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News, Opportunities and Deadlines for September 2020

LBRN Renewal

Louisiana Biomedical Research Network



ReNeWal



LBRN

We are pleased to announce that the Louisiana Biomedical Research Network has been competitively renewed for the next five years. In this new funding period we are pleased to welcome the University of New Orleans as the 8th PUI in the network. The LBRN includes participants from over 27 institutions across the state of Louisiana.

The following PIs will be funded in Year 1 of this new funding cycle.

PI Name	Location	YR
Anup Kundu	Xavier University	DRPP - Full
Kun Zhang	Xavier University	DRPP - Full

<u>Srinivas Garlapati</u>	<u>ULM</u>	<u>DRPP - Full</u>
<u>Xiaoping Yi</u>	<u>SUBR</u>	<u>DRPP - Full</u>
<u>April Wright</u>	<u>Southeastern</u>	<u>DRPP - Full</u>
<u>Daniel Barnes</u>	<u>Southeastern</u>	<u>DRPP - Start-Up</u>
<u>Waneene Dorsey</u>	<u>Grambling</u>	<u>DRPP - Full</u>
<u>Paul Kim</u>	<u>Grambling</u>	<u>DRPP - Full</u>

Additionally, we are pleased to inform that NIH:NIGMS has awarded the following Adminsitratitive Supplements to LBRN.

- 1) NOT-GM-20-012: Administrative Supplements to Existing NIH Grants and Cooperative Agreements : Pharmacometabolomics and Pharmacoproteomics Analysis for Cardiovascular Disease - Marjan Trutschl and Hyung Nam.

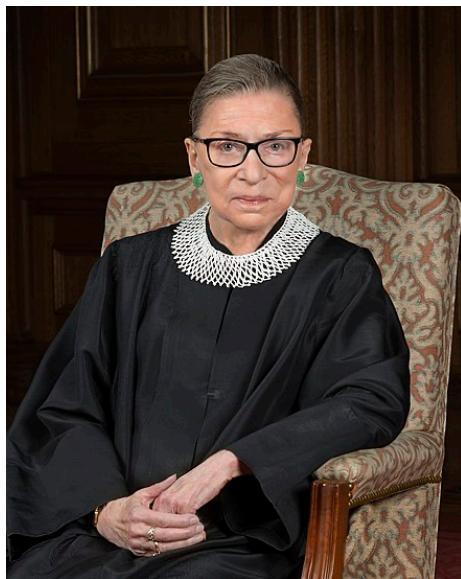
- 2) NOT-GM-20-017: Administrative Supplements on Women's Health in IDeA States: Addressing the Complex Connections of Substance Abuse in Young Women of Childbirth Age and Their Children - Urska Cvek and Nadejda Korneeva.

Congratulations to all these investigators!

We'd like to congratulate Dr. David Mills - LaTech on 3 recent publications. These publications resulted from his LBRN funded Translational project: [3D Printed Nanoclay Enhanced Medical Devices for Reconstruction of Craniofacial Bone Defect.](#)

Passing of Associate Justice Ruth Bader Ginsburg

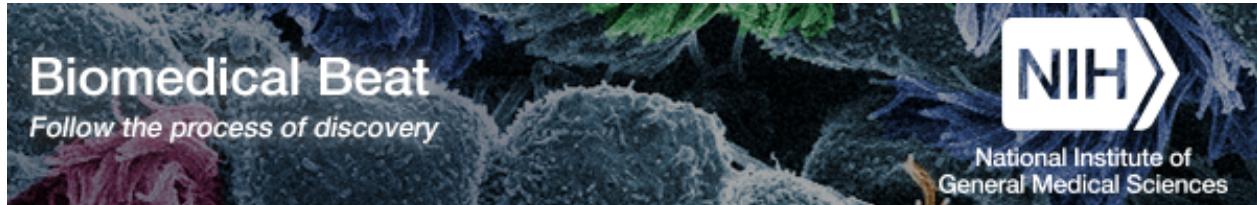
We are saddened by the passing of Associate Justice Ruth Bader Ginsburg, a beacon for women's rights, she championed the cause of equal treatment for women and lived by example.



Here are the statements from the supreme court on her passing:

https://www.supremecourt.gov/publicinfo/press/pressreleases/pr_09-19-20

Biomedical Beat Blog - NIGMS



- Learn Directly From Scientists Through Available Webinar Series



NIGMS recently completed a webinar series where researchers from a range of biomedical fields shared their expertise and answered questions from attendees. All webinars are now available on YouTube, and this post highlights a pick for educators that focuses on virtual instruction.

[Continue reading](#)

- The Science of Infectious Disease Modeling



What does “modeling the spread” or “flattening the curve” mean, and how does it apply to infectious diseases such as COVID-19? Learn more about the science of infectious disease modeling and how NIGMS supports scientists in this field.

[Continue reading](#)

Nationwide Voucher Program



Purpose: The IDeA National Resource for Quantitative Proteomics provides subsidized access to sophisticated proteomics services for investigators performing biomedical research within the mission of NIGMS (<http://idearesourceproteomics.org/>). In addition to providing cost effective access to a variety of proteomics services, the resource supports a competitive voucher program that provides fully subsidized access at no cost to the user. The goal of the voucher program is to provide pilot scale data to investigators that will create new hypotheses, support publications, and

support on-going research studies within the mission of NIGMS. This voucher program supports discovery proteomics workflows limited to 10 sample Tandem Mass Tag (TMT) or 20 sample data independent acquisition (DIA) quantitative proteomic platforms. For example, a 10-plex TMT could be 5 biological replicates of a control versus 5 biological replicates of a treated cell line, while a 20 sample DIA could be 10 control vs 10 experimental tissue/plasma samples. Interested applicants may contact the resource prior to applying to discuss the proposed sample analysis and determine eligibility for the voucher program.

Voucher application due dates: 5:00pm on October 15, February 15, June 15 Earliest start date: November 1, March 1, July 1

Anticipated number of awards: 100 annually

Award budget: Fee-free voucher for 10-plex TMT (>7,000 proteins) or 20 sample DIA Award

Period: Samples must be submitted within 4 months from award date

Eligibility: One awarded voucher per laboratory Principal Investigator per year. Priority will be given to researchers funded by NIGMS, funded through the NIGMS-IDeA Program, and early-stage/new investigators working within the mission of NIGMS. Only one submission per laboratory Principal Investigator per due date.

Pre-submission consultation: Interested applicants may contact the resource at IDeAproteomics@uams.edu to discuss the proposed sample analysis and determine voucher eligibility.

Content and form of application submission: Applications are limited to 2 pages (11pt font, single spaced, 0.5 inch margins) and should include the following sections: Project Overview (outlining the specific research question), Preliminary Studies (providing example data to support the proposed proteomics analysis), Quality Control Data (provide evidence of sample quality such as a gel image, verification of 50 micrograms of protein or 25 microliters of plasma/serum, and details on sample homogenization including buffer components), and Data Utilization (discussing how the proteomics data will be used to support work within the scope of NIGMS). An optional pre-submission consultation may be used to determine whether TMT or DIA proteomics would be most appropriate for the study. Applications are to be submitted as a PDF file at <https://is.gd/IDeAVoucher>.

Other documents for submission: Principal Investigator NIH Biosketch and NIH Other Support documents.

Other requirements: For eligibility, recipients will be required to participate in pre- and post-award surveys.

Contacts: For general questions, contact IDeAproteomics@uams.edu. For administrative questions, contact Ms. Sonet Weed (SWeed@uams.edu)

Mentoring to Diversify the Biomedical Workforce



**Mentoring to Diversify the
Biomedical Workforce**

The University of Utah Grant Writing Coaching Groups Study

Are you an early stage researcher ready to write a new or revised NIH-style proposal and interested in receiving coaching support while you write? If so, we invite you to apply for participation in the University of Utah Grant Writing Coaching Research Study, funded by the NIH Common Fund (grant U01 GM132366; administered by the NIGMS). This study will compare variations of an established grant writing group coaching process to identify features that influence its effectiveness.

Key Dates for Cohort 3:

- Study applications due: October 30, 2020
- Acceptance into study confirmed: December 2, 2020
- Study kickoff: January 13-15, 2021
- Initial group coaching period: Jan-May 2021 (8 sessions + mock review session)
- Applicant's planned grant proposal submission date: May-July 2021 (preferred) or Sep-Nov 2021

Intervention Activities:

- All participants: 2-day virtual kickoff event, 8 virtual group coaching sessions over 5 months, virtual mock study section
- Half of participants: Randomized to receive additional 18 months of one-on-one coaching to support proposal (re)submission
- Baseline and periodic followup surveys/interviews for 24 months (\$90 in gift certificates for completing all assessments)

[More information and application here](#)

LSU HPC Training: Interactive HPC via the Web



The schedule for the Fall 2020 HPC Training is available at <http://www.hpc.lsu.edu/training/tutorials.php>.

The next HPC training will be held on Wednesday, October 14 at 9:00 AM. Due to concern about the COVID-19 pandemic, all training sessions are Zoom online events from 9:00AM to 11:00AM. The sessions will be recorded for later review.

Open, Interactive HPC via the Web

- Easy to use, plugin-free, web-based access to supercomputers
- File Management
- Command-line shell access
- Job management and monitoring
- Applications (currently Jupyter and Rstudio)

The screenshot shows the LSU HPC OnDemand web interface. At the top, there's a purple header bar with the title "LSU HPC OnDemand". Below it, a navigation bar has "Files" selected, showing a dropdown menu with options: "Home Directory" (highlighted with a red box), "/work/mtiger", "Utilities", "Allocation balances", and "Disk quotas". To the right of the navigation bar, there are links for "Jobs", "Clusters", "Interactive Apps", and a user profile icon. A yellow banner on the left says "Announcer please see". Below the banner, there's a large "HIGH PERFORMANCE COMPUTING" logo. A message in the center says "OnDemand provides an integrated, single access point for all of your HPC resources."

Message of the Day

Welcome to the LSU HPC OnDemand portal!

With the OnDemand web portal, you can:

- Manage, download and upload files to the HPC systems (click links in the "Files" on the top of this page)
- Check allocation balances

Wednesday, October 14, 2020: Open OnDemand: Interactive HPC via the Web

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 SuperMike-II's compute nodes. This training will feature an overview of Open OnDemand, and a demonstration of all its features, including Jupyter Notebook and RStudio.

Prerequisites: LSU HPC account, Some knowledge of using HPC is assumed but not required.

Next training:

Wednesday, October 21, 2019: Introduction to R

R is a powerful language for data analysis. In this tutorial, you will learn the basics of R, including language fundamentals, basic programming and data visualization. A few examples of using R to process real-life data will be presented as well.

Prerequisites:

Laptop (Linux/Mac/Windows) with R installed. R can be downloaded from <https://cran.r-project.org/>, RStudio is acceptable but not recommended for this training.

OR

LONI or LSU HPC account, SSH client such as Putty/MobaXterm for Windows, Basic understanding of a programming language is assumed but not required.

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

Coronavirus Disease 2019 (COVID-19): Information for NIH Applicants and Recipients of NIH Funding

The NIH is deeply concerned for the health and safety of people involved in NIH research, and about the effects on the biomedical enterprise in the areas affected by the HHS declared [public health emergency for COVID-19](#). Due to the potential exceptional impact, we want to assure our recipient community that NIH will be doing our part to help you continue your research.

This is a rapidly evolving situation and we will provide updated guidance and information as it becomes available.

See [page update history](#).

- [Guidance](#)
 - [Overview](#)
 - [Proposal Submission & Award Management](#)
 - [Human Subjects & Clinical Trials](#)
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On This Page:

Guidance Overview

- [Overview presentation \(Powerpoint\)](#) – updated 7/17/2020
- [Overview talking points \(Word\)](#) – updated 7/17/2020

Proposal Submission & Award Management

- [NEW NIH Implementation of OMB Memorandum M-20-26 "Extension of Administrative Relief for Recipients and Applicants of Federal Financial Assistance Directly Impacted by the Novel Coronavirus \(COVID-19\) due to Loss of Operations"](#) - 6/25/2020
- [M-20-26](#) issued June 18, 2020: Extension of Administrative Relief for Recipients and Applicants of Federal Financial Assistance Directly Impacted by the Novel Coronavirus (COVID-19) due to Loss of Operations
- [NEW NOT-OD-20-122](#): Guidance for Applicants Preparing Applications for the Fall 2020 Due Dates During the COVID-19 Pandemic
- [NOT-OD-20-123](#): Special Exception to the NIH/AHRQ/NIOSH Post-Submission Material Policy During the COVID-19 Pandemic
- Late Applications
 - See NIH [FAQ on late applications during COVID-19](#)
 - [NEW NOT-NS-20-076](#): Notice to Extend Eligibility for Submission of Diversity K22 Applications due to COVID-related Disruptions
 - [NOT-AG-20-033](#): NIA Late Application Policy for NIA-Specific FOAs with Application Due Dates in May, June, and July 2020
 - [NOT-GM-20-029](#): NIGMS Late Application Policy for NIGMS-Specific FOAs with Application Due Dates in May 2020
- [NOT-GM-20-086](#): Flexibilities Available to Applicants and Recipients of Federal Financial Assistance Affected by COVID-19
- [NOT-GM-20-026](#): Guidance for Cost-Related Flexibilities Available to Support of Competitive Research (SCORE) Award Recipients Affected by COVID-19 - NOT-GM-20-026
- [M-20-11](#) issued March 9, 2020: Administrative Relief for Recipients and Applicants of Federal Financial Assistance Directly Impacted by the Novel Coronavirus (COVID-19)
- Contracts must be handled on a case by case basis. Details regarding any contract must be directed to the cognizant Contracting Officer. Salary changes must be handled by the contracting officer.

Human Subjects & Clinical Trials

- [NOT-OD-20-087](#): Guidance for NIH-funded Clinical Trials and Human Subjects Studies Affected by COVID-19
- [FDA Guidance on Conduct of Clinical Trials of Medical Products during COVID-19 Pandemic](#)
- [OHRP COVID-19 Resources](#)
 - [OHRP Guidance on COVID-19](#)
- [Considerations for New and Ongoing Human Subjects Research During the COVID-19 Public Health Emergency](#) (Word) - 6/22/2020

Animal Welfare

- [COVID-19 Pandemic Contingency Planning for Animal Care and Use Programs](#)
- [NOT-OD-20-088](#): Flexibilities for Assured Institutions for Activities of Institutional Animal Care and Use Committees (IACUCs) Due to COVID-19

Peer Review

- Review Process

Review Process during COVID-19 Pandemic



- [Coronavirus Update: Guidance for Peer Reviewers](#)
- Based on [NIH Guidance on Travel and Meetings](#), in-person NIH peer review meetings are

being held in alternate formats. Scientific review officers will be in contact with peer reviewers about these changes.

LBRN PUI Publication

Professor David Mills, Louisiana Tech University, Department of Biological Sciences, Center for Biomedical Engineering and Rehabilitation Science, an [LBRN Translational Project Program Funded Participant](#).

- Voltage regulated electrophoretic deposition of silver nanoparticles on halloysite nanotubes

Results in Materials 7 (2020) 100112



Contents lists available at [ScienceDirect](#)

Results in Materials

journal homepage: www.journals.elsevier.com/results-in-materials



Voltage regulated electrophoretic deposition of silver nanoparticles on halloysite nanotubes



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ARTICLE INFO

Keywords:
Electrodeposition
Functionalization
Halloysite nanotubes
Metal nanoparticles
Silver

ABSTRACT

Halloysite nanotubes (HNTs) are naturally occurring clay nanotubes mined from abundant mineral deposits, making it an easily accessible nanomaterial. Surface functionalization of HNTs with different components including metals, antibiotics, and bioactive compounds is of increased importance for their potential use in biomedical devices, antimicrobial surface coatings, drug delivery systems, radiation absorptive composites, elastomer composites, electronic components, and as industrial catalysts. We used a simple method for the fabrication of HNT-supported metal nanoparticles. Here, we report our strategy for controlled weight deposition of positively charged metal ions on negatively charged HNTs dispersed in an aqueous medium where metallization can be controlled using changes in voltage, solvent medium, time and other electrolytic parameters without the use of any toxic chemicals, expensive reagents or lengthy pre-processing steps. Our method offers a one-step and low-cost process that offers many advantages, including, the deposition of different metal oxides (Ag, Cu, and Zn) or dual metal coatings. HNTs act as a nanocarrier with an ability for sustained drug release and as a nanofiller with a record for improving the physical properties of polymers. When combined with metal-coated HNTs, this may lead to the creation of multi-functional applications in drug delivery, regenerative medicine and, tissue engineering.

- Surface Modification of 3D Printed PLA/Halloysite Composite Scaffolds with Antibacterial and Osteogenic Capabilities

Article

Surface Modification of 3D Printed PLA/Halloysite Composite Scaffolds with Antibacterial and Osteogenic Capabilities

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Abstract: Three-dimensional (3D) printing techniques have received considerable focus in the area of bone engineering due to its precise control in the fabrication of complex structures with customizable shapes, internal and external architectures, mechanical strength, and bioactivity. In this study, we design a new composition biomaterial consisting of polylactic acid (PLA), and halloysite nanotubes (HNTs) loaded with zinc nanoparticles (PLA+H+Zn). The hydrophobic surface of the 3D printed scaffold was coated with two layers of fetal bovine serum (FBS) on the sides and one layer of NaOH in the middle. Additionally, a layer of gentamicin was coated on the outermost layer against bacterial infection. Scaffolds were cultured in standard cell culture medium without the addition of osteogenic medium. This surface modification strategy improved material hydrophilicity and enhanced cell adhesion. Pre-osteoblasts cultured on these scaffolds differentiated into osteoblasts and proceeded to produce a type I collagen matrix and subsequent calcium deposition. The 3D printed scaffolds formed from this composition possessed high mechanical strength and showed an osteoinductive potential. Furthermore, the external coating of antibiotics not only preserved the previous osteogenic properties of the 3D scaffold but also significantly reduced bacterial growth. Our surface modification model enabled the fabrication of a material surface that was hydrophilic and antibacterial, simultaneously, with an osteogenic property. The designed PLA+H+Zn may be a viable candidate for the fabrication of customized bone implants.

Keywords: 3D printing; antibiotics; bone regeneration; composites; halloysite; zinc

-
- Differential antimicrobial and cellular response of electrolytically metalized halloysite nanotubes having different amounts of surface metallization



Cite this: DOI: 10.1039/d0ma00134a

Differential antimicrobial and cellular response of electrolytically metalized halloysite nanotubes having different amounts of surface metallization

Ahmed Humayun,^a Yangyang Luo,^a Anusha Elumalai^{ab} and David K. Mills  ^{*ab}

We demonstrate an electrolytic method to metallize the outer surface of halloysite nanotubes (HNTs). Different metal HNT (mHNT) combinations (copper, silver, zinc) were produced with metal content in the 5–30 wt% range. mHNTs were characterized using a Scanning Electron Microscope (SEM), energy-dispersive spectroscopy (EDS), X-ray fluorescence (XRF), Fourier-transform infrared spectroscopy (FTIR) and X-ray powder diffraction (XRD). Different amounts of surface/lumen metal content of a system can confer differing antimicrobial/cellular response; hence, it is essential to assess the antimicrobial/cellular response as a function of metal content. Cellular response after exposure to mHNTs was studied in *Staphylococcus aureus* and pre-osteoblasts, respectively. Coated mHNTs could easily be identified using the characterization methods, and contrasting bacterial and cellular responses were obtained, which we propose was due to the extent of metallization. These findings demonstrate the potential of this method for creating metal-coated HNTs and suggest they have potential as an implant coating solution.

Received 26th March 2020,
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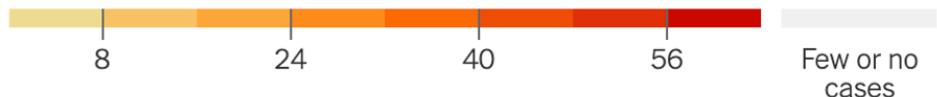
rsc.li/materials-advances

Dr. Mills' BioMorph Laboratory is used for designing novel and dynamic nanofilms (biodegradable, bioactive, micropatterned) for cell adhesion, differentiation and functionality; nanoassembly for dental & orthopedic implants; layer-by-layer assembly for cell encapsulation; application of nanoscale topographic and chemical cues for controlling chondro- and osteogenesis; understanding complex soft tissue modeling during development and remodeling in response to altered joint mechanics; structure-function relationships in TMJ soft tissues, engineering tissues for TMJ repair or replacement.

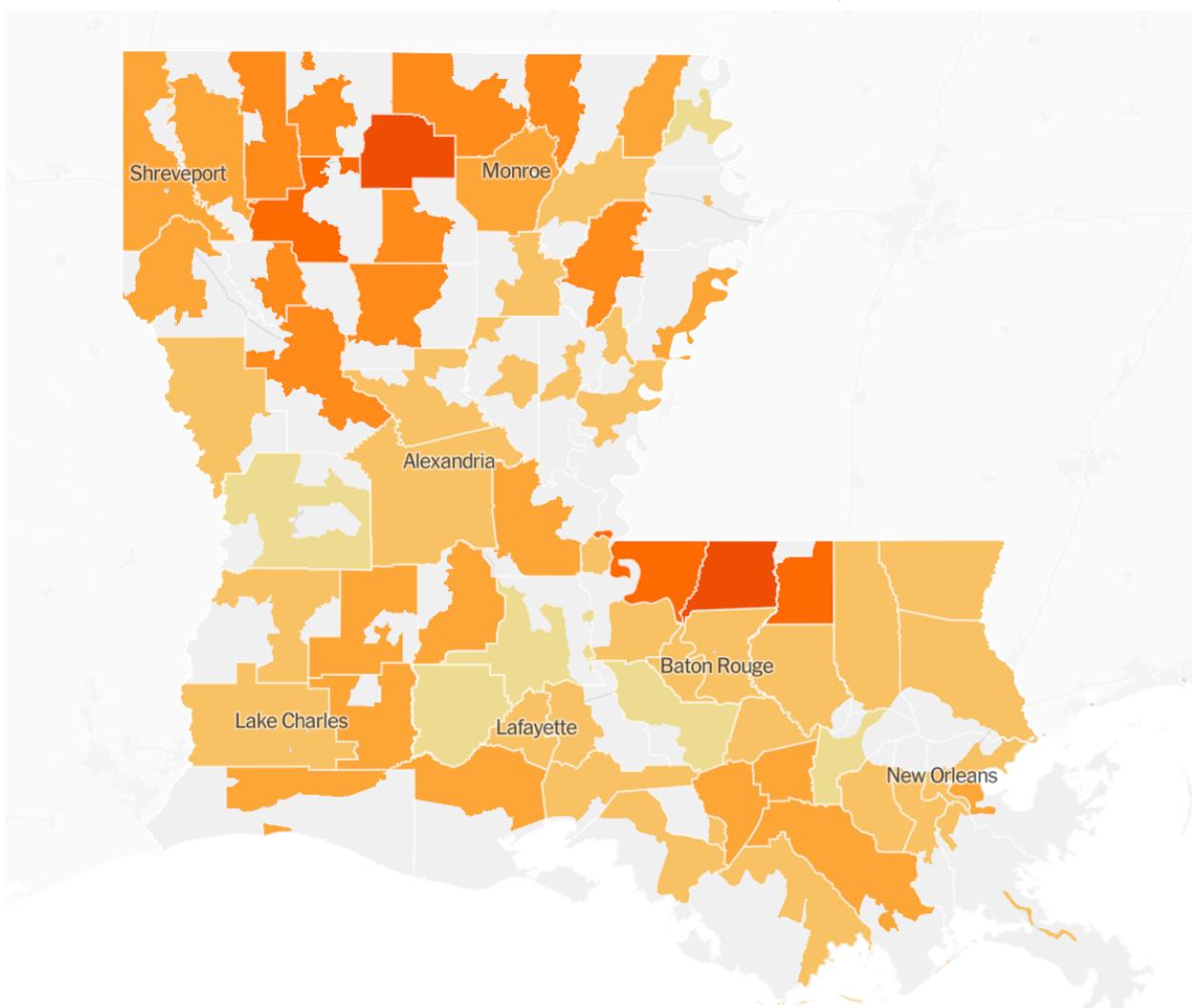
Louisiana Coronavirus (COVID-19) Information

The following information was provided by [The New York Times Interactive Coronavirus website](#).

Average daily cases per 100,000 people in the past week



Double-click to zoom into the map.



We want to remind everyone to continue practicing safety with regards to prevention of spreading and contracting the COVID-19 virus.

The state of Louisiana, per the Governor, will remain in phase 2. Information here: <https://coronavirus.la.gov>.

We remind everyone of the information provided here on our website: [LBRN COVID-19](#).

Notice of Special Interest : NIH



- Availability of Administrative Supplements to INBRE Awards to Fund Research Collaborations**

The National Institute of General Medical Sciences (NIGMS) announces the availability of funds for Administrative Supplements to NIGMS-funded Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE) (P20) awards. These funds are intended for existing INBREs to develop collaborations between investigators at the INBRE partner institutions, including primarily undergraduate institutions (PUIs), community colleges (CCs) and Tribally Controlled Colleges and Universities (TCCUs), and investigators supported by Centers of Biomedical Research Excellence (COBRE), IDeA-Infrastructure for Clinical and Translational Research (IDeA-CTR), IDeA States Pediatric Clinical Trials Network (ISPCTN) awards or Clinical and Translational Science Awards (CTSA) to institutions located in IDeA states, in research areas that are currently supported by these programs. The goal of this funding opportunity is to encourage collaborations by investigators in IDeA states while providing students a broad continuum of research opportunities. Although in-state collaboration is encouraged, the collaborative projects can also be proposed between programs across the IDeA states.

The collaborative project should be an expansion of a project currently supported by a COBRE, IDeA-CTR, ISPCTN or CTSA award. The project must not constitute a change in scope of the parent INBRE or COBRE/IDeA-CTR/ISPCTN/CTSA awards.

For these supplements, all active INBREs, including those in their final year of funding or in a no-cost extension, are eligible to apply. This applies also to COBRE, IDeA-CTR, ISPCTN or CTSA programs that will collaborate with INBREs.

[..... More in detail](#)

- **Administrative Supplements for Research on Women's Health in the IDeA States**

The Office of Research on Women's Health ([ORWH](#)) and the National Institute of General Medical Sciences ([NIGMS](#)), along with Institutes and Centers (ICs) of NIH participating in this Notice, announce the availability of administrative supplements to IDeA awards to expand research and research capability in the IDeA states to address important issues of women's health with a special interest in maternal and infant mortality and morbidity. The proposed research must address at least one of the strategic goals of the 2019-2023 [Trans-NIH Strategic Plan for Women's Health Research](#) "Advancing Science for the Health of Women".

[..... More in detail](#)

IDeA Co-Funding



The IDeA program managed by NIGMS is pleased to announce the 2020 co-funding opportunity for investigators in IDeA-eligible states whose R01 or R15 applications scored well but fall just outside of an IC's funding range. The IDeA program provides a maximum of \$320K in total costs

for each of the first two consecutive years of a selected award. Nominations are made by the NIH IC that has the primary assignment for the application. PIs wishing to be considered for IDeA co-funding should contact directly the program officer at the IC assigned to the application.

IDeA co-funding is conducted once per year, and the nomination period will close in early April. Final selections will be made in June of 2020. Please visit <https://www.nigms.nih.gov/Research/DRCB/IDeA/Pages/IDeA-Co-funding.aspx> for further information about this initiative.

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 (**BBCBC**) 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. [Please contact your LBRN Steering Committee Member.](#)

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.

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 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](#).



• Case Study in Review Integrity: Abuse of Power

A series to raise awareness, encourage dialog and inspire creative problem solving for challenges in maintaining integrity in peer review.

What would you do if, as the Dean of Research at a major university, a group of students, postdocs, and junior faculty reported that they had been pressured into writing reviewer critiques for a senior faculty member?

We were so impressed by the careful handling of just such a situation by an institutional official recently that we wanted to share this story with you (we've changed details and fictionalized names).

Dr. Lee, Dean of Research at a major research university, received an anonymous, written complaint against Dr. Williams, a Distinguished Professor in her university's medical school. According to the complaint, Dr. Williams was sharing NIH grant applications with members of his laboratory with requests for them to complete his written critiques as an NIH peer reviewer. The complaint indicated that Dr. Williams also pressured junior, non-tenured faculty in the department to do the same. All had been instructed by Dr. Williams not to disclose this practice or their evaluations to anyone else.

[... Continue reading](#)

• NIH Helps Small Businesses Change the World

Did you know that the NIH's small business programs ([SBIR and STTR](#)) invest over 1 billion dollars into life science and healthcare companies each year? The newly-created Small business Education and Entrepreneurial Development ([SEED](#)) office provides grantees with many of the valuable entrepreneurship and commercialization services we have discussed in [previous blogs](#) to help them thrive.

As our small business program has grown, we have seen early ideas transform into improved patient access to technologies. To celebrate these successes, the NIH has launched [a new interactive mapping tool](#) that features many of the amazing stories that have come out of NIH small

business investments.



Our interactive mapping tool allows you to explore the stories in many ways. Looking for a successful small business in California? Select the pin in San Francisco and read about the [spoon that counteracts hand tremors](#) that are due to movement disorders like Parkinson's and cerebral palsy and allow patients to feed themselves. You may have heard about the spoon when its developer Liftware was acquired by Google in 2014, but did you know that the technology was developed through an NIH SBIR grant? You can find out more by [reading their success story here](#).

[... Continue reading](#)

- Institute and Center Award Rates and Funding Disparities**

In 2011, Ginther et al. first demonstrated that African American and Black applicants to the National Institutes of Health received grant awards at a lower rate than their white counterparts ([Ginther 2011](#)). Since then, multiple studies have reproduced and extended this finding ([Ginther 2011; Ginther 2016; Hoppe 2019; Erosheva 2020](#)). Recently we reported that African American and Black (AAB) PIs are more likely to propose research on topics that are less likely to be funded ([Hoppe 2019](#)). We found that topic choice has little or no effect on whether an application is chosen for discussion, but after considering a number of confounders, it accounts for over 20% of the gap in funding success for applications that are discussed ([Hoppe 2019](#)).

Why are applications linked to certain topics less likely to be funded? Review is not the only determinant that considers whether any given application will be funded. At the same time that

applications are assigned to a study section for review, they are also independently assigned to a funding Institute or Center (IC), based in large part on the topic of the work. Figure 1 shows that ICs have widely varying award rates (the ratio of funded applications to all applications). These marked variations (from 9.1% to 26.9%) may explain funding differences, a possibility that we did not consider in [Hoppe 2019](#).

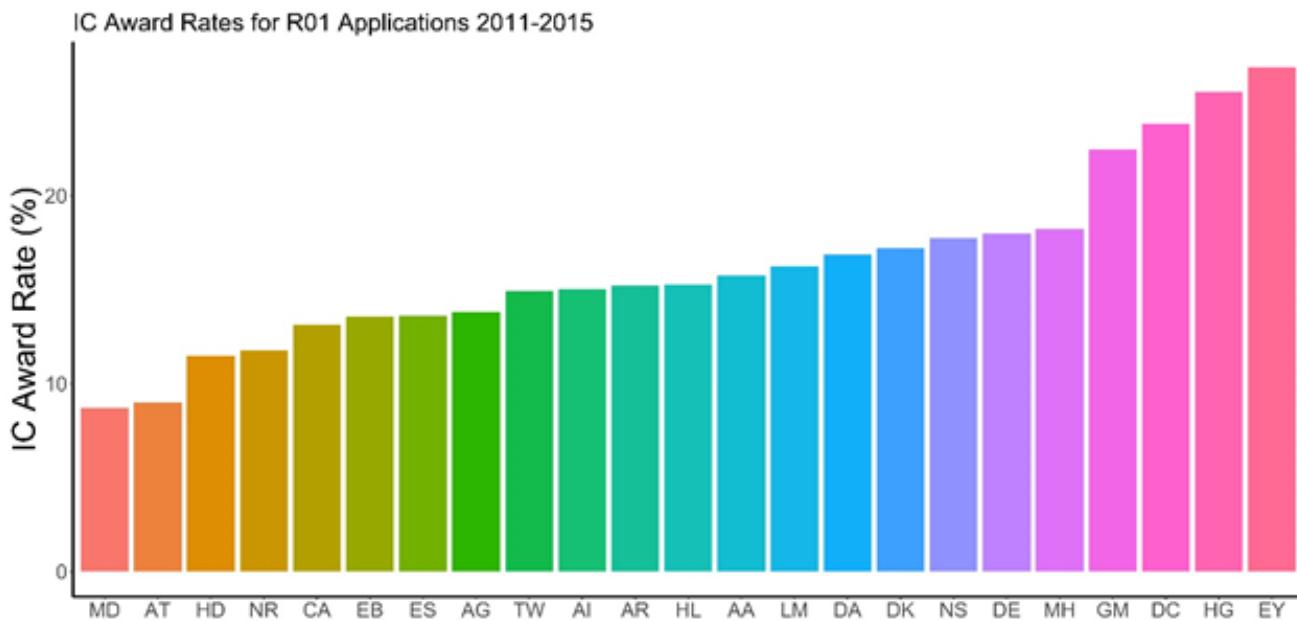


Figure 1. IC award rates for R01 applications, FY11-FY15. MD, Minority Health and Health Disparities; AT, Center for Complementary and Integrative Health; HD, Child Health and Human Development; NR, Nursing Research; CA, Cancer; EB, Biomedical Imaging and Bioengineering; ES, Environmental Health Sciences; AG, Aging; TW, Fogarty Center; AI, Allergy and Infectious Diseases; AR, Arthritis and Musculoskeletal and Skin Diseases; HL, Heart Lung and Blood; AA, Alcohol Abuse; LM, Library of Medicine; DA, Drug Abuse; DK, Diabetes and Digestive and Kidney Diseases; NS, Neurological Disorders and Stroke; DE, Dental; MH, Mental Health; GM, General Medical Sciences; DC, Deafness and Communication; HG, Human Genome Research; EY, Eye. N = 157,405 competing (Type 1 and Type 2) applications.

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- **New “All About Grants” Podcast – Research Misconduct**

That's a bit...odd. That gel image looks photoshopped. The data looks to good to be true. And, wait a second, that figure appeared in another paper!

These are examples of research misconduct. What do you do if you suspect research misconduct? Join us for this next installment of [NIH's All About Grants podcast](#) with Dr. Christine Ring on

addressing research misconduct ([MP3 / Transcript](#)). As an NIH Research Integrity Officer, she will share with us what is meant by fabrication, falsification, and plagiarism, how it affects the integrity of our supported research, what to do if you suspect research misconduct, how we work with the HHS Office of Research Integrity when responding to an allegation, and much more.

- **Free Registration for the Fall 2020 NIH Virtual Seminar on Program Funding and Grants Administration!**

No plane tickets, hotel costs, or food budgets to worry about! In fact, no registration fees either! The NIH is bringing the Fall 2020 NIH *Virtual Seminar* on Program Funding and Grants Administration direct to your computer...free of charge, Tuesday, October 27 – Friday, October 30!

This event is designed to demystify the NIH grant application and review process! Register today at <https://nihvirtualseminar2020.vfairs.com/> and be sure to check out all the networking opportunities taking place during the seminar. For instance, the Meet the Experts page highlights all of the NIH Institutes and Centers, offices and special programs offering booths filled with resources to fill your “swag bag” and times to chat with grants management, policy, review, and program officials throughout the seminar.

If you’re new to working with the NIH grants process as an investigator or administrator, join us as we connect and collaborate! Here’s what to expect:

- **Four days of sessions** with live and simu-live sessions, as well as an on-demand video library
- **Three tracks** designed around grants policies and programs, including case studies and Q&As
- **Live chat opportunities** with NIH & HHS experts on the grants process and policies
- **Downloadable resources** to reuse and/or share with others at your institution
- **Free registration!** Yes, you read it right.

Are you excited yet? Keep tabs on the latest registration and agenda updates on the [seminar site](#). We hope to “see” you there!

NIH LBRN Acknowledgement

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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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