prostate Cancer](#)
- [Skin Cancer \(Nonmelanoma\)](#)
- [Thyroid Cancer](#)

All Cancer Types

- [A to Z List of Cancers](#)
- [Cancers by Body Location/System](#)
- [Childhood Cancers](#)

NCI Cancer Bulletin

Get the latest cancer research news from NCI ▶

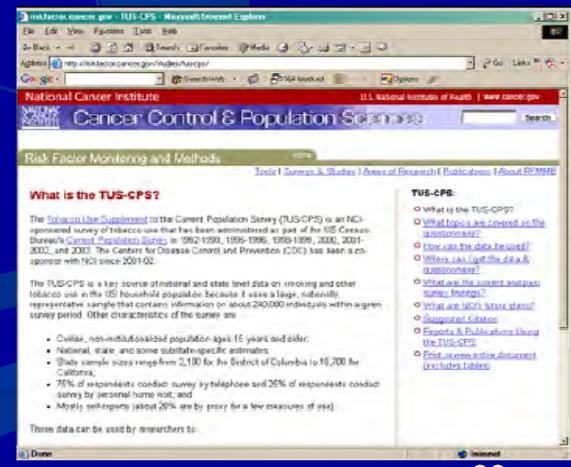
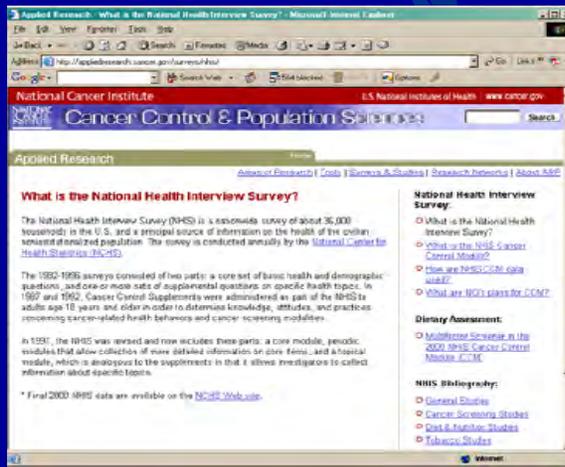
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NCI's Cancer.gov en español

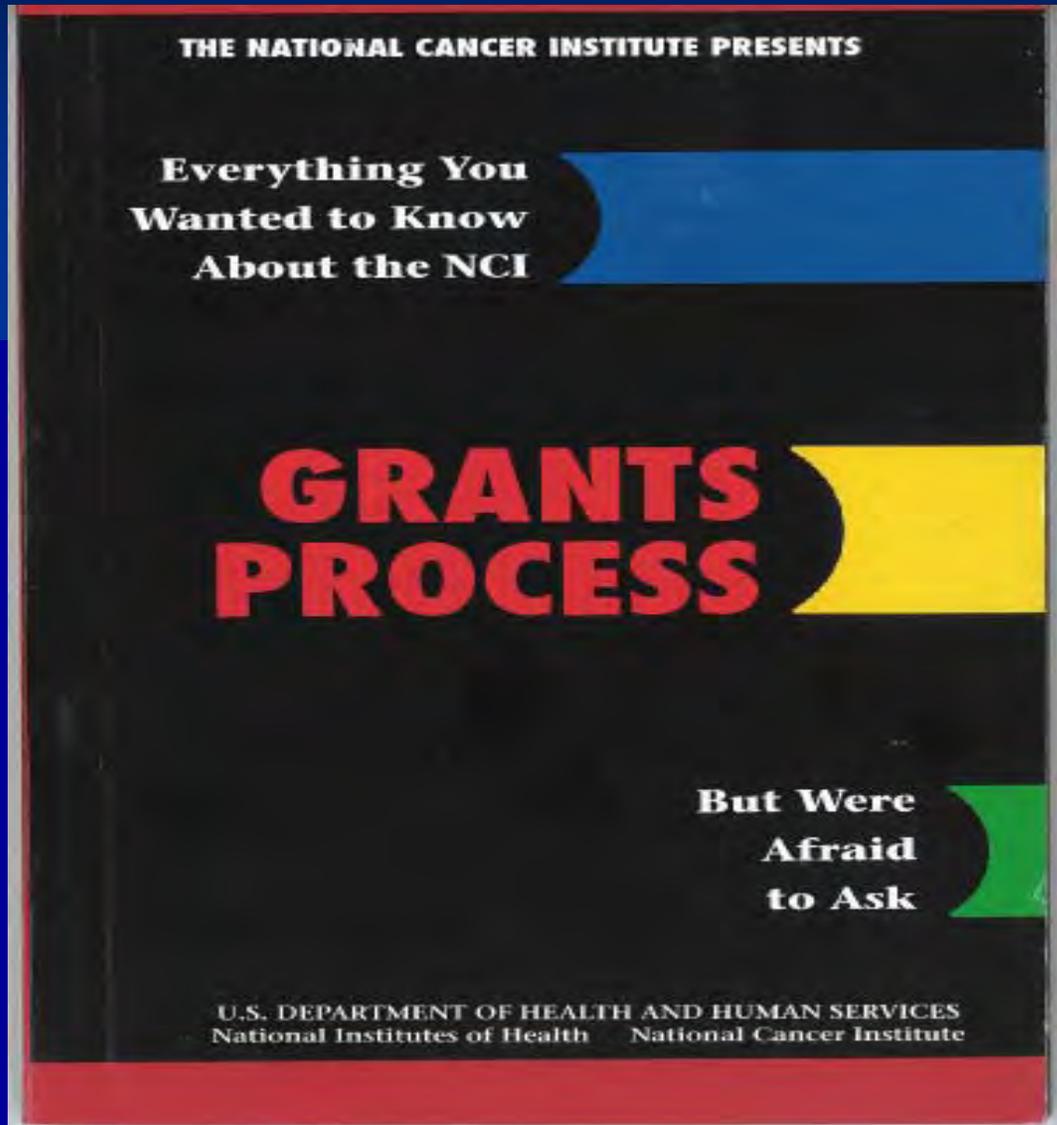
VISIT NOW ▶

Cancer Tools & Resources for Researchers

- SEER and the SEER-Medicare Linked Database
 - <http://seer.cancer.gov>
- National Health Interview Survey (NHIS) Cancer Control Supplement
 - <http://appliedresearch.cancer.gov/surveys/nhis/>
- Current Population Survey Tobacco Use Supplement
 - <http://riskfactor.cancer.gov/studies/tus-cps/>



MUST HAVE!!!!!!



CRCHD Tools & Resources for Researchers

■ *New* CRCHD Web site

- <http://crchd.cancer.gov>
- Nov 2006 launch
- >3200 Web visits in Dec/Jan
- Cancer health disparities (CHD) information for scientists, practitioners, patients, and public



■ CRCHD Cancer Disparities E-Bulletin

- <http://crchd.cancer.gov/news/ebulletin.html>
- Oct 2006 launch
- Monthly; >1000 subscribers
- Current CHD research/training/funding information for scientists and practitioners



CRCHD Tools & Resources for Researchers con't

- Brochures
 - CRCHD, CNP, SPN
 - CURE, MI/CCP



- Special Populations Network (SPN) Monograph in CANCER
 - <http://www3.interscience.wiley.com/cgi-bin/jissue/113386997>



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**SPECIAL THANKS
to MY:
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For More Information

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