

NIH DIRECTOR'S



PIONEER
A · W · A · R · D

NIH Director's Pioneer Award

Webinar for RFA-RM-27-001

Patricia Labosky, Ph.D.
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Office of the Director, NIH



National Institutes of Health
Office of Strategic Coordination—The Common Fund

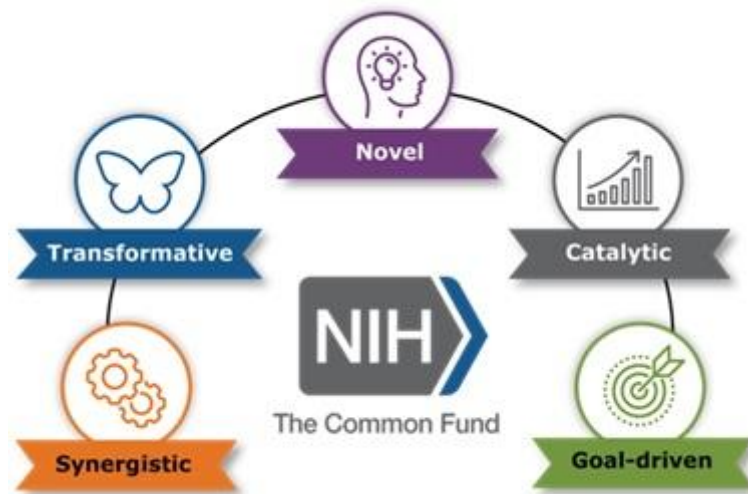
commonfund.nih.gov/pioneer

PioneerAwards@mail.nih.gov

The NIH Common Fund

Mission:

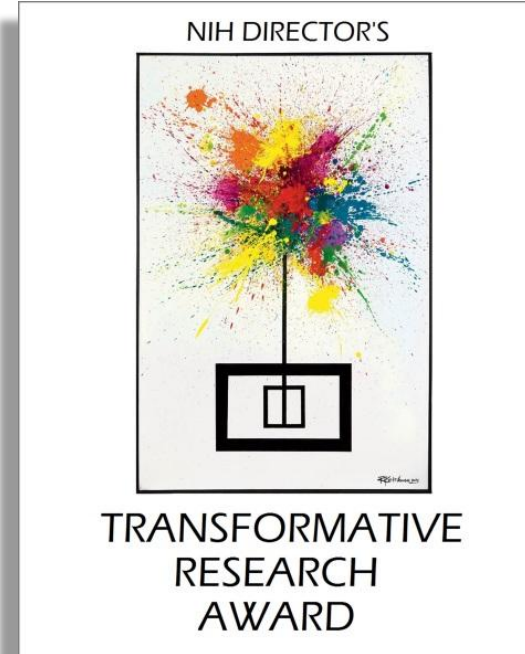
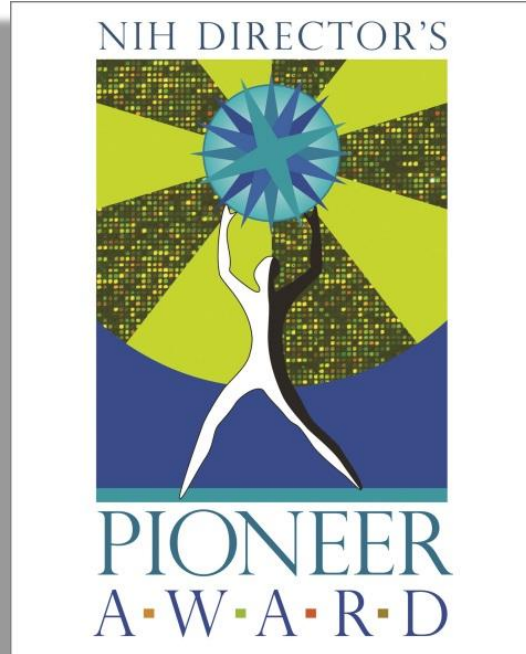
To support **bold scientific programs that catalyze discovery** across all biomedical and behavioral research. Investigators and **multiple NIH Institutes, Centers, and Offices** collaborate on **innovative research** expected to address high priority challenges for the NIH as a whole and make a **broader impact in the scientific community**.



commonfund.nih.gov

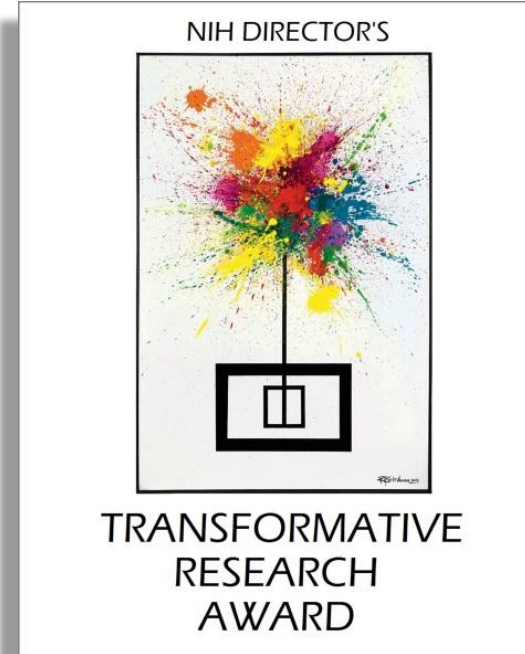
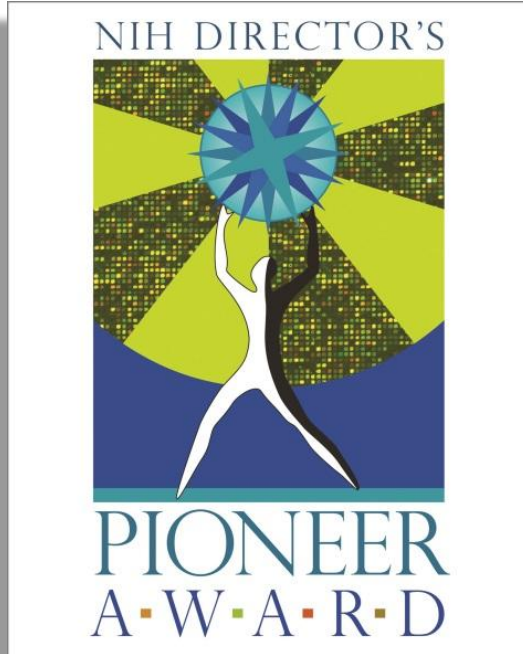


High-Risk, High-Reward Research Program



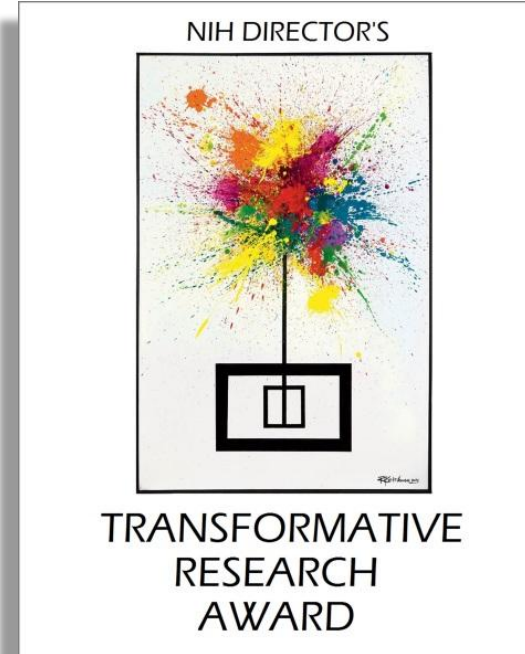
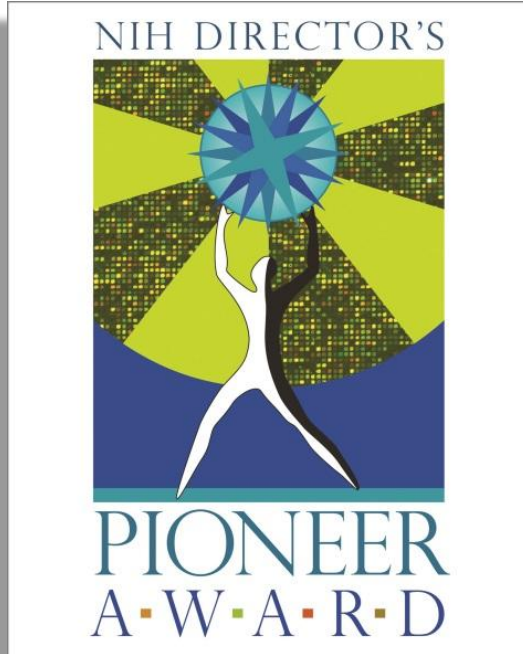
Supporting scientists at all career stages proposing outstanding high-risk, high-impact research

High-Risk, High-Reward Research Program



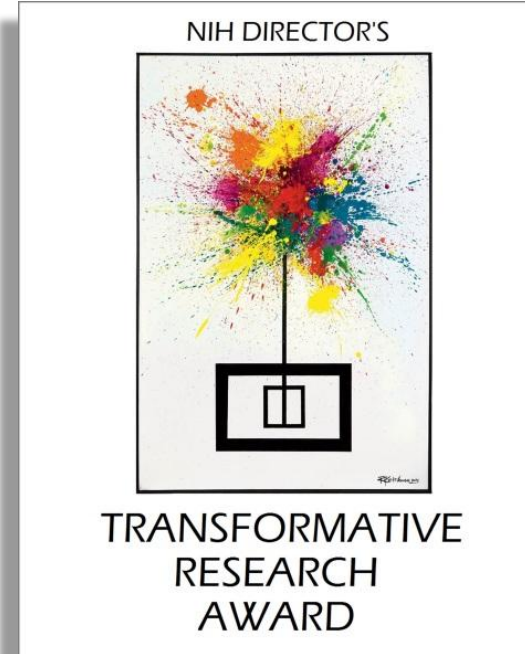
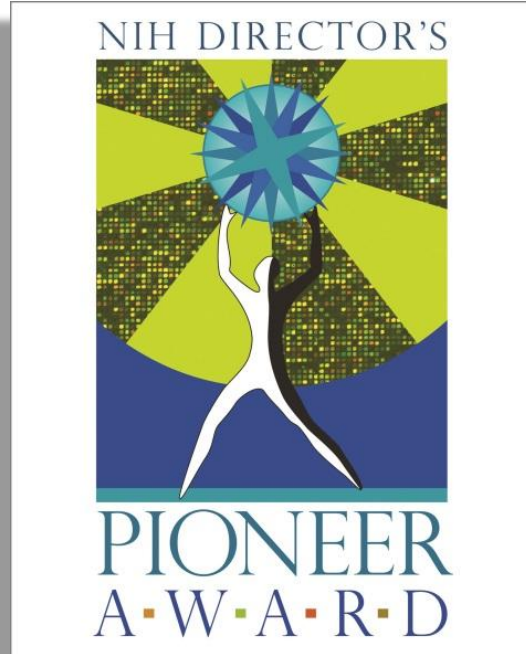
Annual funding opportunities

High-Risk, High-Reward Research Program



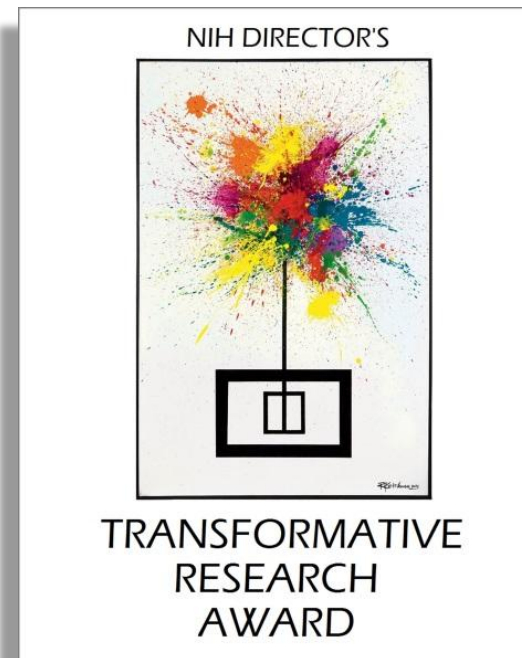
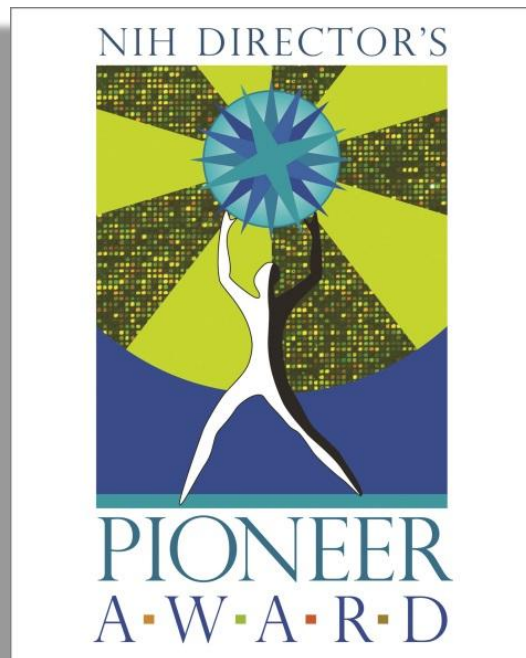
High-risk, high-impact ideas

High-Risk, High-Reward Research Program



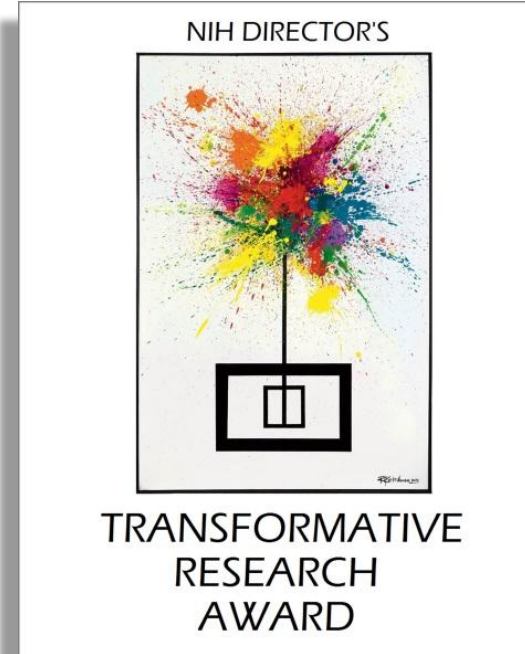
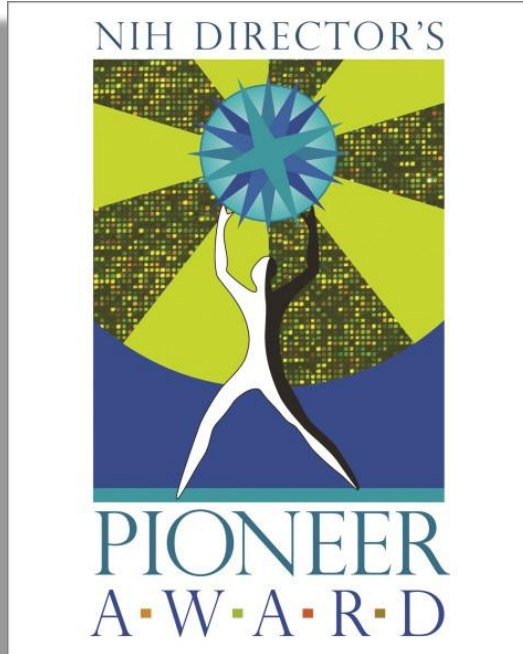
No preliminary data or detailed experimental plan required

High-Risk, High-Reward Research Program



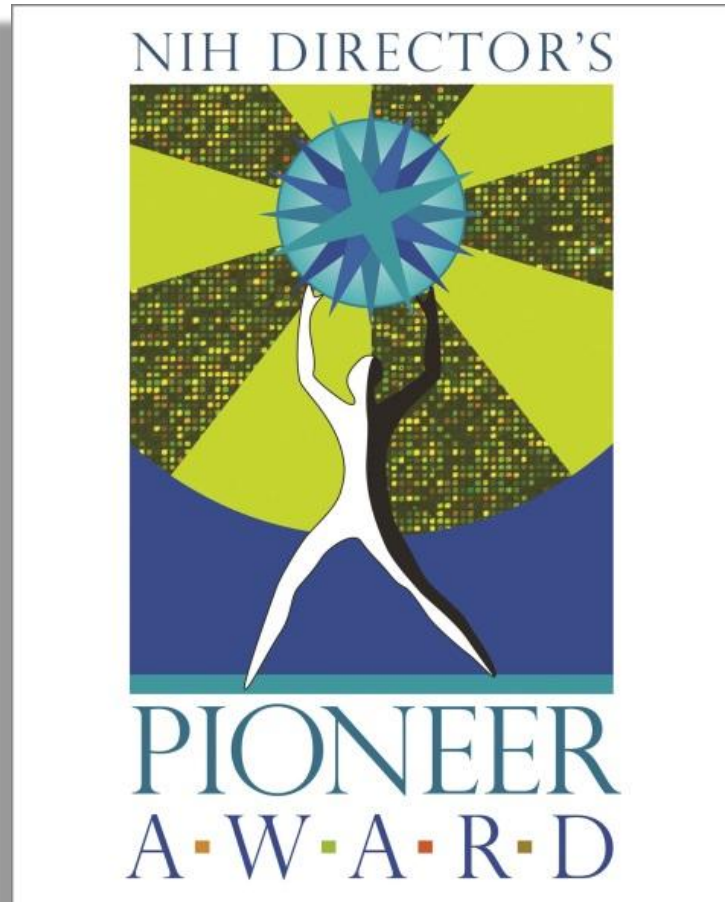
Any topic relevant to NIH mission welcome
Behavioral, social, biomedical, applied, and formal sciences,
and basic, translational, or clinical research

High-Risk, High-Reward Research Program



Encourage applications from full spectrum of eligible institutions

High-Risk, High-Reward Research Program



Supports individual scientists with outstanding records of creativity proposing pioneering approaches to major challenges in biomedical and behavioral research

- Started in 2004
- Single PI applications only
- Open to all career stages
- Must be new research direction
- Requires 3 letters of reference
- Commit major portion of research effort (more than 51% for first three years)
- Awards of \$700,000 per year for 5 years

Pioneer Application

	R01	DP1
Specific Aims page	Required	Do not use
Research Strategy	12 pages including detailed experimental plan and preliminary data	5-page Essay (see later slide for more information)
Biosketch	For all Senior/Key Personnel	For PI only
Bibliography	Required	Do not use; include essential references in Essay
Budget	Details required, esp. for >\$250k direct cost	No detailed budget accepted (indicate only \$3.5M, indirects added later if awarded)
Letters of support	Encouraged	Not allowed
Research Effort	Depends on project	At least 51% for first 3 years
Letters of Reference	Not allowed	3 required

Pioneer Application

Unless specifically directed in the funding opportunity, follow the instructions in the SF424 application guide.

This means that, if appropriate, complete the vertebrate animals section, human subjects section, authentication of key biological and/or chemical resources, ... (These documents do not drive priority scores!)

Complete as best as you can, reviewers will keep in mind that you may have not worked out all the details yet.

Pioneer Research Strategy Essay

In 5 pages, use the following headings or subsections:

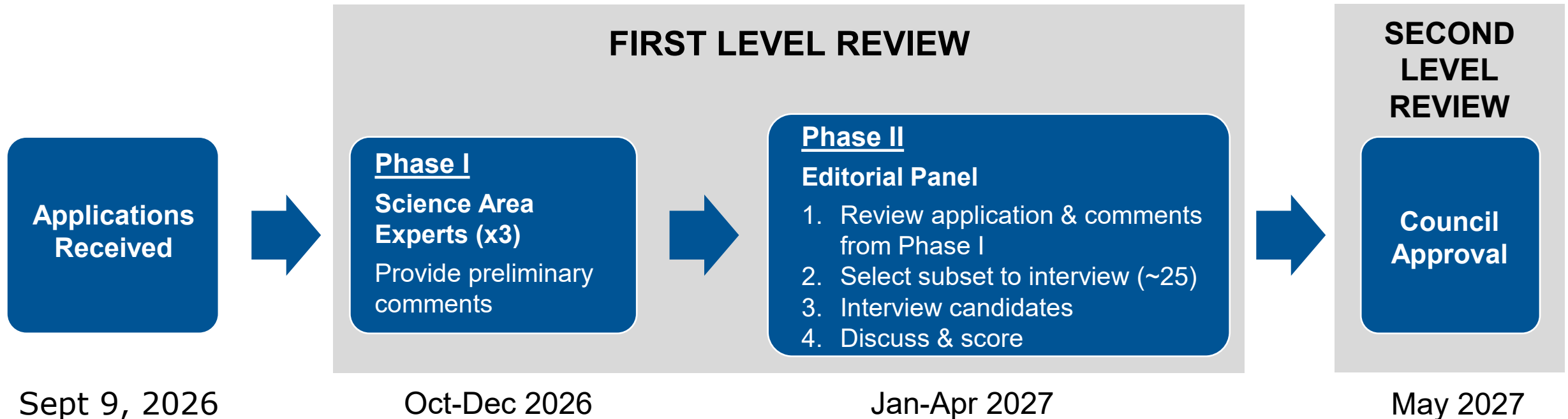
- **Project science areas** – 1 digit code and abbreviation for primary and secondary areas
- **Project title** – descriptive title of proposed project
- **Project Description** – Describe scientific importance of topic; overall innovative approach to be taken; preliminary data not required, but accepted; state that to comply with the funding opportunity, a detailed and extensive experimental plan is not being provided; however, provide sufficient evidence that proposal has been deeply considered and will be pursued in a robust and rigorous manner
- **PI's Innovativeness** – Provide evidence of a history of high innovation
- **Change in research direction** – Explain how proposed project is a change in research direction
- **Suitability for Pioneer Award program** – Describe why proposal is “HRHR” rather than traditional
- **Research effort commitment** – Commit at least 51% research effort toward project
- **Bibliography/citations** – Not required, but encouraged to include critical citations; may be in an abbreviated form as long as identifier is unique

Pioneer Research Strategy Essay

Points to consider:

- Given review process used, be sure that what you write can be easily appreciated by people well outside the field for exceptional innovation and potential for unusually broad impact
- May be helpful to begin with a description of the landscape of the field and current state-of-the-art or boundaries; provide proper context for proposal and why what you are proposing is so innovative and potentially impactful
- Ease the reader into the jargon of the field
- Though no data or detailed experimental plan are required, convince reviewers that you have thought deeply about the project – identify risky aspects, how they will be mitigated, alternate approaches
- Also, convince the reviewer that the research will be performed in a robust and rigorous manner – validate new approaches, provide estimates of numbers of human or animal subjects (if used) and why, include that sex will be considered as a biological variable (if appropriate)

Pioneer Review Process



Science Area Match

Science area (“mail”) reviewers identify their area of expertise. Applicants list a primary and secondary area.

-
1. Chemical Biology (CB)
 2. Clinical and Translational Research (CTR)
 3. Infectious Diseases and Immunology (IDI)
 4. Instrumentation and Engineering (IE)
 5. Molecular and Cellular Biology (MCB)
 6. Neuroscience (NS)
 7. High-Throughput and Integrative Biology (HIB)
 8. Bioinformatics and Computational Biology (BCB)

Phase I - Mail Review

- All Pioneer (DP1) apps reviewed in one special emphasis panel
- Mail reviewers in 8 broad scientific areas/topics recruited
- Each application assigned to 3 mail reviewers
 - 2 reviewers have expertise in the declared 'primary' scientific area
 - 1 reviewer has expertise in the declared 'secondary' scientific area
- Focus on specific Pioneer review criteria
 - The significance and innovation
 - The investigator's track record of conducting highly innovative research
 - A substantial change in research direction motivated by a fundamental new insight

Phase II – Editorial Panel Review

- Editorial panel - group of scientists with diverse scientific background and known for their broad scientific perspective
- With input from Phase I mail reviewers, panel selects ~25 finalists they deem to be the most “pioneering” for a presentation with the review panel in March/April 2027
- Focus on specific Pioneer review criteria
 - The significance and innovation
 - The investigator’s track record of conducting highly innovative research
 - A substantial change in research direction motivated by a fundamental new insight
- Finalist notification will be sent out in mid March 2027

Phase II – Editorial Panel Review

Interview

- 10-minute presentation
- 10-minute Q&A
- 10-15-minute closed panel discussion

Focus

- Is the project paradigm-shifting and does it have transformative potential?
- Does the PI have a track record of exceptional scientific creativity?
- Does the proposal represent substantially different scientific directions from those already being pursued in the field and in the PI's lab?
- Not viewed as a logical extension of ongoing projects

Regular R01 vs Pioneer Review

Regular R01	Pioneer Award
One phase review process	• Two phase review (mail & panel) • Finalists: PI interview
Subject matter experts	• Mail review: broadly matched expertise vs scientific area • Panel review: not assigned by specific topic expertise
Review criteria • Significance/Innovation • Rigor and Feasibility (Approach) • Investigator/Environment (not scored)	Review criteria • Significance/Innovation • Investigator's Innovative track record • Substantial new research direction
Focus tends to be on feasibility in the approach	Focus on exceptional innovation & the PI's track record

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Webinar recording & slides
will be posted on website



National Institutes of Health
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