

This webinar is being recorded.

Q&A Webinar

June 26, 2020 @ 1 PM EDT

Please submit your questions in the “Q&A” box
(scientific inquiries will not be discussed)



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

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PIONEER
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commonfund.nih.gov/pioneer

Panelists

Ravi Basavappa, Ph.D.

Program Leader
Office of the Director

Ellie Murcia, M.Ed.

Program Specialist
Office of the Director

Becky Miller, Ph.D.

Program Officer
Office of the Director

James Mack, Ph.D.

Branch Chief
Center for Scientific Review

The Common Fund (in the NIH Office of the Director)

Current Programs:



The Common Fund

Data/Tools/Methods

- Big Data to Knowledge (BD2K)
- Gabriella Miller Kids First
- Genotype-Tissue Expression (GTEx)
- Glycoscience
- Human BioMolecular Atlas Program (HuBMAP)
- Illuminating the Druggable Genome (IDG)
- Knockout Mouse Phenotyping (KOMP)
- Library of Integrated Network-Based Cellular Signatures (LINCS)
- Metabolomics
- Regenerative Medicine Program (RMP)
- Science of Behavior Change (SOBS)
- Somatic Cell Genome Editing (SCGE)
- Stimulating Peripheral Activity to Relieve Conditions (SPARC)
- Transformative High Resolution Cryo-Electron Microscopy (CryoEM)

New Types of Clinical Partnerships

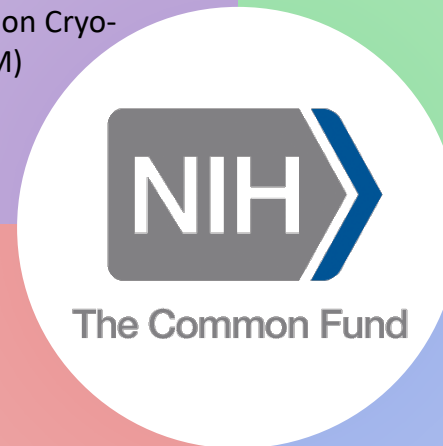
- Acute to Chronic Pain Signatures (A2CPS)
- Global Health
- HCS Research Collaboratory
- Undiagnosed Diseases Network (UDN)

New Paradigms

- 4D Nucleome (4DN)
- Extracellular RNA Communication (exRNA)
- Molecular Transducers of Physical Activity Consortium (MoTrPAC)

Transformative Workforce Support

- Enhancing the Diversity of the NIH-Funded Workforce (DPC/BUILD)
- High-Risk, High-Reward Research Program
 - Pioneer Award
 - New Innovator Award
 - Transformative Research Award
 - Early Independence Award
- Strengthening the Biomedical Research Workforce (BEST)



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Current Programs:



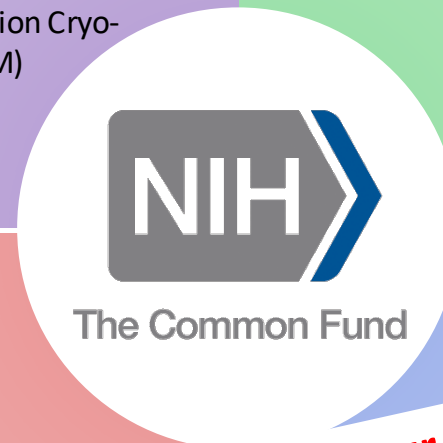
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New Paradigms

- 4D Nucleome (4DN)
- Extracellular RNA Communication (exRNA)
- Molecular Transducers of Physical Activity

**CF programs may be useful for your research:
FOAs, access to high-end instruments, databases,
reagents, protocols,**

Translational Workforce Support

- Diversity of the NIH-Funded Workforce (DPC/BUILD)
- Research Career Development Award
- New Innovator Award
- Transformative Research Award
- Early Independence Award
- Strengthening the Biomedical Research Workforce (BEST)

The Common Fund (in the NIH Office of the Director)

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New Types of Clinical Partnerships

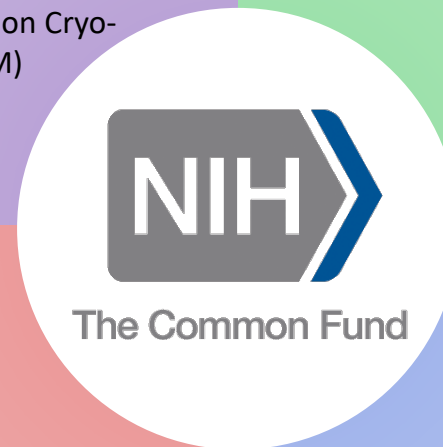
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Transformative Workforce Support

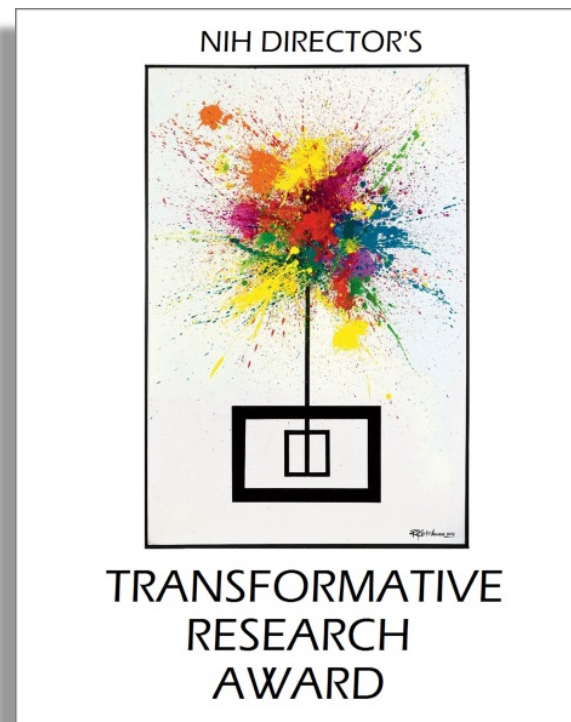
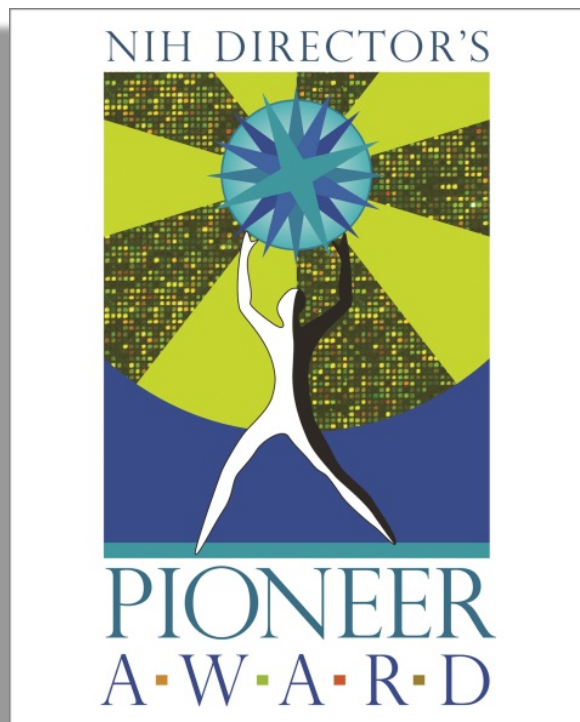
- Enhancing the Diversity of the NIH-Funded Workforce (DPC/BUILD)
- High-Risk, High-Reward Research Program
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High-Risk, High-Reward Research Program



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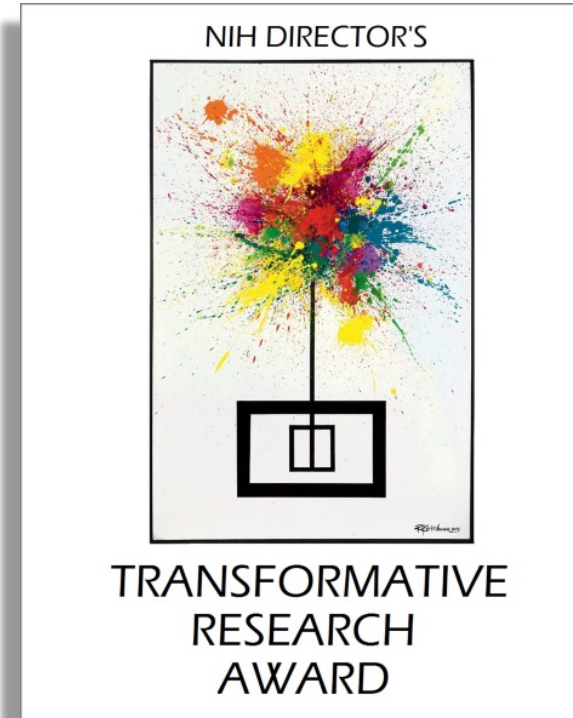
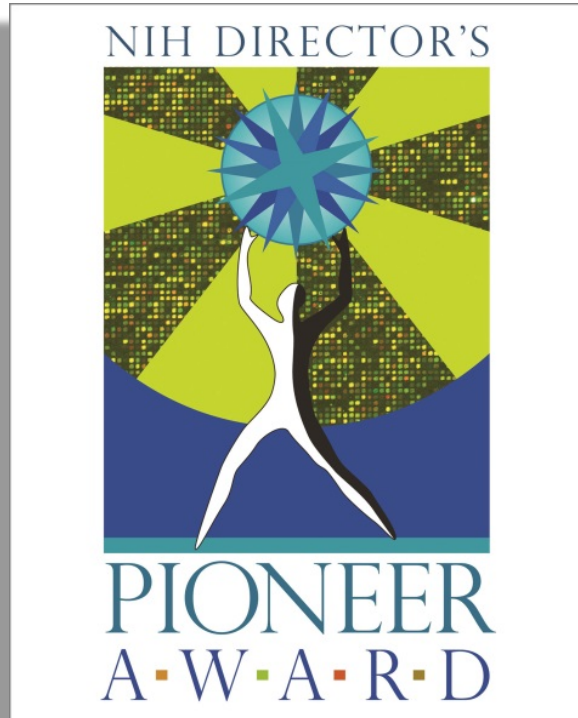


Annual funding opportunities

High-Risk, High-Reward Research Program



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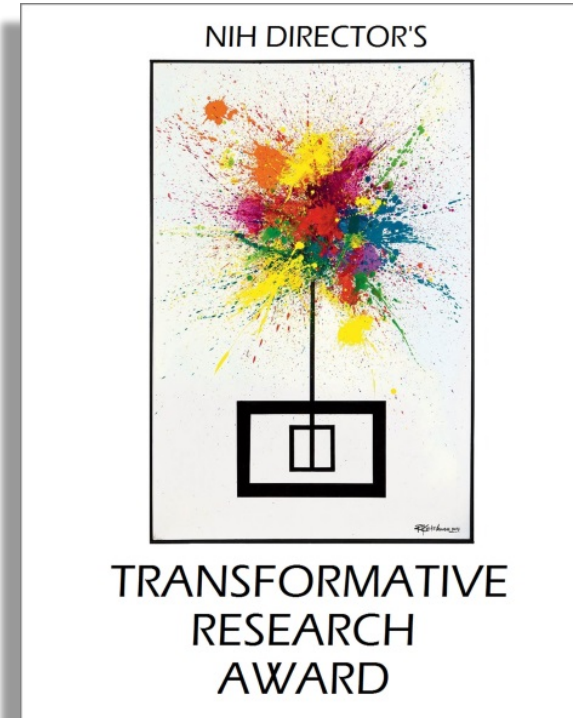
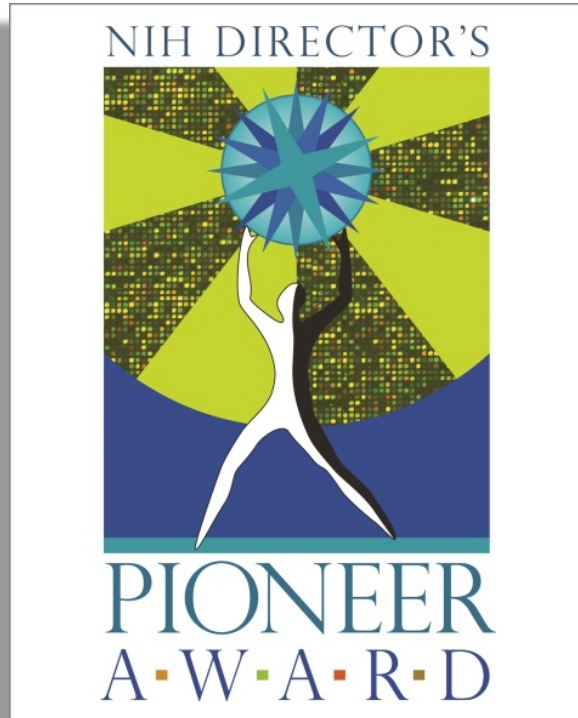


High-risk, high-impact ideas

High-Risk, High-Reward Research Program



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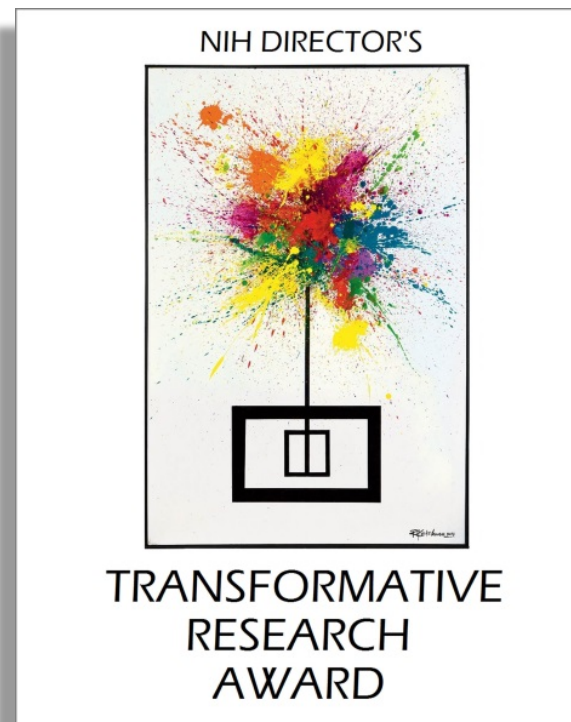
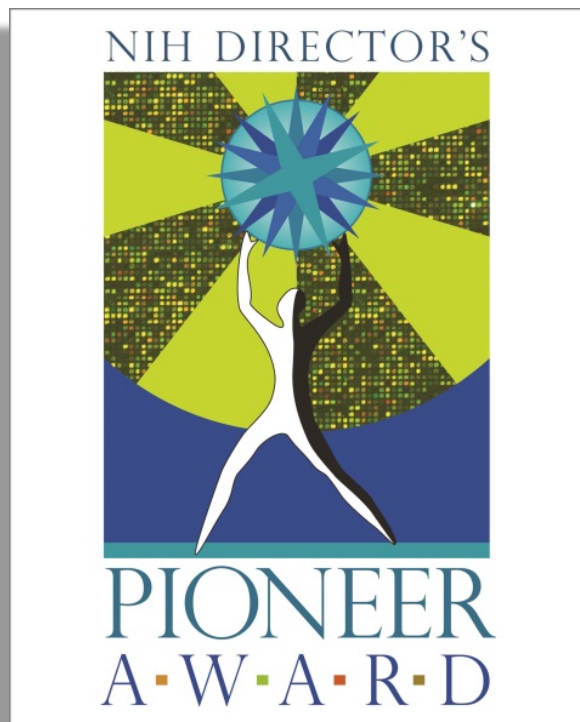


No preliminary data or detailed
experimental plan required

High-Risk, High-Reward Research Program



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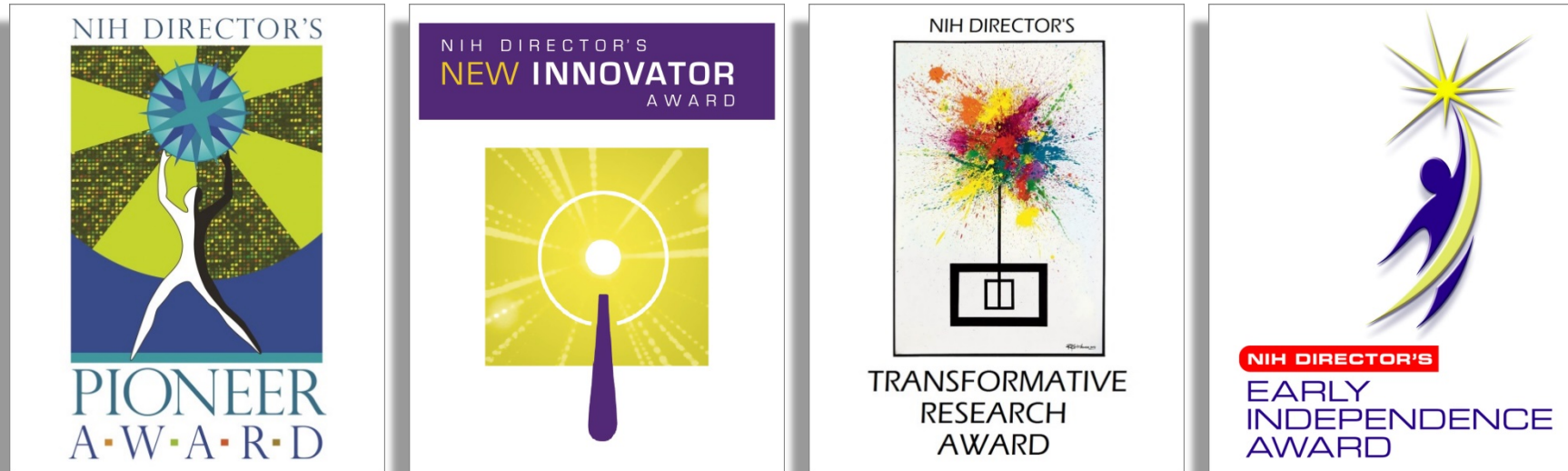


Any topic relevant to NIH mission

High-Risk, High-Reward Research Program



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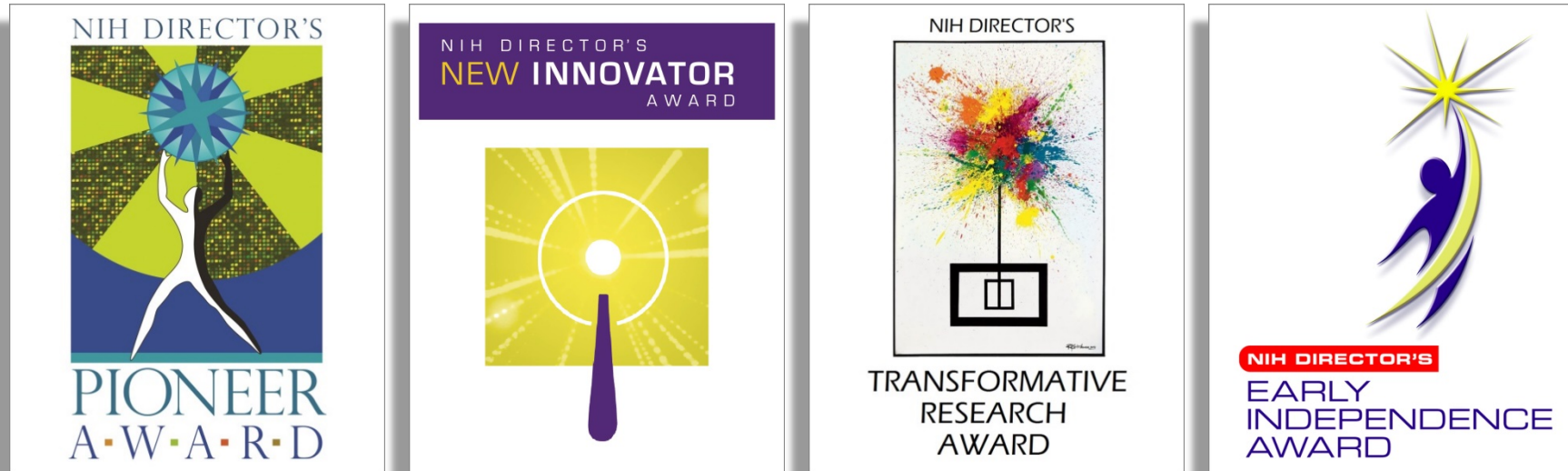


Any topic relevant to NIH mission, including:
behavioral, social, biomedical, applied, and formal sciences,
and basic, translational, or clinical research

High-Risk, High-Reward Research Program



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Encourages applications from investigators with
diverse backgrounds
and from the full spectrum of eligible institutions

High-Risk, High-Reward Research Program



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Chair

James M. Anderson, MD, PhD
OD

Program Leader

Ravi Basavappa, PhD
OSC/DPCPSI/OD

Members

Kristin Abraham, PhD
NIDDK

Vernon Anderson, PhD
NIGMS

Hugh Auchincloss, MD
NIAID

David Balshaw, PhD
NIEHS

Abraham P. Bautista, PhD
NIAAA

Eugene Carstea, PhD
CSR

Robert H Carter, MD
NIAMS

Jennifer Collins, MR
NIEHS

Christine Colvis, PhD
NCATS

Judith A. Cooper, PhD
NIDCD

**Milton Corn, MD, FACP,
FACMI**
NLM

Cindy D. Davis, PhD
Office of Dietary
Supplements/DPCPSI/OD

Emmeline Edwards, PhD
NCCIH

Zeynep Erim, PhD
NIBIB

Rene Etcheberrigaray, MD
NIA

Valerie Florance, PhD
NLM

Gabriel Hidalgo
NIDCR

Christine Hunter, PhD, ABPP
OBSSR/DPCPSI/OD

Raymond Jacobson, PhD
CSR

Flora Katz, PhD
FIC

Karen Kellton
OSC/DPCPSI/OD

Anthony Kirilusha, PhD
NIAMS

Susan Koester, PhD
NIMH

Rajiv Kumar, PhD
CSR

James Li, PhD
CSR

Roger Little, PhD
NIDA

James Mack, PhD
CSR

Judy A. Mietz, PhD
NCI

Becky Miller, PhD
OSC/DPCPSI/OD

Brett Miller, PhD
NICHD

Daniel Miller, PhD
NINDS

Michael Morse
OSC/DPCPSI/OD

Ellie Murcia, MEd
OSC/DPCPSI/OD

Srikanth Ranganathan, PhD
CSR

Diana (Dede) Rutberg, MBA
NIDCR

Suzanne Ryan, PhD
CSR

John Satterlee, PhD
NIDA

Carol Shreffler, PhD
NIEHS

Lillian Shum, PhD
NIDCR

Darren Sledjeski, PhD
NIDCR

Heidi J. Sofia, PhD
NHGRI

Michael A. Steinmetz, PhD
NEI

**Nathaniel Stinson, Jr., PhD,
MD**
NIMHD

Edmund Talley, PhD
NINDS

**Stephanie Johnson Webb,
PhD**
NHLBI

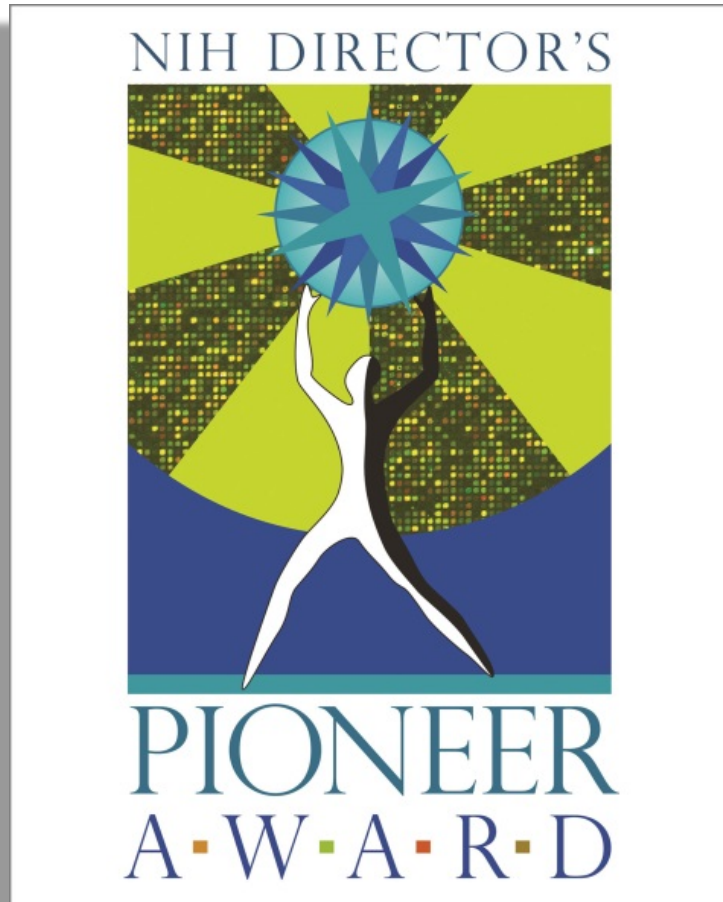
Tasmeen Weik, DrPH, MPH
CSR

Elizabeth L. Wilder, PhD
OSC/DPCPSI/OD

High-Risk, High-Reward Research Program



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

- Started in 2004
- 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
- Uses DP1 activity code

Pioneer Award - application



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	R01	Pioneer Award
Specific Aims page	Required	Do not use
Research Strategy	12 pages including detailed experimental plan and preliminary data	3-5 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)
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

Follow instructions in SF424 application guide unless specific guidance is provided in the FOA

Pioneer Award – Research Strategy Essay



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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 FOA, a detailed experimental plan and extensive are 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*** – State will 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

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 it 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 the reviewer 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)

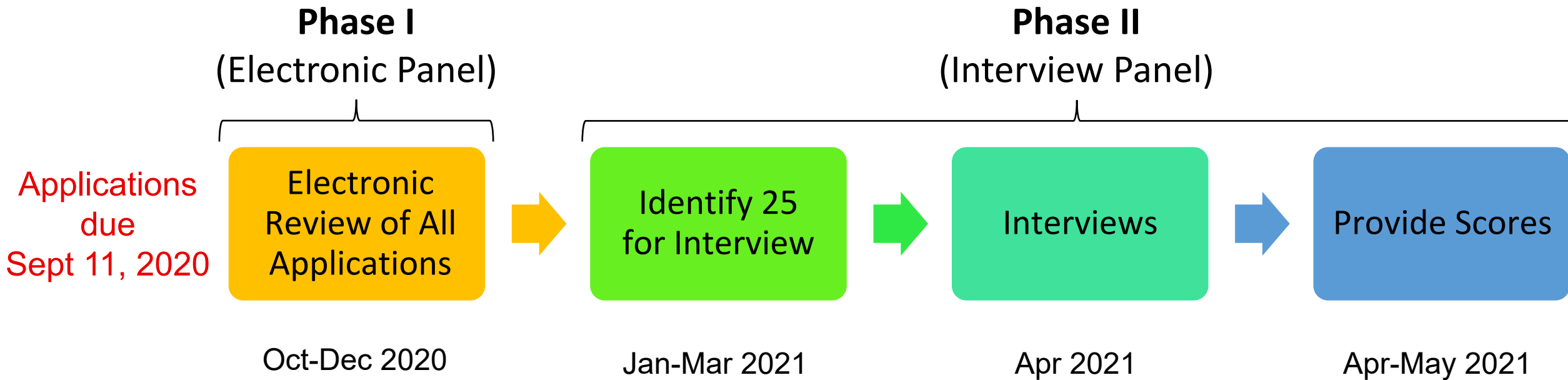
Review Process

R01	Pioneer Award
Single panel	2 phase review (2 panels) and includes in-person interviews
Topic experts	Reviewers <u>not</u> assigned by specific topic expertise
Consider: <ul style="list-style-type: none">• Significance/impact• Innovation• Approach• Investigator• Environment	Consider: <ul style="list-style-type: none">• Innovation/impact• Investigator• Suitability for award
Focus tends to be on approach and feasibility	Focus on investigator

Pioneer Award



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- Applicants also declare research plan to be in one of these:
 1. Behavioral and Social Sciences
 2. Chemical Biology
 3. Clinical and Translational Research
 4. Immunology
 5. Instrumentation and Engineering
 6. Molecular and Cellular Biology
 7. Neuroscience
 8. High Throughput and Integrative Biology
 9. Quantitative and Computational Biology

- All the applications will be reviewed in one Special Emphasis Panel
- All CSR IRGs (Integrated Review Groups) will participate in assigning mail reviewers to applications based on appropriate biomedical and biobehavioral science areas
- Each application is assigned to 3 mail reviewers
 - 2 reviewers have expertise in broad area of the application
 - 1 reviewer has expertise outside the area

Philosophy Adopted by Pioneer Reviewers



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- Think of yourself as a prospector scouring for exciting nascent ideas that explore fundamental mechanisms, probing technologies, or enabling methodologies in basic, clinical and applied biomedical sciences.
- In prospecting, be driven far more by broad recognition of important problems and novel – potentially path-breaking - approaches to address them than by the more traditional narrow focus of expert assessment of feasibility. Avoid picking technical nits as long as violation of laws of nature are not proposed!
- Do not reflexively penalize for riskiness in propositions, especially if the payoff for success would be major.
- Read the research plans with the spirit that you would bring to a Scientific American article; they were written that way, for broadly informed scientific audiences.

1. Behavioral and Social Sciences
2. Chemical Biology
3. Clinical and Translational Research
4. Immunology
5. Instrumentation and Engineering
6. Molecular and Cellular Biology
7. Neuroscience
8. High Throughput and Integrative Biology
9. Quantitative and Computational Biology

Scoring and Critiques



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- Assign an overall impact score (1-9, 1 being the best)
- Use the 1 to 9 scale to score each of the three criteria:
 - Significance
 - Investigator
 - Suitability for Pioneer Award
- Emphasis will be on “investigator” and “innovation” and potential for broad impact and suitability for the Pioneer Award

- A group of eminent scientists known for their broad scientific perspective will conduct a second phase review.
- Informed by first stage review results, Interview Panel selects ~25 applicants that they deem to be the most “pioneering” for in-person or virtual interviews

- Is the Principal Investigator an individual with a track record of exceptional scientific creativity?
- Is the proposed project bold with the potential for broad impact?
- Is the proposal suitable for the Pioneer Award versus conventional NIH funding mechanisms?

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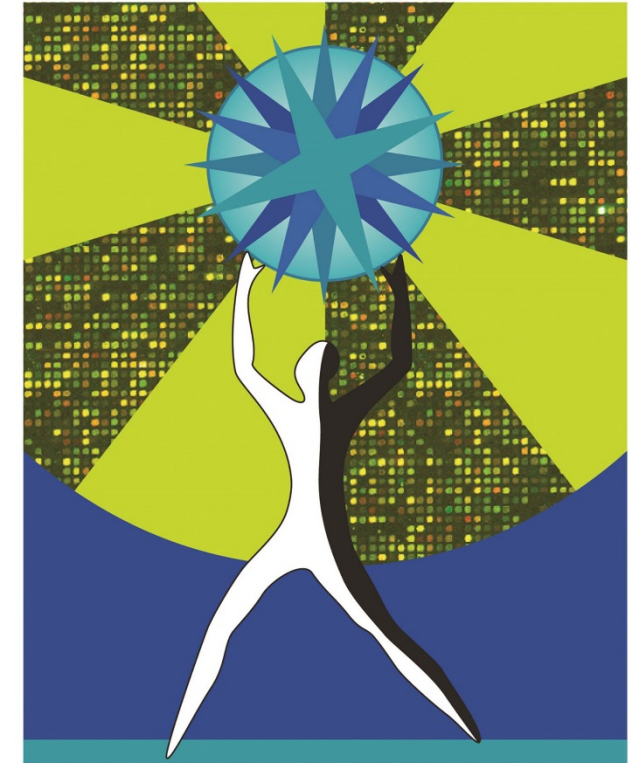
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Eligibility



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Application & Submission



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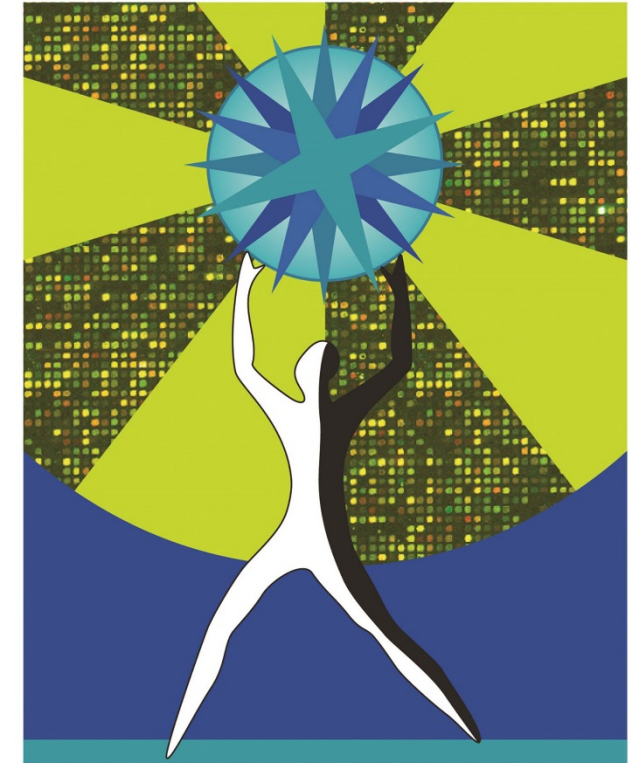
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Budget



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Letters of Reference



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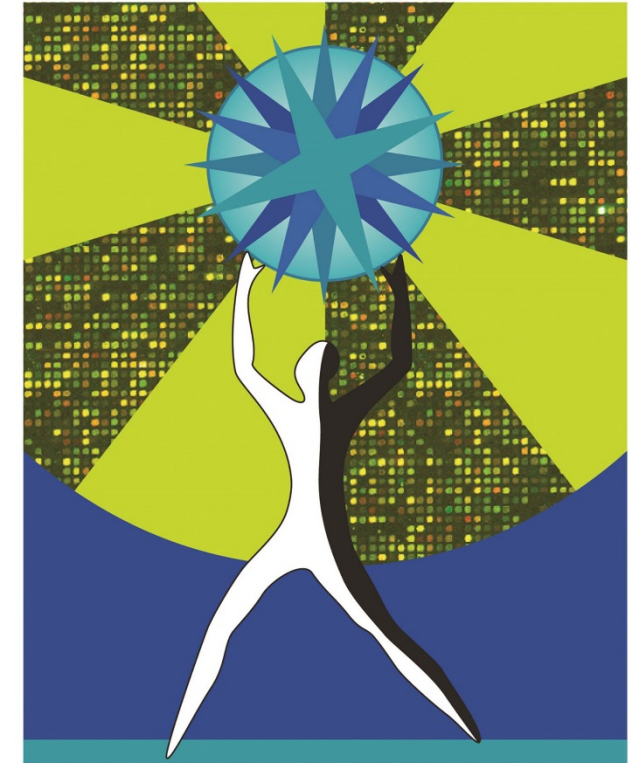
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Review



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