

News, Opportunities and Deadlines for July 2021

Report : 2021 LBRN Virtual Summer Research Program

The LBRN 2021 Virtual Summer Program has two components this year:

1. The first component of the program is hosted by our PUI Campuses within their labs directly under approved supported faculty doing research.



Student	Faculty	Project Title
Alexis Bardwell	Becky Giorno	Searching for Antibiotic Resistance in Saline and Hypersaline Environments
Taylor Teach	Jamie Newman	Canonical and Noncanonical Notch Signaling Regulates Adult Stem Cell State
Claire Colley	Mary Caldorera-Moore	Assessment of Proactive Chitosan-genipin Hydrogels Biomaterial Biocompatibility
Kristin Jackson	Yuri Voziyanov	Construction of a Model Cell Line to Test DNA Replacement Catalyzed by Tyrosine Recombinases



Student	Faculty	Project Title
Eric Phillip Clifford	Urska Cvek	Evaluate Correlations and Mine Drug Abuse Data from LSU Health Shreveport in Shreveport during 2011-2019
Joseph Mondello	Tauhid Alam	Computational Molecular Ensemble Docking with SARS-CoV-2 Proteins
Supriya Karki	Stephanie Villalba / Kathryn A. Hamilton	Developmental stages of olfactory sensory neurons in neonatal life vs. adulthood
Ethan James Manco	Subhajit Chakrabarty	Best practices for inter-conversion of EEG data formats
Kalani Myles	Elahe Mahdavian	Computational-Aided Drug Discovery (CADD), Development of Anti-Viral Drugs for COVID-19
Keelin North	Vonny Salim	Identification of Host Microbiota Relationships involved in Anticancer Alkaloid Biosynthesis

Student	Faculty	Project Title
Hunter Hollie	Patrick Moyer	Development of a hybrid scanning force and optical microscope
Max Cole	Kazim Sekeroglu	A 3D CNN-LSTM based multi-view spatiotemporal deep-fusion learning model for BCI
Anup Ghimire	Kazim Sekeroglu	A 3D CNN-LSTM based multi-view spatiotemporal deep-fusion learning model for BCI
Matthew Giblin	Teague O'Mara	Heart rate variability under extreme energy demands
James Lee	Teague O'Mara	Heart rate variability under extreme energy demands
Bennet Hibner	William Parkinson	Computational Investigations of Stereospecificity in Concerted Electrocyclic Reactions

Student	Faculty	Project Title
Shilpa Thota	Sanjay Batra	Complex interplay between Hsp90 and Beclin-1 regulatesTLR-4 mediated autophagy during Pentachlorophenol exposure-an in vitro approach
Jamaya L. Watson	Sanjay Batra	Complex interplay between Hsp90 and Beclin-1 regulatesTLR-4 mediated autophagy during Pentachlorophenol exposure-an in vitro approach

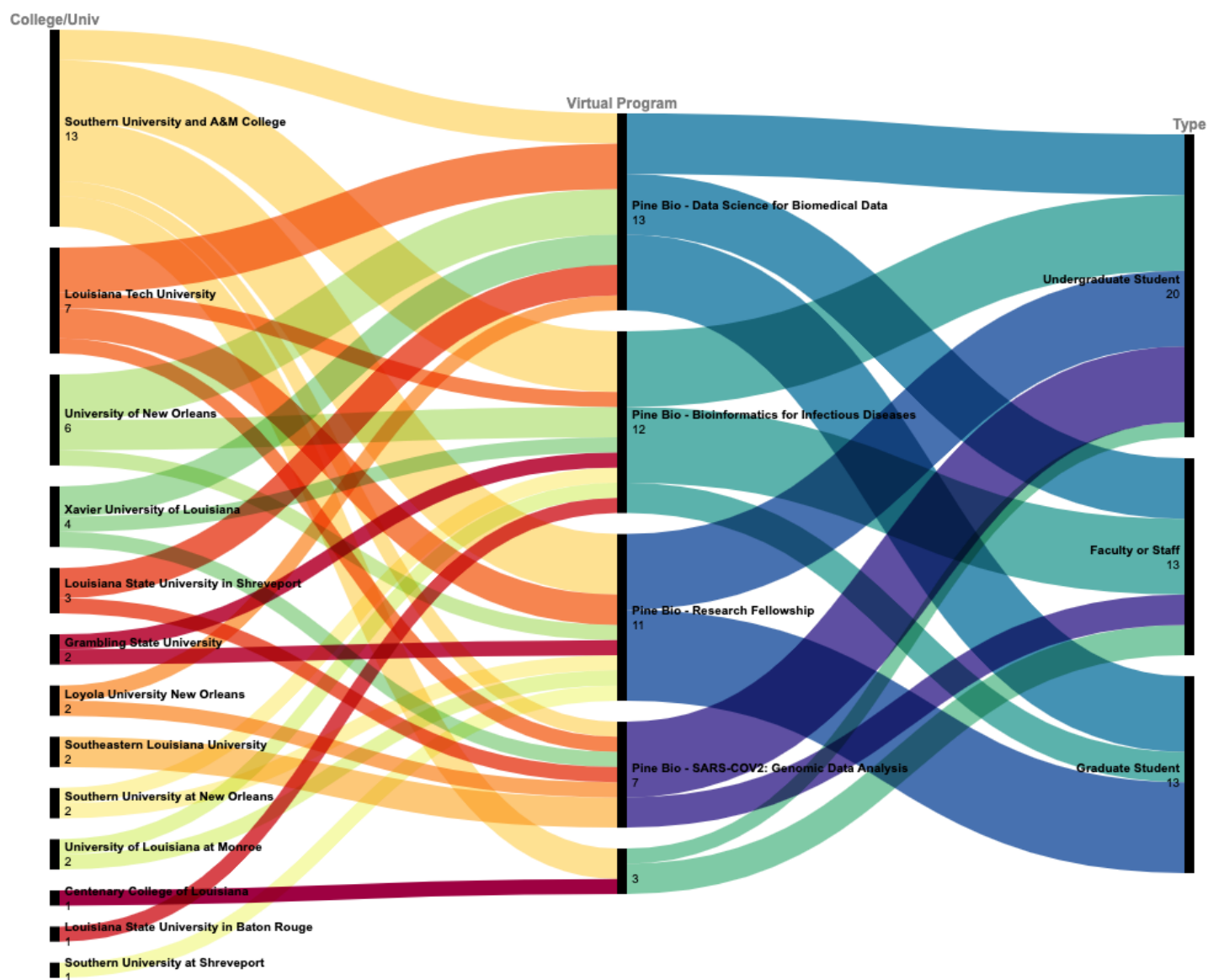
Student	Faculty	Project Title
Chelsea Bock	Jean Christophe Chamcheu	Bioguided fractionation and identification of Graviola (<i>Annona muricata</i>) extract ingredients
Marion Bramwell	Jean Christophe Chamcheu	In vitro anti-skin cancer evaluation of Graviola extract fractions and newly identified compounds from Graviola (<i>Annona muricata</i>)
Bryan Strong	Srinivas Garlapati	Investigation of protein-protein interactions in the translation pre-initiation complex of <i>Giardia lamblia</i>
Uchechi Owunna	Siva Murru	Cobalt-catalyzed Synthesis of Biologically Relevant 1,3-Diarylpyrazoles
David Basnet	Siva Murru	Diversity Oriented Synthesis of Pyrazolone Derivatives for Anticancer Activity Studies
Karli Clifton	Siva Murru	Electrochemical Synthesis of Organonitrogen Compounds
Antionette Leo	Nektarios Barabutis	Unfolded protein response-mediated regulation of lung endothelial permeability

Student	Faculty	Project Title
Julianna Berger	Wendy Schluchter	Characterization of proteins involved in chromatic acclimation
Loandi Cruz	Mark L Trudell	Development of green methods for the synthesis of drug scaffolds

Student	Faculty	Project Title
Kaitlyn Hawkins	Anup Kundu	Targeted delivery of doxorubicin liposomes for the treatment of chemoresistant breast cancer
Amaya Sanders	Joseph Chaney	Applying the Brakes: Understanding the Role of Conformational Changes in Kinesin-5

2. The second component is a program that LBRN is supporting with Pine Bio Omics Logic Bioinformatics, Bioinformatics for Infectious Diseases, SARS-COV2 Genomic, Data Science for Biomedical Data and mentor guided Research Fellowships. The program kicked off June 21, 2021 and is well underway now.

Below graph shows correlations between categorical dimensions among each universities, virtual programs and types of participants, representing them as flows, visually linking categories with shared items. Each rectangle represents a unique value in the selected dimension, its height is proportional to its value. Correlations are represented with curved lines whose width is proportional to their value.



The types of participants and the number of participants in each detailed virtual program are as follows.

Type of participants	# of participants
Faculty or Staff	13
Graduate Student	13
Undergraduate Student	20

Virtual Program	# of participants
Omics Logic Bioinformatics	29
Bioinformatics for Infectious Diseases	12
SARS-COV2: Genomic Data Analysis	7
Data Science for Biomedical Data	13
Research Fellowship	11

Tables available here for readability:



or <https://lbrn.lsu.edu/downloads/2021%20LBRN%20Summer%20Programs%20v3.pdf>

IDEA Workshop



September 2 - 3, 2021

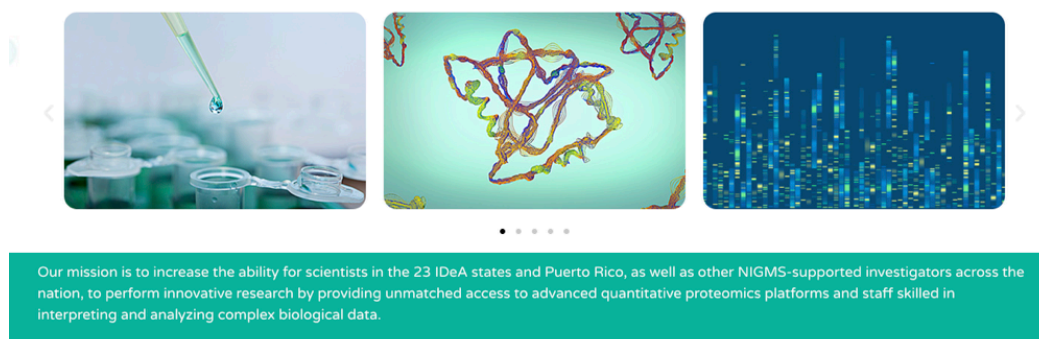
Hosted by the IDeA National Resource for Quantitative Proteomics

The IDeA National Resource for Quantitative Proteomics is hosting a workshop for staff in bioinformatics core facilities in IDeA states with focus on those supported by INBREs. This workshop will present **an overview of bioinformatics approaches specific to the analysis of proteomic data**. After completion of the workshop, attendees will be able to: 1. Understand basic proteomics workflows, including TMT, DIA and phosphoTMT 2. Understand the IDeA National Resource for Quantitative Proteomics deliverables and analyses.

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- 1. Understand basic proteomics workflows, including TMT, DIA and phosphoTMT**
- 2. Understand the IDeA National Resource for Quantitative Proteomics deliverables and analyses**

Applications may be submitted [here](#). Deadline to apply is August 15th



Proteomics Workshops

Applications are open for the 2021 Bioinformatics for Proteomics Workshop. This workshop aims to give bioinformaticians a greater understanding of proteomics approaches and data analysis techniques. More information in the flyer.

Applications may be submitted [here](#). Deadline to apply is August 15th.

 Workshop Flyer

For more information, visit the IDeA National Resource website contact Heather for Quantitative Proteomics (IDeAResourceProteomics.org) or Douglas (HLDouglas@uams.edu). Applications are available [here](#). Preference is given to attendees in NIGMS IDeA states. Only 50 slots are available

and attendees will be selected for regional representation. Deadline for applications is August 15, 2021. Workshop is supported by the IDeA National Resource for Quantitative Proteomics (R24GM137786), Arkansas INBRE (P20GM103429) and Oklahoma INBRE (P20GM103447)

National Research Mentoring Network (NRMN)

Best Practices for Junior Investigators When Writing an NIH Research Grant Application !

We are excited to announce that we will be hosting a new webinar in our career development webinar series with the NIH Common Fund High-Risk, High-Reward Research Program!

This is an opportunity for you to speak with NIH Program Officers and have your questions directly answered. Prior to the webinar, please join the HRHR Award listserv so that you may be kept abreast of future funding opportunities. If you have any questions about these funding opportunities, please do not hesitate to contact:

earlyindependence@od.nih.gov, NewInnovatorAwards@mail.nih.gov, PioneerAwards@mail.nih.gov, t_r01@od.nih.gov.

A promotional poster for a career development webinar series. The background features a teal and yellow geometric design with a notebook and pen. The NRMN logo is in the bottom left. The text is as follows:

CAREER DEVELOPMENT WEBINAR SERIES
*NIH Funding Opportunities for Scientists at All Career Stages
Proposing Innovative High-Risk, High-Reward Research*

Friday, August 6 from 11a - 1p CT

 Ravi Basavappa, Ph.D. Program Leader, NIH Common Fund's High Risk, High-Reward Research Program	 Becky Miller, Ph.D. Program Officer, NIH Common Fund's High Risk, High-Reward Research Program	 Mekyba Charles-Ayinde, Ph.D. Health Science Policy Analyst, NIH Common Fund's High-Risk, High-Reward Research Program	 Ellie Murcia Program Specialist, NIH Common Fund's High-Risk, High-Reward Research Program
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#NRMNmentoringMatters



Success Stories of LBRN

- **Congratulations! LBRN former Summer Student; Adeola Adedokun**



MY SUCCESS STORY AND THE IMPACT OF LBRN

As the first girl child in my family with an advanced degree, I have always dreamed of excelling and being a role model for others who have all the potentials but see no hope. While I have always been clear in my goals, I was not sure how to actualize them. However, what keeps me going is the conviction and belief that the sky is the starting point with persistence and determination.

Among many others, one of the goals I set for myself was to study in one of the top global public health schools. To improve my chances, it was clear that I needed to stand out in both academic prowess and research to realize my dream. Thus, I devoted myself to my classes and academic work.

Also, to increase my chances of success, I sought research exposure opportunities as it was clear that excellent academic performance is not sufficient. Fortunately, a research experience opportunity through Louisiana Biomedical Research Network (LBRN) came at the right time. A

significant landmark in my career progression was the research experience I garnered with LBRN, which exposed me to research on the Fabrication of Human-Scale Biliary Trees Surgical Replacements through 3D Printing. While working on this research, we explored the high complexity of liver transplant surgical procedure, which requires delicate harvesting of the donor and implanting same in the recipient. While there has been a significant rise in the number of global transplantations performed (8000 liver transplants performed in the United States as of 2017), one of the essential reasons for post-liver transplant failure and mortality is related biliary tree complications. We were able to demonstrate invitro proof of design concept combination of 3D printed plastic biliary stents infused with Cholangiocytes.

The catalog of experiences and excellent research skills I gathered within a short period was remarkable, and tremendously improved the quality of my application to John Hopkins Bloomberg School of Public Health. LBRN will forever have a special place in my heart.

• **LBRN Supported PUI Investigators Appointed to LOUIS Open Textbooks Pilot Program**



The Louisiana Library Network (LOUIS) and the Louisiana Board of Regents are pleased to announce their selection for a \$2 million award for the Open Textbooks Pilot Program from the Department of Education. Associate Commissioner and Executive Director for LOUIS, Dr. Teri Oaks Gallaway, who will serve as the Principal Investigator for the grant, explained, “This project engages instructors of dual enrollment across Louisiana in the curation and creation of OER for 25 of the state’s general education courses. Annually these courses have enrollments topping 20,000 for high school students and 250,000 statewide. Not only does this reduce the cost of higher education, but it eliminates an early barrier to participation in post-secondary education”.

The grant will fund LOUIS’ Interactive OER for Dual Enrollment project, which supports the extension of access to high-quality post-secondary opportunities to high school students across Louisiana and beyond. This project, funded by Congress in the 2020 Fiscal Year omnibus spending bill, features a collaboration between educational systems in Louisiana, the library community, Pressbooks technology partner, and workforce representatives. It will enable and enhance the delivery of open educational resources (OER) and interactive quiz and assessment elements for priority dual enrollment courses in Louisiana and nationally. Developed OER course materials will be released under a license that permits their free use, reuse, modification and sharing with others.

Dr. Waneen Dorsey (LBRN PI), Grambling State University, has been appointed to develop CBIO 1033, General Biology I (Science Majors) and CBIO 1034, General Biology I Lecture + Lab (Science Majors) coursework for the grant.

[... to see more details](#)

Louisiana Coronavirus (COVID-19) Information

Information from CDC: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/vaccine-benefits.html>

COVID-19 vaccines are safe

- COVID-19 vaccines were developed using science that has been around for decades.
- COVID-19 vaccines are not experimental. They went through all the required stages of clinical trials. Extensive testing and monitoring have shown that these vaccines are safe and effective.
- COVID-19 vaccines have received and continue to undergo the most intensive safety monitoring in U.S. history. [Learn more about how federal partners are ensuring COVID-19 vaccines work.](#)

COVID-19 vaccines are effective

- COVID 19-vaccines are effective. They can keep you from getting and spreading the virus that causes COVID-19. [Learn more about the different COVID-19 vaccines.](#)
- COVID-19 vaccines also help keep you from getting seriously ill even if you do get COVID-19.
- Getting vaccinated yourself may also protect people around you, [particularly people at increased risk for severe illness from COVID-19.](#)

Once you are fully vaccinated, you can start doing more

- [After you are fully vaccinated for COVID-19](#), you can resume many activities that you did before the pandemic. You can resume activities without wearing a mask or staying 6 feet apart, except where required by federal, state, local, tribal, or territorial laws, rules, and regulations, including local business and workplace guidance.
- People are not considered fully vaccinated until 2 weeks after their second dose of the [Pfizer-BioNTech](#) or [Moderna](#) COVID-19 vaccine, or 2 weeks after a single-dose of [Johnson &](#)

[Johnson's Janssen](#) COVID-19 vaccine. You should keep using all the tools available [to protect yourself and others](#) until you are fully vaccinated.

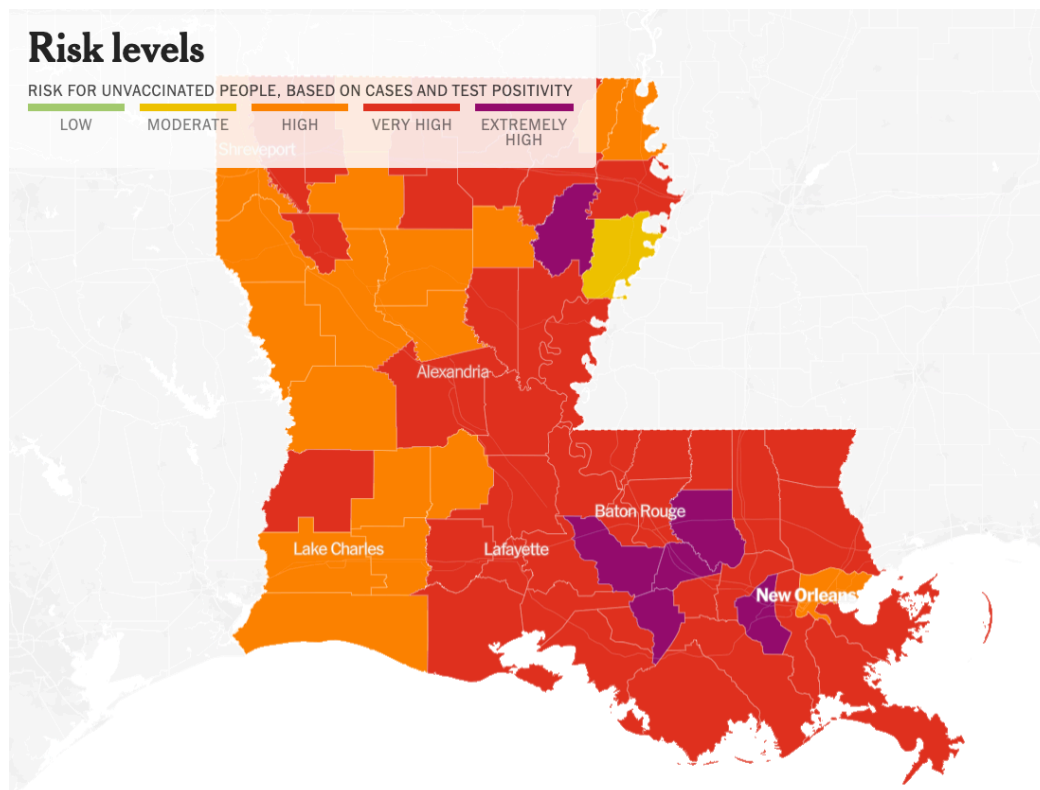
- Learn more about COVID-19 vaccination for [people with underlying medical conditions or weakened immune systems](#).

Louisiana COVID-19 Information

COVID-19 is again on the rise in Louisiana as state officials urge residents to get vaccinated to stave off the rapidly spreading delta variant.

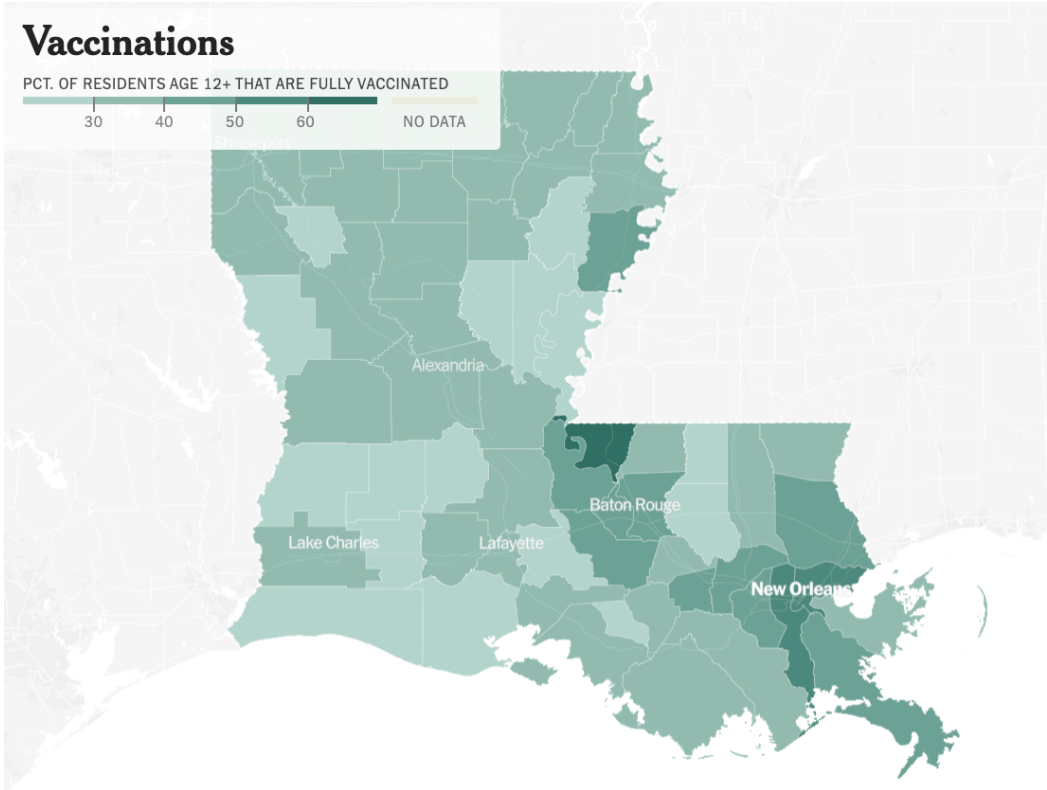
[The Louisiana Department of Health](#) this week reported the most new coronavirus cases in the state since mid-February — a time when vaccines weren't available to a broad section of the population and the nation emerged from a crushing winter surge. Officials warned that the virus's more-transmissible delta variant, first detected in India, is running rampant among unvaccinated residents and hospitals are reporting growing patient numbers.

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



Vaccinations

PCT. OF RESIDENTS AGE 12+ THAT ARE FULLY VACCINATED














CASES CONNECTED TO

LOCATION

CASES

Louisiana State University	Baton Rouge, La.	2,349
Tulane University of Louisiana	New Orleans, La.	2,194
University of Louisiana at Lafayette	Lafayette, La.	848
Louisiana Tech University	Ruston, La.	839
Southeastern Louisiana University	Hammond, La.	604
Northwestern State University of Louisiana	Natchitoches, La.	552
University of Louisiana Monroe	Monroe, La.	507
Louisiana State University Health Sciences Center, New Orleans	New Orleans, La.	467
Nicholls State University	Thibodaux, La.	334
Southern University and A&M College	Baton Rouge, La.	331

	CASES DAILY AVG.	PER 100,000	14-DAY CHANGE	HOSPITALIZED DAILY AVG.	PER 100,000	14-DAY CHANGE	DEATHS DAILY AVG.	PER 100,000	FULLY VACCINATED
United States	26,513	8	+111% 	20,305	6	+22%	283.7	0.09	48%
Tennessee ›	473	7	+475% 	267	4	+9%	5.7	0.08	38%
Florida ›	5,178	24	+219% 	3,057	14	+57%	42.4	0.20	47%
Louisiana ›	1,005	22	+179% 	395	8	+50%	6.1	0.13	36%
Massachusetts ›	165	2	+174% 	106	2	-11%	0.7	0.01	63%
California ›	2,802	7	+165% 	1,725	4	+36%	36.4	0.09	51%
Arkansas ›	1,023	34	+154% 	542	18	+73%	6.3	0.21	35%
South Carolina ›	340	7	+153% 	176	3	+40%	2.4	0.05	40%
Vermont ›	11	2	+145% 	5	<1	-22%	0	—	67%
Alaska ›	79	11	+145% 	38	5	+189%	0.6	0.08	45%
Oklahoma ›	497	13	+142% 	329	8	+60%	1.6	0.04	39%

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

NIH Extramural Nexus



• Organization Eligibility for NIH Research Enhancement Awards

The NIH Research Enhancement Award (R15) supports small-scale research projects at educational institutions that provide baccalaureate or advanced degrees for a significant number of the Nation's research scientists but that have not been major recipients of NIH support.

Two programs are supported under the R15 activity code each with its own general eligibility requirements

- **Academic Research Enhancement Award (AREA) for Undergraduate-Focused Institutions**

- The application must be submitted by the eligible undergraduate-focused organization with a unique entity identifier (such as DUNS) and a unique NIH eRA Institutional Profile File (IPF) number. See [NOT-OD-21-135](#).

- The applicant institution must be an accredited public or non-profit private school that grants baccalaureate degrees in biomedical sciences.
 - At the time of application submission, all the non-health professional components of the institution together have not received support from the NIH totaling more than \$6 million per year (in both direct and F&A/indirect costs) in 4 of the last 7 fiscal years.
 - A signed letter is required from the Provost or similar official with institution-wide responsibility verifying the eligibility of the applicant institution at the time of application submission.
- **Research Enhancement Award Program (REAP) for Health Professional Schools and Graduate Schools**
 - The application must be submitted by the eligible health professional or graduate school with a unique entity identifier (such as DUNS) and a unique NIH eRA Institutional Profile File (IPF) number. See [NOT-OD-21-135](#).
 - The applicant organization must be an accredited public or non-profit private school that grants baccalaureate or advanced degrees in health professions or advanced degrees in biomedical and behavioral sciences.
 - At the time of application submission, the applicant institution may not have received support from the NIH totaling more than \$6 million per year (in both direct and F&A/indirect costs) in 4 of the last 7 fiscal years.
 - A signed letter is required from the Provost or similar official with institution-wide responsibility verifying the eligibility of the applicant institution at the time of application submission.

The [R15 funding opportunity announcements](#) contain additional organization and principal investigator eligibility details.

Applicants are encouraged to use the following resources to help determine eligibility:

- [FAQs](#)
- [R15 Eligibility Decision Tree](#)
- [Help Determining Organization Funding Levels for R15 Eligibility](#)

Check out our [NIH Research Enhancement Award \(R15\)](#) page for additional information on these exciting programs.

• **New FY 2020 RCDC Categories and Funding Data are Available (Including for Coronaviruses)**

NIH recently updated its [Research, Condition, and Disease Classification \(RCDC\)](#) system with FY 2020 actual spending data and estimates for FY 2021 and 2022.

“Coronaviruses” is a new category as part of this update. This category covers Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and all types of other coronaviruses. Footnote #28 on the [RCDC Categorical Spending page](#) indicates that the FY 2020 actuals include obligations from resources specified for NIH in FY 2020 COVID-19 related emergency supplemental appropriations and funding from FY 2020 annual appropriations. FY 2021 and FY 2022 estimates reflect anticipated use of carryover from FY 2020 COVID-19 supplemental accounts plus support of research activities from annual appropriations.

Several other new categories as part of the FY 2020 update include (in alphabetical order):

- Electronic Nicotine Delivery Systems
- Esophageal Cancer
- Maternal Morbidity and Mortality
- Postural Orthostatic Tachycardia Syndrome
- Social Determinants of Health
- Stomach Cancer
- Wound Healing & Care

• All About Grants Podcast – Financial Conflicts of Interest

In this [NIH All About Grants](#) podcast episode, we virtually sit down with Diane Dean, a senior advisor within the NIH’s Office of Extramural Research, and dive into what you should know about [financial conflicts of interest \(FCOIs\)](#) ([MP3](#) / [Transcript](#)). The conversation touches on the regulations and our [Guide Notice NOT-OD-21-002](#), what investigators and recipient institutions should do to comply, how NIH oversees the process, what may happen if these rules are not followed, and [who to contact with questions](#).

“Remember that ... significant financial interests, whether they’re foreign or domestic, if they’re related to your institutional responsibilities, they must be disclosed ... transparency and accountability ensure that research is objective and in the best interest of the public.” – Diane Dean

Have an idea for a future podcast? Email ExtramuralNexus@mail.nih.gov and tell us all about it.

• An Update on Implementing ACD Recommendations on Changing the Culture to End Sexual Harassment

In our continued effort to address sexual harassment, the NIH has implemented some of the [recommendations](#) of the [NIH Advisory Committee to the Director \(ACD\) Working Group on Changing the Culture to End Sexual Harassment](#). I recently [presented](#) to the ACD an update on our work, and want to share some highlights with you. Over the last couple of years, the NIH has taken a number of steps, including:

- Developing and publishing our [processes for handling allegations of sexual harassment at NIH-funded institutions](#). As part of this process, our Extramural Integrity Team reviews all allegations of professional misconduct, which includes sexual harassment, in a manner similar to its review of allegations of research misconduct.
- Making available a web-based form and an email address for anyone to use to inform NIH of harassment. We recently added a telephone number for reporting allegations.
- Issuing a notice and related blog announcing our expectation that grant recipients who request changes in the principal investigator, key personnel, or recipient institution notify us if these requests are related to concerns about safety and/or work environments, including issues related to sexual harassment, bullying and other hostile working conditions.

During the ACD meeting, we presented data on our casework to date (see Table 1). People are reaching out to us to share their concerns. We receive notifications from a range of individuals, including targets of harassment, colleagues or bystanders, and institutional officials. While the majority of our case intake is for sexual harassment, other forms of professional misconduct are commonly reported, such as bullying or general harassment. We expect to receive at least as many case reports, perhaps more, in 2021 than we did for 2019 and 2020. Thus far in 2021, we have seen an uptick in the number of reports of racial discrimination compared to previous years.

Table 1

Case Intake Since 2018

Characteristic / CY	2018	2019	2020	2021
Total N (%)	31 (9.9)	107 (34.1)	106 (33.8)	70 (22.3)
Sexual Harassment	28 (90.3)	91 (85.0)	55 (51.9)	41 (58.6)
Other Harassment	2 (6.5)	7 (6.5)	22 (20.8)	20 (28.6)
Bullying	1 (3.2)	14 (13.1)	26 (24.5)	5 (7.1)
Racial Discrimination	1 (3.2)	9 (8.4)	9 (8.5)	16 (22.9)
Media Publicity	18 (58.1)	21 (19.6)	17 (16.0)	26 (37.1)
Institution Self-Disclosure	2 (6.5)	8 (7.5)	16 (15.1)	5 (7.1)
Values are N (%)				
2021 values through April 30				
Where percentage total greater than 100, cases involve more than one concern				

The data also show how harassment cases were resolved while working with the recipient institution (Table 2). In a substantial number of cases, principal investigators were removed from grants or other substantive grant or safety actions were taken. We also chose to remove a number of individuals from peer review.

[... Continue reading to learn more](#)

• NIH Seeking Feedback on Consent Language Resource to Foster Participant Specimen and Data Sharing

NIH is committed to ensuring that study participants are equal partners in research and have input into how their data and biospecimens are collected and used in the future. At the heart of any research effort lies the need for transparent and clear conversations between researchers and prospective participants about mutual goals and expectations regarding sharing practices.

To assist in facilitating this dialogue, NIH has been working with stakeholders to identify informed consent language “best practices” capable of effectively describing how data and biospecimens will be stored and shared for future research. From these conversations, NIH has developed a new resource that we are seeking the community’s feedback on. The resource describes points to consider when addressing this issue, and provides sample consent language that researchers can tailor based on their own unique study needs.

Don’t worry – this is intended to be a helpful resource for the community and will be completely voluntary in nature – which is why we need to hear from you about its utility and usability. For example, are there gaps or additional components that would be helpful to include? What about barriers to the voluntary use of the sample language by the community? We look forward to hearing from all of our stakeholders – study participants, researchers, institutional authorities, and

more – to help make this a valuable tool for enabling effective sharing to advance research.

Deadline for [comments](#) is September 29, 2021 and more information can be found [here](#).

• Updated NIH-wide Strategic Plan for COVID-19 Research Now Available

NIH recently released its [updated Strategic Plan for COVID-19 Research](#), available on the [NIH COVID-19 website](#). Responses to a [Request for Information](#) helped inform this iteration, building on progress [since the 2020 plan](#). The updated strategic plan highlights progress made in the development of diagnostics, therapeutics, and vaccines, along with developing strategies on how to effectively provide these resources. It also directs NIH-supported research into:

- Investigating and treating the long-term health consequences of COVID-19;
- Understanding and responding to new SARS-CoV-2 variants;
- Understanding and engaging disproportionately impacted populations.

• Common Data Elements: Increasing FAIR Data Sharing

This article was originally published in the National Library of Medicine’s blog, [Musings from the Mezzanine](#).

Previous posts published in *Musings from the Mezzanine* have explained [the importance of health data standards](#) and their role as the backbone of interoperability. **Common Data Elements (CDEs) are a type of health data standard that is commonly used and reused in both clinical and research settings.** CDEs capture complex phenomena, like depression, or recovery, through standardized, well defined questions (variables) that are paired with a set of allowable responses (values) that are used in a standardized way across studies or trials.

CDEs provide a way to standardize data collection—ensuring that data are collected consistently, and otherwise-avoidable variability is minimized.

Where possible, CDEs are linked to [controlled vocabularies](#) and terminologies commonly used in health care, such as [SNOMED-CT](#) and [LOINC](#), and CDEs can provide a route to harmonize with non-prospective clinical research designs. Such links leverage common data entities, like clinical concepts underlying common data models, to align evidence of clinical studies with evidence from ‘real-world data’ such as electronic health records (EHRs), mobile/wearables, and patient-reported

outcomes, what's become known in recent years as 'real world evidence'.



FAIR Data Principles (Source: National Institute of Environmental Health Sciences)

Importance of CDEs for Interoperability and Consistency of Evidence Across Settings

NIH's response to the COVID-19 pandemic highlighted the importance of developing CDEs that can be used and endorsed across NIH-funded COVID-19 research so that resulting, urgently-needed data would be [FAIR](#): Findable, Accessible, Interoperable, and Reusable.

Many groups across NIH identified, or are in the process of identifying, CDEs that are both COVID-19-related, and related to the needs of specific research projects such as NIH's [Disaster Research Response \(DR2\)](#) program, [Rapid Acceleration of Diagnostics—Underserved Populations \(RADx-UP\)](#) and [Researching COVID to Enhance Recovery \(RECOVER\)](#) initiatives. There was also a need to develop a process for indicating NIH endorsement of CDEs that meet meaningful criteria, are made available through a common discovery platform (the [NIH CDE Repository](#)), and avoid duplicating functions of resources that already exist.

NIH's [Scientific Data Council](#) charged a group of members of the NIH CDE Task Force, the CDE Governance Committee (Governance Committee), to develop this endorsement process based on the following criteria:

- Clear definition of variable/measure with prompt and response
- Documented evidence of reliability and validity, where applicable
- Human- and machine-readable formats
- Recommended/designated by a recognized NIH body (Institute, Center, Office, Program/Project Committee, etc.)
- Clear Licensing and Intellectual Property status (prefer Creative Commons or open source)

The role of the Governance Committee is to assure that the evidence of acceptability, reusability, and validity is properly presented and documented.

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

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 2020/2021.

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 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 GM103424-18 and 3 P20 GM103424-15S1.

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