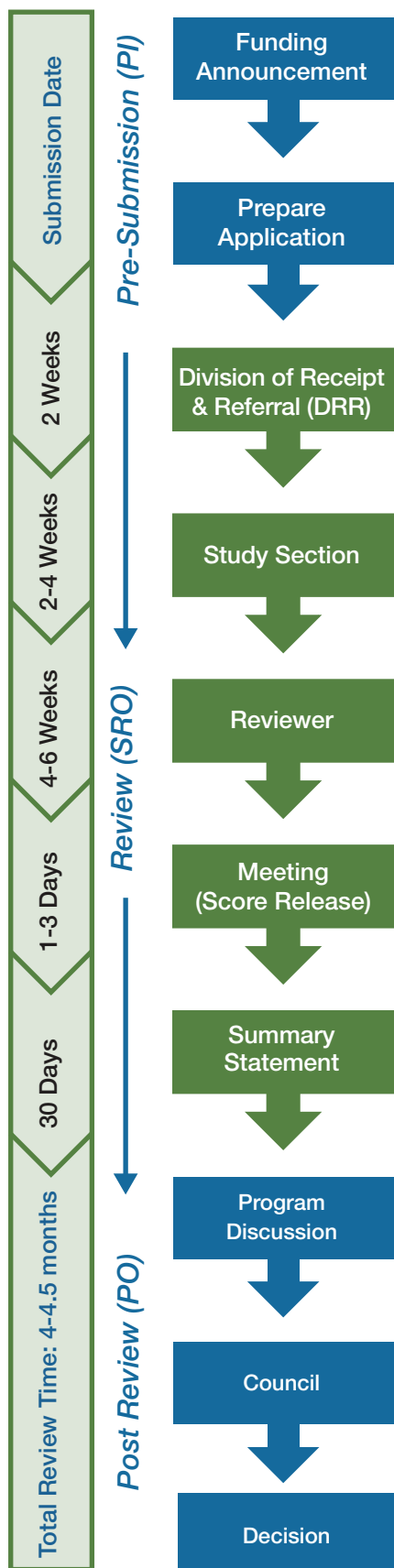# Nuts and Bolts of Peer Review
Center for Scientific Review

NIH › Center for Scientific Review

CSR Mission: To see that NIH grant applications receive fair, independent, expert, and timely reviews – free from inappropriate influences – so NIH can fund the most promising research.

Flowchart (left column)

Timeline (left axis):
- Submission Date
- 2 Weeks
- 2-4 Weeks
- 4-6 Weeks
- 1-3 Days
- 30 Days
- Total Review Time: 4-4.5 months

Phases:
- Pre-Submission (PI)
- Review (SRO)
- Post Review (PO)

Process steps:
- Funding Announcement
- Prepare Application
- Division of Receipt & Referral (DRR)
- Study Section
- Reviewer
- Meeting (Score Release)
- Summary Statement
- Program Discussion
- Council
- Decision

Scored Review Criteria
Significance • Innovation • Approach
Investigator(s) • Environment

Additional Review Criteria (Impact Score)
- Study Timeline (clinical trials)
- Human Subjects/Inclusion
- Vertebrate Animals
- Biohazards
- Resubmission/Renewal/Revision

Additional Review Considerations
- Select Agents
- Resource Sharing Plans
- Foreign Organizations
- Authentication Plan
- Budget & Period of Support

Research Grants: R01, R03, R15, R21, SBIR/STTR

How To Identify Study Sections
- **Visit the CSR website for Study Section Descriptions:** *https://public.csr.nih.gov*
- **CSR Assisted Referral Tool (ART):** *https://art.csr.nih.gov/ART*
- **NIH Reporter Matchmaker:** *https://projectreporter.nih.gov/reporter_matchmaker.cfm*
- **Use the Assignment Request Form**: in application package for both Study Section and Institute requests
- **Check your assignment ASAP:** Contact Scientific Review Officer with questions/concerns

Visit our new website: **www.csr.nih.gov**

Explore:
- Updated Study Section Descriptions
- Study Section Rosters
- Meeting Dates
- SRO Contact Information
- Tips for Applicants
- How to become a reviewer

...and more!

COMPETITIVE APPLICATIONS

are carefully crafted in all aspects of the application and clearly convey the value of the proposed research.

Who Do I Talk To?

Before Review:
- Administrative questions: Scientific Review Officer
- Funding/Relevance questions: Program Officer
- Institute support of fellowships: Check website / Ask PO
- Study section assignment questions: Contact IRG Chief

After Review: Program Officer

Documentation
- Publications
- Resources and access
- Compliant biosketches
- Human subjects, vertebrate animals, biohazards, etc.
- Budget / Resource Sharing Plans

Preparation
- Clear Organization-Headers
- Readable figures & tables
- Adequate resolution, font
- Minimize abbreviations and acronyms
- Complete & current references, numbers, labels, forms
- Proofread - no typos

Rigor / Reproducibility
- Rigor of the Prior Research
- Consideration of Relevant Biological Variables
- Authentication of Key Resources.

Competitive Application

Realistic Goals
- Clear, focused objectives
- Realistic aims & timelines
- Explained pitfalls & alternatives
- Support expertise (w/ letters)

Significance
- Impact on and relevance to field
- Connection: present and future

Core Values of Peer Review

- Expert Assessment
- Transparency
- Impartiality
- Fairness
- Integrity
- Confidentiality
- Efficiency

Integrity

The review process requires public trust and the support of the entire research community – investigators, reviewers, study section chairs, and NIH staff. Confidentiality is critical for discussion and evaluation, and conflicts of interest are closely monitored.