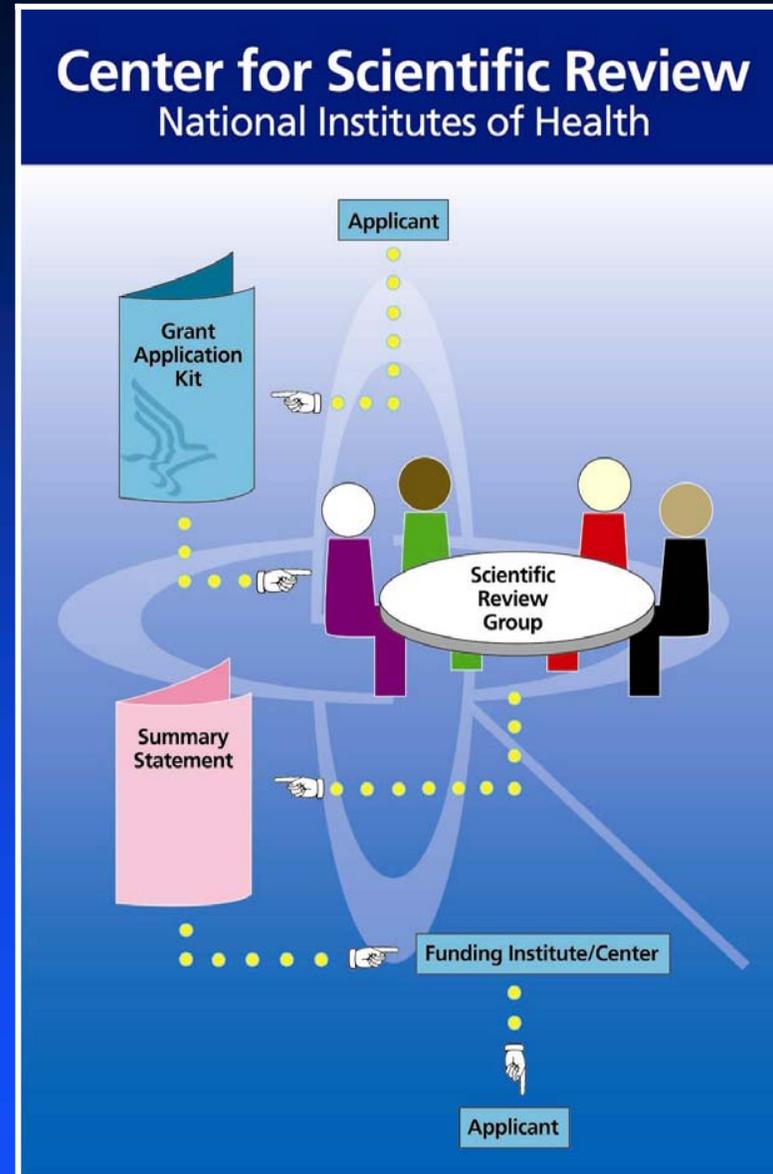


NIH Grant

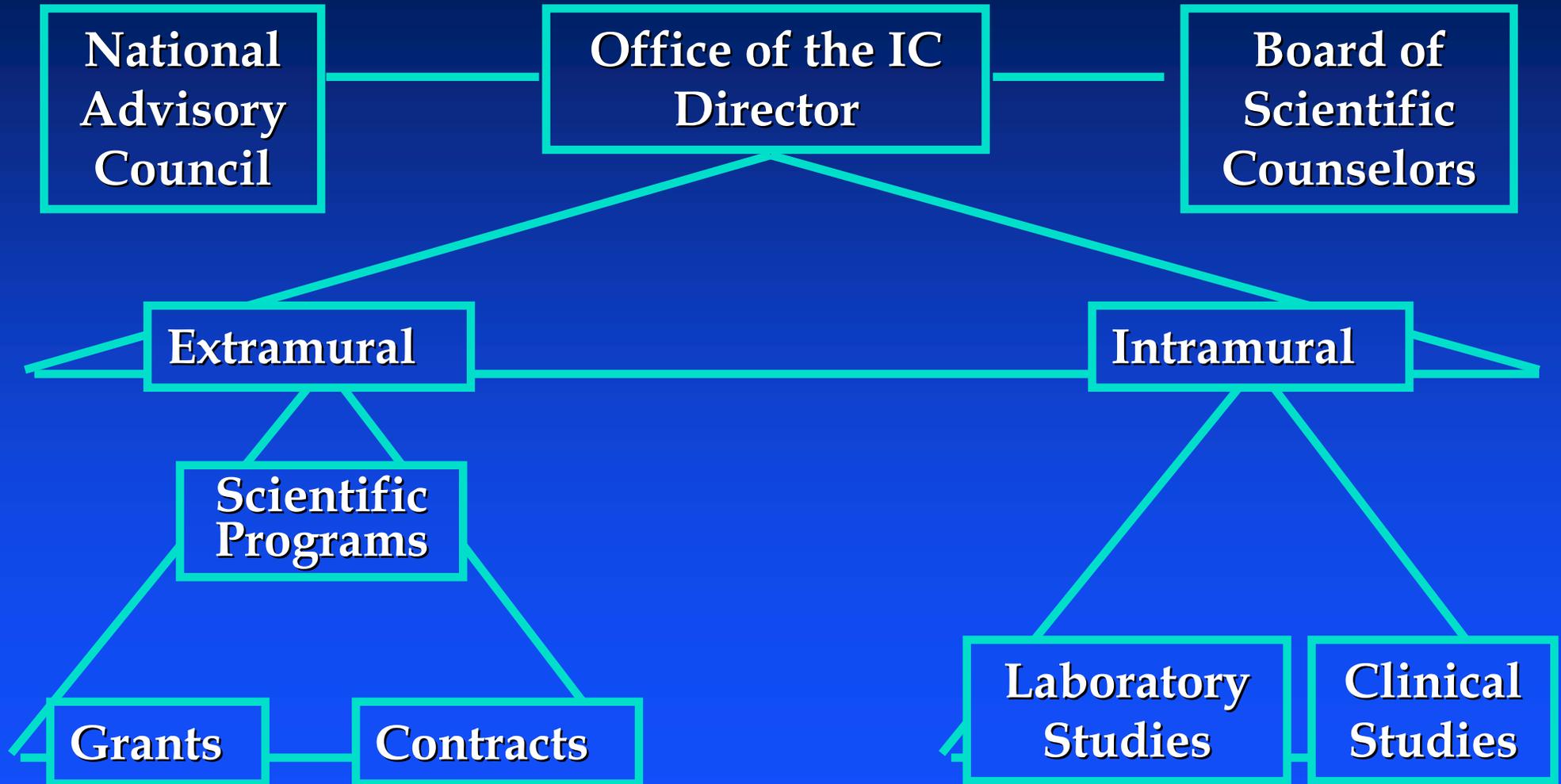
Application & Review Process



National Institutes of Health



A Typical Institute/Center



NIH Extramural Program

Grant	Patron (assistance, encouragement)
Cooperative Agreement	Partner (assistance but substantial program involvement)
Contract	Purchaser (procurement)

Typical Timeline for a New Individual Research Project Grant Application (R01)

There are three overlapping cycles per year:

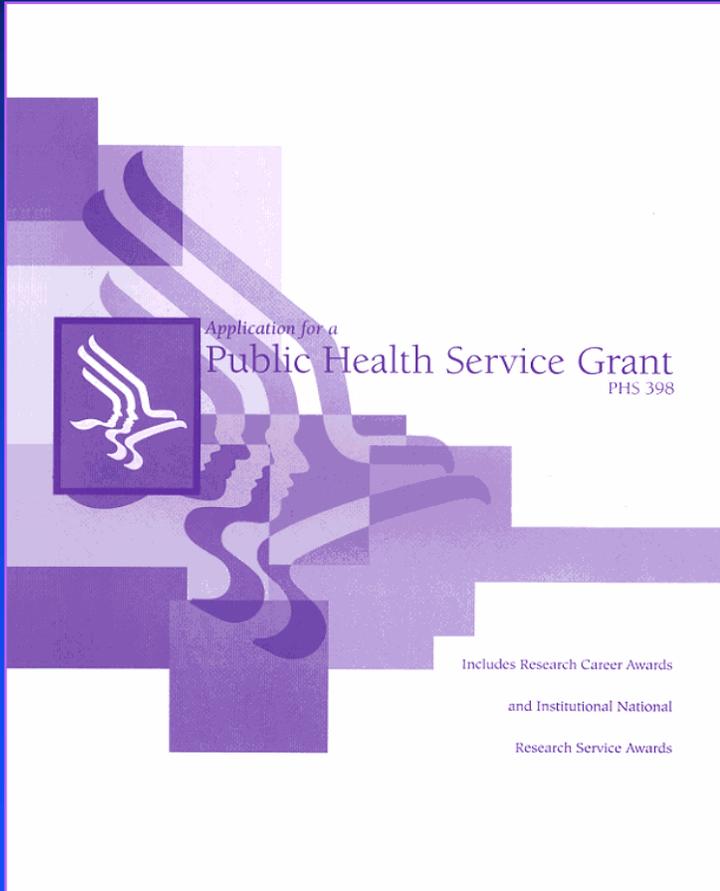
- Submit in February (June, October)
- Review in June (October, February)
- Council in September (January, May)
- Earliest award in December (April, July)

Cycle 1----

Cycle 2----

Cycle 3----

***PHS Research Grant
Application Kit (form PHS 398)
<ftp://ftp.grants.nih.gov/forms/phs398.pdf>***



Mail Completed Forms To:

**CENTER FOR SCIENTIFIC REVIEW
NATIONAL INSTITUTES OF HEALTH
ROCKLEDGE II ROOM 1040 MSC-7710
BETHESDA MD 20892-7710**

When Preparing an Application

- Read instructions (FONT_{FONT})
- Never assume that reviewers “will know what you mean”
- Refer to literature thoroughly
- State rationale of proposed investigation
- Include well-designed tables and figures
- Present an organized, lucid write-up
- Obtain critical, substantive pre-review

Applications Submitted to NIH

- Approximately 40,000 grant applications are submitted to NIH each year, of which 25-30% are funded
- Competing grant applications are received for three review cycles per year



Applications are Assigned to:

- **Scientific review groups based on:**
 - Specific review guidelines for each scientific review group
- **Institutes based on:**
 - Overall mission of the Institute
 - Specific programmatic mandates and interests of the Institute

Assignment to CSR Study Sections

Applications are assigned to Integrated Review Groups (IRGs) for review. IRGs are clusters of scientifically-related study sections

- The IRG assignment is based on specific referral guidelines for each IRG
- Each of the 20 IRGs within CSR has 5 - 8 standing study sections

Assignment to CSR Study Sections (continued)

Within an IRG, applications are assigned for review to

- **Standing Study Sections** when the subject matter of the application matches the referral guidelines for the study section
- **Ad Hoc Special Emphasis Panels (SEPs)** when the subject matter does not fit into any study section, or when assignment of an application to the most appropriate study section would create a conflict of interest. Also used for special mechanisms (e.g., fellowships, SBIRs, AREAS)

Assignment to Institutes

Applications are referred to an Institute or Center as the potential funding component:

- This assignment is based on a match between the research proposed and the overall mission of the Institute or Center
- Where applications are appropriate for more than one Institute or Center, multiple assignments are made

Review Criteria

- **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?

Scientific Review Group or Study Section Actions

- **Scored, Scientific Merit Rating
(priority scores and percentiles)**
- **Unscored (lower half)**
- **Deferral**

Summary Statement

Once applications are reviewed, the results are documented by the SRA in a summary statement and forwarded to the Institute (and the PI) where a funding decision is made:

The summary statement contains:

- Overall Resume and Summary of Review Discussion
- Essentially Unedited Critiques
- Priority Score and Percentile Ranking
- Budget Recommendations
- Administrative Notes

Council Actions

- **Concurrence with study section action**
- **Modification of study section action**
- **Deferral for re-review**

What Determines Which Awards Are Made?

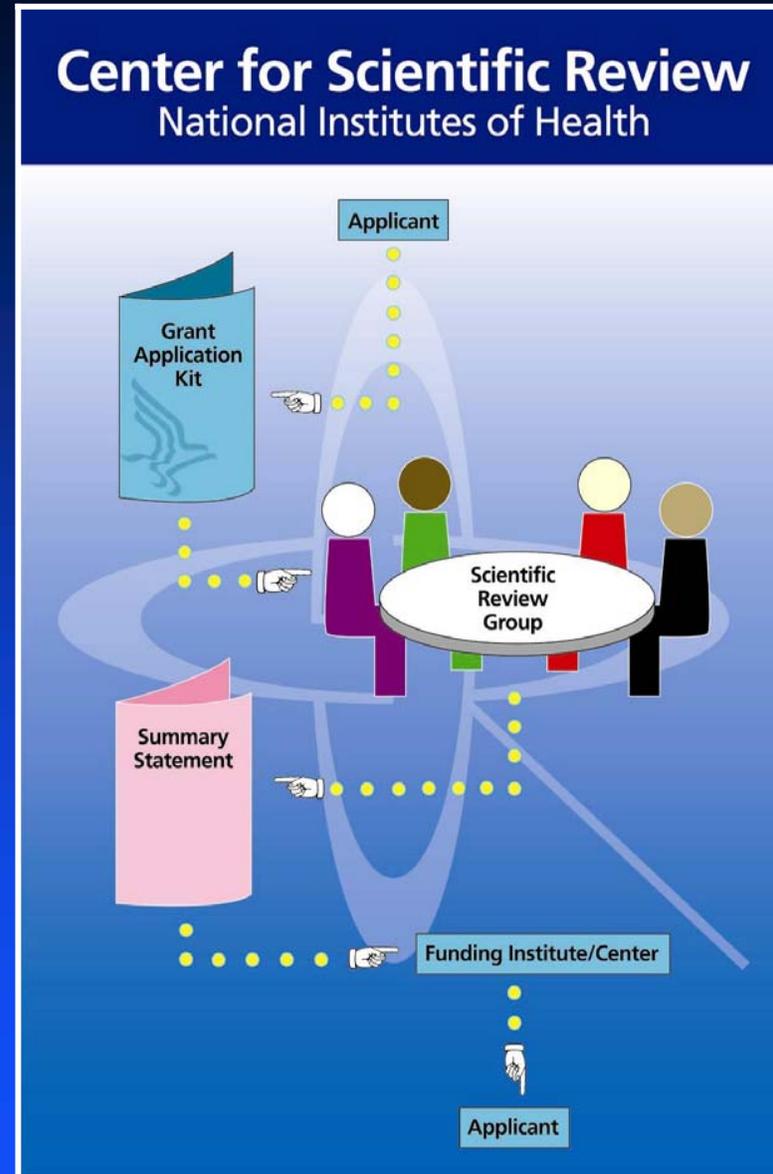
- Scientific merit
- Program Considerations
- Availability of funds

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

NIH Grant

Application & Review Process



Information on the World Wide Web

Selected Sites of Interest

- National Institutes of Health (<http://www.nih.gov>)
 - Office of Extramural Research (<http://www.nih.gov/grants/oer.htm>)
 - Grants Policy (<http://www.nih.gov/grants/policy/policy.htm>)
- Center for Scientific Review (<http://www.csr.nih.gov>)
 - Referral and Review (<http://www.csr.nih.gov/refrev.htm>)
 - Overview of Peer Review Process (<http://www.csr.nih.gov/review/peerrev.htm>)
 - CSR Study Section Rosters (<http://www.csr.nih.gov/committees/rosterindex.asp>)
 - NIH Peer Review Notes (<http://www.csr.nih.gov/prnotes/prnotes.htm>)

There is no grantsmanship that will turn a bad idea into a good one, but... ..

There are many ways to disguise a good one.

William Raub, Past Deputy Director, NIH

*In God We Trust, All Others
Must Bring Data*