LBRN Scholarship Program

Application Deadline for the LBRN Scholarship Program for existing LBRN Summer Undergraduate Program participants is October 30, 2019. Application review and acceptance with rolling deadline to being September 9, 2019.

LBRN Summer Program participants were sent an application link for participation in the Scholarship Program. This program provides a more extensive research experience by allowing existing summer program students to extend their summer program participation into the academic year at their mentoring laboratory or home PUI campus. Students may be paid up to 20 hours per week in a research lab during the fall and spring semesters for a total of 30 weeks at a rate of $8/hr, up to 20 hours per week, not to exceed $4,800. Up to $3,000 will be available to help support laboratory supplies for the research. In the case where the student attends a PUI campus close to their mentoring institution for the summer they can continue to work on the research they began during the summer. Students who elect to work at their home campus, that is not near a mentoring institution, will require a research mentor on their campus and an outline for a potential project.

For more information, please use this [link](#)

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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.

LSU College of Science Inclusive Excellence Series

The LSU College of Science
and Office of Diversity and Inclusion
present the

Inclusive Excellence Series
DR. SUZANNE LENHART
Chancellor’s Professor &
James R. Cox Professor of Mathematics
University of Tennessee-Knoxville

Lecture Topic: One Health, Connecting Humans, Animals and the Environment

Thursday, September 26, 2019
3:30 p.m.
Hill Memorial Library

About the Inclusive Excellence Series:
The LSU College of Science Office of Diversity and Inclusion has launched the Inclusive Excellence Lecture series featuring
signature guest lectures at the frontiers of scientific achievement led by preeminent scientists and mathematicians. This series will
provide a vehicle for enriching scholarly exchanges, exploring interdisciplinary discovery-based research, and emphasizing
collaborative scientific inquiry.

About the Speaker:
Dr. Suzanne Lenhart, a chancellor’s professor and the James R. Cox professor of mathematics UT-Knoxville, is known for her
research on population models with applications in infectious diseases, invasive species, and natural resources. Lenhart also
serves as the associate director for education and outreach at the National Institute for Mathematical and Biological Synthesis.
She is a fellow of the Association for Women in Mathematics, American Mathematical Society, the American Association for the
Advancement of Science and SIAM.

About the Topic:
‘One Health’ is a multidisciplinary approach to improving the health of people, animals and the environment. Environmental,
wildlife, domestic animal, and human health fall under the One Health concept. Mathematical models of infectious diseases
involving animals, environmental features, and humans will be presented. These models can suggest management policies and
predict disease spread, and examples including La Crosse virus and Zika virus will be discussed.
LSU Shreveport (LSUS) is Louisiana’s public institution of higher education, offering undergraduate and graduate degrees. LSUS began in September of 1967 as a two-year college with 35 faculty members and 807 students. Today, LSUS has over 150 career faculty and over 8,000 students.

In 2016, LSUS was number 1 in the nation, 2nd year in a row, amongst academic institutions in terms of innovation productivity as measured by the number of new inventions generated per research dollar expended (Source: Assoc. of Univ. Technology Managers) with a third of our Science faculty participating in tech transfer/patent activity. We continue to strive to increase our innovation activities over the last three years.

Dr. William Yu from LSUS’ Department of Chemistry and Physics is a leader in nanotechnology-related research, the development of photonics sensors, as well as new materials for photovoltaic solar panels. In the last few years Dr. Yu received funding for more than 16 research proposals and published over 20 peer-reviewed journal articles.
In the last year Dr. Yu was the inventor of 3 of the 4 patents that LSUS was granted:
- Pat. No 10,011,498: Dr. William Yu, Method of Magnetite and Ferrite Nanoparticle Synthesis
- Pat. No 9,759,652: Dr. William Yu, Quantum Dot Light Emitting Diodes for Multiplex Gas Sensing
- Pat. No 10,334,685: Dr. William Yu, Carbon Light emitting diodes

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**New Funding Opportunity – NIH Maximizing Opportunities for Scientific and Academic Independent Careers**

The NIH Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) program is designed to facilitate the transition of promising postdoctoral researchers from diverse backgrounds, such as individuals from groups underrepresented in the biomedical research workforce at the faculty level, into independent faculty careers at research-intensive institutions. The program has two components:

- **MOSAIC Postdoctoral Career Transition Award to Promote Diversity (K99/R00).** Supports postdoctoral scientists from diverse backgrounds conducting research in areas within the NIGMS mission by providing up to 5 years of support in two
phases. The initial (K99) phase provides support for up to 2 years of mentored postdoctoral research training and career development. The second (R00) phase provides up to 3 years of independent research support once the scholar transitions to an independent faculty position. Awardees must be US Citizens or Permanent Residents. For more information see: PAR-19-343. Please note, the first application deadline is February 12, 2020.

- MOSAIC Institutionally-Focused Research Education Cooperative Agreement to Promote Diversity (UE5). Supports scientific societies whose members conduct research within the NIGMS mission. Awardees will provide skills development, mentoring, and networking opportunities that prepare cohorts of scholars supported by MOSAIC K99/R00 awards to transition into, succeed, and advance in independent faculty careers at research-intensive institutions. For more information see: PAR-19-342. Please note the first application deadline is November 15, 2019.

For additional information on both funding announcements, please see the MOSAIC website. We will host an informational webinar on Tuesday, September 24 at 1 PM ET for applicants to both the UE5 and K99/R00 programs (slides and video will be posted on the MOSAIC website following the webinar).

Please disseminate information about the MOSAIC Postdoctoral Career Transition Award and webinar to postdocs at your institution and those affiliated with the INBRE program who would be interested.

NIH MOSAIC Applicant Webinar

Tuesday, September 24, 1:00-3:00 p.m. ET

Join us to learn more about the MOSAIC UE5 and K99/R00 programs.

Access the WebEx meeting

Meeting number: 620 364 007
Event password: nihms
Call-in number (U.S./Canada): 1-650-479-3208

LA CATS Research Investigator Symposium

You're Invited!
In Person or by Webinar to Attend a Special LA CaTS Center Event

LA CaTS Research Investigator Symposium
September 25, 2019

Time: 11:00 am-2:00 pm
Location: Tulane University, New Orleans OR by Webinar
Registration: https://redcap-training.sph.tulane.edu/redcap/surveys/?s=8WEE7RC8WM (register if attending by webinar and in person),

This free event will feature nationally recognized experts:

- Paula Strickland, PhD., MPH. Director, Office of Research Training and Special Programs, Division of Extramural Activities,
“Grant Writing for Success: Preparing an NIH Grant Application”

- Stanley Korenman, MD. Associate Director, CTSI Associate Dean for Ethics, David Geffen School of Medicine at UCLA, Distinguished Professor, Medicine Distinguished Professor, Endocrinology Diabetes and Hypertension

“Bias in Research”

- Mukesh Kumar, PhD. RAC. Chief Executive Officer at Brij Strategic Consultations, Adjunct Assistant Professor, Clinical Research and Leadership, George Washington University School of Medicine and Health Sciences, Washington DC

“FDA-compliant Clinical Protocols”

Lunch will be served for in person participants. For more information, please contact 504-988-0200 or research@tulane.edu.

Don’t miss this! Register NOW!!!

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**2019 Southeast Regional IDeA Conference**

The **2019 Southeast Regional IDeA Conference** is scheduled for November 6-8, 2019 in Louisville, Kentucky at the Galt House Hotel. We encourage you to attend. This will include various workshops, oral and poster presentation sessions from COBRE, INBRE and IDeA-CTR programs in the southeast region, as well as presentations from NIGMS Program Officials. The website link for more information is: [https://seidea19.com/](https://seidea19.com/).

**DEADLINES:**

- Conference Early Registration deadline: August 9, 2019
- Conference Registration deadline: September 27, 2019
- Hotel Registration deadline: September 27, 2019

**ABSTRACTS:** Abstract submission is not yet open. The deadline to submit an abstract is August 9, 2019.

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**Fall 2019 NIH Regional Seminar on Program Funding and Grants Administration**
Nov. 6-8 in Phoenix, Arizona.

The NIH Regional Seminar serves the NIH mission of providing education and training for the next generation of biomedical and behavioral scientists. This seminar is intended to:

- Demystify the application and review process
- Clarify federal regulations and policies
- Highlight current areas of special interest or concern

Who Should Attend? The seminar and optional workshops are appropriate for those who are new to working with the NIH grants process – administrators, early stage investigators, researchers, graduate students, etc. For those with more experience, the seminar offers a few more advanced sessions, updates on policies and processes direct from NIH staff, as well as valuable presentation resources to share with your institution.

Who are the Presenters? The NIH Regional Seminar involves approximately 65 NIH and HHS staff who are brought to a central location in order to educate, share, and hear your questions over the course of two days, plus the pre-seminar workshops. (Faculty page with pictures and bios will be posted this spring, so keep watching this website!)

This seminar is your opportunity to make direct contact with NIH policy officials, grants management, program and review staff, and representatives from the HHS Office for Human Research Protections (OHRP), HHS Office of the Inspector General (OIG), and others. In addition, take advantage of discussions involving more than 600 fellow attendees from around the world.

In addition to learning more about the NIH grants processes and policies through the optional workshops and 2-day sessions, there are opportunities throughout the seminar to Meet the Experts 1:1. These 15 minutes chats are a great way to get more specific questions answered by NIH & HHS experts. You’ll have the opportunity to sign up in advance or on-site to speak with the expert(s) of your choice participating in the seminar.

What are some of the topics? Here’s a quick overview of some of the topics:

- Budget Basics for Administrators and Investigators
- Career Development Awards
- Clinical Trials
- Compliance (Case Studies)
- Current Issues at NIH
- Diversity in the Extramural Research Workplace
- electronic Research Administration (eRA)
- Financial Conflict of Interest
- Fundamentals of the NIH Grants Process
- Grant Writing for Success
- Human Research Protections
- Intellectual Property, Inventions, and Patents
- Loan Repayment Program
- Office of Laboratory Animal Welfare (OLAW)
- Peer Review Process
- Preventing & Detecting Fraud
- Public Access
- SciENcv
- R&D Contracts
- Research Integrity
- Rigor & Reproducibility
- Training/Fellowships
- SBIR/STTR Program
- ….and that’s not all!

Can I go ahead and make my hotel reservations now? Yes! See our Hotel/Travel page for all the details. The room block is for a limited time and rooms traditionally sell out before the date for this seminar.

For inquiries regarding the seminar, email NIHRegionalSeminars@mail.nih.gov.

Listserv information is available on the NIH Regional Seminar Webpage.
The next two HPC training will be held on Wednesday, September 11 and Wednesday, September 18 at 9:00 AM in 307 Frey Computing Service Center and broadcast online for remote users.

- **Wednesday, September 11, 2019: HPC User Environment 1, Job Management with PBS**

  **Topic**
  HPC User Environment 1

  **Date**
  September 11, 2019

  **Time**
  9:00 AM - 11:00 AM

  **Place**
  307 Frey

  **Description**
  This training provides an overview of the HPC hardware and software environment, queuing system, compiling programs, writing submit scripts, running and monitoring jobs on HPC systems.

  **Prerequisites**
  - LONI or LSU HPC account
  - Familiarity with Linux/Unix
  - Editors such as vi or emacs
  - SSH client such as Putty for Windows

  Slides for this training

  **Registration**
  Click here

- **Wednesday, September 18, 2019: HPC User Environment 2, Job Management with PBS**

  **Topic**
  HPC User Environment 2

  **Date**
  September 18, 2019

  **Time**
  9:00 AM - 11:00 AM

  **Place**
  307 Frey

  **Description**
  This training provides an overview of the HPC hardware and software environment, queuing system, compiling programs, writing submit scripts, running and monitoring jobs on HPC systems.
submit scripts, running and monitoring jobs on HPC systems.

**Prerequisites**

- LONI or LSU HPC account
- Familiarity with Linux/Unix
- Editors such as vi or emacs
- SSH client such as MobaXterm for Windows

[Slides](#) for this training

**Registration**

[Click here](#)

**Next HPC Training:**

**Wednesday, September 25, 2019: Basic Shell Scripting**

For anyone who works in a Linux/Unix environment, a working knowledge of shell scripting is essential and will boost their efficiency and productivity tremendously. For this tutorial, we will focus on bash as it is one of the most popular shells. This tutorial will include topics such as creating simple bash scripts, flow control, command line arguments, regex, grep, awk and sed. This is a practical tutorial, so we will provide examples and/or hands-on exercises for most of the covered materials. 

**Prerequisites:** LONI or LSU HPC account, Familiarity with Linux/Unix, Editors such as vi or emacs, SSH client such as Putty/MobaXterm for Windows.

Please visit [http://www.hpc.lsu.edu/training/tutorials.php](http://www.hpc.lsu.edu/training/tutorials.php) for more details and register using the link provided. Users who plan on joining remotely will be provided with a zoom link in their registration confirmation email. Please see the system requirements at [https://support.zoom.us/hc/en-us/articles/201362023-System-Requirements-for-PC-Mac-and-Linux](https://support.zoom.us/hc/en-us/articles/201362023-System-Requirements-for-PC-Mac-and-Linux).

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**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.

*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.
We are happy to announce that High Performance Computing allocation for supporting LBRN/BBC Core community from the LONI HPC system.

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.

NIH Extramural Nexus (NIH/OD)

• Thoughts on How Institutions Can Promote a Culture of Research Integrity

On May 22, I had the privilege of participating in a terrific national conference that focused on what institutions can do to foster a culture of research integrity (see the agenda here). The DHHS Office of Research Integrity (ORI), Northwestern University, and the Council of Graduate Schools hosted the conference, “The Role of Research Integrity in Promoting Excellence: Tools for Colleges and University Leaders.” The conference organizers’ goal was “to engage university and college leaders in lively discussions about strategies, resources, and tools for promoting research integrity for current and future scientists, and scholars at
institutions nationwide.” That goal was met and then some. A number of institutional leaders described a number of concrete, practical, and intriguing efforts to promote integrity and excellence.

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**NIH Natural Disaster Policy Reminder**

If your institution closes due to severe weather or other natural disasters, NIH has policies in place to help your research to continue. We recently published an NIH Guide Notice that reminds those impacted by Hurricane Dorian about the flexibilities for application and report submission provided by these policies.

For more resources, including guidance on animal welfare issues, check our Extramural Response to Natural Disasters page.

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**Reminder: xTRACT Use Required in FY 2020**

Beginning with RPPRs due on or after October 1, 2019 (FY 2020), recipients must use the xTRACT system to create the required training tables for submission with NIH and AHRQ T15, T32, T90/R90, and TL1 progress reports. While it is not mandatory to use xTRACT for new and renewal applications for the specified types of training grants, it may be required in future years. Check out our resources on xTRACT such as the user guide, instructional videos, and FAQs, available on the eRA website. For more details on its required use and implementation, see the full Guide Notice.

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**Don’t Forget to Link Your ORCID iD to Your eRA Commons Profile**

We encourage everybody from graduate students to senior scientists to register for an ORCID account and link it to their eRA Commons personal profile. Starting October 1, 2019, ORCID identifiers will be required for individuals supported by institutional research training, career development, and other research education awards. xTrain appointments will not be accepted for agency review if potential appointees do not have an ORCID iD linked to their eRA personal profile. ORCID iDs will also be required for PD/PIs on individual fellowship and career development applications submitted for due dates on or after January 25, 2020. For more details, see the full Guide Notice or the recent Open Mike blog on this topic.

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**New Centralized Notification for Unfunded Applications**

The more you know, and the more that can be sent in a single email, the better. Applicant organizations will begin receiving centralized email notifications, listing applications that NIH does not intend to fund, approximately 14 months after the application’s council date. NIH eRA systems will automatically send these consolidated notifications to the Notice of Award email address listed in the organization’s eRA Commons Institutional Profile File (IPF) and the Authorized Organization Representatives (AORs)/Signing Officials (SOs) listed in the included grant applications. In addition, an “Unfunded notification sent on
Reference Letters vs. Letters of Support: What’s the Difference?

Reference letters and letters of support provide key information for reviewers and NIH staff. Check out the table below for an overview of when each letter is used, who writes them, and what should be included.

<table>
<thead>
<tr>
<th>Reference Letters</th>
<th>Letters of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When are they used?</strong></td>
<td><strong>Used to demonstrate:</strong></td>
</tr>
<tr>
<td>Used in Fellowships, mentored Career Development Awards, and other programs as requested</td>
<td>- Institutional commitment or resources</td>
</tr>
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<td></td>
<td>- Collaboration or role in the project</td>
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<tr>
<td></td>
<td>- Potential or current user of a resource or service proposed in the application</td>
</tr>
<tr>
<td><strong>Who writes them?</strong></td>
<td><strong>Who submits them?</strong></td>
</tr>
<tr>
<td>Referees should be individuals not directly involved in the application, but who are familiar with the applicant’s qualifications. The sponsor/co-sponsor(s) cannot be counted toward the 3 required references.</td>
<td>Applicant organization submits the letters of support as part of the application.</td>
</tr>
<tr>
<td><strong>What should be included?</strong></td>
<td><strong>Who sees them?</strong></td>
</tr>
<tr>
<td>- Describe qualities and potential of candidate</td>
<td></td>
</tr>
<tr>
<td>- Letters can be addressed to “To Whom It May Concern” or “Dear Reviewer”</td>
<td>Only reviewers and select NIH staff</td>
</tr>
<tr>
<td></td>
<td>Anyone with access to view the application</td>
</tr>
<tr>
<td><strong>Where are the instructions?</strong></td>
<td><strong>Where are the instructions?</strong></td>
</tr>
<tr>
<td>- Reference Letters FAQ page</td>
<td></td>
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<tr>
<td></td>
<td>- “Application form instructions” on the How to Apply – Application Guide page.</td>
</tr>
<tr>
<td></td>
<td>- Special instructions may also be found in funding opportunity announcements and notices</td>
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<td></td>
<td>(including Notices of Special Interest)</td>
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</tbody>
</table>

For more information, see the Reference Letters FAQ page. The National Institute of Allergy and Infection Diseases (NIAID) also has helpful advice on Letters of Support.

What You Need to Know About NIH Grants, Straight from the Source at the NIH Regional Seminar
What better way to learn about NIH grants policy and processes than straight from the source? The NIH Regional Seminar on Program Funding and Grants Administration provides an array of pre-seminar workshops and sessions over the course of three days, all presented by 70 NIH & HHS review, program, grants and policy experts! Check out some of these topics designed to help you understand the NIH grants process, such as:

- Application Preparation and Submission
- Understanding NIH Funding Mechanisms
- Human Subjects and Animals in Research
- Peer Review Mock Study Section
- Research Integrity
- Grants Policy and Compliance
- Budget Basics for Administrators and Investigators
- Navigating NIH Programs to Advance Your Career
- Inventions, Patents, Copyrights, & Data Sharing
- RePORT and Online Resources
- And so much more!

In addition to approximately 45 different session and workshop topics to choose from, you also have the opportunity to meet with our experts 1:1 to address your specific questions. Make plans to join your peers from all over the world and register today for the Fall 2019 NIH Regional Seminar in Phoenix, Arizona, November 6-8, 2019. See the tentative agenda, hotel/travel details, and more on the NIH Regional Seminar site.

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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 GM103424-15 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.

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.