News, Opportunities and Deadlines for December 2019

Best wishes for
Happy Holidays
&
Happy New Year

Gus Kousoulas

18th LBRN 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.

Oral Presenters: INBRE Full Project PIs, Pilot Project PIs, Summer Graduate Students, and invited guests.

Poster Sessions: Pilot, Translational, and Startup Project PIs, 2019 LBRN Summer Faculty, and Graduate Students are required to submit an abstract to participate in the poster session. LBRN Undergraduate Summer students are also invited to participate. Poster abstract submission form will be sent after your registration.

This year’s meeting is being held on January 17-18th in Baton Rouge, Louisiana at the LSU Student Union in the Ballroom and Theater.
Address: LSU Student Union, 310 LSU Student Union, Baton Rouge, LA 70803

- The program agenda can be found here
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 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.
The schedule for undergraduate students covers ten weeks during the summer; the summer program dates are May 25 - July 31, 2020. The schedule for graduate students and faculty is more flexible.

Please see our website for support details and program requirements for each application type, applications are open on our [LBRN Summer Program Webpage](http://bit.ly/35g6eSu) now.

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**NRMN Upcoming December Webinars**

**NRMN Webinar**

**Date:** 12/5/2019  
**Time:** 1-2:30p CT

Dr. Jaime Rubin of Columbia Medical School will share her best practices and techniques for for submitting NIH Research (R) and Career Development (K) Awards, and other helpful tips for transitioning to research independence.


*Registration is required to attend*
When: Dec 5, 2019 01:00PM Central Time (US and Canada)
Topic: How to Write NIH Research (R) and Career Development (K) Grant Applications
Register in advance for this webinar:
https://unthsc.zoom.us/webinar/register/WN_Vd20DRuPSsO7L9pG2GG3Xg

After registering, you will receive a confirmation email containing information about joining the webinar.

GeneLab Launched Two New Illumina Sequencing Machines

GeneLab (School of Veterinary Medicine - Louisiana State University) is a multi-faceted core laboratory directed by the Division of BIOMMED in the School of Veterinary Medicine at Louisiana State University. GeneLab engages in specific research and training projects, which require expertise in Next-Generation Sequencing, traditional DNA sequencing, gene cloning, PCR, gene expression and other molecular methods. The goal of GeneLab is to facilitate the utilization of the state-of-the-art technologies in genomics research by LSU faculty and researchers nationwide at a competitive price and in a timely fashion.

The primary focus of GeneLab is its portfolio of sequencing capabilities. Currently, two Next Generation Sequencing instruments, the Illumina NextSeq, the Illumina MiSeq and 10X Genomics Chromium Controller along with bioinformatics support for NGS data are provided to the research community and offering will be extended rapidly as NGS and other emerging sequencing technologies are evolving.

**Illumina NextSeq**

The Illumina NextSeq System is a desktop sequencer with power and flexibility to carry out applications such as whole genome sequencing, exome sequencing, whole transcriptome sequencing, mRNA-Seq, and others. In one run it can sequence a full human genome at 30x coverage. Users can choose between high output or mid output flow cell configurations. At high output, up to 800 million paired end reads can be generated (at 150 bp read length) to produce up to 120 Gb of data in 29 hours. The Illumina sequencing systems utilize a well-established sequencing by synthesis (SBS) method and patented cluster generation technology in which fluorescently labeled nucleotide bases are detected as they are incorporated into DNA template strands. All four reversible terminator-bound dNTPs are present in each sequencing cycle.
**Illumina MiSeq**

Cluster generation, sequencing, and analysis are all done on a single instrument. The sequencing process takes place on a flow cell with 1 channel. Multiple samples can be run at once by using indices for each sample. 2x300bp reads are supported on the MiSeq and takes ~3 days to run.

With v.3 kits the MiSeq can produce >25 million reads or 15GB per run. With v.2 kits the MiSeq can produce >15 million reads or 7.5 GB per run with standard flow cells. There is also the option of using micro and nano flow cells which produce up to 4 million and 1 million reads per run (1.2Gb & 500Mb). Actual output can vary depending on cluster density.
10X Genomics Chromium Controller
Go beyond traditional gene expression analysis to characterize cell populations, cell types, cell states, and more on a cell-by-cell basis. From assessing tumor heterogeneity and stem cell composition, to dissecting neuronal populations—the technological advancements provided by the Chromium Single Cell Gene Expression Solution allow the creation of high complexity libraries from single cells to maximize insight from any sample type.
Services and collaboration can be delivered through the LBRN cores.

CFA for Short Term Core Projects
Molecular Cell Biology Research Resources Core (MCBRC) and Bioinformatics, Biostatistics, and Computational Biology Core (BBCC) are calling for proposals to carry out short term projects in collaboration with the Cores. All LBRN researchers can submit a proposal for a defined project that can be carried out in collaboration with the Core facilities listed in the attached Call for Proposals (CFP) on a competitive basis. Each selected project will be allocated $1,500 to fully or partially offset Core expenses. More details can be found in the attached CFP.

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BBC Core Educational Resource

The BBC Core provides introductory educational lecture series on informatics topics that are recorded and streamed. Prior offerings that are available for on demand streaming include;
- An Introduction to Computers and Informatics in the Health Sciences
  http://metagenomics.lsuhsc.edu/lectures/introinformatics/

- An Introduction to Microbial Community Sequencing and Analysis
  http://metagenomics.lsuhsc.edu/lectures/intromicrobiota/

On demand streaming links are available by each lecture along with downloadable lecture slides.
To support the LBRN / BBC Core community on LONI HPC systems, we have renewed our high-performance computing allocation for 2019/2020.

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.
Expanding NIH’s Definition of Socio-Economic Disadvantaged to be More Inclusive and Diversify the Workforce

An extensive literature demonstrates that socioeconomic status is one of the strongest predictors of health, on par with typical risk markers like smoking, physical inactivity, hypertension, and diabetes. An intriguing graphic shows life expectancy according to stops on the London subway system – as described in a news story, “if you travel eastbound between Lancaster Gate and Mile End – 20 minutes on the Central line – life expectancy decreases by 12 years.” This association of strong links between socioeconomic status and health is remarkably reproducible – including on subway maps of the Washington DC area and in a study of Northeastern Ohio patients undergoing stress testing at the Cleveland Clinic.

This same pattern – low socioeconomic status and poor outcome – applies to educational outcomes: if anything, the differences are even more striking. A study of 2002 high-school sophomores found that 10 years later, in 2012, 60% of those from a high socioeconomic status received a bachelor’s degree compared to only 29% of those from a middle socioeconomic status and 14% of those from a low socioeconomic status. These differences are enormous – coming from a high socioeconomic status background doubles to quadruples the likelihood of receiving a bachelor’s degree. Furthermore, among students who do attend college, lower socioeconomic status predicts a much lower likelihood of choosing a “STEM” major. Even among those students who make it all the way to securing a position as a full-time professor, low socioeconomic status background continues to present barriers to success.

NIH recognizes it needs to encourage and enable careers of biomedical scientists with disadvantaged backgrounds. In a 2018, Guide Notice (NOT-OD-18-210) describing our interest in diversity, we stated that “NIH encourages institutions to diversify their student and faculty populations to enhance the participation of individuals from groups that are underrepresented in the biomedical, clinical, behavioral and social sciences (NOT-OD-18-210), such as:

- Individuals from racial and ethnic groups that have been shown by the National Science Foundation to be underrepresented in health-related sciences on a national basis...
- Individuals with disabilities …, and individuals from disadvantaged backgrounds …”

Despite our calling out “individuals from disadvantaged backgrounds,” less than 1% of investigators on diversity supplement applications in FY2018 came in under the disadvantaged
Why so few? We suspect that a critical reason is our definition of a disadvantaged background. Looking at NOT-OD-18-210 in detail, we offer two criteria for defining a disadvantaged background:

1. Individuals who come from a family with an annual income below established low-income thresholds
2. Individuals who come from an educational environment such as that found in certain rural or inner-city environments that has demonstrably and directly inhibited the individual from obtaining the knowledge, skills, and abilities necessary to develop and participate in a research career.

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**Case Study in Review Integrity: Undisclosed Conflict of Interest**

A series to raise awareness and inspire creative problem solving of the challenges in maintaining integrity in peer review

Sometimes it takes detective work to unearth attempts to undermine the integrity of peer review.

Take the case of Dr. Smith, one of the reviewers on a study section in the Center for Scientific Review. The scientific review officer (SRO) would like Dr. Smith to review an application with Dr.
In checking for potential conflicts of interest (COI), the SRO cast a wider net and found something troubling. Dr. Smith, one of the reviewers currently set to review the application listing Dr. Jones’ as PI, had been listed as one of the key personnel on an application with Dr. Jones as PI that was under review in another, recent study section.

It was obvious Dr. Smith had a clear COI as a reviewer for the application with Dr. Jones as PI. The COI instructions for reviewers state that a reviewer may not review certain applications and must leave the room when the reviewer, within the past three years, has been a collaborator or has had any other professional relationship with any person on the application who has a major role. In this case, Dr. Smith, who is being considered as a reviewer for the application, is a professional associate of Dr. Jones, the PI on the application. However, Dr. Smith had not declared a conflict with that application.

**Updated Grant Application Instructions and Forms Coming in Spring 2020**

NIH will require the use of updated application forms and instructions (FORMS-F) for due dates on or after May 25, 2020 (NOT-OD-20-026). A preview of form changes and clarification of how the changes impact research training grant, fellowship, and career development award applications (NOT-OD-20-033) are already available. Additional details will be posted early next year.

In the meantime, continue to use FORMS-E application packages for due dates on or before May 24, 2020 despite the expiration dates noted on each form. We are working with the Office of Management and Budget to renew our forms and new expiration dates will be reflected on our forms when the FORMS-F application packages are posted.

**NIH Needs Your Feedback on a DRAFT NIH Policy for Data Management and Sharing**

NIH has released for public comment a Draft NIH Policy for Data Management and Sharing along with supplemental draft guidance. Since releasing a Request for Information last year on Proposed Provisions of a Draft NIH Data Management and Sharing Policy, NIH has received helpful feedback that has been incorporated into this version of the draft policy proposal. The draft policy requires all NIH-funded grantees to submit a Data Management and Sharing Plan outlining how
researchers plan to manage scientific data, including when and where the scientific data will be preserved and shared. Plans may include consideration of other factors (e.g., legal, ethical) that may appropriately limit data sharing.

Continue the conversation and let the NIH know what you think works and what doesn’t in the proposed policy by submitting your comments through the [web-portal](#) no later than January 10, 2020. For more insight on the draft policy, see Dr. Carrie Wolinetz’s [Under the Poliscope blog post](#) and check out the [informational public webinar](#) on Monday, December 16 (12:30pm to 2pm ET).

**NSTC Seeks Insights on the American Research Environment**

Have suggestions to improve the American research environment? The National Science and Technology Council’s (NSTC’s) Joint Committee on the Research Environment (JCORE) wants to hear from you!

Make your voice heard in response to JCORE’s Request for Information (RFI), seeking input on actions that Federal agencies can take, working in partnership with private industry, academic institutions, and non-profit/philanthropic organizations, to maximize the quality and effectiveness of the American research environment. Specific emphasis is placed on ensuring that the research environment is welcoming to all individuals and enables them to work safely, efficiently, ethically, and with mutual respect, consistent with the values of free inquiry, competition, openness, and fairness.

The RFI also seeks input on the following areas:

- Rigor and integrity in research,
- Reducing administrative burden,
- Strengthening research security, and
- Safe and inclusive research environments.

Submit your comments via email to the NSTC Executive Director, Chloe Kontos, [JCORE@ostp.eop.gov](mailto:JCORE@ostp.eop.gov) on or before 11:59 p.m. ET on December 23, 2019. See the [Federal Register notice](#) for full details.

**Selecting the Correct Budget Format for Your Application**
Providing budget information is a necessary part of requesting federal funding. The amount of budget detail needed for funding consideration varies based on the type of funding you are requesting. The funding opportunity announcement, application instructions, and the associated form package hold the key for determining the prefect level of budget detail and format needed to apply. Each opportunity announcement includes award budget and project period information; any opportunity-specific budget guidance; and the specific forms appropriate for the opportunity.

Some grant programs require all applicants to use a specific budget format. For example, applicants for R35 Outstanding Investigator Awards must provide detailed budgets. Some director awards (DP1, DP2, DP3) and a few other programs simply use the total funds requested information collected on the SF424 (R&R) form and don’t include a budget form at all. For these programs there is no choice of budget format – you simply fill out the forms presented to you.

Many research grant programs, however, require applicants to choose between two budget formats (e.g., R01, R03, R21, R15, R34, U01):

1. the modular budget format using the PHS 398 Modular budget form, or
2. the detailed budget format using the R&R Budget form and associated subaward budget form (if needed).

...Continue reading...

A Blizzard Ate My Application! What Can I Do?

NIH has your back. We have a standing natural disaster policy that can protect you in the event a natural disaster such as a hurricane or blizzard closes your institution close to an application due date. Periodically we issue reminder notices, but even if we don’t issue a notice, the policy is still there to protect you from missing your deadline.

If your institution closes due to an emergency, keeping you from being able to get your application in on time, document the reason in the cover letter of your application. Keep in mind that the delay in the submission should not exceed the time period of your institution’s closure. Reasons for late applications are reviewed on a case-by-case basis, and no one at NIH can grant permission in advance for a late application.

The Spring NIH Regional Seminar is Warming Up with Early Bird Registration Rates

Don’t miss out on the savings or the opportunity to learn about the NIH grants process directly from
NIH experts next spring. From April 20-22, 2020, over 100 NIH & HHS experts will be on hand at the NIH Regional Seminar on Program Funding & Grants Administration in Baltimore, MD, ready to provide you with the latest policy and process information. What’s the urgency to register? Early Registration Rates end on December 31, 2019!

Read on for more details and if it sounds like what you’ve been looking for…then register today!

- **75 NIH presenters**: Review, program, grants management and policy officials ready to meet you at the seminar.
- **HHS experts**: Hear from and talk to experts from the Office of Human Research Protections (OHRP), Office of Inspector General (OIG) & Office of Research Integrity (ORI).
- **1:1 Meet the Experts**: Many of our presenters, plus over 30 additional NIH & HHS experts, will be available for 20-minute conversations throughout the seminar to help provide more personal guidance.
- **3 Tracks and over 45 different topics**: Within the seminar’s 3 tracks for Administrators, New Investigators and All Interests, you’ll find topics that cover the fundamentals, Peer Review Process, budgets, grant writing, research integrity, compliance, humans and animals in research, pre-award and post award issues, contracts, and so much more! Review the draft agenda and list of session descriptions today! (Check out the sample [2-Day Seminar Agenda](https://regionalseminars.od.nih.gov/baltimore2020/welcome/).)
- **Optional Pre–Seminar Workshops**: Looking for more in-depth learning opportunities on specific subjects? Consider these seminars on Monday, April 20. Topics include electronic Research Administration (eRA), Intellectual Property, OHRP & NIH Human Subjects Review, and Administrator’s Boot Camp. ([Overview of Optional Workshops](https://regionalseminars.od.nih.gov/baltimore2020/welcome/)).

More information about the seminar, optional workshops, discounted hotel room block can be found on the Baltimore 2020 NIH Regional Seminar website at [https://regionalseminars.od.nih.gov/baltimore2020/welcome/](https://regionalseminars.od.nih.gov/baltimore2020/welcome/).

- **December 25 (Wednesday), 2019 and January 1 (Wednesday), 2020: NIH Closed for the Federal Holidays**

NIH (including help desks) will be closed on Wednesday, December 25, 2019 and Wednesday, January 1, 2020, for the federal holidays (Christmas and New Year’s Day).
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 [insert institution] 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 GM103424-15 and 3 P20 GM103424-15S1.

• 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 P20GM12345.

• 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 (P20GM12345) an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health.