Jan 31 Template

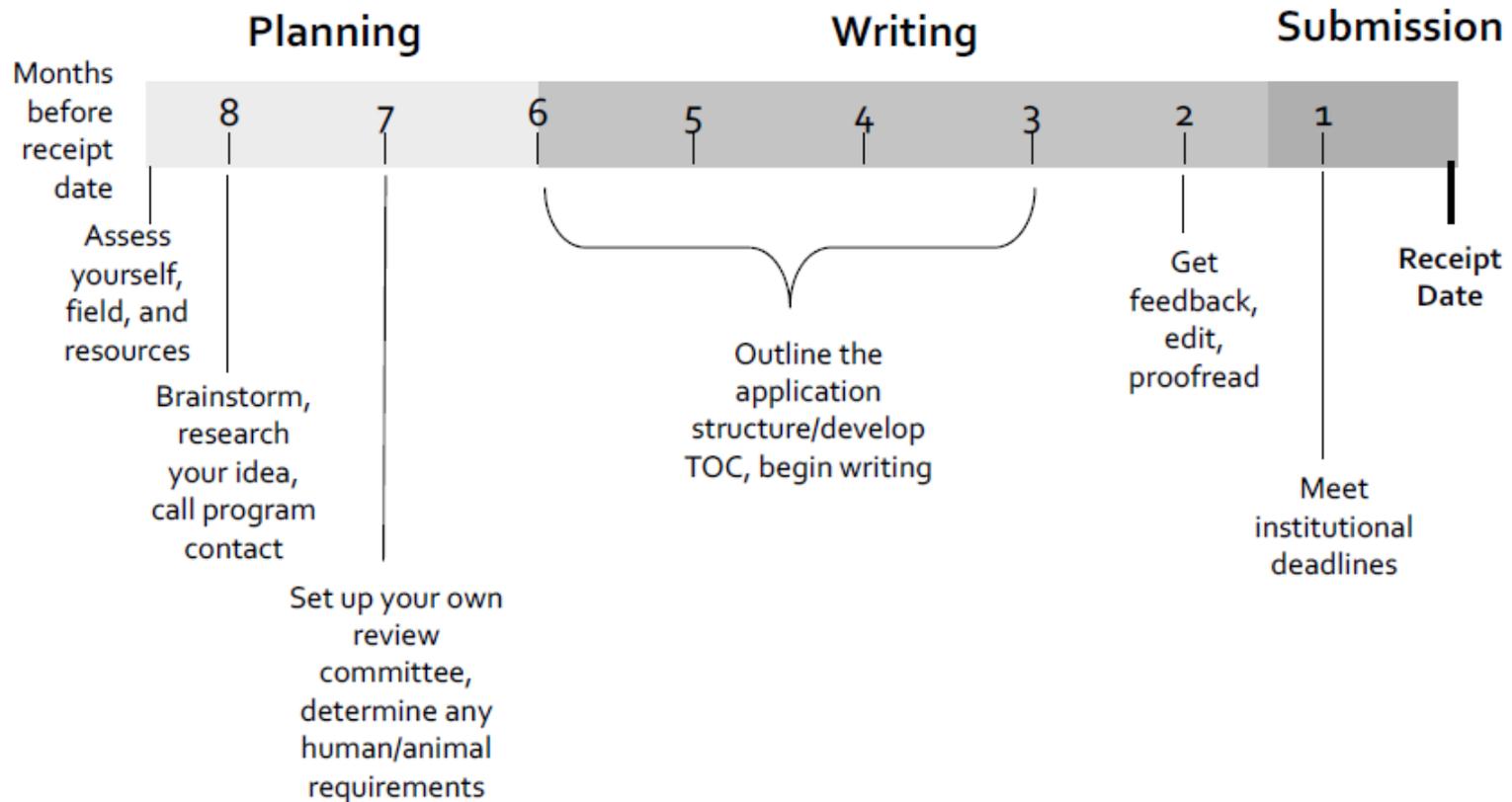## PERSON NAME

Their Title Here

University of Memphis

Timeline

REVIEW PROCESS

Who Reviews

▸ Each funding agency has its own review process

▸ Federal agencies generally have formalized review panels of experts—peer review

▸ State agencies generally use staff as reviewers

▸ Foundations generally rely on staff and boards for review and funding decisions

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"Heilmeier Catechism

- ▶ What are you trying to do? Articulate your objectives using absolutely no jargon.

- ▶ How is it done today, and what are the limits of current practice?

- ▶ What is new in your approach and why do you think it will be successful?

- ▶ Who cares? If you are successful, what difference will it make?

- ▶ What are the risks?

- ▶ How much will it cost?

- ▶ How long will it take?

- ▶ What are the mid-term and final "exams" to check for success?

Review Criteria

Mandatory criteria reviewers consider

▶ Reviewers are provided a proposal scoring/rating form and instructed to review proposals based on how well the mandatory review criteria are met

▶ Recent NSF criteria emphasizes transformative and interdisciplinary research

▶ Recent NIH criteria emphasize clinical, interdisciplinary, and translational research; add'l components added for rigor & transparency and clinical trials

NIH Proposal Review

- The most transparent and detailed process of all agencies
    - Review Criteria & Considerations
    - Scoring
    - Process
- Compare/Contrast with other federal agencies

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NIH Review Criteria & Considerations

▸ Scored (formerly Core) Review Criteria
  ▸ 5 criteria scored individually and considered in final Overall Impact score

▸ Additional Review Criteria
  ▸ Not scored individually, but considered in final Overall Impact score

▸ Additional Review Considerations
  ▸ Not scored individually and not considered in Overall Impact score

  Great alignment of application structure with review criteria

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Scored Review Criterion: Significance

▶ Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field? **Is the prior research that serves as the key support for the proposed project rigorous?***

*Previously "Is there a strong scientific premise for the project?"

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Scored Review Criterion: Approach

▸ Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?

▸ Have the investigators presented strategies to ensure a robust and unbiased approach, as appropriate for the work proposed? (Design)

▸ **Have the investigators included plans to address weaknesses in the rigor of prior research that serves as the key support for the proposed project? (i.e., rigor of prior research)**

▸ Have the investigators presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects? (Sex as a biological variable)

▸ If the project involves human subjects and/or NIH-defined clinical research, are the plans to address: 1) the protection of human subjects from research risks, and 2) the inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion (exclusion) of individuals of all ages (including children and older adults), justified in terms of the scientific goals and research strategy proposed? (Clinical research)

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Scored Review Criterion: Innovation

► Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

Scored Review Criterion: Investigator

▶ Are the PD/PIs, collaborators, and other researchers well suited to the project? If Early Stage Investigators or New Investigators, or in the early stages of independent careers, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)? If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?

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Scored Review Criterion: Environment

▶ Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

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Additional Review Criteria

▶ Protections for Human Subjects

▶ Inclusion of Women, Minorities, and Children

▶ Vertebrate Animals

▶ Biohazards

▶ Resubmission/Renewal/Revision Applications

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Additional Review Considerations

▶ Other Rigor & Transparency (Authentication)

▶ Budget and Period Support

▶ Select Agent Research

▶ Applications from Foreign Organizations

▶ Resource Sharing Plans

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Rigor & Transparency: Criteria and Considerations

▸ Scored Review Criteria

   ▸ Significance

      ▸ Rigor of Prior Research: Is the prior research that serves as the key support for the proposed project rigorous?

   ▸ Approach

      ▸ **Rigor of Prior Research:** Have the investigators included plans to address weaknesses in the rigor of prior research that serves as the key support for the proposed project?

      ▸ **Design:** Have the investigators presented strategies to ensure a robust and unbiased approach, as appropriate for the work proposed?

      ▸ **Biological Variables:** Have the investigators presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects?

▸ Additional Review Considerations

   ▸ Authentication: For projects involving key biological and/or chemical resources, reviewers will comment on the brief plans proposed for identifying and ensuring the validity of those resources.

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Rigor & Transparency: Revisions to Review Criteria Summary

Section	Criteria	Previous language	Current language
Scored Review Criteria	Significance	Is there a strong scientific premise for the project?	Is the prior research that serves as the key support for the proposed project rigorous?
Scored Review Criteria	Approach	Not Applicable	Have the investigators included plans to address weaknesses in the rigor of prior research that serves as the key support for the proposed project?
Scored Review Criteria	Approach	If the project involves human subjects and/or NIH-defined clinical research, are the plans to address 1) the protection of human subjects from research risks, and 2) the inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion (exclusion) of children, justified in terms of the scientific goals and research strategy proposed?	If the project involves human subjects and/or NIH-defined clinical research, are the plans to address: 1) the protection of human subjects from research risks, and 2) the inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion (exclusion) of individuals of all ages (including children and older adults), justified in terms of the scientific goals and research strategy proposed?
Additional Review Criteria	Protections for Human Subjects	For research that involves human subjects but does not involve one of the six categories of research that are exempt under 45 CFR Part 46, the committee will…	For research that involves human subjects but does not involve one of the categories of research that are exempt under 45 CFR Part 46, the committee will…
Additional Review Criteria	Inclusion of Women, Minorities, and Individuals Across the Lifespan	When the proposed project involves human subjects and/or NIH-defined clinical research, the committee will evaluate the proposed plans for the inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion (or exclusion) of children to determine if it is justified in terms of the scientific goals and research strategy proposed.	When the proposed project involves human subjects and/or NIH-defined clinical research, the committee will evaluate the proposed plans for the inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion (or exclusion) of individuals of all ages (including children and older adults) to determine if it is justified in terms of the scientific goals and research strategy proposed.

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Clinical Trials Criteria

New Scored Review Criteria

▶ **Significance:** Are the scientific rationale and need for a clinical trial to test the proposed hypothesis or intervention well supported by preliminary data, clinical and/or preclinical studies, or information in the literature or knowledge of biological mechanisms? For trials focusing on clinical or public health endpoints, is this clinical trial necessary for testing the safety, efficacy or effectiveness of an intervention that could lead to a change in clinical practice, community behaviors or health care policy? For trials focusing on mechanistic, behavioral, physiological, biochemical, or other biomedical endpoints, is this trial needed to advance scientific understanding?

▶ **Investigator(s):** With regard to the proposed leadership for the project, do the PD/PI(s) and key personnel have the expertise, experience, and ability to organize, manage and implement the proposed clinical trial and meet milestones and timelines? Do they have appropriate expertise in study coordination, data management and statistics? For a multicenter trial, is the organizational structure appropriate and does the application identify a core of potential center investigators and staffing for a coordinating center?

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Clinical Trials Criteria

New Scored Review Criteria

▸ **Innovation:** Does the design/research plan include innovative elements, as appropriate, that enhance its sensitivity, potential for information or potential to advance scientific knowledge or clinical practice?

▸ **Approach:** Does the application adequately address the following, if applicable?

  ▸ Study Design

   ▸ Is the study design justified and appropriate to address primary and secondary outcome variable(s)/endpoints that will be clear, informative and relevant to the hypothesis being tested? Is the scientific rationale/premise of the study based on previously well-designed preclinical and/or clinical research? Given the methods used to assign participants and deliver interventions, is the study design adequately powered to answer the research question(s), test the proposed hypothesis/hypotheses, and provide interpretable results? Is the trial appropriately designed to conduct the research efficiently? Are the study populations (size, gender, age, demographic group), proposed intervention arms/dose, and duration of the trial, appropriate and well justified?

   ▸ Are potential ethical issues adequately addressed? Is the process for obtaining informed consent or assent appropriate? Is the eligible population available? Are the plans for recruitment outreach, enrollment, retention, handling dropouts, missed visits, and losses to follow-up appropriate to ensure robust data collection? Are the planned recruitment timelines feasible and is the plan to monitor accrual adequate? Has the need for randomization (or not), masking (if appropriate), controls, and inclusion/exclusion criteria been addressed? Are differences addressed, if applicable, in the intervention effect due to sex/gender and race/ethnicity?

   ▸ Are the plans to standardize, assure quality of, and monitor adherence to, the trial protocol and data collection or distribution guidelines appropriate? Is there a plan to obtain required study agent(s)? Does the application propose to use existing available resources, as applicable?

  ▸ Data Management and Statistical Analysis

   ▸ Are planned analyses and statistical approach appropriate for the proposed study design and methods used to assign participants and deliver interventions? Are the procedures for data management and quality control of data adequate at clinical site(s) or at center laboratories, as applicable? Have the methods for standardization of procedures for data management to assess the effect of the intervention and quality control been addressed? Is there a plan to complete data analysis within the proposed period of the award?

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Clinical Trials Criteria

New Scored Review Criteria

▸ **Environment:**

- ▸ If proposed, are the administrative, data coordinating, enrollment and laboratory/testing centers, appropriate for the trial proposed?

- ▸ Does the application adequately address the capability and ability to conduct the trial at the proposed site(s) or centers? Are the plans to add or drop enrollment centers, as needed, appropriate?

- ▸ If international site(s) is/are proposed, does the application adequately address the complexity of executing the clinical trial?

- ▸ If multi-sites/centers, is there evidence of the ability of the individual site or center to: (1) enroll the proposed numbers; (2) adhere to the protocol; (3) collect and transmit data in an accurate and timely fashion; and, (4) operate within the proposed organizational structure?

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Clinical Trials Criteria

New Additional Review Criteria

▶ Study Timeline: Is the study timeline described in detail, taking into account start-up activities, the anticipated rate of enrollment, and planned follow-up assessment? Is the projected timeline feasible and well justified? Does the project incorporate efficiencies and utilize existing resources (e.g., CTSAs, practice-based research networks, electronic medical records, administrative database, or patient registries) to increase the efficiency of participant enrollment and data collection, as appropriate? Are potential challenges and corresponding solutions discussed (e.g., strategies that can be implemented in the event of enrollment shortfalls)?

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Overall Impact Score

▶ Overall Impact is the synthesis/integration of the five review criteria that are scored individually and the additional review criteria which are not scored individually

▶ To evaluate, the reviewer(s) make an assessment of the **likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the scored review criteria, and additional review criteria**

▶ Likelihood (i.e., probability) is primarily derived from the investigator(s), approach and environment criteria

▶ Sustained powerful influence is primarily derived from the significance and innovation criteria

▶ Research field(s) may vary widely, so it would be helpful if reviewers identify in their reviews the research field(s) they believe will be influenced by each project

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Overall Impact Paragraph

▶ Reviewers write a paragraph summarizing the factors that informed their Overall Impact score, i.e., their rationale for the score

  ▶ Not a summary and/or restatement of the strengths and weaknesses outlined in the full critique

  ▶ This paragraph succinctly informs the reader (e.g., the applicant, program staff, members of council) of the underlying rationale for the Overall Impact score in consideration of the five scored review criteria

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NIH Scoring

- 9-pt scoring scale, emphasis on impact
  - 1 = Exceptional, 9 = Poor
  - 1 to 3 = high impact; 4 to 6 = moderate impact; 7 to 9 = low impact
  - Exceptional, Outstanding, Excellent, Very Good, Good, Satisfactory, Fair, Marginal, Poor
- Only whole number ratings
  - Center for Scientific Review piloted an expanded half-point scale
- Scored Criteria Ratings
  - Scoring and critiques per individual Scored Review Criteria
- Overall Impact Score (individual reviewer)
  - Paragraph in written critique to explain factors that informed reviewer's Overall Impact score
- Priority Score (all reviewers, averaged)
- Percentile Rank (normalized)

NIH Scoring At-a-Glance

Overall Impact or Criterion Strength	Score	Descriptor
High	1	Exceptional
	2	Outstanding
	3	Excellent
Medium	4	Very Good
	5	Good
	6	Satisfactory
Low	7	Fair
	8	Marginal
	9	Poor
Other Designations for Final Outcome		
AB		Abstention
CF		Conflict of Interest
DF		Deferred
ND		Not Discussed
NP		Not Present
NR		Not Recommended for Further Consideration

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NIH Scoring Summary

High		
1	Exceptional	Exceptionally strong with essentially no weaknesses
2	Outstanding	Extremely strong with negligible weaknesses
3	Excellent	Very strong with only some minor weaknesses
Medium		
4	Very Good	Strong but with numerous minor weaknesses
5	Good	Strong but with at least one moderate weakness
6	Satisfactory	Some strengths but also some moderate weaknesses
Low		
7	Fair	Some strengths but with at least one major weakness
8	Marginal	A few strengths and a few major weaknesses
9	Poor	Very few strengths and numerous major weaknesses

Non-numeric score options: NR = Not Recommended for Further Consideration, DF = Deferred, AB = Abstention, CF = Conflict, NP = Not Present, ND = Not Discussed

Minor Weakness: An easily addressable weakness that does not substantially lessen impact
Moderate Weakness: A weakness that lessens impact
Major Weakness: A weakness that severely limits impact

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NIH Review Criteria At-a-Glance

- A table of Scored Review Criteria, Additional Review Criteria, and Additional Review Considerations for all types of proposals:
  - Research
  - Training
  - Other (Shared Instrumentation, Administrative Centers)

NIH Scoring for Research Awards

Overall Impact:
The likelihood for a project to exert a <u>sustained</u>, <u>powerful</u> influence on research field(s) involved

Overall Impact	High	Medium	Low
Score	1 2 3	4 5 6	7 8 9

Evaluating Overall Impact:
Consider the 5 criteria: significance, investigator, innovation, approach, environment (weighted based on reviewer's judgment) and other score influences, e.g. human subjects, animal welfare, inclusion plans, and biohazards

e.g. Applications are addressing a problem of <u>high</u> importance/interest in the field. May have some or no weaknesses.

e.g. Applications may be addressing a problem of <u>high</u> importance in the field, but weaknesses in the criteria bring down the overall impact to medium.

e.g. Applications may be addressing a problem of <u>moderate</u> importance in the field, with some or no weaknesses

e.g. Applications may be addressing a problem of <u>moderate</u>/<u>high</u> importance in the field, but weaknesses in the criteria bring down the overall impact to low.

e.g. Applications may be addressing a problem of <u>low</u> or <u>no</u> importance in the field, with some or no weaknesses.

5 is a good medium-impact application, and the entire scale (1-9) should always be considered.

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Spreading Scores

▸ The entire scale (1-9) should always be considered

▸ NIH expects that scores of 1 or 9 to be used less frequently than the other scores

▸ A score of 5 is a good, medium-impact application

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Paylines & Success Rates

▶ Priority Score

▶ Percentile Rank

▶ Payline

▶ Success Rates

▶ Streamlining, unscored or "triaged"

  ▶ ~50% R01s, ~40% shared instrumentation, 30% fellowships, Pre-arranged for RFAs

  ▶ Preliminary score for streamlined applications

Review Purview

- Center for Scientific Review (CSR)
  - Most R01s, fellowships, and small business applications
  - Some Program Announcements (PA, PAR, RFA)

- Institute/Center Review
  - IC-specific features
  - Program Project Grants (PPG; P01)
  - Training grants
  - Career development awards
  - Most RFAs

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NIH Bifurcated Review Process
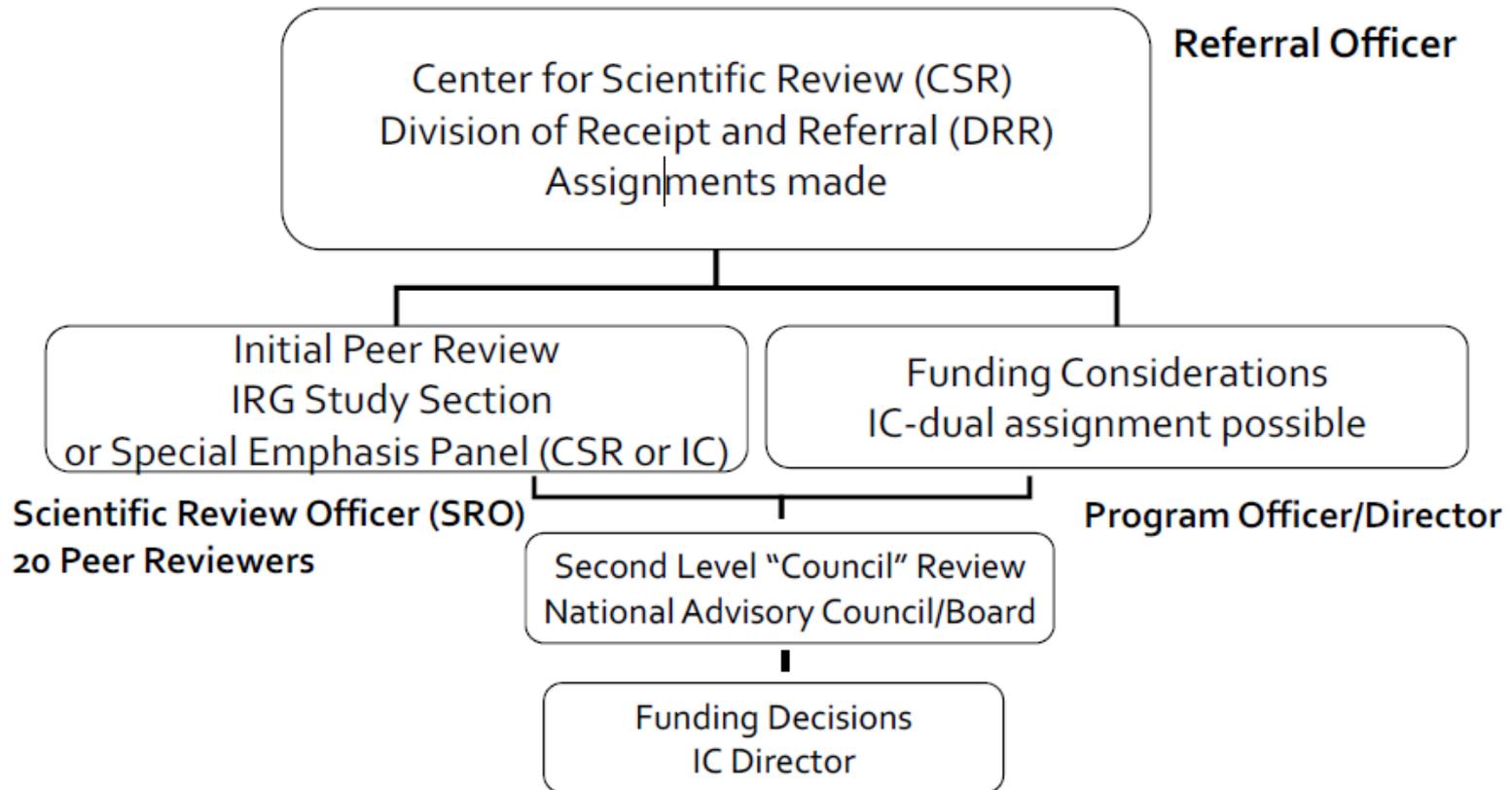
CSR Referral Officers

- Division of Receipt and Review
- 12-15 referral officers
- Checks for completeness
- Determines area of research
- Assigns an identification number
- Assigns a grant number
- Assigns application to specific NIH IC for possible funding
- Assigns a Scientific Review Group
- Receives over 92,000 applications/year!

Scientific Review Officer (SRO)

- ▸ Formerly SRA

- ▸ Designated federal officer

- ▸ Extramural scientist

- ▸ IDs and recruits reviewers

- ▸ Manages COI

- ▸ Oversees review meeting arrangements

- ▸ Presides at review meetings

- ▸ Prepares and releases resume + summary statements

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Reivewers

- 3 reviewers/proposal
  - 2 primary, write critiques
  - 1 discussant
- Telephone and mail-in reviews as well
- Chartered
  - Permanent, 4 yrs
  - Ad hoc member
- Special Emphasis Panel

- ~18,000/yr
- Expertise
- Stature in field
- Mature judgment
- Impartiality
- Geographic balance
- Diversity
- Workload
  - 6-8 as reviewer
  - 2-3 as discussant
- No COI

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Pick Your Reviewers

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Discussion Format

▶ Members with conflicts excused

▶ Initial level of enthusiasm of assigned reviewers (Overall Impact Score)

▶ Primary reviewers explain project, strengths, and weaknesses

▶ Other assigned reviewers discuss

▶ Open discussion (full panel)

▶ Revised levels of enthusiasm from assigned reviewers

▶ Completion of ballots

▶ ~14 min/application

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NIH Enhancing Peer Review

- ▶ Only one resubmission*

- ▶ New 1-9 scoring scale

- ▶ Enhanced review criteria

- ▶ Critiques for each Core Review Criterion in a structured summary statement

- ▶ A paragraph in written critiques to explain factors that informed reviewer's Overall Impact score

- ▶ Preliminary score for streamlined applications

- ▶ Separate precentiling of new vs. resubmissions

- ▶ Revised "New Investigator" designation, clustered (along with Early Stage Investigator proposals) during review

- ▶ Shorter (12 page) R01 applications

- ▶ Applications restructured to align with review criteria

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CSR Applicant & Reviewer Resources

▸ Applicant Resources

▸ Reviewer Resources

    ▸ Become a Reviewer

    ▸ Meeting Overview

    ▸ General Review Guidelines

    ▸ Specific Review Guidelines

    ▸ Tools and Technology

    ▸ Online Briefings for Applicants and Reviewers (live and archived)

▸ Become a Reviewer

▸ Subscribe to receive monthly Peer Review News newsletter

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NSF Proposal Review

▶ Guiding Review Principles

▶ Merit Review Criteria

▶ Review Elements

▶ Additional Solicitation Specific Review Criteria

▶ Rating

▶ Process

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NSF Guiding Review Principles

▶ All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge.

▶ NSF projects, in the aggregate, should contribute more broadly to achieving societal goals.

▶ Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects.

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NSF Merit Review Criteria

▶ **Intellectual Merit:** This criterion encompasses the potential to advance knowledge

▶ **Broader Impacts:** This criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes

▶ When evaluating proposals, reviewers should consider the following issues, which apply both to the technical aspects of the proposal (Intellectual Merit) and the way in which the project may make broader contributions (Broader Impact):

    ▶ What the proposers want to do

    ▶ Why they want to do it

    ▶ How they plan to do it

    ▶ How they will know if they succeed

    ▶ What benefits would accrue if the project is successful

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NSF Review Elements

Elements considered in the review for both Merit Review Criteria:

▶ What is the potential for the proposed activity to
  ▶ Advance knowledge and understanding within its own field or across different fields (Intellectual Merit);
  ▶ Benefit society or advance desired societal outcomes (Broader Impacts)?

▶ To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?

▶ Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?

▶ How well qualified is the individual, team, or institution to conduct the proposed activities?

▶ Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

Additional Solicitation Specific Review Criteria

▶ Augment the two standard NSB-approved Merit Review Criteria of Intellectual Merit and Broader Impacts

▶ Specific for the individual solicitation

▶ Not included for all solicitations

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All the Same Review

NIH Scored Review Criteria	NSF Review Elements – Intellectual Merit
Significance : ...project address an important problem or a critical barrier to progress in the field	Potential of the activity to advance knowledge and understanding, and benefit society
Approach: ...overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project	Well-reasoned, well-organized plan for proposed activities and mechanism to assess success
Innovation: ...challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions	Originality, creativity and transformative nature of proposed activities
Investigators: ...PD/PIs, collaborators, and other researchers well suited to the project	Qualifications of individual(s), team, or institution
Environment: ...scientific environment in which the work will be done contribute to the probability of success	Adequate resources to carry out proposed activities
NIH Overall Impact	**NSF Review Elements – Broader Impact**
Likelihood for the project to exert a sustained, powerful influence on the research field(s) involved	The potential to benefit society and contribute to the achievement of specific, desired societal outcomes

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NSF Rating Scale

▶ Excellent: Outstanding proposal in all respects; deserves highest priority for support

▶ Very Good: High quality proposal in nearly all respects; should be supported if at all possible

▶ Good: A quality proposal, worthy of support

▶ Fair: Proposal lacking in one or more critical aspects; key issues need to be addressed

▶ Poor: Proposal has serious deficiencies

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NSF Review Process

▸ Proposal arrives electronically, assigned to the appropriate program(s) for review

▸ Review process overseen by a Division Director

▸ Program officer (or team of POs) reviews the proposal and assigns it to reviewers

  ▸ Ad hoc and advisory panel reviews

  ▸ Most programs use a combination of ad hoc and advisory panel, but some use either one or the other

  ▸ 2-3 reviewers/proposal

  ▸ No external review required: RAPID/EAGER, small conferences, workshops, symposia

NSF Program Officers

▸ Selects ad hoc reviewers and advisory panel members

▸ Checks for COI

▸ Synthesizes the comments of the reviewers and panel

▸ Makes recommendation to award/decline proposal
   ▸ External proposal reviews
   ▸ Support for potentially transformative advances in a field
   ▸ Novel approaches to significant research questions
   ▸ Capacity building in a new and promising research area
   ▸ Potential impact on the development of human resources and infrastructure
   ▸ NSF core strategies, such as 1) the integration of research and education and 2) broadening participation
   ▸ Achievement of special program objectives and initiatives
   ▸ Other available funding sources
   ▸ Geographic distribution

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NSF Higher Order Review

▸ Division Director reviews all program officer recommendations

▸ Large awards may receive additional review

- ▸ Director's Review Board reviews award recommendations with an average annual award amount of 2.5 percent or more of the awarding Division's annual budget
- ▸ National Science Board reviews recommended awards with an annual award amount of one percent or more of the awarding Directorate's annual budget

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NSF Review & Rolling Deadlines

▶ Ad Hoc Review: Proposal will be sent out for review shortly after it's received. Once reviews are received, POs will assess and make a decision about funding.

▶ Advisory Panel: When POs receive a critical mass of proposals, they then convene a panel meeting to consider them. Scheduling of panel meetings is also balanced against NSF's 6-month dwell time ideal – i.e., notifying PIs about funding recommendation within 6 months of when a proposal was submitted.

▶ Regardless of when a proposal is submitted, you are likely to have notification of its disposition within 6 months.

▶ Understanding that proposals are received over the course of a FY, program officers will keep some monies in reserve to fund well-reviewed proposals submitted later in the year. Often in late April/May there are unspent funds available that divisions and programs look to spend. So, whatever advantage of early year submission might exist, latter year funding also has its advantages. And, even if a proposal is submitted in July – by which time most fiscal year funds are committed – it will be considered for funding in the next fiscal year. Sometimes well-reviewed proposals are "held" by POs beyond the 6-month period so that they can be funded with new FY funds. When this happens, PIs are usually notified.

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NEH Application Review Criteria

▶ Intellectual Significance

▶ Quality of Work; Feasibility of Work Plan

▶ Innovation

▶ Project Staff Qualifications

▶ Overall Value to Humanities Scholarship

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Still All the Same Review

NIH Scored Review Criteria (and Overall Impact)	NEH Application Review Criteria
Significance	Intellectual Significance
Approach	Quality of Project; Feasibility of Work Plan
Innovation	Quality of Innovation
Investigators	Project Staff Qualifications
Overall Impact	Overall Value to Humanities Scholarship

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Always All the Same Review

- Why does it matter?
  - Importance/Significance/Premise
- How are you going to do it?
  - Approach/Plan/Methodology/Objectives/Aims
- How will you know you've been successful?
  - Evaluation/Assessment
- What's new?
  - Novelty/Innovation/Creativity
- What's special about the human capital involved?
  - Organization/People/Investigators/Partners/Collaborators/Staff
- What's the context?
  - Resources/Environment/Populations
- What's the return on investment?
  - Impact/Value/Relevance
- How effectively will you manage the financial resources?
  - Budget
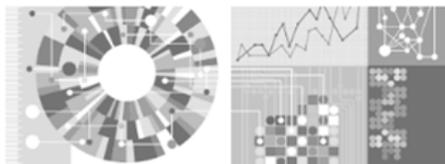
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Quick Guide

Research Grant Proposal Review Criteria
...understanding the rules of the grantsmanship game

▶ Grantsmanship Guide on Elsevier Researcher Academy at https://researcheracademy.elsevier.com/sites/default/files/2017-11/Successful%20grant%20writing.pdf

Even in Canada!

Are All Scores Equal?

- Studies to examine correlation between Core Review Criteria (now Scored Review Criteria) scoring and Overall Impact score
  - Preliminary 2010/11 NIGMS study examined correlation between individual criteria scores and Overall Impact score
  - April 2015 study from NIH CSR examined the correlation between individual criteria scores and Overall Impact score
  - June 2016 study from NIH OER examined the key criterion scores that drive impact score and funding outcomes

- Findings
  - All of the criteria are influential despite score range restriction good scores are necessary on all 5 Core Review Criteria for a good Overall Impact score, but…
  - **Approach** > Significance > Innovation > Investigator > Environment

- Conclusion: **The quality of ideas matter more than reputation** (good for new investigators!)

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Weighted Review

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- Importance of the problem (15 pts)
- Plan of Evaluation (10 pts)
- **Design of Research Activities (50 pts)**
- Project Staff (15 pts)
- Adequacy and Accessibility of Resources (10 pts)

OJJDP

- Statement of the problem (20 points)
- Definition of objectives (10 points)
- **Project design (30 points)**
- Project management and organizational capability (25 points)
- Reasonableness of costs (15 points)

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- There is no slide 253.

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Questions?

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