News, Opportunities, and Deadlines for September 2024

LBRN 23rd Annual Meeting

Each year the LBRN program has an annual meeting in which program participants, committee members and administrators meet to review individual research accomplishments and to discuss the overall program activity. Summer research faculty and graduate and undergraduate students are encouraged to present their LBRN sponsored research, and talks are scheduled to highlight sponsored research projects from partnered campuses across the state.

The 23rd LBRN Annual Meeting will be held virtually on Thursday and Friday, February 20-21. Details and registration information will be posted on the LBRN webpage later on.

LSU Vet Med - Graduate Student Open House

GRADUATE STUDENT OPEN HOUSE

Learn about our research programs, meet students, faculty and staff, and tour our facilities to see the myriad opportunities available in our three academic departments.

LSU Vet Med is a superior biomedical research institution with scientific experts in a variety of

disciplines. You do not need to have experience or even an interest in veterinary medicine or veterinary research. We are seeking outstanding Ph.D. students in all areas of departmental research strengths.

SATURDAY, OCTOBER 5, 2024
9 AM - 4 PM
LSU SCHOOL OF VETERINARY MEDICINE

COMPARATIVE BIOMEDICAL SCIENCES

- Anatomy and Developmental Morphology
- Biomedical Imaging
- Cancer, Oncology, and Mutagenesis
- Cell and Molecular Biology
- Lung and Cardiopulmonary Biology
- Neuroscience
- Toxicology Specialties

PATHOBIOLOGICAL SCIENCES

- Bacterial Pathogenesis
- Viral Pathogenesis
- Immunology
- Cancer Biology
- Lung Biology
- Parasitology
- Pathology

VETERINARY CLINICAL SCIENCES

- Biomedical Engineering & Regenerative Medicine
- Cancer Biology
- Equine Surgery
- Gastrointestinal Physiology
- Immunology
- Theriogenology
- Wildlife Epidemiology & Conservation Medicine
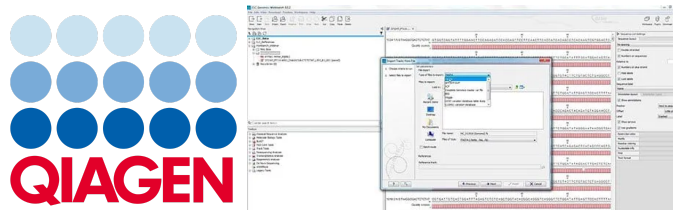- Zoological Medicine

CLICK HERE TO REGISTER OR TO REQUEST INFORMATION ABOUT OUR GRADUATE PROGRAM IF YOU CANNOT ATTEND
(Registration is limited to 100 attendees)

DOWNLOAD A PDF OF THIS INFORMATION

QIAGEN Computational Laboratory for Clinical Genomics Online Training

October 7: RNA-seq data analysis and interpretation with sankey plot update
https://qiagen.zoom.us/webinar/register/2016550838681/WN_TkTfIPOmTSmZFRNscebVzA

October 24: Long reads analysis using CLC Genomics workbench (with new features - 2024)
https://qiagen.zoom.us/webinar/register/2016550838681/WN_tOcSVnQMROCj4ZLeeFUzeg

Other trainings (IPA, OmicSoft, GEO data, COSMIC, scRNA-seq and more)
https://digitalinsights.qiagen.com/webinars-and-events/

CLC Genomics Workbench Software trial: (not required for trainings)
https://qiagen.showpad.com/share/I6MqdhIybpIIyvuYW3AKy

Funding Opportunities provided by LBRN

We are pleased to inform you that LBRN is currently in the process of assembling a carryover request, allocating $30,000 per PUI for equipment needs. This initiative aims to support our partner institutions in enhancing their research capabilities. Recently, we convened a meeting with the Steering Committee to discuss this proposal in detail, ensuring that the funds are effectively utilized to meet the specific needs of each PUI. We look forward to seeing the positive impact this will have on our collective research endeavors.

2024 SCWHE Virtual Women of Color Workshop

This annual workshop creates a space for individuals who identify as women of color within South Carolina's higher education institutions and organizations. It serves as a platform for these individuals to exchange inspiration and support, fostering a collaborative environment that contributes to their professional development. This year's theme is "Enhancing Momentum for Women of Color in Higher Education" and will feature 2 dynamic speakers.

Registration is open for the Women of Color Virtual Workshop, which will occur on **Oct 25**, 9 am to 12 pm, via Zoom.

Biomedical Research Initiative for Next-Gen BioTechnologies - NSF

The National Science Foundation Directorate for Engineering (NSF/ENG) and the National Institute of Biomedical Imaging and Bioengineering (NIH/NIBIB) announce the Biomedical Research Initiative for Next-Gen BioTechnologies – SynBio Control (BRING-SynBio) Solicitation. The BRING – SynBio Control solicitation aims to accelerate the translation of novel fundamental synthetic and engineering biology advances to early-stage biomedical technologies through interagency collaboration.

Projects responsive to the BRING–SynBio solicitation will include a two-phased plan to pursue proof of principle synthetic and engineering biology research (Phase I) and exploratory research to translate findings toward biomedical technologies (Phase II). Phase II research should build on the projected outcomes of Phase I. NSF will provide support for fundamental research activity in Phase I. NIH will provide support for exploratory biomedical engineering technology development in Phase II. Successful completion of Phase I milestones will be administratively evaluated by NIH/NIBIB to determine eligibility to transition to Phase II. This transition is neither automatic nor

guaranteed.

Potential areas of interest for BRING–SynBio include but are not limited to:

Novel design principles for the characterization and design of new synthetic biology tools and parts:

- Gene circuit designs that enhance the robustness, reliability, predictability, and tuneability of current designs.
- Modular designs for tools and parts that, when combined, result in predictable network outcomes.
- New strategies to improve upon size limitations of gene circuit designs.

Regulation and control of biological processes in cells/tissues:

- Synthetic gene regulatory networks for controlled modulation of gene expression and dynamic noise filtering.
- Design of synthetic circuits that incorporate novel feedback control strategies.

The full proposal due date is **Dec 4.**

NIH National Cancer Institute

NCI Director Dr. Kimryn Rathmell and Division of Cancer Biology Director Dr. Dan Gallahan explain how the R15 grant program supports researchers at smaller institutions and encourages students to pursue careers in cancer research.

Growing the Cancer Research Pipeline by Expanding Opportunities

In his senior year at Oakland University in Michigan, Tyler Parsons started working on a research project led by Gerard Madlambayan, Ph.D.

Tyler was able to be part of the NCI-funded project—investigating how certain types of stem cells affect tumors' ability to grow in the aftermath of radiation therapy—because of the type of NCI grant Dr. Madlambayan had received, called a Research Enhancement Award, or an R15.

Tyler flourished in the lab and decided to remain at Oakland, working on the R15-funded project, to get his Ph.D. However, while he was in the home stretch of getting his doctoral degree, Tyler's life took an extremely worrisome turn: After a series of health problems caused by blood clots, he was finally diagnosed with a type of blood cancer called polycythemia vera.

How to Use the Cancer Data Aggregator

What is the Cancer Data Aggregator?

The Cancer Data Aggregator (CDA) is a resource that lets you search for data across NCI's Cancer Research Data Commons (CRDC). The CDA includes standardized and indexed terms from the Genomic Data Commons (GDC), Imaging Data Commons, Proteomic Data Commons (PDC), Integrated Canine Data Commons, and the Cancer Data Service.

This accessible and easy-to-use tool not only allows you to collect data but also explore and analyze that data, making it an invaluable asset if you're following the cancer data science lifecycle research process. You can find information using harmonized, common language terms. You can then easily work with your search results in Excel, integrate them into a pipeline, or upload to an NCI Cloud Resource.

Fundamental Tips for Using the CDA Effectively

The CDA has many features that will help you with your cancer research.

CDA tools for beginners include:

- a point-and-click search tool.
- Google Colab notebooks that provide templates you can use to write queries and run them against the CDA API without the need for installation. This tool is perfect if you're learning how to code but still need some help.

More advanced CDA tools include:

- a local install of cdapython for a more hands-on experience if you're comfortable with complex search queries.

And remember, the CDA Team is always available to help! Whether you need assistance with running complex queries, guidance with writing code, general advice, and more, you can reach the CDA Team through the helpdesk or email.

NCI CDA Resources and Initiatives

NCI-Supported Projects

You'll find CDA contributions in other NCI-supported projects that may be helpful for your cancer research. Explore them to see whether you could benefit from these resources.

- ISB-CGC is an NCI cloud resource that lets you access, explore, and analyze large-scale cancer data through the Google cloud platform. ISB-CGC provides mutation data to CDA, and CDA provides ISB-CGC with aggregated data from across the CRDC. Through ISB-CGC, you can access smaller, easier to use files that ISB-CGC has processed from CRDC data commons. You can also find data through the CDA and then export the data to ISB-CGC to do your analysis. Explore the ISB-CGC BigQuery Table Search to browse tables of metadata and molecular cancer data!
- FireCloud and SB-CGC are NCI-funded cloud platforms you can use for data analysis. Once you've found the data you want on CDA, both platforms provide you with user-friendly access to a range of analysis pipelines. Just upload the identifiers you found at CDA to start your analysis.

$500K in Cash Prizes Available in 2024 DataWorks!

NIH and the Federation of American Societies for Experimental Biology invite you to showcase the power of data reuse in advancing human health by better understanding the development and progression of diseases, such as cancer.

Through the "2024 Dataworks! Prize Challenge," you and a team of fellow researchers can submit ideas for creative approaches to secondary analysis and data reuse that yield novel insights for the broader research community.

Put together a team and submit your solution to the challenge by **Wednesday, October 23, 2024**. NIH's Office of Data Science Strategy (ODSS) will award up to $500,000 total in cash prizes to the challenge winners!

NCI Data Catalog

The NCI Data Catalog is a listing of data collections resulting from major NCI initiatives and other widely used data sets. Data collections in the catalog meet the following criteria:

- Products of NCI intramural researchers or major NCI initiatives, or regularly referenced NCI-funded extramural research data
- Available to all researchers and may be Open or Controlled Access (requiring approval by a Data Access Committee)
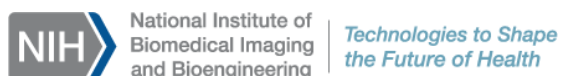- Well documented and available for download

Categories of data sets include:

- Biospecimen
- Cancer Screening Trial
- Clinical
- Drug Discovery
- Epidemiology
- Genomics
- Imaging
- Multiple
- Nanomaterial Characterizations
- Networks
- Pediatric, Adolescent, and Young Adult (AYA)
- Proteomics
- Target Discovery

NIH Funding Opportunities and Notices

National Institute of Biomedical Imaging and Bioengineering | *Technologies to Shape the Future of Health*

Policy Notices

- NIHs Adoption of Common Forms for Biographical Sketch and Current and Pending (Other) Support by May 25, 2025

(NOT-OD-24-163)
National Institutes of Health

General Notices

- Notice of Pre-application Webinar for Notices of Funding Opportunity PAR-23-152 and PAR-23-153: Impacts of climate change across the cancer control continuum

(NOT-CA-24-082)
National Cancer Institute

- Notice of Early Expiration of NOT-CA-24-060 - Notice of Special Interest (NOSI): Advancing Diet and Physical Activity Biomarkers for Assessing Lifestyle Interventions in Cancer Prevention and Cancer Interception Research

(NOT-CA-24-092)
National Cancer Institute

- [Notice of Informational Webinar for the NIGMS Innovative Programs to Enhance Research Training (IPERT) Program (R25)](#)

(NOT-GM-24-047)
National Institute of General Medical Sciences

Notices of Changes to Funding Opportunities

- [Notice of Change to Expiration Date for PAR-21-217 and PAR-21-218](#)

(NOT-AG-24-057)
National Institute on Aging

- [Notice to Extend the Expiration Date of PAR-22-025, "NIDCD Clinical Research Center Grant (P50 Clinical Trial Optional)"](#)

(NOT-DC-24-036)
National Institute on Deafness and Other Communication Disorders

- [Notice of Information: NICHD to Change from a Research Opportunity Announcement for ACT ENDO (Advancing Cures and Therapies and ending ENDOmetriosis diagnostic delays) to a Prize Competition Announcement](#)

(NOT-HD-24-027)
Eunice Kennedy Shriver National Institute of Child Health and Human Development

..... further information can be found here

HPC Training

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

October 2,2024: Open OnDemand: Interactive HPC via the Web

- Topic   Open OnDemand: Interactive HPC via the Web
- Date   October 2,2024
- Time   9:00 AM - 11:00 AM
- Place   Zoom Online
- Description   This training will provide an introduction to Open OnDemand, a browser based tool now available to all LSU HPC users on campus. Open OnDemand requires only a web browser (no plug-ins) and an LSU HPC account. It features a file browser, command line shell access, job management, and access to interactive Jupyter notebooks and RStudio servers running interactively on SuperMIC's compute nodes. This training will feature an overview of Open OnDemand, and a demonstration of all it's features, including Jupyter Notebook and RStudio.
- Prerequisites
  - LSU HPC account
  - Some knowledge of using HPC is assumed but not required

October 9,2024: Introdution to Python

- Topic   Introdution to Python
- Date   October 9,2024

- Time   9:00 AM - 11:00 AM
- Place   Zoom Online
- Description   Python is a high-level programming language, easy to learn yet extremely powerful. This training will provide an introduction to programming in Python. The subjects include basic Python syntax, Python classes used in object-oriented programming. Basic Python modules for scientific computing and plotting will also be introduced. During the training, simple Python programs will be provided for demonstration.
- Prerequisites
    - Basic understanding of a programming language is assumed but not required.

October 16,2024: Magic Tools to Install - Manage Software Part 1: Conda Virtual Environment

- Topic   Magic Tools to Install - Manage Software Part 1: Conda Virtual Environment
- Date   October 16,2024
- Time   9:00 AM - 11:00 AM
- Place   Zoom Online
- Description   Installing and managing software packages often poses a challange to HPC users on Linux systems without root permission. This two-part mini series is aiming at introducing helpful tools to remedy that.
- Part 1 will feature virtual environments and the software Conda, a popular tool working with virtual environments. In this training, we will discuss how to use Conda and virtual environments to install and manage software packages on our clusters, including frequently requested packages such as Tensorflow and PyTorch. We will also share useful tips, such as sharing virtual environment with group members and using Conda to manage software packages beyond Python (e.g., R / Perl).
- Prerequisites
    - Basic understanding of shell commands is assumed but not required.

October 23,2024: Magic Tools to Install - Manage Software Part 2: Singularity Container

- Topic   Magic Tools to Install - Manage Software Part 2: Singularity Container
- Date   October 23,2024
- Time   9:00 AM - 11:00 AM
- Place   Zoom Online
- Description   Installing and managing software packages often poses a challange 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 techenology 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.

October 30,2024: Introduction to GNU Parallel

- Topic   Introduction to GNU Parallel
- Date   October 30,2024
- Time   9:00 AM - 11:00 AM
- Place   Zoom Online
- Description   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.

NIGMS News & Outreach

Fall 2024
[National Institute of General Medical Sciences (NIGMS)](#)

In This Issue:
- Upcoming Events
- NIGMS in the News
- New in Science Education and Outreach
- Meet Our MOSAIC Scholars
- Featured Blog Posts
- NIGMS-Funded Work on the NIH Director's Blog

Read this article on LinkedIn to join the conversation

ABRCMS 2024

Join a vibrant community of the brightest minds in STEM at the [Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS)](#), taking place, November 13-16 in Pittsburgh, PA and the Graduate Symposium occurring November 16-17. Through cutting-edge scientific sessions in [12 scientific disciplines](#) and interactive professional development sessions, covering topics like career pathways, curriculum development and more, ABRCMS delivers timely and relevant content for students and non-students in STEM fields to learn, connect and share. Get involved, and join us:

· [Submit a Session Proposal](#) — deadline July 10

- Become a Judge — deadline for travel award Aug. 20
- Become a Reviewer — deadline to sign up Aug. 31
- Student Abstract Submission — deadline Sept. 6 for abstracts. Travel awards are available.

As one of the largest communities for underrepresented groups in STEM, ABRCMS is the go-to conference for scientific and professional development. Learn more at https://abrcms.org.

NIGMS
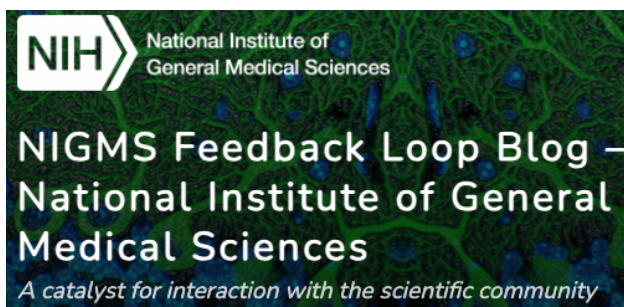
IDeA States Need Basic Science Too!

Posted by Jon Lorsch on September 12, 2024
In Vannevar Bush's 1945 report *Science, the Endless Frontier* [PDF], he wrote:
"A nation which depends upon others for its new basic scientific knowledge will be slow in its industrial progress and weak in its competitive position in world trade, regardless of its mechanical skill."
This principle also applies to U.S. states and the academic institutions in them. When resources are limited, organizational leaders are often tempted to focus their research efforts on applied studies that could have short-term payoffs. It's easy to understand this reasoning because there are often pressing health, social, and economic problems close at hand that are crying out for prompt action. However, economic studies, including a recent paper by Hans Gersbach and colleagues and a 2012 study by Andrew Toole, have indicated that basic research is essential to overall advancement, even on a local level.

Weekly opportunities and events from NIGMS
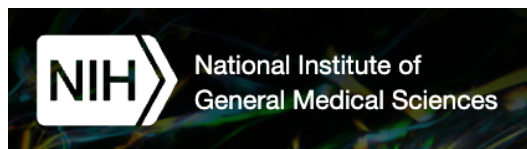
Issue 203, 09/23/2024

- State-based Healthcare Extension Cooperatives to Accelerate Implementation of Actionable Knowledge into Practice (U19) (RFA-HS-24-004). Application Due: December 13.
- Tribal Undergraduate to Graduate Research Training and Leadership Experiences (TURTLE) (PAR-24-236 and PAR-24-235). Applications Due: January 27, 2025. Informational

webinar on October 21, 3:30 p.m. ET.
- COBRE Phase 3 (PAR-23-216). **Application Due: September 24.**
- SuRE (PAR-24-144) and SuRE-First (PAR-24-145). **Applications Due: September 27.**
- Existing Dataset/Resource Definition Clarified: Please refer to the following links:
  - Does My Clinical Research Involve an Existing Dataset or Resource?
  - FAQs on Working with Existing Datasets
  - New Existing Dataset Infographic

Issue 202, 09/16/2024

- State-based Healthcare Extension Cooperatives to Accelerate Implementation of Actionable Knowledge into Practice (U19) (RFA-HS-24-004). Application Due: December 13.
  - Refer Press Release
  - Refer AHRQ's Healthcare Extension Service website for upcoming NOFOs: A National Coordinating Center (NCC) and an independent National Evaluation Center (NEC)
- Tribal Undergraduate to Graduate Research Training and Leadership Experiences (TURTLE) (PAR-24-236 and PAR-24-235). Applications Due: January 27, 2025. Informational webinar on October 21, 3:30 p.m. ET.
- COBRE Phase 3 (PAR-23-216). Application Due: September 24.
- CTR-D Award Program (PAR-23-257) and CTR-N Award Program (PAR-23-241). Applications Due: October 9.
- Existing Dataset/Resource Definition Clarified: Please refer to the following links:
  - Does My Clinical Research Involve an Existing Dataset or Resource?
  - FAQs on Working with Existing Datasets
  - New Existing Dataset Infographic

Issue 201, 09/09/2024

- Request for Information: Expanding the Technology Scope of NIGMS Resource and Centers Programs. Respond by September 30.
- Tribal Undergraduate to Graduate Research Training and Leadership Experiences (TURTLE) (PAR-24-236 and PAR-24-235). Applications Due: January 27, 2025.
- Tribal Institutional Review Board Establishment and Enhancement (TIRBEE) (PAR-24-260). Applications Due: January 27, 2025.
- COBRE Phase 3 (PAR-23-216). Application Due: September 24.
- CTR-D Award Program (PAR-23-257). Applications Due: October 9.
- CTR-N Award Program (PAR-23-241). Applications Due: October 9.
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  - New Existing Dataset Infographic

Issue 200, 09/04/2024

- Request for Information: Expanding the Technology Scope of NIGMS Resource and Centers Programs. Respond by September 30.
- Tribal Institutional Review Board Establishment and Enhancement (TIRBEE) (PAR-24-260). Applications Due: January 27, 2025.
- COBRE Phase 3 (PAR-23-216). Application Due: September 24.
- CTR-D Award Program (PAR-23-257). Applications Due: October 9.
- CTR-N Award Program (PAR-23-241). Applications Due: October 9.

NIH Extramural Nexus

- ### New Federal Common Disclosure Forms Strengthen Integrity and Security of NIH-Funded Research

The White House Office of Science and Technology Policy (OSTP) through the National Science and Technology Committee (NSTC) working group, led the development of the [Common Forms](#) to support "a secure and fair research ecosystem in the United States." Through [National Security Presidential Memorandum-33](#), they directed the development and use of these disclosure forms and encouraged funding agencies to allow supported researchers to provide unique digital identifiers as part of the disclosure process. The memorandum resulted from thoughtful and deliberative conversations amongst leadership from NIH, the National Science Foundation, and other federal research partners. OSTP discussed the importance of these forms at a [House of Representatives Science, Space and Technology Committee hearing](#) back in February, where I also [testified](#) about our efforts to secure NIH-supported extramural research from malign foreign interference.

..... Continue Reading .....

- # Fiscal Year 2025 NIH Loan Repayment Program Cycle Is Open Until November 21, 2024

In fiscal year (FY) 2024, we funded nearly three-quarters of [NIH Loan Repayment Program (LRP)](#) applications, an incredible success rate. With that momentum in mind, we are excited to announce that applications for the FY 2025 cycle are now being accepted until November 21, 2024. We encourage those interested to apply.

The Extramural LRP was developed to recruit and retain highly qualified biomedical and behavioral researchers within the research workforce. It does this by offering to repay up to $100,000 of qualified educational debt in exchange for a two-year commitment to research. To be eligible, you must be a [qualified](#) health professional engaged in NIH-mission relevant research for at least 20 hours per week at a nonprofit or government institution. [Mission-relevant research areas](#) include:

- **Clinical Research**
- **Pediatric Research**
- **Health Disparities Research**
- **Research in Emerging Areas Critical to Human Health (REACH)**
- **Clinical Research for Individuals from Disadvantaged Backgrounds**
- **Contraception and Infertility Research**

Table 1. NIH LRP Applications, Awards, and Funding for FYs 2015–2024

FY	Number of Applications	Number of Awards	Success Rate	Total Funding
2015	2,732	1,347	49%	69,034,959
2016	2,579	1,325	51%	68,332,852
2017	2,597	1,282	49%	68,185,910
2018	2,710	1,269	47%	71,569,901
2019	2,518	1,322	53%	72,308,731
2020	2,451	1,262	51%	87,020,128
2021	2,253	1,301	58%	91,518,202
2022	2,306	1,343	58%	92,661,827
2023	1,906	1,323	69%	92,542,308
2024	2,120	1,545	73%	95,212,034

..... Continue Reading .....

- # Updates to Data Management and Access Practices under the NIH Genomic Data Sharing Policy

NIH has issued an implementation update for data management and access practices under the Genomic Data Sharing (GDS) Policy (see [Guide Notice NOT-OD-24-157](#)) which introduces updated security standards for Approved Users of controlled-access data shared under the NIH GDS Policy ([NOT-OD-14-124](#)) and for repositories and/or systems storing or providing access to these data. **The updates will take effect on January 25, 2025**.

In summary:

- NIH is making the following changes to modernize the security standards provided for NIH controlled-access data in the [NIH Security Best Practices for Controlled-Access Data Subject to the NIH GDS Policy](#) that Approved Users adhere to as a part of terms and conditions of access:
    - Approved U.S. and non-U.S. users will be required to attest to NIH that their institution and any third-party system or Cloud Service Providers involved in data analysis or

storage comply with NIST SP 800-171 or an equivalent IT security standard.
  - Adherence to the new standard will be included in new or renewed Data Use Certifications or similar agreements.

- NIH is establishing security standards for NIH controlled-access data repositories requiring the adoption of the NIST SP 800-53 Moderate IT security standard. These security standards will apply to NIH controlled-access data repositories and access systems supported by NIH funding to provide long-term storage for, or control access to, human genomic data generated and shared under the GDS Policy.

- NIH is establishing minimum expectations for developers provided access to controlled-access human genomic data under the GDS Policy. Developers will be expected to submit a request containing a Developer Use Statement to a NIH Developer Data Access Committee (DAC) for review. If the DAC approves, the NIH controlled-access data repository can use existing technical capabilities to grant developer access.

- ## NIH All About Grants Podcast – Simplified Review Framework

NIH is [simplifying review](#) for most research project grants [starting](#) on January 25, 2025. The new framework aims to better facilitate identifying the strongest, highest-impact research. [This NIH All About Grants podcast episode](#) will discuss a few facets of Simplified Review Framework (SRF) to keep in mind. We will hear directly from Drs. Stephanie Constant, NIH's Review Policy Officer, and Lisa Steele, Chief of the Epidemiology and Population Health Branch within the NIH Center for Scientific Review. The conversation will touch on the new three review factors (based on the [regulatory review criteria](#)) what is [changing or not](#), addressing reputational bias, [available resources](#), and much more.

"This framework has taken the five regulatory criteria that we already have of significance, investigator, innovation, approach, and environment and then bundled them into three factors. Factor one the importance of the research. Factor two the rigor and feasibility of that research. And then factor three the expertise and resources." – Dr. Lisa Steele

"Now it's going to be much more focused on the actual impact of that science, the feasibility of that science…[so reviewers can look] at these very high level and important criteria that are felt to be the driving force for what makes [an] impactful project." – Dr. Stephanie Constant

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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

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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:

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

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