



# NIH FUNDING OPPORTUNITIES

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- 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*

# National Institutes of Health





## 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

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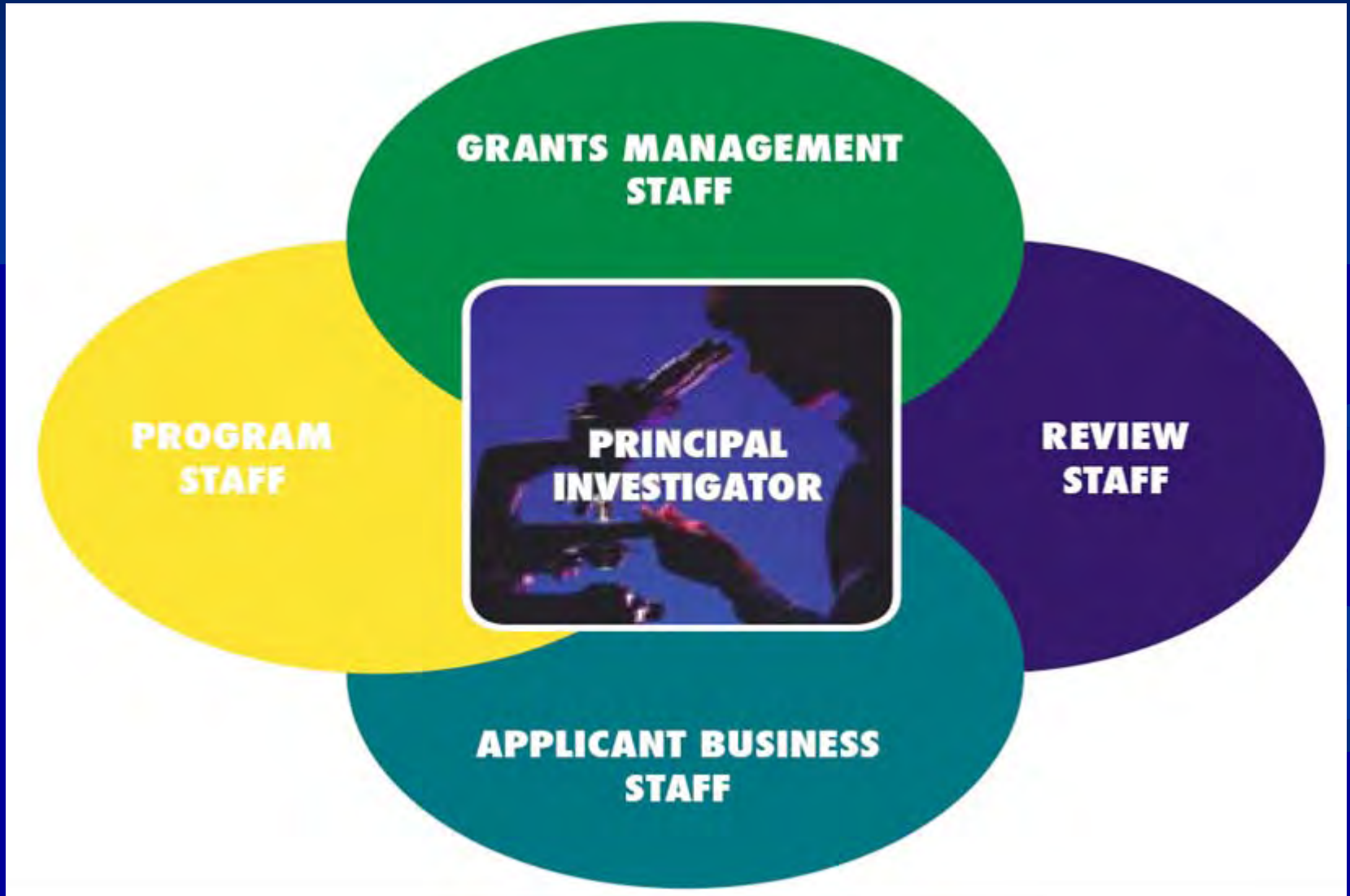
- **Select a fundamental question**
- **Transform idea(s) into an exciting story**
- **Build confidence**
- **Build enthusiasm**

# Writing - General Comments

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- **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

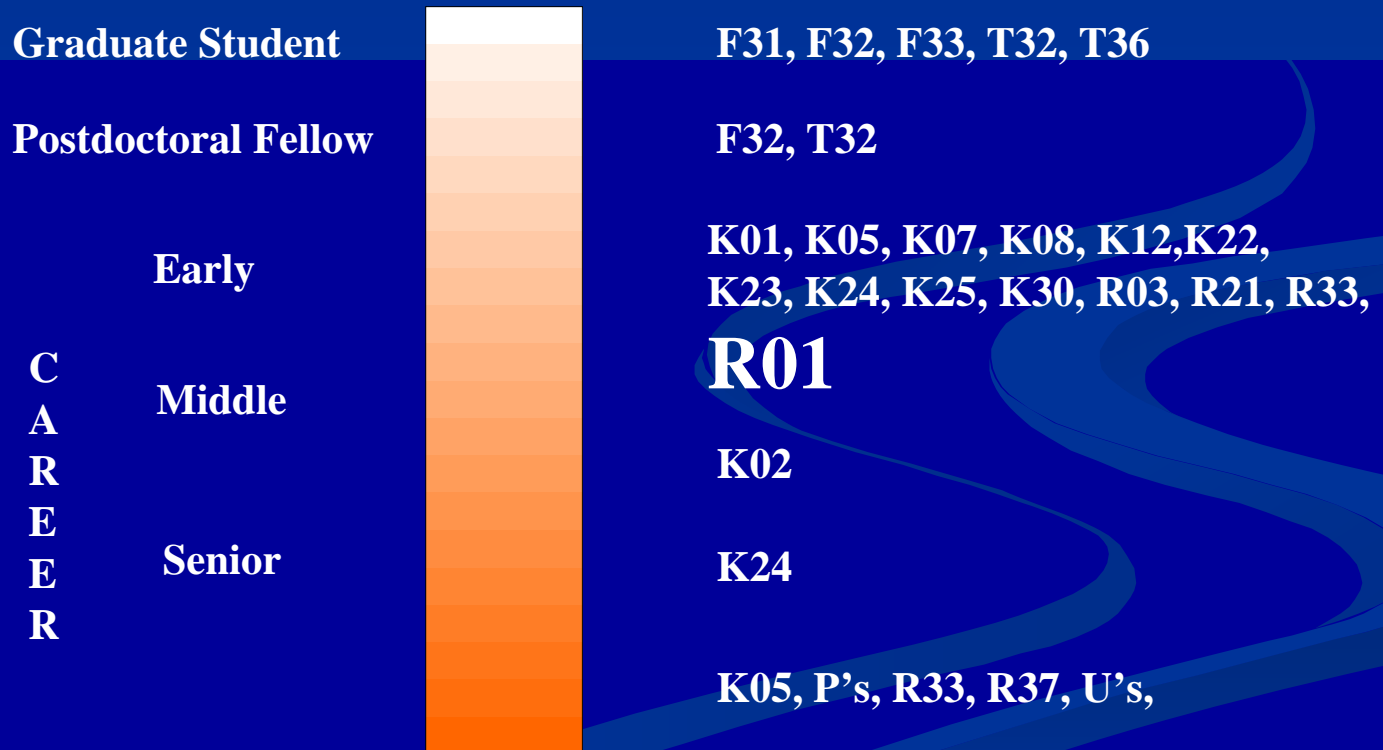
- **Diversity Awards** – designed to promote diversity in health related research (Postdoc, Graduate Research, Post-Bac, Post Master's, Undergraduate Students, High School Students, and Individuals with Disabilities)
- Reentry Supplements
- Travel Awards – support travel of minority students to attend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



# Special Mechanisms

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

# Crude Career Development Proxy Timeline



# 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
<b>PA</b>	Broad	Many Cmtes	Long term	No	Multiple	Applicant selects	Continuity
<b>PAR</b>	Narrow	Focused Cmtes	Long term	No	Multiple	Applicant selects	Continuity
<b>RFA</b>	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

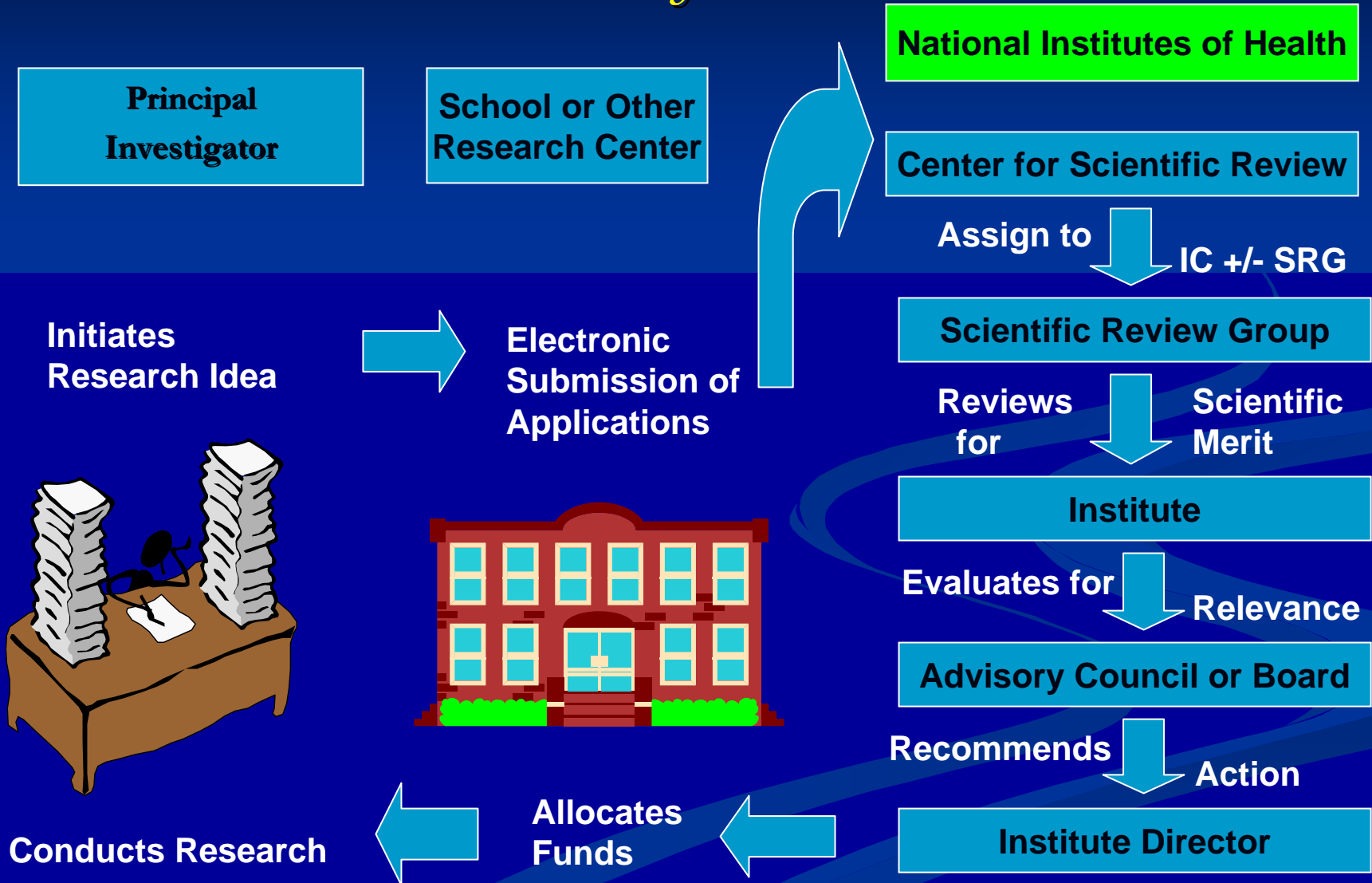
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Application Receipt Dates



# 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*

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## **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

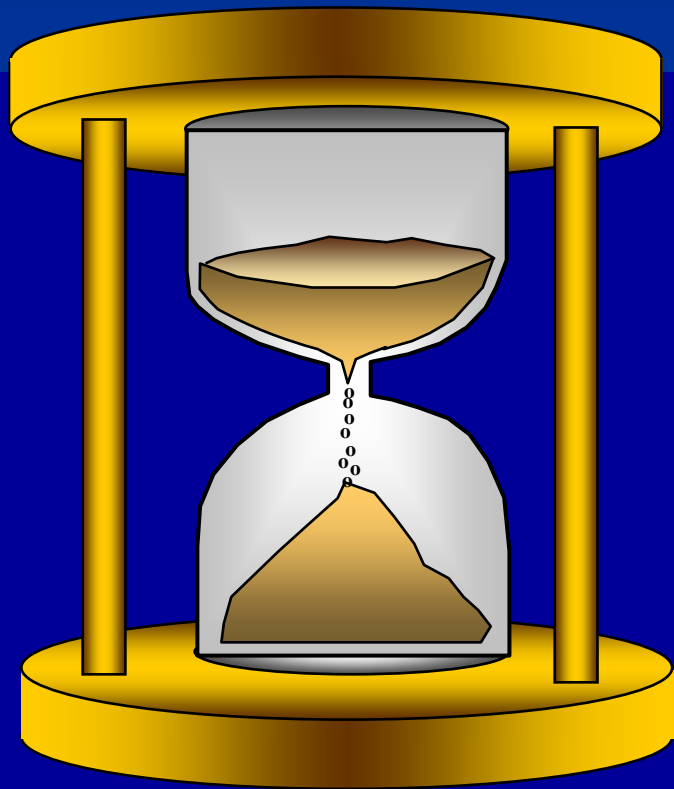
# *Human Subjects Research: Requirements for Grant Application*

- 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!!!!*

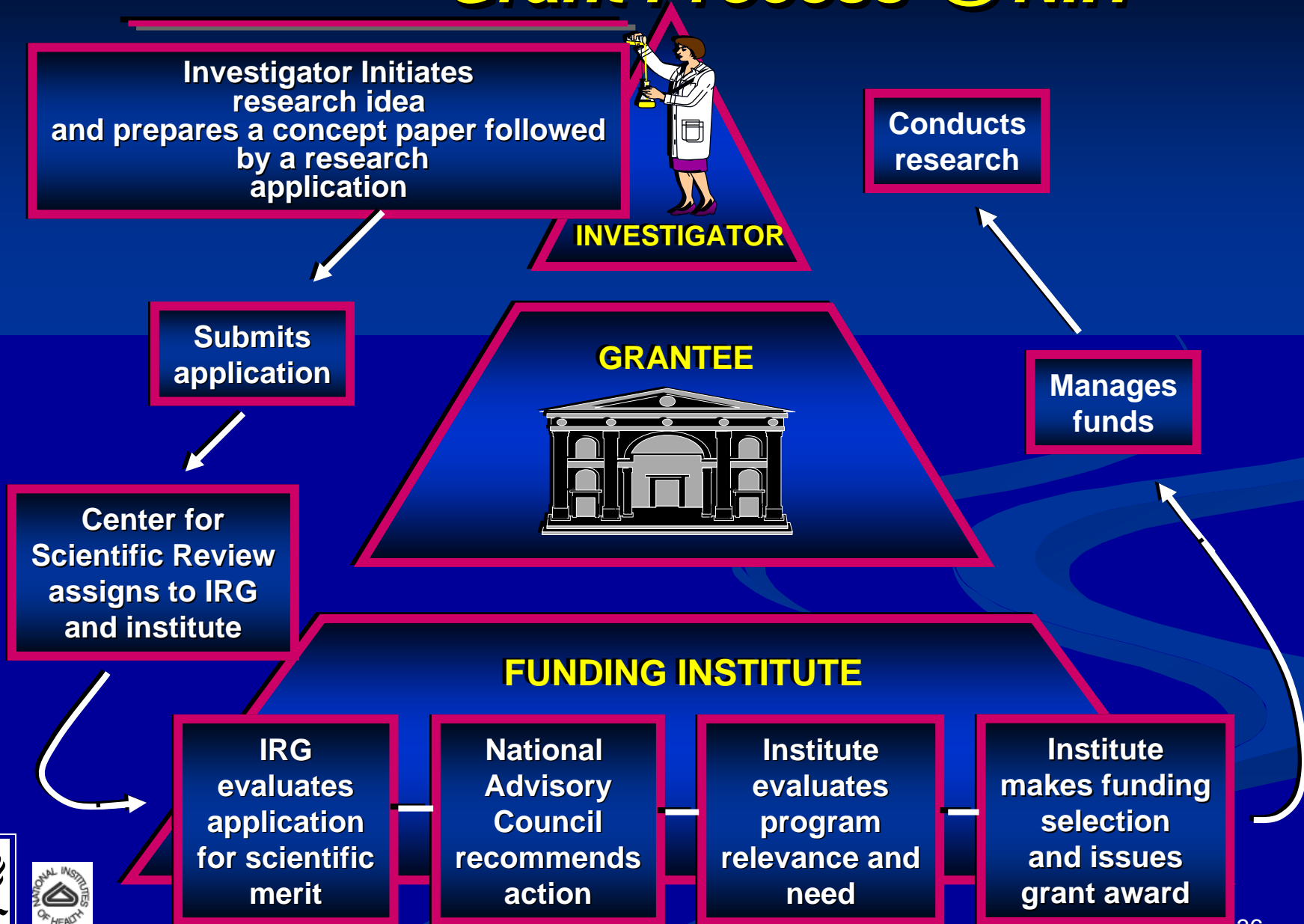
# Follow-up with NIH-PD

- 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**

- [NCI Home](#)
- [Cancer Topics](#)
- [Clinical Trials](#)
- [Cancer Statistics](#)
- [Research & Funding](#)
- [News](#)
- [About NCI](#)

### Quick Links

- [Director's Corner](#)  
Updates from the Director
- [Dictionary of Cancer Terms](#)  
Cancer-related terms
- [NCI Drug Dictionary](#)  
Definitions, names, and links
- [Funding Opportunities](#)  
Research and training
- [NCI Publications](#)  
Order/download free booklets
- [Advisory Boards and Groups](#)  
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](#)



[play again](#) | [learn more](#)

## 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 ▶

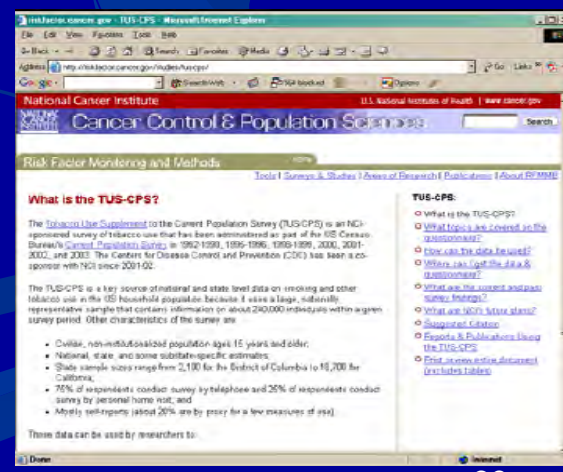
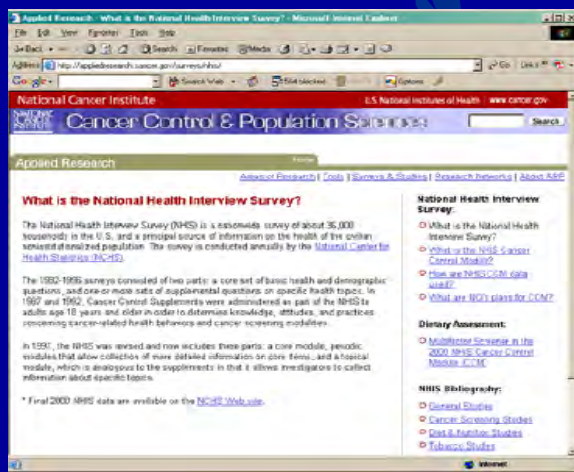
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**NCI's Cancer.gov en español**

**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/>



# Cancer Tools & Resources for Researchers (Cont)

- Health Services Research Consortia: e.g., HMO Cancer Research Network
  - <http://crn.cancer.gov>
- Health Information National Trends Survey
  - <http://hints.cancer.gov>
- Cancer Control PLANET
  - <http://cancercontrolplanet.cancer.gov>

**hints** Health Information National Trends Survey

- View HINTS Findings**
  - Search HINTS Questions
  - Downloadable SAS, SPSS formats
  - Registration required
  - Data version: February 2005
  - Survey instrument
  - Sampling plan
  - Survey instruments
  - Screening & interview codebooks
  - Survey administration
  - Ongoing Research Using HINTS Data
  - Presentations & publications
  - Registered research abstracts
  - Submit a research abstract
- Learn About HINTS**
  - About HINTS
  - What HINTS does
  - How HINTS data are used
  - NCI presentations
  - Schedule of events

**CRN Cancer Research Network**

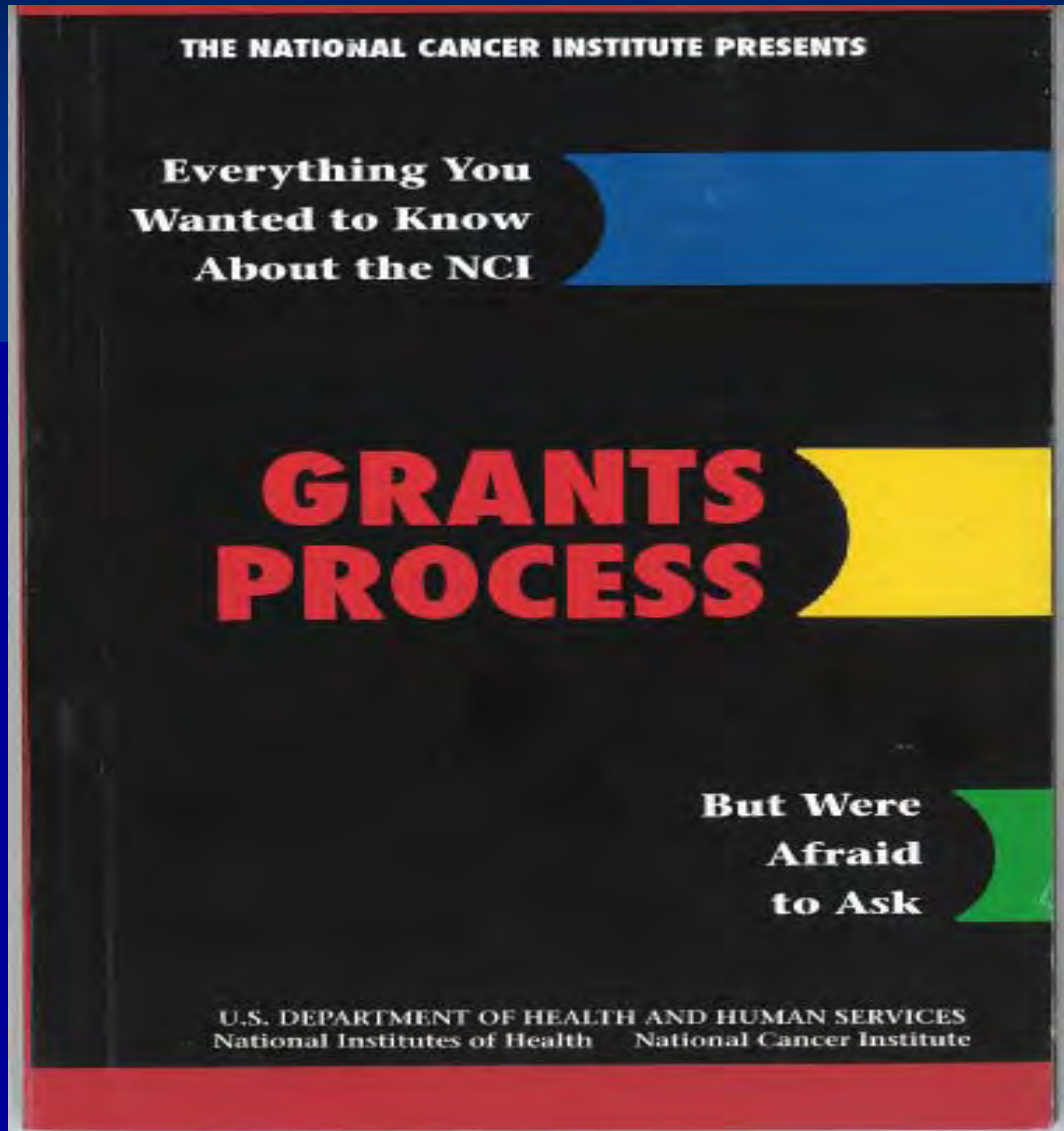
Participating Health Plans and Associated Research Centers

**Cancer Research Network Sites**

CRN is composed of 12 healthcare systems across the nation. All of these systems are members of the **EMC Research Network** – a larger consortium of health maintenance organizations with formal recognized research capabilities and a shared commitment to public domain research.



# 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:**  
**NIH Colleagues,**  
**NIH Webmaster, and Others**  
**for**  
**Sharing Their Slides**

# For More Information

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