News, Opportunities and Deadlines for November 2023

Happy Thanksgiving! May the warm glow of autumn surround you as you celebrate the holiday with family & friends.

- K. Gus Kousoulas, Principal Investigator, Louisiana Biomedical Research Network (LBRN)

Save the Date!

22nd LBRN Annual Meeting

This year, the LBRN will hold its Annual Meeting January 19-20, 2024 at the Baton Rouge Marriott. We are looking forward to bringing our funded researchers from across the state together to

showcase the culture of biomedical research excellence in our state. A closed Steering Committee Retreat will be held on Friday, January 19 at the hotel so that our Steering Committee members can provide detailed updates on the impact that the LBRN has had on their institutions.

Symposium for Proteomics Core Directors and Staff

The topic for the symposium this year is the DIA workflow. Data Independent Acquisition (DIA) is rapidly becoming the most popular global proteomic workflow. Instrumentation geared towards the DIA workflow have dominated the market in recent years. This year's symposium is centered around this very important technique. Whether you are a facility that has never tried DIA or you have years of experience this workshop will cover the details from experimental design to data processing in a highly interactive format. Attendees will also share best practices, discuss cutting-edge techniques, and dialog about shared instrumentation grants.

The 2024 workshop will be held February 20 – 21, 2024. The deadline to apply is December 15, 2023.

Preparing Figures for Publications and Grant Applications

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Tue, Dec 19, 3:00-4:00 PM Eastern The visual representation of data can enhance the quality of your application by presenting complex and lengthy content in a time- and space-effective manner. Incorporating figures can provide clarity around complicated topics, and displaying data from

preliminary studies can support the premise of an application. However, if poorly designed and improperly applied, they can also detract from the overall impression of a proposal. This webinar will explore best practices to avoid common mistakes and to understand how to present figures simply and effectively.

- Learn best practices for presenting data in a way that clearly conveys the main point, is transparent, and is accessible to all.
- Review examples of figure legends that demonstrate a rigorous approach to experimental design.
- Consider strategies for including figures while dealing with the space limitations of a grant application.

LBRN - Requesting Proposals for Research Projects

Applications Are Open!

The application period for Research Funding Proposals (RFPs) is now open through **December 8, 2023**. Submit your proposal here: https://lbrn.inforeadv4.com/

About
The LBRN receives funds from NIH/NIGMS to fund biomedical research throughout the state. Please note that starting this year, **all Louisiana Primarily Undergraduate Institutions are eligible for funding** in the following areas:

- **Computational & Structural Biology**
  This area includes development of new computational approaches to solving significant bio-medical questions, biological modeling, bioinformatics, or investigations of molecular structure.

- **Molecular Mechanism of Disease**
  This area includes investigations focused on understanding the molecular mechanisms of significant human diseases, including, but not restricted to cancer, metabolic disorders, and infectious diseases.

- **Preventive Medicine**
  This area includes basic research important in the prevention of major human diseases. Research topics might include work such as the development vaccines, tissue engineering, drugs or new diagnostic tests.

Additional information on funding can be found on the application page. You can also email Program Coordinator Brent Stanfield at bstanf5@lsu.edu with questions.

Weekly Update from DRCB / NIGMS

Updates from DRCB/NIGMS

Issue 157, 11/06/2023
NIH Funding Opportunity and/or Policy Announcements

- ***Reminder:*** IDeA CTR-N Award (PAR-23-241) & CTR-D Award (PAR-23-257). Applications Due: November 9.
- Diversity, Equity, Inclusion, and Accessibility (DEIA) Mentorship (NOT-OD-24-001). Applications Due: February 16.
- Correction: Locus of Peer Review for Interactive Digital Media (IDM) Biomedical Science Resources for Pre-College Students and Teachers (NOT-GM-24-008).
- Simplified Review Framework for NIH RPG Applications (NOT-OD-24-010).
- Showcase Opportunities for SBIR and STTR Awardees (NOT-OD-24-013).

Issue 156, 10/30/2023
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- **NOTICE:** Expanded Program Eligibility for PA-23-189 “Research Supplements to Promote Diversity in Health-Related Research” (NOT-GM-24-003). **IDeA, NARCH, SuRE, and SCORE grantees** are eligible to apply for this opportunity. See the recent *Feedback Loop* post and NIGMS Diversity Supplement website for more information. Applications accepted: October 1 – May 31.
- Modern Equipment for Shared-use Biomedical Research Facilities: Advancing Research-Related Operations (PAR-24-028). Applications due: November 15.
- Encouraging Small Businesses to Partner with Resource-Limited Institutions (RLIs) on SBIR and STTR Program Applications (NOT-OD-23-179). Applications Due: January 5.

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NIH Extramural Nexus

Opportunity for Outstanding DEIA Mentors to Apply for Supplemental Funding

Numerous NIH institutes and centers are inviting applications, and supplements are available for various grant types, including career development, training, cooperative, and Research Project Grants (e.g., R01s). The parent grant must have a mentoring component in the reviewed objectives or an active diversity supplement. Applicants may request up to $250,000 in direct costs per year for one or two years, depending on institution type, and cannot exceed the direct costs of the parent award. Funds will support their current or future efforts. The deadline to apply is **February 16, 2024**.

Please review the NOSI and read the DEIA mentorship supplements FAQ for eligibility and application information.

Prospective applicants should join me for an informational webinar on **Monday, December 11, from 1:30–3:00 p.m. ET**, where I will provide an overview of this funding opportunity and address questions. Webinar registration is open, and attendees can submit questions in advance via COSWDevents@nih.gov. An event recording will be available for those unable to attend.

Read More ...

Trends in NIH-Supported Basic, Translational, and Clinical Research: FYs 2009-2022

I often hear concerns raised that NIH does not fund enough basic research, or enough applied research for that matter. Basically, the concerns center around what is the correct balance. It is an important point to consider, as a better understanding of these wider research areas can shed light on NIH's approach to higher-level priority setting and funding decisions.

To get at this question, we leveraged the Research, Condition, and Disease Classification (RCDC) system and looked at trends in NIH funding of these areas between fiscal years (FYs) 2009 and 2022. For the purpose of this analysis, we used projects reported in the Clinical and Translational RCDC categories to define "applied" research. Projects that were not reported in the Clinical and Translational categories were used to define "basic" research. Projects in the "applied" and "basic" groupings align with the NIH definitions for basic, clinical, translational research. RCDC categories are validated by subject matter experts and have accuracy of more than 90%. Additionally, the results from this basic and applied analysis have also been validated by several ICs within their portfolio. This blog explains more about the RCDC process.

Read More ...

What Early Career Researchers Should Know (Part 2) – Discovering Strengths to Advance Your Research Career

In our second episode of a two-part NIH All About Grants mini-series, we explore ways early career researchers can align and apply their strengths to advance their professional development. Dr.

Marguerite Matthews, a program director and co-host of Building Up the Nerve with the National Institute of Neurological Disorders and Stroke, and Dr. Ericka Boone, Director of the Division of Biomedical Research Workforce at the NIH Office of Extramural Research, join us in this conversation building off what we previously heard about the "hidden curriculum" (Part 1). They will share experiences and perspectives on how personal growth and professional development intersect, setting a plan to identify your strengths, reiterate the importance of engaging your network, the power of communication, and much more.

"Personal and professional growth is an ever-evolving and iterative process. What you need today may not be what you need tomorrow, or next year, or 10 years from now…don't be afraid to constantly evolve and change, and maybe revisit some things, take on new things. But you don't have to have it figured out…certainly there are so many aspects of your life that are going to continue to change, and you should be helping that change along."– Dr. Marguerite Matthews

"I really feel like, once a person starts to understand who they are more, and understand some of their own personal strengths, you feel a lot more confident in yourself, you feel a lot more confident in your abilities, and you feel a lot more confident in your ability to be able to grow and develop even further…Just don't be afraid to ask questions. Don't be afraid to gain more strengths and skills in more areas than just your scientific area, because it's really important to help develop you as an investigator, or as a researcher, or a person that's in the biomedical research workforce more generally." – Dr. Ericka Boone

- ## Reviewers, Some Handy Resources to Help With Required Training

Most reviewers participating in review meetings in early 2024 are required to complete 2 training modules before they can access their assigned applications in the Internet Assisted Review (IAR) module. The training, to be taken once every 3 years, is designed to raise awareness of bias in review and actions that breach the integrity of peer review (See NIH Guide Notice NOT-OD-23-156 and Open Mike blog).

Two resources are available to help reviewers:

- An eRA webpage: Take Required Review Integrity & Bias Awareness Training
- An updated eRA video tutorial: For Reviewers: You Received an IAR Invitation. Now What? (see section on Reviewer Training at 5:51)

The IAR module will begin system checks starting November 2, 2023 to determine if reviewers have taken the trainings. If reviewers have not taken the training, they will not be able to access their applications. Instead, they will see a message with a NIH training site link to complete the training.

For reviewers who have already completed the training, it will be business as usual in IAR.

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 2022 / 2023.

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

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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.
