NEI - DBT Educational Program for the Indo-US Vision Research Collaboration - 2022

Friday, July 15, 2022: 8:30 – 10:30 AM, US East Coast Time Zone; 6:00 – 8:00 PM IST

Virtual Meeting Location: Registration required at Email: gyan.prakash@NIH.gov and vinita.chaudhary@nic.in

If you are planning to join, please send an email to both the emails listed above.

Location: https://nih.zoomgov.com/j/1601817681?pwd=QjYzOEVRL0lMVXdqL25CUWlOazJKUT09

Workshop Chairs: Dr. Gyan Prakash, National Eye Institute-NIH, USA & Dr. Sundeep Sarin, Scientist 'G' /Advisor, Department of Biotechnology, Ministry of Science and Technology, India

Summary:

Scientific collaborations in vision research between the U.S. and India have been successfully conducted for more than a decade under a US-India Vision Research Collaboration signed in 2005. Recognizing that continuing collaborative research focused on eye diseases and visual disorders would be of mutual benefit to the U.S. and India, the National Eye Institute (NEI), the Indian Department of Biotechnology (DBT), developed a strategic plan for collaborations and to facilitate the expedited review and clearance of bilateral projects. Both the NEI and the DBT have pledged funds to support joint activities pursued under this bilateral program for meritorious projects that are selected by peer review process at NIH and DBT. Several eye diseases such as diabetic retinopathy, AMD, and glaucoma are complex and influenced by multiple genetic, epigenetic, and environmental factors including family, nutrition, and exposure to toxins. During the past decade, a dozen programs have been successfully established making progress in understanding of many eye diseases and training of a large number of next generation scientists in the US and India. Large scale genomic, proteomic, metabolomic, and informatic methods using emergent or current technologies to study unique populations are encouraged to identify new factors that can affect susceptibility to these diseases and/or ocular infections, as well as biomarkers that will provide the basis for accurate diagnostic tests and predict treatment outcome. The US and India have strong interest in applying new technologies including AI, mobile and telehealth to study eye diseases for developing cost effective solutions. There are also many eye conditions and complications such as inflammation that affect some intracommunity populations to a much greater extent, providing a valuable resource for learning more about visual restoration as well as the pathogenesis and physiology of a disorder. For instance, the impact of environmental pollutants on the development of cataracts, as well as the susceptibility of toxins to cause infections, such as ocular TB and trachoma, are not well understood. Research on these populations that will further our understanding of neural plasticity including neurogenesis, cognition, and processing after the treatment of visual disorders and injury are also of interest to NEI and the DBT. The NEI-DBT educational workshop-2022 will focus on the Funding Opportunity Announcement (FOA) Number PAR-21-249, how Indo-US investigators can write grants, and how grant applications are reviewed.

Program:

Welcome by Dr. Michael Chiang-Director, NEI & Dr. Rajesh Gokhale, Secretary, DBT 5 min each

1. Dr. Gyan Prakash, NIH-NEI, USA & Dr. Sundeep Sarin, DBT, India — 10 min
   Title: Overview of the Indo-US Vison Research Collaborations and Program Areas of Interest

2. Dr. Lisa Neuhold and Dr. Michael Steinmetz, NIH-NEI, USA — 20 min
   Title: NIH - NEI Grant Opportunities, FOA Number PAR-21-249 & Application Process

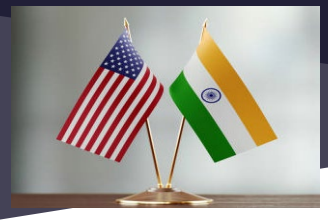
3. Dr. Seetha Bhagavan, NIH-CSR — 20 min
   Title: NIH-NEI Grant Review Process

4. Dr. Vinita Chaudhary, DBT
   Title: DBT Application Process and Review — 10 Min

5. Discussion/Q & A — 20 Min

6. Dr. Preetha Rajaraman, Health Attaché at the US Embassy in India — 5 Min
   Title: Moving forward with the Indo-US Vision Research Collaboration-Closing Remarks

National Eye Institute
Research Today...Vision Tomorrow



DEPARTMENT OF BIOTECHNOLOGY
MINISTRY OF SCIENCE & TECHNOLOGY , GOVERNMENT OF INDIA
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NEI - DBT Educational Program for the Indo-US Vision Research Collaboration - 2022

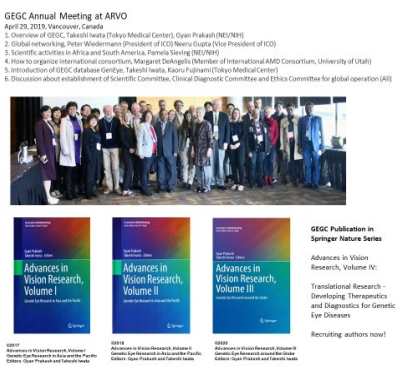
Friday, July 15, 2022: 8:30 – 10:30 AM, US East Coast Time; 6:00 – 8:00 PM IST

National Eye Institute (NEI), National Institutes of Health (NIH)
Bethesda, MD , USA

Department of Biotechnology (DBT), Govt. of India
New Delhi, India

Important

- The session is being recorded. If you have joined this session, you have agreed to be recorded. Please log off if you don't wish to be in the recorded session.
- Please put yourself on "MUTE" unless you are speaking.
- Please "raise your hand" to talk.



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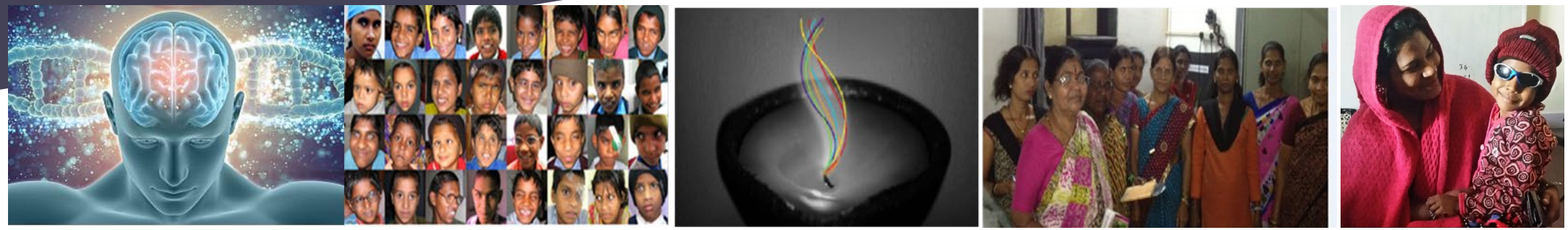

" Overview of the Indo-US Vison Research Collaborations and Program Areas of Interest"

Gyan Prakash, PhD, MBA
Director, Office of International Program Activities (OIPA)
National Eye Institute (NEI), National Institutes of Health (NIH)
Bethesda, MD
USA

Sundeep Sarin, PhD, MBA
Scientist G & Head-International Cooperation (Bilateral)
Department of Biotechnology (DBT), Govt. of India
New Delhi
India

July 15, 2022

Global Blindness is a Serious Problem

- **World Report on Vision-Oct 2019:** At least 2.2 B people around the world have a vision impairment, of whom at least one billion have a vision impairment that could have been prevented or is yet to be addressed.
- 90% of the global burden of eye disease is shouldered by developing countries, where many treatable eye diseases often go undiagnosed.
- **Motivation - Wider collaboration of researchers is needed to advance the high-quality science in many areas of vision research as well as to improve standard of care in order to support health policies and advocacy.**
- **India and the US: Two of the largest and most active eye research communities**
- **Strong interest in the next generation of Indo-US vision researchers: OUR key motivation and inspiration**

Indo-U.S. Collaboration on Vision Research

STATEMENT OF INTENT

between

The Government of the Republic of India
Ministry of Science and Technology

and

The Government of the United States of America
Department of Health and Human Services

on

Indo-U.S. Collaboration on Expansion of Vision Research

Recognizing:

The strong commitment shared by the two countries to reduce the burden of vision disability and blindness;

For the Government of the
United States of America

Dr. Elias A. Zerhouni
Director
National Institutes of Health
Department of Health and Human Services

For the Government of the
Republic of India

Dr. Maharaj K. Bhan
Secretary
Department of Biotechnology
Ministry of Science and Technology

NIH National Eye Institute
Research Today...Vision Tomorrow

Gov't of India & the US Gov't Signing
on NIH Campus, Bethesda, USA – August 24, 2005

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1st Round of US-Indo Collaborative Vision Research Studies, 2006 – 2012

NEI Collaboration with Gov't of India – Dept. of Biotechnology

India–US Genetic Study of Ocular Quantitative Traits
Sankara Nethralaya, Chennai & Harvard University, Boston

Role of Vitreous Liquefaction in Age-related Nuclear Cataract
L.V. Prasad Eye Institute, Hyderabad & Washington University, St. Luis

Identification of Primary Open-angle Glaucoma Biomarkers
Aravind Eye Hospital, Madurai & The Cleveland Clinic, Cleveland

Generation of Disease-specific Induced Pleuripotent Stem Cells
L.V. Prasad Eye Institute, Hyderabad & Harvard University, Boston

Characterization of Retinal Degeneration in Obese Rat Model
National Institute for Nutrition, Hyderabad & University of California, San Diego

Project Prakash: Neuroplasticity & Object Perception after Late Sight Onset
Shroff Charity Eye Hospital, New Delhi & MIT, Boston

2nd Round of US-Indo Collaborative Vision Research Studies, 2015 – 2018
Programs Ongoing

Two New Programs were added in the 2nd Round

GLAUCOMA

US-Indo Genetic Study of Ocular Quantitative Traits related to Glaucoma
Harvard University, Boston & Sankara Nethralaya, Chennai

DIABETIC RETINOPATHY

Unraveling the genetic architecture of diabetic retinopathy in South India
Cleveland Clinic & Vision Research Foundation, Chennai

3rd Round of US-Indo Collaborative Vision Research Studies, 2018 – 2021

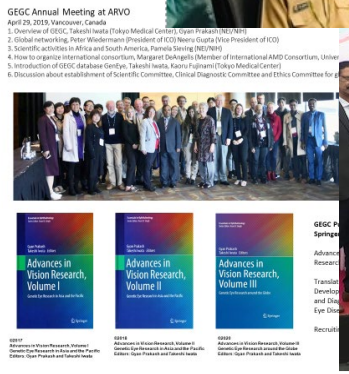
Expanded to all areas of eye research - No new application funded.

4th Round of Indo-US Vision Research Program Call of 2021-2023

All Areas of Vision Research: Next Grant Application due Date: Nov 8, 2022

Summary: Indo-US Vision Research collaboration on Multiple Programs

1. Long relationship - Formal association in vision research began in 2005
2. Groundwork – Thanks to all the Indian & US leaders in Vision research and the leading Indian and US institutions of eye research and training
3. Joint research programs and mutually beneficial fellowships and training programs --Many vision research programs conducted in the last 15 years, trained a large number of scientists at all levels – Graduate, Postdoctoral and Career scientists, exchange research and clinical fellows, visiting fellows, eye camps, outcomes-based research, and more……
4. Leading vision scientists/centers from India and the US have participated in GEGC founding and programs including highest participation of the US and Indian scientist in three volumes of Advances in Vision Research (Pub: Springer-Nature)
5. **Next steps are to grow mutually beneficial collaboration in all areas of vision research & share training programs**



Moving forward…..

- India and the US - two of the most active research communities- valuable collaborative science in all areas of eye diseases
- Suggestions for finding your Indian/US partner for research collaboration
- Next grant application due date: Nov 8, 2022
- Program Areas and review process to be covered by Dr. Neuhold, Dr. Chaudhary, Dr. Bhagavan

Lisa Neuhold

Program Director

NEI

- Program Director at the National Eye Institute (NEI) in the Division of Extramural Research and serves as Group Leader of the Retinal Cell Biology and Development of Novel Therapies Program.
- Portfolio on the basic biology and biochemistry of photoreceptors and retinal pigment epithelium (RPE) function, as well as early development and differentiation of both animal and human stem cells, and transplantation of these retinal tissues.
- Program Director for International Vision Research and Liaison to the Office of Women's Health.

Previous Research Experience

- Program Director of the Neurogenetics Program at the National Institute on Alcoholism and Alcohol Abuse.
- Pharmaceutical company, Wyeth-Ayerst Research as a Senior Research Scientist in the Molecular Genetics Division, where she supervised the production of transgenic and gene-targeted mice for use in drug development.
- Postdoctoral research at the California Institute of Technology.
- Ph.D. from the University of Maryland

NEI Grant Opportunities

PAR-21-249 and Application Process

July 15, 2022

Lisa A. Neuhold, PhD
Program Director for International Research
National Eye Institute

lneuhold@nei.nih.gov

NIH National Eye Institute

- US-Indo Program Announcement
- Bilateral Collaborations
- Research Objectives
- How to Apply?
- How Can Your Program Director Help?
- NEI Program Directors

U.S. - India Collaborative Vision Research Program (R01 Clinical Trial Not Allowed) PAR-21-249

https://grants.nih.gov/grants/guide/pa-files/PAR-21-249.html

Purpose:

- establish bilateral collaborations with U.S.-based institutions and Indian-based institutions

Research focus:

- basic biology and/or genetics of ophthalmic diseases

Areas include:

- diabetic retinopathy, glaucoma, age-related macular degeneration, retinitis pigmentosa,
- rare and genetic diseases such as congenital cataracts
- eye conditions such as ocular inflammation/uveitis, refractive error, low vision, and corneal injury.

PAR-21-249: Collaborations

https://grants.nih.gov/grants/guide/pa-files/PAR-21-249.html

C. Collaborations

The FOA requires that the collaboration between the U.S. and Indian research teams be submitted as a Multiple Principal Investigator (Multi-PD/PI) application with both of the lead scientists from each country as the PD/PI. Applications may be derived from existing collaborations with an established history of interaction, or from new partnerships developed in response to this FOA. The collaboration must be based on interactive relationships that maximize the expertise of the individual U.S. and Indian research teams.

Through this FOA, U.S. and Indian collaborating investigators should work together to develop and submit an application to National Institutes of Health (NIH) and the India Ministry of Science and Technology's Department of Biotechnology (DBT).

U.S. - India Collaboration

Research Project Grant Applications

- Mechanism: R01 Basic Research, Investigator Initiated
- Multiple Principal Investigator (Multi-PD/PI) application with both of the lead scientists from each country as the PD/PI.
- Budgets are limited to $250,000 annual direct cost.
- Award project period is limited to 3 years.
- Clinical trials will not be supported under this FOA
- Resubmissions allowed

U.S. - India Collaborative Vision Research Program (R01 Clinical Trial Not Allowed) PAR-21-249

https://grants.nih.gov/grants/guide/pa-files/PAR-21-249.html

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- establish bilateral collaborations with U.S.-based institutions and Indian-based institutions

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- diabetic retinopathy, glaucoma, age-related macular degeneration, retinitis pigmentosa,
- rare and genetic diseases such as congenital cataracts
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Research Objectives

Applications may include, but are not limited to collaborations addressing the following areas:

- Family based genome wide association studies (GWAS) on available cohorts of consanguineous families from India to identify genetic variants that predispose to both Mendelian and complex forms of eye disease;
- Validation of novel GWAS findings in appropriate animal models;
- Identification of biomarkers that predict and/or assess risk and response to interventions;
- Studies of environmental factors that predict risk of eye diseases such as imprinting and other epigenetic effects;
- Studies to determine the underlying biology of ocular diseases including, AMD, diabetic retinopathy, glaucoma, retinitis pigmentosa, cataracts, myopia and presbyopia;
- Studies focusing on the basic science of neuroplasticity of vision including perceptual learning and adaptation after eye injury;
- Studies of the mechanisms through which environmental pollutants/toxins contribute to ocular diseases and their complications including infection and inflammation;
- Identification of factors that influence the success of corneal transplantation and recovery after surgery.

https://grants.nih.gov/grants/guide/pa-files/PAR-21-249.html

National Eye Institute

Applications Not Responsive to this FOA:

D. Applications Not Responsive to this FOA

The following applications will be considered non-responsive and will not be reviewed for this FOA:

- Applications that include clinical trials
- Applications that include research topics that do not fall within the NEI mission and/or the NIH referral guidelines such as the diagnosis and treatment of ocular cancers

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Important Dates:

Application Due Dates			Review and Award Cycles		
New	Renewal / Resubmission / Revision (as allowed)	AIDS	Scientific Merit Review	Advisory Council Review	Earliest Start Date
November 08, 2021	November 08, 2021	Not Applicable	January 2022	May 2022	July 2022
November 08, 2022	November 08, 2022	Not Applicable	January 2023	May 2023	July 2023
November 08, 2023	November 08, 2023	Not Applicable	January 2024	May 2024	July 2024

National Eye Institute

How to Apply – Application Guide

Prepare to Apply

- Systems and Roles
- Register
- Find Funding
- Understand Funding Opportunities
- Types of Applications
- Submission Options
- Obtain Software

Write Application

- Write Your Application
- How to Find Forms
- Develop Your Budget
- Format Attachments
- Rules for Text Fields
- Page Limits
- Data Tables
- Reference Letters
- Biosketches

Submit

- How to Submit, Track, and View
- How We Check for Completeness
- Changed/Corrected Applications
- Standard Due Dates
- Submission Policies
- Dealing with System Issues

https://grants.nih.gov/grants/how-to-apply-application-guide.html

National Eye Institute

Organization/Organization Representative Registration

System	How Do I get Started?	How Long Does It Take?
Dun & Bradstreet - Organization Registration Dun & Bradstreet will assign a unique nine-digit Dun & Bradstreet Universal Numbering System (DUNS) identification number to your organization to be used with all other registrations. Learn more.	Submit a request at: http://fedgov.dnb.com/webform	1-2 business days (U.S); Up to 5 days (non-U.S.)
eRA Commons - Organization Registration eRA Commons is an online interface where grant applicants, grantees and federal staff can access and share grant-related administrative information. Learn more.	Follow steps on: https://public.era.nih.gov/commons/public/registration/registrationInstructions.jsp	10 business days
System for Award Management (SAM) - Organization Registration SAM is a system required by the federal government to collect information on organizations applying for grants and contracts. Learn more.	Submit a registration request at: https://www.sam.gov	12+ business days; longer if EIN (U.S.) or NCAGE (non-U.S.) needs to be obtained
Grants.gov - Organization Registration Grants.gov is a website for finding and applying to funding opportunities from all federal agencies. Learn more.	Follow Grants.gov's steps for registering as an organization at: http://www.grants.gov/web/grants/applicants/organization-registration.html	1 business day or more (depends on responsiveness of your EBiz POC)

Applying for a grant requires 2 Separate Systems Working Together

Grants.gov – required to prepare and submit grant applications

- The site where you apply for your grant, i.e., submit your application.
- Submission of your application must be electronically.

eRA Commons – required to do business with NIH

- Organizations must register and apply with their eRA Commons.
- Allows you to track your application.
- Allows you to view the same image of your application that NIH staff and reviewers see.
- Online interface where you go to access grant information such as Institute/Center assignments, review outcomes, summary statements, and Notices of Awards.

Organization Registration

Your organization must be registered in multiple systems to submit. Start early – can take 6 weeks!

DUNS number (Data Universal Numbering System) – provides unique organization identifier

- Need DUNS number in order to apply for a grant in Grants.gov
- All U.S. and Indian applicants must have an active DUNS number.

DUNS will no longer be used after April 2022

SAM registration (System for Award Management): – needed to do business with government

- Need SAM registration in order to complete the eRA Commons registration
- Non-U.S. organization: Need NCAGE code prior to registering with SAM.
- Requires annual renewal

Grants.gov – required to prepare and submit your application

eRA Commons – required to do business with NIH

https://grants.nih.gov/grants/how-to-apply-application-guide/prepare-to-apply-and-register/registration/org-representative-registration.htm

DUNS Number –Policy Change

C. Collaborations

Note: Organizations must register and apply with their eRA Commons. All U.S. and Indian applicants must have an active DUNS number and SAM registration in order to complete the eRA Commons registration.

- Currently, all applicant organizations must have a DUNS number as the Universal Identifier when applying for federal grants.
- The government is moving to a new government-owned Unique Entity Identifier (UEI) which will replace the DUNS number.
- DUNS will no longer be used after April 2022.

NIH National Eye Institute

Update: Notification of Upcoming Change in Federal-wide Unique Entity Identifier Requirements (NOT-OD-21-170)

- Beginning mid-FY2021, all entities registered in System for Award Management (SAM) will automatically be issued a UEI.
- Entities registering in SAM prior to April 2022 must still obtain a DUNS from Dun and Bradstreet prior to SAM registration.

Update: Notification of Upcoming Change in Federal-wide Unique Entity Identifier Requirements
Notice Number:
NOT-OD-21-170

Key Dates

NOT-OD-21-170

Release Date:

August 5, 2021

Related Announcements

NOT-OD-19-098 - Notification of Upcoming Change in Federal-wide Unique Entity Identifier Requirements

NOT-OD-21-169 - New NIH "FORMS-G" Grant Application Forms and Instructions Coming for Due Dates on or after January 25, 2022

Issued by

NATIONAL INSTITUTES OF HEALTH (NIH)

U.S. Food and Drug Administration (FDA)

Agency for Healthcare Research and Quality (AHRQ)

Substance Abuse and Mental Health Services Administration (SAMHSA)

Office of Research and Development (ORD), Department of Veterans Affairs (VA)

Purpose

The purpose of this notice is to update the applicant and recipient communities of the federal-wide transition from the DUN and Bradstreet (D&B) Data Universal Numbering System (DUNS) number to a new government-owned Unique Entity Identifier (UEI). By April 2022, the federal government will stop using the DUNS number to uniquely identify entities registered in the System for Award Management (SAM). SAM will become the central repository for the new UEI that will be incorporated into an institution's SAM registration.

Policy Change

Currently, in accordance with federal assistance regulations and the NIH Grants Policy Statement 2.3.7.8, all applicant organizations must have a DUNS number as the Universal Identifier when applying for federal grants or cooperative agreements, and recipient organizations must notify potential subrecipients that no organization may receive a subaward under the grant unless the organization has provided its DUNS number to the recipient organization.

In March 2019, the General Services Administration (GSA) announced that the U.S. Government is moving to a new government-owned Unique Entity Identifier (UEI) which will replace the DUNS as the unique entity identifier in all systems, including Grants.gov and eRA Commons. The assignment of the UEI will be incorporated into the SAM registration process, eliminating the need for applicants to seek external identifiers in order to register. This change will not impact the Institutional Profile File (IPF) generated by eRA Commons for tracking and reporting on awards.

Implementation Update

The transition from DUNS to UEI is ongoing. By April 2022, the Federal government will stop using the DUNS number to uniquely identify entities registered in the System for Award Management (SAM).

Beginning mid-FY2021, all entities registered in SAM will automatically be issued a UEI. Note: Entities registering in SAM prior to April 2022 must still obtain a DUNS from Dun and Bradstreet prior to SAM registration.

Implementation:

- Beginning October 2021, entities registered in eRA Commons will begin to see their UEI populated in the Institutional Profile File (IPF). No action is required by the entity.
- Beginning October 2021, recipients' UEI will be populated on Page One of the Notice of Award. The recipient UEI will also be transmitted in award data reported to the HHS Tracking Accountability in Government Grants System (TAGGS) and USASpending.gov.
- For applications due on or after January 25, 2022, applicants must have a UEI at the time of application submission. Application forms and packages required for application submission will be updated to reflect UEI instead of DUNS. See NOT-OD-21-169 for more information.

https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-170.html

New NIH "FORMS-G" Grant Application Forms and Instructions Coming for Due Dates on or after January 25, 2022
Notice Number:
NOT-OD-21-169

Key Dates

NOT-OD-21-169

Release Date:

August 5, 2021

Related Announcements

NOT-OD-21-073 - Upcoming Changes to the Biographical Sketch and Other Support Format Page for Due Dates on or after May 25, 2021

NOT-OD-21-109 - Expanding Requirement for eRA Commons IDs to All Senior/Key Personnel

NOT-OD-21-110 - Implementation of Changes to the Biographical Sketch and Other Support Format Page

NOT-OD-21-122 - Announcing New Inbox for Inquiries Related to Changes to Biographical Sketch and Other Support Format Page

NOT-OD-21-170 - Updates: Notification of Upcoming Change in Federal-wide Unique Entity Identifier Requirements

Issued by

NATIONAL INSTITUTES OF HEALTH (NIH)

U.S. Food and Drug Administration (FDA)

Agency for Healthcare Research and Quality (AHRQ)

Purpose

This notice informs the applicant and recipient communities of changes to grant application forms and application guide instructions for due dates on or after January 25, 2022.

The following application forms include substantive form changes (i.e., new/deleted/modified fields). All other forms include only an OMB expiration date change.

- SF424 R&R
- R&R Senior/Key Person Profile (Expanded)
- R&R Budget and Associated Subaward Budget Attachment(s) Form
- Project/Performance Site Location(s)
- PHS 398 Training Budget and Associated Subaward Budget Attachment(s) Form
- PHS Additional Indirect Costs
- PHS Fellowship Supplemental Form
- PHS Human Subjects and Clinical Trials Information
- SBIR/STTR Information

Key changes:

- As part of the federal-wide transition from the DUN and Bradstreet (D&B) Data Universal Numbering System (DUNS) number to the new government-owned Unique Entity Identifier (UEI), applicants will be required to have a UEI to apply for federal grants or cooperative agreements. The System for Award Management (SAM) will become the central repository for the new UEI that will be incorporated into an institution's SAM registration. Although agencies are not required to fully transition until April 2022, NIH, AHRQ, and FDA will transition for due dates on or after January 25, 2022 to align with standard application and review cycles. See NOT-OD-21-170 for more information.
- NIH will require the use of the updated Biographical Sketch and Other Support format pages for submissions on or after January 25, 2022. See NOT-OD-21-073, NOT-OD-21-110, and NOT-OD-21-122 for more information.
- Targeting due dates on or after January 25, 2022, all Senior/Key personnel listed on the R&R Senior/Key Person Profile (Expanded) form will be required to have an eRA Commons username (Commons ID). Extension of the existing eRA Commons ID requirement to include all senior/key personnel will facilitate better data collection for individuals contributing to federally funded research as well as assist in disambiguating data on applications and facilitating the identification of conflicts of interest in peer review. See NOT-OD-21-109 for more information.

See High-level Summary of Form Changes in FORMS-G Application Packages for a full list of form changes. Participating agencies will notify the community if it is determined additional changes are needed. These changes will be implemented with application form packages identified with a Competition ID of "FORMS-G" and associated application guide instructions. Additional guidance and confirmation ofimplementation plans will be provided in Fall 2021.

Effective Date
Applicants must use FORMS-G application packages for due dates on or after January 25, 2022 and must use FORMS-F application packages for due dates on or before January 24, 2022. Applications submitted using the wrong forms for their intended due date may be withdrawn and removed from funding consideration.

Availability of FORMS-G Application Guides
Application guides for FORMS-G application packages will be posted to the How to Apply - Application Guide page no later than October 25, 2021.

Availability of FORMS-G Application Packages
FORMS-G application packages will be posted as follows

- New funding opportunity announcements (FOAs) will be posted with FORMS-G application packages beginning October 25, 2021.
- New FOAs posted before October 25, 2021 with initial due dates on or after January 25, 2022 will be posted without application forms until updated forms are available. Application packages will be added to these FOAs by November 25, 2021.
- All active Parent and IC-issued FOAs with due dates on or after January 25, 2022 will be updated to add FORMS-G application packages between October 25, 2021 and November 25, 2021.

For a transition period, both FORMS-F and FORMS-G application packages will be active simultaneously. Applicants must choose the appropriate application package for their due date when presented with both FORMS-F and FORMS-G application packages on the same FOA (see table below).

https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-169.html

Grant Application Forms and Instructions for Due Dates on or After January 25, 2022

NOT-OD-21-169

If your intended due date is...	You must use...
On or before January 24, 2022, including: • Applications submitted for due dates on or before January 24, 2022 • Applications submitted under NIH Late Policy 2-week window of consideration for intended due dates on or before January24, 2022 • Applications submitted by February 1, 2022 under NIH Continuous Submission Policy for the January 7, 2022 AIDS intended due date	FORMS-F application package

If your intended due date is...	You must use...
On or after January 25, 2022, including: • Applications submitted for due dates on or after January 25, 2022 • All application types (New, Resubmission, Renewal, Revision) • Applications submitted early for intended due dates on or after January 25, 2022	FORMS-G application package

Applications submitted using the incorrect application package for their due date may be withdrawn and removed from funding consideration.

https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-169.html

NIH National Eye Institute

How can Your Program Director Help?

- Determine if your basic concept is a good fit with the mission of the NEI, i.e., program's goals and objectives.
- Seek advice concerning project design and appropriate funding mechanism.
- Ascertain trends in preferred research methodologies.
- Identify possible limits in project duration and budget.
- Discuss the review of your application.

NIH National Eye Institute

NEI Program Directors-Basic Research

Program Director	Email	Program Area
George McKie	mckiegeo@nei.nih.gov	Structure, Function and Diseases of the Cornea
Tony Gover	Tony.Gover@nih.gov	Corneal Injury
		Bioengineering and Technology; Retina, Glaucoma
Ellen Liberman	esl@nei.nih.gov	Glaucoma and Optic Neuropathies
Tom Greenwell	greenwellt@nei.nih.gov	Development and Regeneration; Retina, Glaucoma, SAVP

NEI Program Directors-Basic Research

Program Director	Email	Program Area
Grace Shen	sheng@nei.nih.gov	Retinal Diseases
Lisa Neuhold	lneuhold@nei.nih.gov	Photoreceptor/RPE Biology
		Cell and Molecular Technologies } Retina
Chuck Wright	charles.wright@nih.gov	Retinal Neuroscience
Nataliya Gordiyenko	nataliya.gordiyenko@nih.gov	Retinal Angiogenesis and Immunology

NIH National Eye Institute

NEI Program Directors-Basic Research

Program Director	Email	Program Area
Houmam Araj	houmam.araj@nih.gov	Lens and Cataract
		Oculomotor and Neuro-Ophthalmology
		Ocular Pain
Martha Flanders	Martha.Flanders@nih.gov	Central Visual Processing
Cheri Wiggs	wiggsc@nei.nih.gov	Perception and Psychophysics
		Myopia & Refractive Errors
		Low Vision & Blindness Rehabilitation

NIH National Eye Institute

Program Directors-Training and Resources

Program Director	Email	Program Area
Neeraj Agarwal	agarwalnee@nei.nih.gov	Translational Research
		Training and Workforce Development
PaekGyu Lee	Paek.lee@nih.gov	Small Business SBIR/STTR
		Research Resources
James Gao	james.gao@nih.gov	Informatics and Data Science

NEI Program Directors of Collaborative Clinical Research

Program Director	Email	Program Area
Don Everett	dfe@nei.nih.gov	Collaborative Clinical Research
Maryann Redford	maryann.redford@nei.nih.gov	Collaborative Clinical Research
Sangeeta Bhargava	bhargavas@nei.nih.gov	Collaborative Clinical Research
Jimmy Le	jimmy.le@nih.gov	Collaborative Clinical Research

NIH National Eye Institute

Questions?

U.S. Department of Health & Human Services

NIH Center for Scientific Review

NIH Scientific Peer Review Process

by

Dr. Seetha Bhagavan

Scientific Review Officer,

Review Coordinator for International Programs

on

July 15, 2022

NIH-NEI & DBT Education Program
for the
Indo-US Vision Research Collaboration

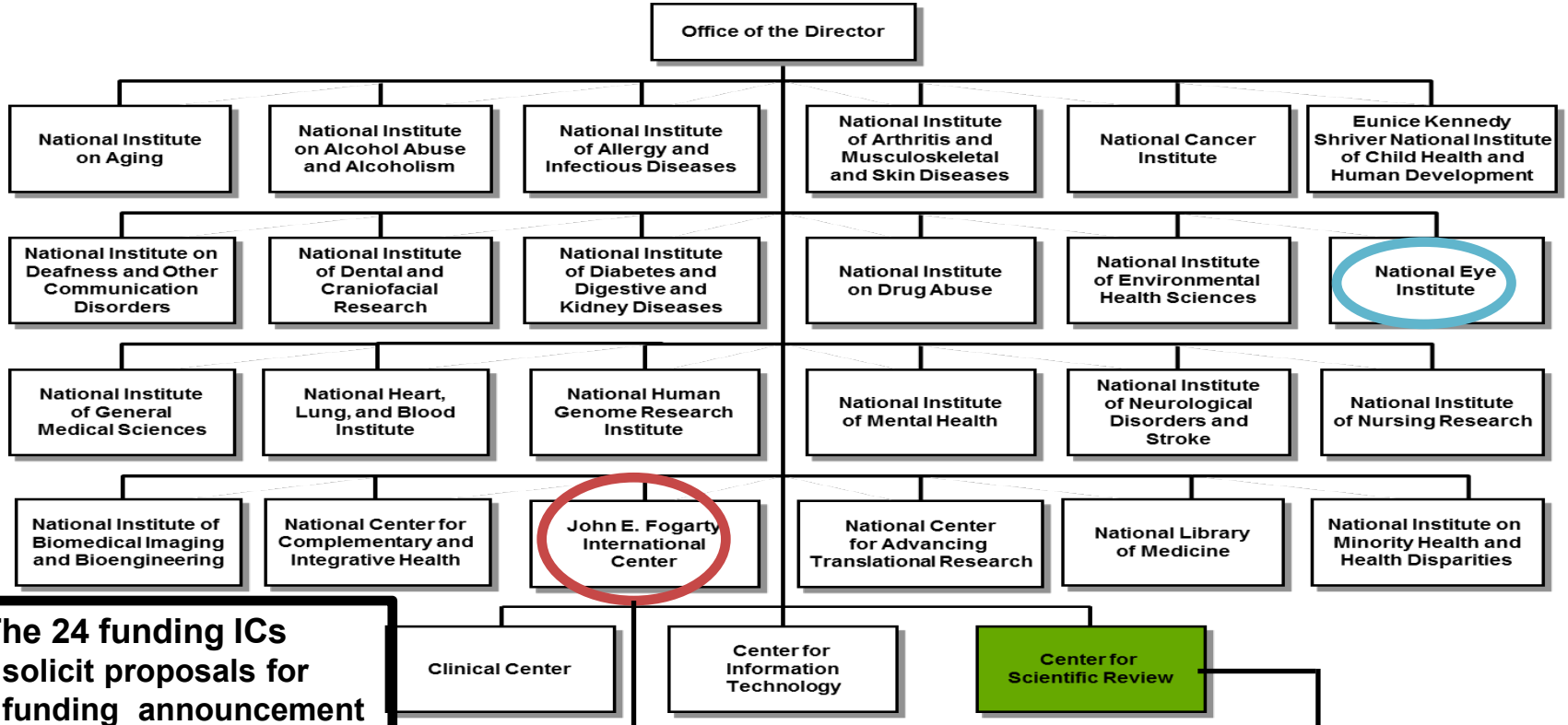
National Institutes of Health

Turning Discovery Into Health

NIH's mission is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

- Much of the biomedical research in the United States is supported by the Federal Government, primarily NIH.
- NIH is the only premier biomedical funding agency— both nationally and internationally—**to separate the solicitation and funding of proposals for a special program from the scientific review of an application's merit.**

27 NIH Institutes or Centers (ICs)



The 24 funding ICs

- **solicit proposals for funding announcement opportunities (FOAs)**
- **fund these and investigator-initiated projects following review of their applications by CSR or in their own small review branch**
- **have their own intramural research units**

- FIC co-funds most of the awards in its program with other ICs.
- **FIC does not have a review branch**

- **CSR's Division of Receipt and Referral** (DRR **receives every application** seeking NIH support and assigns each one to a funding IC and to a review branch
- **CSR only reviews applications that are submitted**; it does not fund them.
- **CSR conducts scientific merit review of most NIH research applications**

Center for Scientific Review

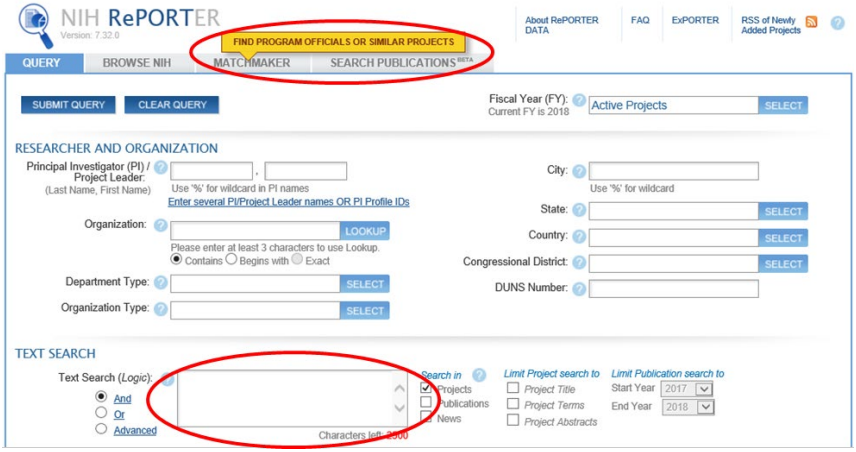
Gateway for NIH Grant Applications

CSR's 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.

- Receives all NIH grant applications
- Assigns applications to one or more NIH Institute or Center for potential funding
- Assigns applications to CSR or NIH Institute review groups
- Conducts initial scientific merit review of most NIH research applications

CSR's Division of Receipt and Referral

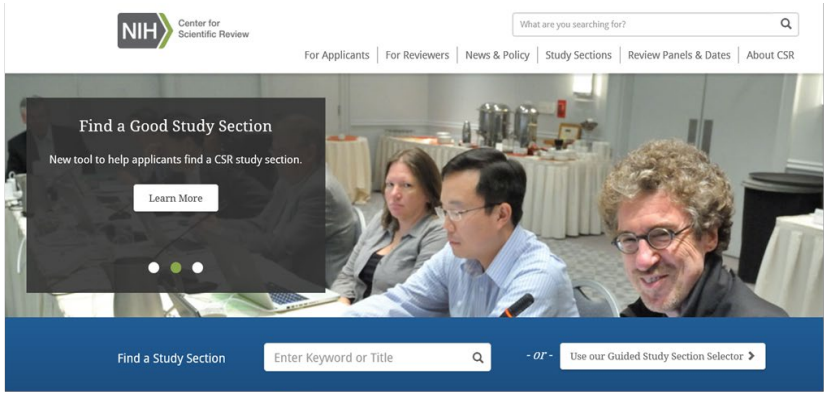
Refers the application to the appropriate funding Institute(s)/Center(s)



http://projectreporter.nih.gov

- Copy abstract/Aims;
- Matchmaker Search returns:
  - List of Institutes
  - List of funded grants
  - Link to Program Officials

Refers the application to a Scientific Review Panel



http://www.csr.nih.gov

- Assignment Request Form (ARF)
- Cover Letter

You should never suggest specific reviewers

Key Word **Search**

Assisted Referral Tool **Search**

CSR's Scope of Review

NIH

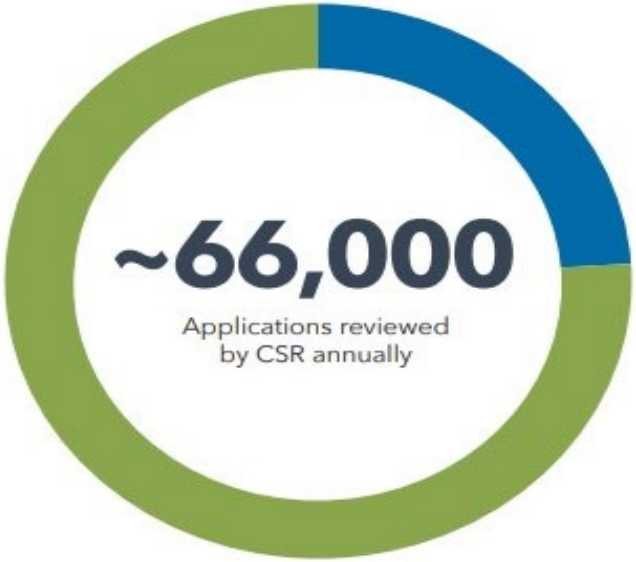
~88,000

NIH applications received annually

CSR

75%

of NIH applications are reviewed by CSR



92%

Research Project Grants (R01)

95%

Small Business (SBIR/STTR)

83%

Fellowship

~20,000

Reviewers participate

~1,300

Meetings

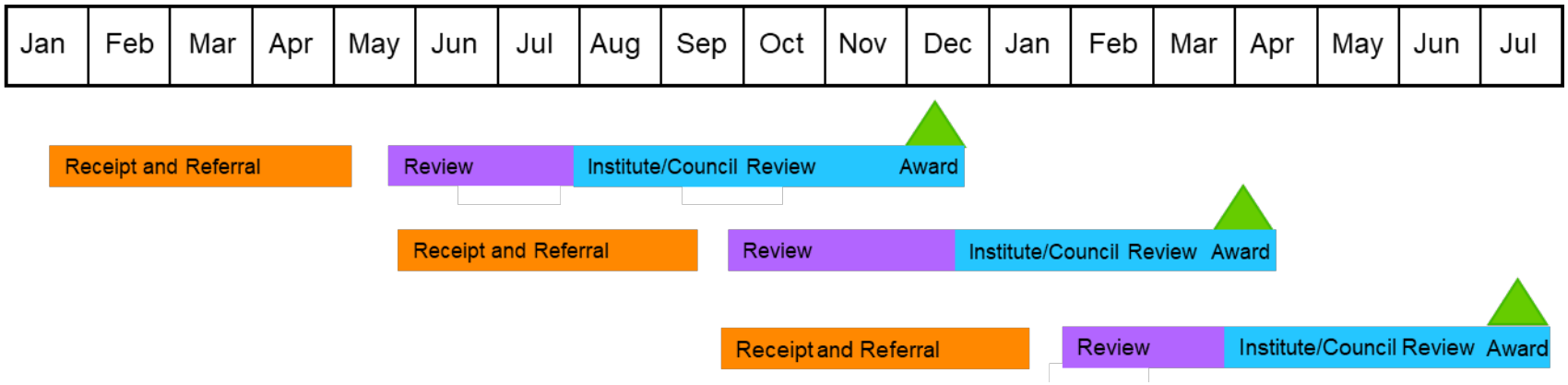
CSR

~250

Scientific Review Officers

NIH submission process

There are three main overlapping cycles per year



http://grants1.nih.gov/grants/funding/submissionschedule.htm

CSR's 5 Review Divisions and 27 Review Branches

Division of AIDS, Behavioral and Populations Sciences (DABP)	Division of Basic and Integrative Biological Sciences (DBIB)	Division of Neuroscience, Development and Aging (DNDA)	Division of Physiological and Pathological Sciences (DPPS)	Division of Translational and ClinicalSciences (DTCS)
Biobehavioral Processes Review Branch (BP)	Bioengineering, Biodata, and Biomodeling Technologies Review Branch (BBBT)	Aging and Neurodegeneration Review Branch (AN)	Disease Control and Applied Immunology Review Branch (DCAI)	Cancer Diagnosis, Prevention & Therapeutics Review Branch (CDPT)
Clinical Care and Health Interventions Review Branch (CCHI)	Basic and Translational Cancer Review Branch (BTC)	Basic Neuroscience Review Branch (BN)	Endocrine and Metabolic Systems Review Branch (EMS)	Cancer Therapeutics Review Branch (CTH)
Epidemiology and Population Health Review Branch (EPH)	Cell and Developmental Biology Review Branch (CDB)	Clinical Neuroscience Review Branch (CN)	Immunology and Infectious Diseases A Review Branch (IIDA)	Imaging, Surgery, and Bioengineering Review Branch (ISB)
Health Services and Systems (HSS)	Macromolecular Biophysics and Biological Chemistry Review Branch (MBBC)	Integrative and Cognitive Neuroscience Review Branch (ICN)	Immunology and Infectious Diseases B Review Branch (IIDB)	Integrative Vascular Biology and Hematology Review Branch (IVBH)
Social and Community Influences across the Lifecourse Review Branch (SCIL)	Molecular and Cellular Sciences and Technologies Review Branch (MCST)	Neurotechnology and Vision Review Branch (NV)	Kidney, Urology, and Digestive Systems Review Branch (KUDS)	Musculoskeletal, Skin, and Oral Sciences Review Branch (MSOS)
	Molecular Genetics and Genomics Review Branch (MGG)			Respiratory, Cardiac, and Circulatory Sciences Review Branch (RCCS)

240 Study Sections and Recurring Special Emphasis Panels reviewing Research Grants, Fellowships, Small Business Innovation Research and Academic Research Enhancement Award

Division of Neuroscience, Development and Aging (DNDA)

Review Branch	Scientific Review Groups
Aging and Neurodegeneration	**Bioengineering of Neuroscience, Vision and Low Vision Technologies (BNVT)**
Basic Neuroscience	Drug Discovery for the Nervous System (DDNS)
Clinical Neuroscience	**Pathophysiology of Eye Disease 1 & 2 (PED1 and PED 2)**
Neurotechnology and Vision	**Vision Imaging, Bioengineering and Low Vision Technology Development (VIBT)**
Integrative and Cognitive Neuroscience Review Branch (ICN)	**Small Business: Aging and Development, Auditory, Vision and Low Vision Technologies (ZRG1 NV 12)**
	Special Topics: Vision Imaging, Bioengineering and Low Vision Technology Development (ZRG1 NV-P 81)
	Special Topics: Noninvasive Neuromodulation and Neuroimaging Technologies (ZRG1 NV-Q 91)
	Small Business: Clinical Neurophysiology, Devices, Neuroprosthetics and Biosensors (ZRG1 NV 10)
	Small Business: Drug Discovery Involving the Nervous System (ZRG1 NV 14)
	Fellowships: Biophysical, Physiological, Pharmacological and Bioengineering Neuroscience (ZRG1 F03B)
	Small Businesses: Neuroscience Assays, Diagnostics, Instrumentation and Interventions (ZRG1 NV 13)

Assignment to CSR Study Sections

Within a Review Branch, applications are assigned to:

Standing Study Sections

- When subject matter of application matches the referral guidelines for the study section or

Special Emphasis Panels (SEPs)

- When the subject matter does not fit into any study section—recurring or for one time conflicts or initiatives.
- When assignment of an application to the most appropriate study section creates a conflict of interest
- When certain types of grants are sought (e.g., fellowships, SBIRs, AREAS)

Some of CSR's Vision/Eye research related Review Panels

- **Bioengineering of Neuroscience, Vision and Low Vision Technologies (BNVT):** Development of bioengineering approaches, therapeutic formulations, and drug delivery strategies for treatment of ocular disorders
- **Biology and Development of the Eye (BDE):** Basic biological studies of the eye with the focus on the fundamental processes and mechanisms.
- **Brain Imaging, Vision, Bioengineering and Low vision Technology Development (BIVT)** Studies that develop brain imaging approaches that primarily use light (e.g. e.g. optical or high/super-resolution microscopy, near-infrared spectroscopy, adaptive optics, optical coherence tomography) or sound waves (e.g. ultrasound and photo-acoustic imaging).
- **Emerging Imaging, Technologies in Neuroscience (EITN)** Applications that focus on radiofrequency waves or radioactive tracers (e.g. MRI, PET, SPECT).
- **Genetics of Health and Disease (GHD)**: Applications strongly focused on the genetics or transcriptome functions in ocular disorders.
- **Neuroscience of Basic Visual Processes (NBVP):** Applications seeking to study the neurobiological and developmental mechanisms underlying vision and visual perception in both humans and animal models.
- **Pathophysiology of Eye Disease (PED) 1 and 2**: Applications where the major focus is on etiology, pathophysiology, prevention, diagnosis, and treatment of diseases and disorders.

NIH Peer Review Process

- NIH peer review is governed by legally binding, stringent Confidentiality and Conflict of Interest Rules and Review Policy and Guidelines
- **Unique role of Scientific Review Officer** distinct from Program Official and other funding agency representatives
- Restricted Attendance and Access to NIH applications and meetings.
- Unique scoring system of 1-9, with 1 being the highest level of potential overall impact and 9, the lowest.
- **Two Levels of Review**

  1. Evaluation of scientific merit by a review panel
  2. Deliberation of funding post-review by each

     Institute/Center's National Advisory Council

Scientific Review Officer
(Designated Federal Official of Review Meeting)

- **Has a PhD and/or MD degree with a scientific research background**
- **Finds and Recruits Reviewers** who are
  - Recognized authorities in their field with a doctoral degree or equivalent, demonstrated scientific expertise/research support; mature, impartial judgment and breadth of perspective, and work effectively in a group context
  - NIH PI and reviewer databases, Internet, Scientific conferences and Volunteers
  - Recommendations from professional societies, reviewers, NIH staff and from NIH RePORTER (http://projectreporter.nih.gov/reporter.cfm)
- **Balances diversity (expertise, gender, minority and geography) on panels**
- **Selects Chair from among panelists who**
  - Has a particularly strong record of scientific productivity & grant funding history
  - Is a leader in their specialty with a particularly strong reputation for impartiality
  - Has an especially broad perspective
  - Communicates particularly well to moderate scientific discussions at the meeting
- **Assigns applications to reviewers, manages the meeting and conflicts**
- **Trains and guides reviewers and Chair to ensure fair and timely reviews**
- **Prepares summary statements, including synopsis of the review discussions at the meeting, to provide review outcome information to NIH Institutes/Centers and applicants.**

Before the Review Meeting – Confidentiality and Conflicts of Interest

Confidentiality – Mandated by NIH legal rules.

- Review materials and proceedings of review meetings represent confidential information for reviewers and NIH staff.
- At the end of each meeting, reviewers must destroy or return all review-related material.
- Reviewers should not discuss review proceedings with anyone except the SRO.
- Questions concerning review proceedings should be referred to the SRO.
- Applicants should never communicate directly with any members of the study section about an application.
- **Statute of confidentiality is life long**.

What Constitutes a Reviewer Conflict of Interest?

- Institutional (direct/indirect financial benefit)
- Family member/close friend has a major professional role on the application
- Collaborator is a Key Personnel on the application
- Longstanding scientific disagreement
- Personal bias
- Appearance of conflict to a reasonable person

http://grants.nih.gov/grants/peer/peer_coi.htm

Review Criteria

5 Scored Review Criteria

Each Scored from 1 to 9

- **Significance**
- **Investigator(s)**
- **Innovation**
- **Approach**
- **Environment**

Overall Impact

Scored from 1 to 9

Assessment of the likelihood for the project to *exert a sustained, powerful influence on the research field(s) involved*

Reviewing Rigor and Transparency in Research Project Grant Applications

1. Rigor of Prior Research in support of the project
2. Scientific Rigor of the proposed Approach
3. Consideration of relevant biological variables
4. Authentication of Key Biological and/or Chemical Resources

Overall Impact	Scores	Examples
High	1 2 3	Applications address a problem of high importance/interest in the field. May have some or no technical weaknesses.
Medium	4 5 6	Applications may address a problem of high importance in the field, but weaknesses in the criteria bring down the overall impact to medium. Applications may address a problem of moderate importance in the field, with some or no technical weaknesses.
Low	7 8 9	Applications may address a problem of moderate/high importance in the field, but weaknesses in the criteria bring down the overall impact to low. Applications may address a problem of low or no importance in the field, with some or no technical weaknesses.

Additional Scorable Review Criteria to assess Overall Impact

- Protections of human subjects
- Inclusion plans for sex/gender, race/ethnicity, and age of human subjects across the lifespan
- Appropriate use of vertebrate animals
- Management of biohazards
- *Resubmissions and Renewals*

Other non-scoreable considerations

- **Resource Sharing Plans**
  - Data
  - Model Organisms
  - Genomic Data (Human and nonhuman)
- **Authentication of Key Biological/Chemical Resources**
- **Foreign Organizations**
- **Select Agents**
- **Budget**

Before the Review Meeting

- **Review Format:**
  - Face to Face in a closed room
  - Telephone Assisted Meetings
  - Video Assisted Meetings
  - Virtual Internet Meetings

- **Reviewer Assignments:** Each application is assigned to 3 or more reviewers 5-6 weeks in advance

- **Reviewer's Role: To provide**
  - Preliminary Overall Impact score
  - Criterion scores for each of the 5 core review criteria
  - A written critique
  - Comment on appropriateness of proposed budget

- **Chair's Role: To assess**
  - Partners with their Scientific Review Officer to conduct the meeting
  - Guides and summarizes study section discussion
  - Ensures all study section member opinions are given careful consideration
  - Manages scientific discussions at the meeting, e.g., timeliness and thoroughness

At the Review Meeting

Clustering of Review: **R01** applications from NI/ESI are clustered and reviewed separately.

- **New Investigator (NI):** PD/PI who has not yet competed successfully for a substantial NIH independent research award
- **Early Stage Investigator (ESI)** PD/PI who qualifies as a New Investigator AND is within 10 years of completing the terminal research degree or is within 10 years of completing medical residency (or equivalent)

Order of Review

- Applications to be discussed are reviewed in random order within each cluster.
- About half the applications will be discussed
- Applications unanimously judged by the review committee to be in the lower half are not discussed

CSR Study Sections: The Meeting

- Each CSR standing Study Section has ~20-22 regular members plus temporary reviewers from the scientific community
- About 70-100 applications are reviewed by each study section in 1-2 day meetings

- Any member in conflict with an application leaves the room
- Reviewer 1 introduces the application and presents critique
- Reviewers 2 and 3 highlight new issues and areas that significantly impact scores
- All members without a conflict are invited to join the discussion and then vote on the final overall impact score
- **Reviewers typically discuss the top half of the applications based on the preliminary scores and assign final impact scores**
- The panel will discuss any application from lower half if a reviewer presents a sound rationale for doing so.

Review Outcome

Priority Scores/Percentile Rank: based on Review Panel's collective vote

- The entire panel (except those in conflict) cast a final score on each discussed application.
- Individual scores are averaged and multiplied by 10 to give the final priority score
- A percentile ranks your application relative to the other applications reviewed by the study section at its last three meetings.
- Not all scored applications receive a percentile

Summary Statement – prepared by the SRO

- Includes Criterion scores and critiques from assigned reviewers
- The one's with priority score include the SRO's resume summarizing the panel's discussion.
- Prepared within 30 days to provide information to NIH Institutes and Center and Applicants.

Timeframe from Submission to Award

Center for Scientific Review

Division of Receipt and Referral

Assigns to Institute(s) and Review Group	2 weeks

Level I Review: Study Section

Recruits and Assigns Reviewers	2-4 weeks
Reviews for Scientific Merit	4-6 weeks
Meets	1-2 days
Releases Score	~3 days
Produces Summary Statement	~ 30 days

Level II Review: Institute or Center

Evaluates Relevance to Research Priorities	2-4 Months
Council Recommends Action	
Decision	

Competitive NIH Applications

Reviewers Look for

- Significance and impact
- Exciting ideas
- Clarity
- Ideas they can understand –
  Don't assume too much
- Realistic aims and timelines –
  Don't be overly ambitious
- Brevity with things that everybody knows
- Noted limitations of the study
- A clean, well-written application

Common Problems in Applications

- Lack of a strong scientific foundation
- 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

Insider's Guide to Peer Review for Applicants:
http://www.csr.nih.gov/applicantresources/insider

NIH Encourages Applicants to Describe their Research in Terms Easily Understood by Reviewers, Scientists, Congress and the Public

Titles, statements of public health relevance & abstracts should:

- Convey value of research in plain language
- Be understandable by both scientists and the public
- Clearly relay the potential impact of the research on health

The public accesses funded NIH grant info through
http://ProjectRePORTER.NIH.gov

Examples and more info:
http://grants.nih.gov/grants/plain_language.htm

Who Can Answer Your Questions?

Before You Submit Your Application

- A Program Officer at an NIH Institute or Center
- Scientific Review Officer

After You Submit

- Your Scientific Review Officer

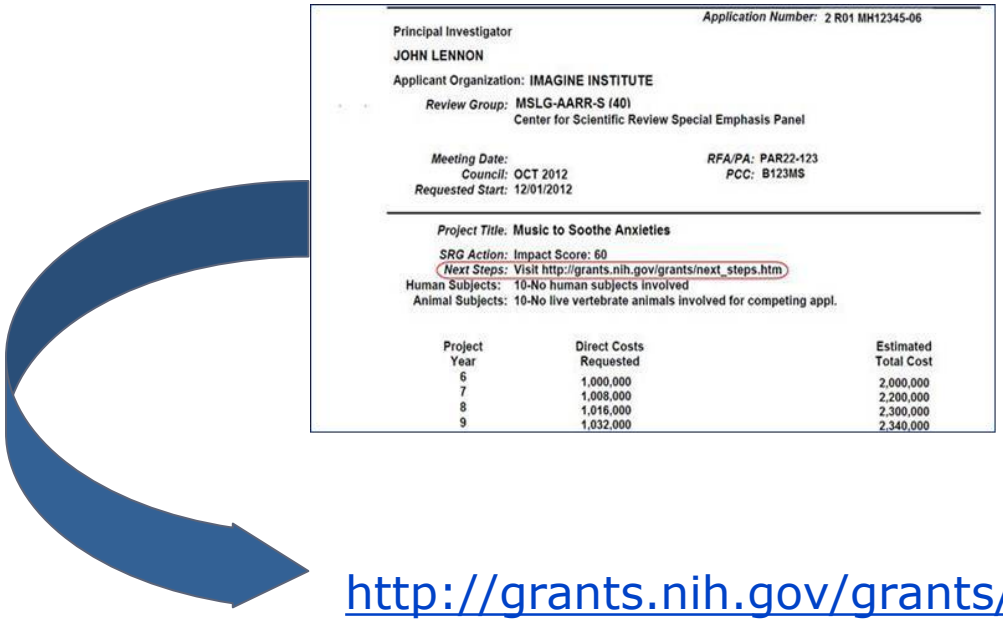
After Your Review

- Your Assigned Program Officer

GrantsInfo: GrantsInfo@od.nih.gov – 301 945-7573

Your Application Was Reviewed: What Do You Do Next?

Visit NIH's Next Steps Website



Application Number: 2 R01 MH12345-06

Principal Investigator

JOHN LENNON

Applicant Organization: IMAGINE INSTITUTE

Review Group: MSLG-AARR-S (40)
Center for Scientific Review Special Emphasis Panel

Meeting Date:
Council: OCT 2012
Requested Start: 12/01/2012

RFA/PA: PAR22-123
PCC: B123MS

Project Title: Music to Soothe Anxieties

SRG Action: Impact Score: 60
Next Steps: Visit http://grants.nih.gov/grants/next_steps.htm
Human Subjects: 10-No human subjects involved
Animal Subjects: 10-No live vertebrate animals involved for competing appl.

Project Year	Direct Costs Requested	Estimated Total Cost
6	1,000,000	2,000,000
7	1,008,000	2,200,000
8	1,016,000	2,300,000
9	1,032,000	2,340,000

http://grants.nih.gov/grants/next_steps.htm

NIH Peer Review Information on the Web

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
- **Electronic Submission**
  http://era.nih.gov/ElectronicReceipt

Center for Scientific Review: http://www.csr.nih.gov

- **Resources for Applicants**
  http://www.csr.nih.gov/ResourcesforApplicants
- **CSR Study Section Descriptions**
  http://public.csr.nih.gov/StudySections
- **CSR Rosters and Meeting Dates**
  http://public.csr.nih.gov/RosterAndMeetings

Helpful Handouts

Insider's Guide to Peer Review

Insider's Guide to Peer Review for Applicants

NIH Center for Scientific Review

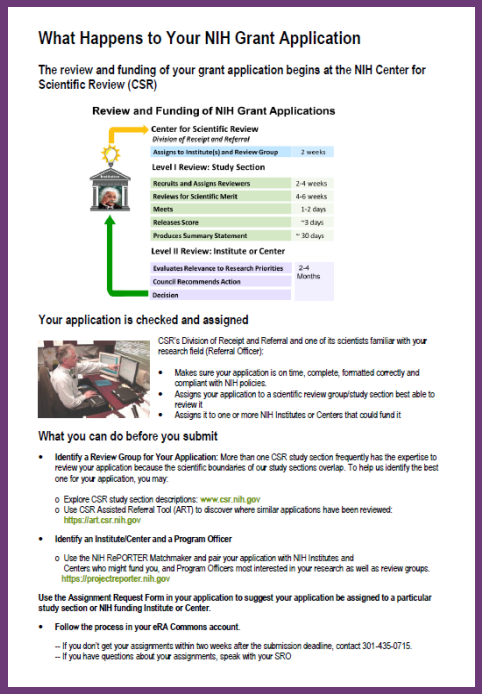
To help new and established applicants submit better applications, CSR asked current and recent study section chairs to share their personal insights on producing a highly competitive NIH grant application. They responded with great enthusiasm.

Don't jump too fast into writing your application: Since the most critical parts are the summary and specific aims sections, write a one-page summary page with specific aims first and share it with someone who is experienced, has their own funding or—ideally—someone who has served on a study section. If you can't wow them, start again and use the time you saved to come up with some fresh ideas.

Propose something significant: It is a real turn-off to read an application that is basically a re-hash of a previous project with a new issue. The same goes for "me too" research. Identify an area of current controversy or importance within your field. Make it something that would interest more people than you and your coworkers. Will it be important to clinicians or other investigators? Are you dealing with key questions or controversies in the field?

Good ideas don't always sell themselves: Tell me why it's important up front in the background section, and I'll be ready to roll. Tell me what's known and what isn't known and how, after you complete your studies, you'll move the field forward or answer important questions. A lot of people really are unaware of how absolutely important it is to tell the reviewer from the beginning why it's worth doing. If you're seeking an incremental advance over what's known, it's essential to justify it.

What Happens to Your Grant Application



What Happens to Your NIH Grant Application

The review and funding of your grant application begins at the NIH Center for Scientific Review (CSR)

Review and Funding of NIH Grant Applications

Center for Scientific Review
Division of Receipt and Referral

Assigns to Institute(s) and Review Group	2 weeks
Level I Review: Study Section	
Recruits and Assigns Reviewers	2-4 weeks
Reviews for Scientific Merit	4-6 weeks
Meets	1-2 days
Releases Score	~3 days
Produces Summary Statement	~30 days
Level II Review: Institute or Center	
Evaluates Relevance to Research Priorities	2-4 Months
Council Recommends Action	
Decision	

Your application is checked and assigned

CSR's Division of Receipt and Referral and one of its scientists familiar with your research field (Referral Officer):

- Makes sure your application is on time, complete, formatted correctly and compliant with NIH policies.
- Assigns your application to a scientific review group/study section best able to review it
- Assigns it to one or more NIH Institutes or Centers that could fund it

What you can do before you submit

- **Identify a Review Group for Your Application:** More than one CSR study section frequently has the expertise to review your application because the scientific boundaries of our study sections overlap. To help us identify the best one for your application, you may:
  - Explore CSR study section descriptions: www.csr.nih.gov
  - Use CSR Assisted Referral Tool (ART) to discover where similar applications have been reviewed: https://art.csr.nih.gov
- **Identify an Institute/Center and a Program Officer**
  - Use the NIH RePORTER Matchmaker and pair your application with NIH Institutes and Centers who might fund you, and Program Officers most interested in your research as well as review groups. https://projectreporter.nih.gov

Use the Assignment Request Form in your application to suggest your application be assigned to a particular study section or NIH funding Institute or Center.

- **Follow the process in your eRA Commons account.**

-- If you don't get your assignments within two weeks after the submission deadline, contact 301-435-0715.
-- If you have questions about your assignments, speak with your SRO

NIH Grant Application Useful Web Links

Applying for NIH Grants

Useful Links

NIH Office of Extramural Research: http://www.grants.nih.gov
Learn the Basics: https://grants.nih.gov/grants/grant_basics.htm

- Finding the right fit for your research
- What does NIH look for?
- Types of grant programs and applications

Plan Your Application: https://grants.nih.gov/grants/planning_application.htm

- Use NIH RePORTER to identify where your research fits best
- Contact NIH staff for guidance
- Explore the different Funding Opportunity Announcements (FOAs) to find the best fit
- Determine the application submission date, which varies by type of grant
- Involve your Office of Sponsored Research early in the process
- Learn about prior approvals you might need from NIH
- Learn about the NIH peer review process & criteria
- Consider other elements – collaborators, New Investigator status . . .

Learn How to Apply -- Application Guide:
https://grants.nih.gov/grants/how-to-apply-application-guide.html

- Prepare to apply using Form SF 424
- Submitting and tracking your application
- How to direct where your application is assigned and reviewed, using the PHS Assignment Request Form
  - Use NIH RePORTER — https://projectreporter.nih.gov — to identify possible funding institutes and review groups
  - Use CSR's Assisted Referral Tool — http://art.csr.nih.gov — to identify review groups

Discover NIH Programs to Advance a Diverse Workforce: https://diversity.nih.gov/programs-partnerships
Extramural Training Opportunities: http://grants.nih.gov/training/extramural.htm

The OER Grants Information support team will help you identify the best online resources or staff to answer your questions about funding opportunities and grant application forms, instructions, and policies: grantsinfo@nih.gov; phone 301 945-7573; https://grants.nih.gov/grants/giwelcome.htm.

NIH National Institutes of Health http://www.nih.gov

August 2020

http://www.csr.nih.gov/publications/

NIH Peer Review Revealed – View the Videos

- **What Happens to Your NIH Grant Application**
- **Navigating NIH Peer Review**
- **Jumpstart Your Research Career with CSR's Early Career Reviewer Program**

http://www.csr.nih.gov/video/

Top 10 NIH Peer Review Q&As

Top 100 NIH Peer Review Q&As www.csr.nih.gov/faq

Department of Biotechnology
Government of India

Department of Biotechnology
Ministry of Science and Technology
Government of India

DBT Application Process and Review

Dr. Vinita Chaudhary

HOW TO APPLY:

For the submission to DBT : please apply through this link;
https://dbtepromis.nic.in/Login.aspx

Steps for submission:

- Please login to eProMIS account (https://dbtepromis.nic.in/Login.aspx)
- Go to International Cooperation-Bilateral Programs area
- Open Call link for Indo-US Vision Research Program
- Submit proposal

Evaluation Process

- ✓ Peer Review
- ✓ Independent Review by DBT and NIH/NIE
- ✓ Consensus on shortlisted proposals

Evaluation Criteria

- **Significance**
- **Investigators**
- **Innovation**
- **Approach**
- **Scientific Environment**

ELIGIBILITY CRITERIA

Academic/Research Partners:

- Public and/or private universities and research organizations must have a well established research support system, for basic or applied research; and
- Submission of proof of establishment under Indian statue; recognition documents and registration at Government of India's Public Finance Management System (PFMS) - https://pfms.nic.in shall be obligatory.

NGO(s)/VO(s)/Trust(s)/Research Foundations:

- The Indian private R&D performing institutions and Not-for-profit, NGO(s)/ VO(s)/ Trust(s)/Research foundations should have experience of at least 3 years in scientific research, teaching, training and extension activities; and must follow research as one of the mandates;
- Proof of registration at 'NGO DARPAN' of NITI Aayog (http://ngodarpan.gov.in/), Certificate of registration under Society Registration Act, Firm's Memorandum of Association, Registration at Government of India's Public Finance Management System (PFMS) (https://pfms.nic.in), Valid SIRO certificate for firm's in-house R&D recognition and audited account statements for the past three years shall be obligatory.

Ineligible Organizations:

- Research centres and academic organisations headquartered and owned outside India and their subsidiaries in India, or vice versa, are not eligible to receive funding from DBT under this programme.

Consortium:

- The number of Indian project partners should be optimum and correspond to the objectives of the project. Each project should clearly demonstrate the partner's essentiality, complementarities, and added value in jointly addressing the topic.
- In case there is more than one Indian participant in a given proposal it is advised that the Indian participants appoint among them a **'Lead Scientific Coordinator'**, who can represent the Indian participants in the consortium vis-à-vis DBT.
- In case there is only one Indian participant in a given proposal it is advised that the Indian participant should include one Co-Principal Investigator in the proposal.

FUNDING SUPPORT BY DBT

Eligibility for Funding:

Budgeted cost of the project to legal entities subject to obligatory fulfillment to eligibility criteria.

DBT will support (Grant-in-aid) 100% of the approved budget cost to the following two categories of organizations:

1. Government of India supported or recognised public or private academic institutions or research organisation, and urban or other local bodies;
2. Indian private R&D performing institutions and Not-for-profit,NGO(s)/VO(s)/Trust(s)/Research Foundations, having research as one of the imperative mandates.

Eligible costs for funding are: Capital expenditure (equipment's) || Manpower || Consumables || Travel(local and international travel) || Contingency || Overheads || Outsourcing || Others. (*Academia can factor in additional sub heads (in other category) such as; workshops; publications; review meetings,etc.under expenditure based on the requirement of the project).*

Funding Instruments/Items

(Rs. in lakhs)

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Head	Year1	Year2	Year3	Total
A.Non-recurring				
1.Equipment				
TotalA				
B.Recurring				
1.Consumables				
2.Manpower (JRF/SRF/RA/TA)				
3.Travel(both Domestic and International for Project purpose)				
4.Contingency				
5.Overheads–as per DBT norms				
6.Outsourcing				
7.Others				
TOTALB				
TOTAL(A+B)				

Important Notice: *This budget table should be made for each Indian participating/applicant partner. Details and Justification should be provided for each head.Equipment cost should not exceed 30 per cent of totalprojectcost*

Non-AdmissibleCostfromDBT:

- Regulatory approval fees;
- Prosecution/litigation costs;
- Insurance coverage;
- Salary of investigators;
- Capital expenditure for the purchase of assets such as office furniture, motor vehicles, Office equipment viz. desktops, laptops, tablets, cell phones, scanners, printers, photocopy machines, and renovation or extension of facilities such as buildings and laboratories;
- Capital expenditure toward technology(ies), demonstration plants and associated field equipment(s), hardware, software etc. for test and analysis from consortium partner(s) from abroad;
- Expenditure toward rental and utilities;
- International travel to countries other than the one participating within the consortia in a particular call;
- Mere attendance at conferences/symposiums/congresses

REGULATORY, ETHICAL, SAFETY &STATUTORY CONSIDERATIONS (IF APPLICABLE)

Research Using Hazardous Microorganisms, Genetically Engineered (GE)Organisms & Products there off or R&D Purpose:

necessary intimation/ recommendation/ authorization from concerned Institutional Biosafety Committee (IBSC), Review Committee on Genetic Manipulation (RCGM) &Genetic Engineering Appraisal Committee (GEAC) is obligatory based on type & scale of researchoperations.

Further guidance on regulatory consideration scan be obtained from:

I) Guidelines and Hand book forIBSCs,2011 http://www.dbtindia.nic.in/wp-content/uploads/9.-Guidelines-_Handbook_2011.pdf

I) Regulations and Guidelines on Biosafety of Recombinant DNAResearch&Biocontainment,2017http://www.dbtindia.nic.in/wp-content/uploads/Draft-Biosafety-Regulations-andBiocontainment-Guidelines-2017-FF.pdf

II) Recommendations for Streamlining the Current Regulatory Framework, 2005http://www.moef.nic.in/divisions/csurv/geac/draftreport_rpharma.pdf

•Human and Animal Subjects Research:

I) National Ethical Guidelines for Biomedical and Health Research InvolvingHumanParticipants,2017http://www.icmr.nic.in/guidelines/ICMR_Ethical_Guidelines_2017.pdf

II) Indian PIs of the consortium should apply to their institutional review boards (IRBs)/ institutional ethics committees (IECs) at the time of submission of proposal to obtain necessary bioethics approvals from all involved institutions. If selected, Indian PIs are required to submit proof of their institution's IRB/IECs approval to DBT by before start of project.