LBRN Summer Bioinformatics Program

LBRN Summer Bioinformatics Program
Independent Project Workshop

Part 1: Preparing your data and mapping out the analysis plan.
Part 2: Getting the most out of your project.

July 30; 10 AM - 6 PM
@LSU CCT 340 E Parker Blvd, Baton Rouge, LA 70808

Also available ONLINE!

Date: July 30th, 2018
Time: 10:00 am to 5:30 pm (CST)
Location: CCT, LSU

Schedule
• 10:00 AM - 10:15 AM - Remarks by Dr. Gus Kousoulas
• 10:15 AM - 11:45 AM - 1st session: Review of the analysis process
( break 11:45 AM - 12:00 PM)
• 12:00 PM - 12:45 PM - 2nd session: Introduction of a project example
( Lunch break [Lunch will be provided] 12:45 PM - 1:30 PM)
• 1:30 PM – 2:15 PM - 2nd session: Continue Discussion of a project example
( break 2:15 PM - 2:30 PM )
• 2:30 - 4:00 PM - 3rd session: Making your project impactful
( break 4:00 PM - 4:15 PM )
• 4:15 PM - 5:30PM - 4th session: Project ideas discussion - group session
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 Summer Undergraduate Research Forum (SURF), will be held Friday, **July 27th, 2018 from 1:00pm – 4:00pm** in LSU’s Union’s Cotillion Ballroom. All is welcome.

The 25th Annual Summer Undergraduate Research Forum (SURF) where undergraduate students from across the LSU campus present their summer research projects.

SURF participants represent programs, including:

- NASA Planetary Geology and Geophysics Undergraduate Research Program, (PGGURP)
- Chemical Engineering (CHE REU)
- Consortium of Innovation in Manufacturing and Materials (CIMM REU)
- COTEL: A NASA Space Grant USIP Project
- Interdisciplinary Research Experience in Computational Sciences (CCT REU)
- Louisiana Biomedical Research Network (LBRN)
- McNair Research Scholar Program (McNair)
- Office of Strategic Initiatives Research Experiences for Undergraduate (OSI REU)
- Physics & Astronomy Research Experiences for Undergraduate (P&A REU)
- Smart Polymer Composite Materials and Structures REU (SMART)
- and Individual student researchers in various laboratories across LSU

**WHEN & WHERE**

SURF is being held at the LSU Student Union - Royal Cotillion Ballroom on July 27, 2018

Please come and ask the participants about their summer research!

**MENTORSHIP**

The LBRN program expects that our participants perform full time research for the period of funding. We do not allow for other jobs, teaching or classes or vacations to be scheduled during the funding period; fellowships (undergraduate students), stipends (graduate students), and summer salaries (faculty) are sufficient to enable the funded participant to focus 100% on the research project during the funding period. The student participant may become involved in a research project that is ongoing in the chosen laboratory, or design a project in collaboration

**Wednesday, July 11, 2018: Practical Programming in C/C++ 2**

C/C++ is the programming language often used on HPC (high performance computing) systems. This two-part training on C/C++ will provide a brief introduction to the C/C++ programming language. The first part will cover basic syntax and grammar. The second part will focus on more advanced concepts which lead to practical programming techniques especially useful for scientific research and engineering. No prior programming background is expected.

**Prerequisites:**

Users are free to use their own laptops/workstations in which case a C/C++ compiler such as GCC must be installed OR HPC/LONI account to access C/C++ compilers on the clusters.

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 WebEx Link in their registration confirmation email. Please see the system requirements at [https://grok.lsu.edu/Categories.aspx?parentCategoryId=3381](https://grok.lsu.edu/Categories.aspx?parentCategoryId=3381).

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**NIH : Academic Research Enhancement Award for Undergraduate-Focused Institutions (R15 - Clinical Trial Not Allowed)**

A new NIGMS R15 AREA program FOA ([PAR-18-714](https://grants.nih.gov/grants/guide/pa-files/PAR-18-714.html)) that has been published today. The purpose of this Academic Research Enhancement Award (AREA) for Undergraduate-Focused Institutions is to support small scale research grants at institutions that do not receive substantial funding from the NIH, with an emphasis on providing biomedical research experiences primarily for undergraduate students, and enhancing the research environment at these applicant institutions. Eligible institutions must award baccalaureate science degrees, and have received less than 6 million dollars per year of NIH support (total costs) in 4 of the last 7 fiscal years. This AREA FOA emphasizes the engagement and inclusion of undergraduates in research.


**Please note the following changes in NIGMS Support of Academic Research Enhancement Award (R15) Grants as published in the Notice (PAR-18-714):**

1. NIGMS will no longer accept New, Renewal, Resubmission or Revision applications for R15 grants [under the NIH Parent R15 Funding](https://grants.nih.gov/grants/guide/pa-files/PAR-18-714.html)

2. All R1S applications for NIGMS support must be submitted to PAR-18-714 "Academic Research Enhancement Award for Undergraduate-Focused Institutions".

The first AIDS Application due date for this FOA is September 7, 2018

More details...

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/](http://metagenomics.lsuhsc.edu/lectures/introinformatics/)
- An Introduction to Microbial Community Sequencing and Analysis
  [http://metagenomics.lsuhsc.edu/lectures/intromicrobiota/](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
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.

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.

NIH Extramural Nexus (NIH/OD)
The NCATS Trial Innovation Network – A Resource Supporting High Quality and Cost Effective Clinical Trials Available to You

Well-conducted randomized trials are considered the best method of providing evidence about the safety and efficacy of treatments to improve health. Each year, NIH Institutes and Centers spend an estimated $3-4 billion supporting clinical trial activities. These activities require high-level understanding of human biology, of manufacturing and pre-clinical research, and of regulatory requirements. The process of translating a new therapeutic from discovery to practice can be robust, but … at the same time is long and expensive – and despite the challenges inherent in complex, multi-disciplinary research sometimes too long and too expensive.

Rigorous Resources for Rigorous Research

Over two years ago, NIH rolled out a policy to enhance reproducibility of its supported research through rigor and transparency. Applicants and reviewers were required to devote more attention to four areas: the rigor of the prior research (scientific premise), the rigor of the proposed research (scientific rigor), consideration of biological variables including sex, and the authentication of key biological and/or chemical resources. When the 21st Century Cures Act was passed later that same year, we were required, amongst other things, to assemble a working group of the Advisory Council to the NIH Director (ACD). These experts were charged with recommending ways to further enhance reproducibility of the research we fund, while being informed by the current policy.

When to Share or When Not to Share, that is the Privacy Question

Looking for a grant award you heard about? Go here! Perhaps how many trainees NIH supported? You got it! Research spending on a certain disease? Done! Comparing NIH to another federal funder? Look no further! As you can see, NIH shares a quite diverse array of data associated with our funded grants in a transparent way. But, that does not mean we share everything.

NIH Wants You! – Apply to Be Our Next Director of the Center for Scientific Review

Do you have a vision for the future of improving scientific reviews? Are you a first-rate Scientific Leader seeking a career at the Center for supporting the most preeminent biomedical research institutes in the nation and the world? If so, the NIH has the perfect opportunity for you!

RCDeCade: 10 Years and Still Counting

Remember hearing those stories about how your grand-PIs had to walk five miles, in the snow, uphill, with no shoes just to learn how NIH spent its research budget? Well, believe it or not, but that was just ten years ago. Today, we have the Research, Condition, and Disease Categorization (RCDC) webtool to do this in a blink of an eye. Now, following the official release of Fiscal Year (FY) 2017 data and updated estimates for FYs 2018 and 2019 last month, we wanted to celebrate a successful decade of service.

With origins stemming from the NIH Reauthorization Act of 2006, and now available via NIH RePORT, RCDC is a helpful resource for investigators, advocacy groups, Congress, and the public to easily see how much NIH spends on certain research areas year by year. Since 2008, we have made regular enhancements to make the system more beneficial to all. Project listings published. Data cleansed. Quality enhanced. Disease burden information added. And, today, 285 categories reported online.
Top Stories

- If You Run Into SAM Registration Processing Delays, We’ve Got Your Back

GSA now requires entities who are updating or renewing their SAM registration to provide an original, signed and notarized letter stating that the organizational official registering the organization is the authorized administrator. The new process is slowing processing time for registrations and GSA is unable to provide estimated processing time frames. NIH encourages applicants and recipients with existing SAM accounts to review their account information and begin the renewal process well in advance of the expiration date, to ensure all renewals are competed on time. But if you started early and the registration process isn’t complete by the application deadline, don’t fret, we recognize this could be due to reasons beyond your control.

New Resources

- New Podcast on NIH Advisory Councils: Understanding What Happens During the Second Round of Peer Review

Have you ever wondered why your grant application must undergo a separate round of peer review—even after a panel of experts initially weighed in on its scientific merit and provided a score to consider when making funding decisions?

- Expiring Appropriations and What it Means for You – New Video and Podcast

Did you know that grant funds can expire? A recent interview with NIH experts on the topic of “Expanding Appropriations” addresses how you know if you have expiring funds, what to do if you find yourself in this situation, and whether money can be restored. This 10 minute conversation is available as both a video and a podcast.

- Fall 2018 NIH Regional Seminar Heads to the “City by the Bay” – San Francisco, CA

In just a few months, approximately 65 NIH & HHS grants process and policy experts will be bringing their expertise to the San Francisco Bay area for the NIH Regional Seminar on Program Funding and Grants Administration. Plan to meet, share, and learn with us over the course of 2-3 days, October 17-19, 2018!

You Ask, We Answer
Does the NIH inclusion policy apply to research using existing datasets or other types of existing resources involving human subjects?

If the study is considered human subjects’ research and meets the NIH definition of clinical research, then it is subject to the NIH inclusion policy.

What do I do if my proposed study involves both an existing dataset/resource AND recruitment of new participants? How do I address inclusion and complete the forms?

If you are proposing a study that will include both an existing dataset and recruitment of new participants, you should provide separate inclusion forms for the existing dataset and the participants to be prospectively recruited. The existing dataset sample can be provided on the Cumulative Inclusion Enrollment Report. You should provide the sex/gender, race, and ethnicity information only for the data points you will use from the existing dataset or resource. You would provide information for the entire dataset or resource if you were analyzing data from all individuals in that dataset or resource.

In part D of the F-RPPR (participants), should we report time worked for the final budget period or time worked for the final budget period + the no cost extension period?

In the Final RPPR you should report on the individuals that worked on the project during the last budget period minus any approved no-cost extensions. You can find this and more in the RPPR FAQs.
ABRCMS is one of the nation’s largest STEM conferences for underrepresented minority students. Over the four days, more than 2,000 students present their research, explore over 380 exhibit booths, participate in cutting edge scientific sessions and network with faculty and peers from across the nation.

Research faculty provide the students with valuable feedback by serving as presentation judges and play an essential role in mentoring students and learning strategies for facilitating student success.

The Annual Biomedical Research Conference for Minority Students (ABRCMS) is inviting applications for two travel award programs.

- Research faculty and mentors willing to serve as judges at ABRCMS 2018 are eligible to apply for the ABRCMS Judge Travel Award. Apply by July 20th
- Undergraduates, postbaccaularetes, and terminal level master’s students are invited to showcase their research by submitting abstracts for presentation. The abstract submission deadline is September 7th
- Travel funds are available to eligible undergraduates and postbaccalaureates students who submit an abstract for poster or oral presentation. The deadline to apply for a travel award is August 22nd

Questions? Contact abrcms@asmusa.org.

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**NIH 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.