News, Opportunities and Deadlines for March 2024

2024 LBRN Summer Research Program

Dear LBRN Community,

The Louisiana Biomedical Research Network (LBRN) sponsors a summer research program in support of undergraduate students, graduate students and faculty from any Louisiana institute. We offer qualified participants the opportunity to work in established research laboratories on their own campus or LBRN flagship institutions at Louisiana State University, LSU Health Sciences Center in New Orleans, LSU Health Sciences Center in Shreveport, Tulane Medical Center, or Tulane National Primate Research Center. The goal of our program and funding is to support biomedical research through an increase in graduate school admissions in these scientific fields and make Louisiana researchers more competitive in obtaining federal funding for research.

Our Summer Research Program is a research based summer program for faculty, graduate students and undergraduate students attending a Louisiana college or university. The program will be held **May 27 – Aug 3, 2024**

Application deadline: Friday, April 12th, 2024

Thank you,
LBRN Admin Core

Registration : https://lbrn.lsu.edu/summer-research-program.html

or

Registration Now Open
for
NISBRE2024 Conference

at Washington Hilton, Washington DC
June 16-19, 2024

2024 National IDeA Symposium of Biomedical Research Excellence (NISBRE) Conference

NAIPI aims to protect and promote the IDeA programs. It fosters interactions, promotes resource sharing, enhances the national visibility of the INBREs, COBREs, and CTRs, develops consensus on priorities, identifies and disseminates best practices, identifies opportunities and develops strategies.

The 9th Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE) will be held in Washington, D.C. June 16-19, 2024 at the Washington Hilton. Louisiana State University (LSU) has been awarded an NIH: NIGMS U13 grant to organize 2022, 2024, and 2026 NISBRE meetings.

The NISBRE is a national scientific meeting to showcase the scientific and training accomplishments of the IDeA program of the National Institute of General Medical Sciences (NIGMS). The IDeA program develops scientific centers of excellence and also supports Networks such as INBRE, COBRE, and IDeA-CTR programs and trains biomedical scientists in the IDeA-eligible states.

Dates : JUNE 16-19, 2024
Location : Washington Hilton, Washington, D.C.

Important Dates

- Abstract submission deadline is March 18, 2024.
- Nominations for NISBRE awards are due April 15, 2024.
- Registration is open until April 15, 2024.

We are particularly interested in undergraduate students to submit an abstract and we will be providing the travel/registration funding to the students (preferably minority students) upon their acceptance of the abstract and faculty.

NIGMS Feedback Loop

- **Application and Funding Trends in Fiscal Year 2023**

Posted by Reina Villanueva-Unger and Jon Lorsch on March 20, 2024

NIGMS continues to support a broad range of scientific topics and investigators within its research portfolio, including support for investigator-initiated research project grants (RPGs) at institutions throughout the country. As part of its commitment to transparency, NIGMS examines and publishes data on annual trends reflected in its RPG portfolio. In this post, we review and describe investigator-level trends associated with competing R01/R01-equivalent RPGs including those in the Institute's R35 Maximizing Investigators' Research Award (MIRA) program.

..... continue to see more

- **Medical Scientist Training Program (MSTP) Funding Opportunity and Upcoming Webinar**

Posted by Mercedes Rubio, Miles Fabian, Andrea Keane-Myers, and Alison Gammie on March 19, 2024

We're pleased to announce our Medical Scientist Training Program (MSTP) notice of funding opportunity (NOFO) has been reissued (PAR-24-128). This NOFO continues our support of eligible, domestic organizations to develop and implement effective, evidence-informed approaches to dual-degree training and mentoring that will keep pace with the rapid evolution of the biomedical research enterprise and lead to the completion of both a clinical degree (for example, M.D., D.O., D.V.M., D.D.S., Pharm.D.) and a research doctorate degree (Ph.D.).

Join us to learn more about our MSTP (T32):

Friday, April 12, 1:30-3:00 p.m. ET

..... continue to see more

- **Also of Note**

- NIH Support for Conferences and Scientific Meetings (Parent R13 Clinical Trial Not Allowed) (PA-24-141)
- Notice of Intent to Publish a Funding Opportunity for Academic Research Enhancement Award (AREA) for Undergraduate-Focused Institutions (R15 Clinical Trial Not Allowed) (NOT-GM-24-017)
- Notice to Clarify the Eligibility Criteria of Program Directors/Principal Investigators in PAR-22-180 "Maximizing Investigators' Research Award (R35 - Clinical Trial Optional)" (NOT-GM-24-026)
- Read the executive order, Preventing Access to Americans' Bulk Sensitive Personal Data and United States Government-Related Data by Countries of Concern, and submit comments on the accompanying advanced notice of proposed rulemaking

---

HPC Training

Note that all HPC trainings will start at 9:00AM.

- **March 20,2024: Magic Tools to Install & Manage Software Part 2: Singularity Container**

Installing and managing software packages often poses a challenge to HPC users on Linux systems without root permission. This two-part mini-series is aiming at introducing helpful tools to remedy that. **Part 2** will feature container technology and the software Singularity (a.k.a. Apptainer), a popular implementation of containers on HPC. Containers are gaining increasing popularities for its flexibility and portability. More and more developers now start to release their software packages as working containers for users' convenience. In this training, we will discuss how to use Singularity to run container images on our clusters, acquire more container images, and build your own container images. We will also showcase the usage of containerized popular packages such as Tensorflow and PyTorch.
Prerequisites: Basic understanding of the Linux OS and shell commands is assumed but not required.

- **March 27,2024: Introduction to GNU Parallel**

In scientific computation disciplines, such as bioinformatics and computational biology, many computational tools are serial in nature. To effectively run many serial jobs simultaneously on multi-core HPC platform can be challenging. GNU Parallel is an easy to use and also powerful tool for executing commands/tasks in parallel on one or multiple host machines. This training will introduce GNU Parallel and its basic features. Hand-on, real-world examples will be demonstrated on how to run different types of massive individual tasks using GNU Parallel.
Prerequisites: Basic knowledge of HPC environment and Linux is preferred but not required.

Please visit http://www.hpc.lsu.edu/training/tutorials.php for more details and register using the link provided. Users will be provided with a zoom link in their registration confirmation email.

40th Southern Biomedical Engineering Conference.

When : September 13-15, 2024
Where : Louisiana State University Health Shreveport, Shreveport, LA

(Major Sponsors- Department of Orthopaedic Surgery, LSU Health Science Center-Shreveport and Mississippi Academy of Sciences**)**

Abstract Deadline: April 30, 2024

Additional information is at https://sbeconference.org/40th-sbec/

SuRE R16 NOFO Announcement

SuRE Resource Center

A pathway for under-resourced academic institutions to build research capacity and increase NIH funding success.

SuRE R16 NOFO Announcement

The National Institutes of Health (NIH) has published NOFOs for the SuRE (PAR-24-144) and SuRE-First (PAR-24-145) R16 grant mechanisms. Notable changes include:

Deadlines
Beginning in 2024, each SuRE R16 grant now has two annual submission deadlines, with the due dates being the same for each. The next due date for both SuRE and Sure-First applications is May 29, 2024.

- 2024: May 29 and Sept 27
- 2025: May 28 and Sept 29
- 2026: May 27 and Sept 28

PEDP Attachement
The NIH now requires that an attachment called a Plan for Enhancing Diverse Perspective (PEDP) be included with all R16 submissions. This is a summary of strategies to advance the scientific and technical merit of the proposed project through inclusivity. The PEDP is submitted as a one-page "Other Attachment" to be included in grant applications. You may learn more by visiting this NIH page on PEDPs.

News from Fogarty International Center at NIH

NIH Fogarty International Center

NIA releases Notice of Special Interest on U.S. Health in the International Perspective

This NOSI expresses NIA's interest in research that examines mechanisms and causes behind the increasing U.S. health disadvantage, which refers to worsening life expectancies and health outcomes in the U.S. compared to other countries. Applications proposing analysis of existing data collected in LMICs are welcomed, as LMICs often have greater variation and speed of change in their policy contexts compared to high-income countries.

- Notice of Special Interest (NOT-AG-24-004)
- First Available Due Date: June 5, 2024
- Expiration date: May 8, 2027

Fogarty to host G11 Pre-Application Webinar

The Fogarty International Center will hold two free pre-application interactive Q&A webinars for the Fogarty Infrastructure Development Training Programs for Critical HIV Research at Low-and Middle-Income Country Institutions (G11) funding opportunity.

- Webinar dates:
  - April 22, 2024 - 8:30-10a.m. ET (USA) - Register
  - May 22, 2024 - 2:00-3:30pm. ET (USA) - Register
- Application deadline: August 22, 2024

NIH funding opportunities for which foreign organizations and/or foreign components of U.S. organizations may apply:

- Exploring Proteogenomic Approaches to Unravel the Mechanisms of Mis-Folded Protein Accumulation in Tauopathies (R01 Clinical Trial Not Allowed) (RFA-AG-25-017)
  Application due date: Multiple dates, see announcement.
- Research on the Neuro-Immune Axis in the context of HIV and Substance Use funding opportunities:
  - Research on the Neuro-Immune Axis in the context of HIV and Substance Use (R01 Clinical Trial Not Allowed) (RFA-DA-25-004)
    Application due date: Multiple dates, see announcement.
  - Research on the Neuro-Immune Axis in the Context of HIV and Substance Use (R21 Clinical Trial Not Allowed) (RFA-DA-25-005)
    Application due date: Multiple dates, see announcement.

NIH funding opportunities for which foreign components may apply:

- Utilizing Equipment to Study Environmental Extrinsic Factors and Enhance Rigor and Reproducibility of Animal Research (R24, Clinical Trials Not-Allowed) (PAR-24-167)
  Application due date: Multiple dates, see announcement.
- Center of Excellence for Systems Modeling of Infection and Immunity across Biological Scales (U54 Clinical Trial Not Allowed) (RFA-AI-23-077)
  Application due date: Multiple dates, see announcement.

The Next Gen. Conversations at Louisiana Tech University

Please join the Next Gen. Conversations.
Albany at Tech
June 11 - 15, 2024
Louisiana Tech University in Ruston

After a very successful 40 year series of Conversations at SUNY Albany, the Next Gen. Conversations will be held at Louisiana Tech

Additional information is at https://coes.latech.edu/albany-conversations/

NIH Extramural Nexus

- ## Seeking Ideas on Using Common Data Elements for NIH-Supported Clinical Research

Do you have thoughts on how common data elements (CDEs) may be used in NIH-supported clinical research? If so, please share them in response to this recently released Request for Information.

CDEs allow for easier exchange of data across different research areas because they are standardized, consistent, interoperable, and defined. They represent one way that NIH implements FAIR (Findable, Accessible, Interoperable, and Reusable) data principles. In addition, as we mentioned in this post from 2021, CDEs help us implement one aim of the NIH Data Science Strategic plan, which is having data resources that maximize the value and rigor of NIH research investment.

Identifying the right CDEs can be difficult. This is because data collection methods and models vary between disciplines. Systems may need to be adapted to collect new information. Common vocabulary and definitions must be agreed upon. And researchers need time to find the appropriate CDEs for use in their project.

NIH-supported clinical research represents an area where using CDEs may have promise though. Currently, there are no established CDEs for use across all NIH-funded clinical research activities. But if appropriate CDEs are adopted, then our supported clinical research data could be integrated with other healthcare information obtained from electronic health records, coverage claims, and patient-reported outcomes, thereby allowing for new analyses to be performed. With this in mind, we seek your input on the following:

- **Recommended CDEs for NIH-funded clinical research/trials, including a set of minimal core CDEs**
- Tools and technologies that could enhance the use of NIH CDEs
- Policies facilitating and/or incentivizing broader CDE usage in research and in data sharing and management

We would greatly appreciate your feedback by April 20, 2024. Comments may be submitted online via the RFI or by emailing a PDF response to cde-rfi@od.nih.gov.

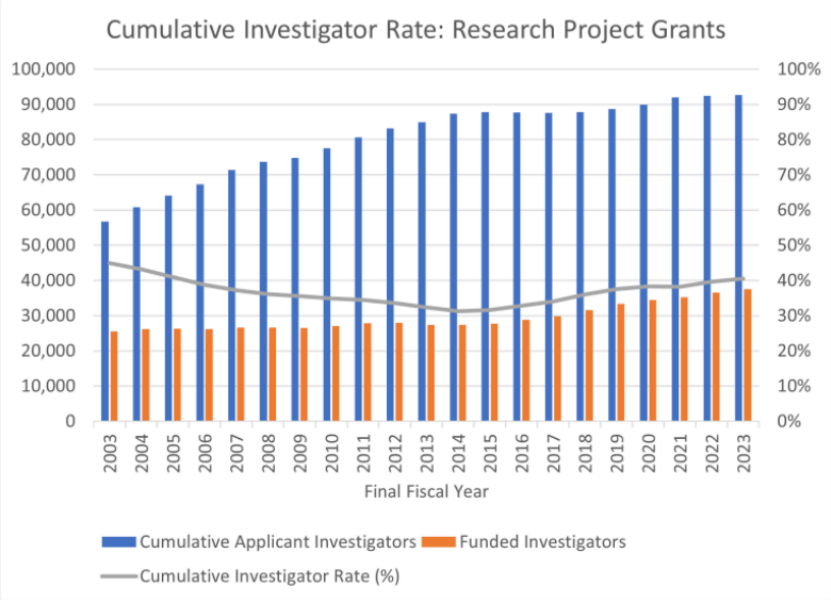
How Many Researchers: The FY 2023 Cumulative Investigator Rate

We are pleased to share our annual snapshot of how many researchers NIH supports. These fiscal year (FY) 2023 data are also available in the NIH Data Book (see report #303) and represent awards made with traditional and supplemental coronavirus appropriations. Please keep in mind that these data are distinct from success rates, however, which are application-based metrics (see this recent post).

Our cumulative investigator rate is an NIH-wide person-based metric. The metric is calculated as the number of unique principal investigators who were designated on an NIH research project grant (RPG) award, divided by the number of unique principal investigators who were designated on applications over a five-year period. For simplicity, we will refer to those investigators as either "awardees" or "applicants" in this post, even though NIH receives applications from and issues awards to institutions, not individual scientists. We focus on a five-year timeframe because most research grants last for more than one year, and applicants submit applications with the goal to secure multiple years of funding. We also only count someone once if they are designated on separate applications from the same or multiple NIH Institutes or Centers in a particular five-year timeframe.

Figure 1 shows cumulative investigator rate data for RPGs between FYs 2003 and 2023. Applicants are in blue bars, awardees in orange bars, and the cumulative investigator rate itself is the gray line. NIH supported 37,543 awardees in FY 2023, out of 92,691 applicants. This is an increase of 2.6% and 0.2%, respectively, over FY 2022, and the cumulative investigator rate was 40.5%.

Figure 1. Cumulative Investigator Rate: Research Project Grants: FY 2003 to 2023



..... continue to see more

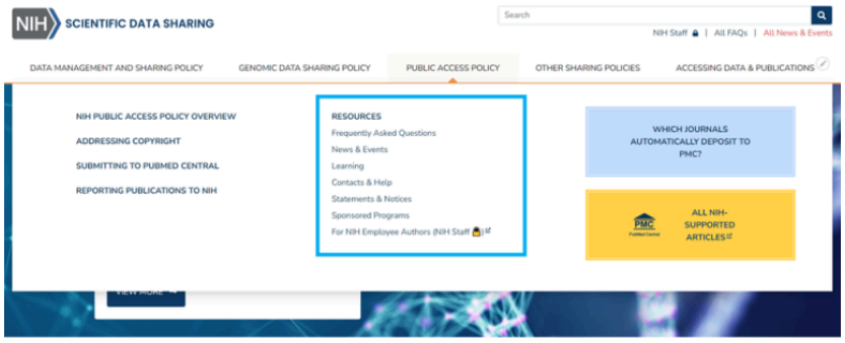
New Location for NIH Public Access Policy Content & Resources

As of March 12, 2024, the NIH Public Access Policy content and resources have been consolidated into the NIH Sharing Site.

Information about the NIH Public Access Policy now appears in a new tab on the NIH Scientific Data Sharing website:

There are **no policy changes** associated with this migration.

In addition, resources for each sharing policy have been consolidated within the tab for that individual policy:



We have implemented redirects from the previous Public Access website to the new Public Access Policy tab of the Scientific Data Sharing website. **The redirects will be in place for one year**. Please update your URLs, bookmarks, and any other references during that time. An archive of the previous site will continue to be available after the one-year period.

LONI HPC Allocation for LBRN

To support the LBRN / BBC Core community on LONI HPC systems, we have renewed our high-performance computing allocation for 2024.

This can be utilized in lieu of individual investigators having to apply for and acquire their own allocations to access the HPC resources. If any of your campus members need access to high performance computing, please have them interface with Dr. Nayong Kim.

LBRN "Core Bucks"

The BBC Core and MCBR Core offer researchers the opportunity to earn “Core Bucks” to support faculty and students upto $1500. Requests for Core Bucks from Member Institutions must be initiated through the respective Core Contact on campus.

- The Bioinformatics, Biostatistics, and Computational Biology Core (BBC Core)

The BBC Core serves to train and support project investigators and their teams across Louisiana. It works to enable Louisiana Biomedical Research Network project PIs and their teams to employ Louisiana cyberinfrastructure (especially high performance computing), and to provide bioinformatics services, training, and educational support.

The core provides bioinformatics training, conducts workshops, and provides bioinformatics analysis services. The core also provides access to the IBM Delta Cluster and has a dedicated BBC allocation for the high performance computing resources at LSU. The BBC Core maintains software licenses and access to Ingenuity Pathway Analysis (IPA), Partek Flow, DNASTAR, and Ion Torrent analysis software. In addition, several open source tools for bioinformatics such as bowtie, tophat, cufflinks, samtools, GATK, QIIME, DADA2, Phyloseq, etc. are installed and maintained.

Some examples of standard bioinformatics workflows that can be supported through core bucks requests:

- Gene Pathway Analysis
- RNA-Sequencing Processing and Analysis
- 16S rRNA Microbial Community Analysis
- ITS2 Fungal Community Analysis

Other workflows can be developed or adapted from existing software on an as needed basis.

For more information, see: https://lbrn.lsu.edu/cores.html#corebucks

- The Molecular and Cell Biology Resources Core (MCBR Core)

MCBR Core Services include both one-on-one training for faculty and students as well as workshops on topics like bioinformatics and protein purification.

Sample services:
1. Molecular Biology Reagent Equipment and Services

- GeneLab provides conventional and next generation nucleic acid sequencing (NGS), and recombinant DNA Service. NGS equipment includes Torrent PGM, Ion Proton etc
- NGS Services provides a reliable connection between NGS experiments and the analysis of NGS data

2. Protein Production, Purification and Characterization Laboratory

- Protein Purification and Characterization includes semi automated Bio-rad profinia affinity chromatography system, AKTA Explorer FPLC system, and HPLC and ultracentrifugation equipment
- Peptide Synthesis and purification
- Protein-protein interactions are investigated using primarily Surface Plasmon Resonance (SPR) implemented on Biacore and ForteBio SPR equipment. Additional physicochemical characterization of protein-protein interactions is available through collaborations with the LSU Department of Chemistry.
- Gene-to-Protein-to-Antibody Services – you provide the gene, we return an antibody

3. Molecular Immunopathology Laboratory Services

- Pathology Services including necropsy procedures, gross and histopathological examinations and interpretation of immunohistochemistry and special stains performed by veterinarians and histology specialists
- Flow Cytometry and immunophenotyping Services
- Multiplex/Luminex complements immunophenotyping services for rapid and standardized analysis of soluble factors e.g., lymphokines, using bead based array technology.
- Microscopy – contains transmission and scanning electron microscopes, a laser dissection microscope, a Leica TCS SP2 for 3D fluorescence microscope, and a high-throughput digital slide-scanner.

For more information, see: https://lbrn.lsu.edu/cores.html#corebucks

---

NIH LBRN Acknowledgement

So that we can most effectively communicate the scope and results of our funding support, we would like to know when you are planning news announcements about IDeA awards or program activities and achievements…

When you produce such material, please be sure to identify the IDeA program, not just the INBRE, COBRE or sub-program, and to provide context about the program's goals along the lines of:

The University of _____ has received $XXX from the National Institutes of Health (NIH) to support an Institutional Development Award (IDeA) Center of Biomedical Research Excellence. The IDeA program builds research capacities in states that historically have had low levels of NIH funding by supporting basic, clinical and translational research; faculty development; and infrastructure improvements.

In journal articles, news releases, or other materials about your program's activities or achievements, please use funding acknowledgement language such as:

Research reported in this {publication, release} was supported by an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health under grant number 5 P20 GM103424-21.

• In journal articles, oral or poster presentations, news releases, news and feature articles, interviews with reporters and other communications, acknowledge the IDeA program's full or partial support of the research. The citation in scientific publications should use the following format:

Research reported in this publication was supported by an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health under grant number P20GM103424-21.

• If you wish to acknowledge NIH/NIGMS funding on your Web site or other communication product, you may use wording such as:

Funded by an Institutional Development Award (IDeA) from the National Institutes of Health.
or
*Funded by the LBRN (*2P20GM103424-21) *an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health.*

Please do not use the NIH or NIGMS logo to acknowledge funding, as these logos are only to be used for material produced by NIH and its components.