News, Opportunities and Deadlines for Dec. 2021

Seasons Greetings from LBRN

Due to the holiday break, LBRN offices are closed December 24, 2021 through January 3rd, 2022.

Happy Holidays to all! Season's greetings from the Louisiana Biomedical Research Network!

Registration: 20th LBRN Annual Virtual Meeting

Event Date: January 28-29, 2022

All Deadlines: **Noon, Friday, January 7, 2022**
Location: **Virtual Meeting**

Mark your calendars!
January 2022

Wk	Sun	Mon	Tue	Wed	Thu	Fri	Sat
52							1
1	2	3	4	5	6	7	8
2	9	10	11	12	13	14	15
3	16	17	18	19	20	21	22
4	23	24	25	26	27	28	29
5	30	31					

Greetings!! LBRN team is pleased to announce that the 20th Annual LBRN Meeting will be held virtually on the 28th and 29th of January, 2022. The virtual format has been necessitated owing to COVID-19 related safety measures. As was the case last year, in-spite of the unprecedented pandemic LBRN investigators and students have been carrying out active research in a responsible and safe manner. We are encouraged by their commitment and look forward to celebrating the wonderful research efforts by all involved. This is an open meeting and all are welcome, there is no registration fee. We invite the biomedical researchers from all over the state to participate.

Each year the LBRN program has an annual meeting in which program participants, committee members and administrators meet to review individual research accomplishments and to discuss the overall program activity. Summer research faculty and graduate and undergraduate students are encouraged to present their LBRN sponsored research, and talks are scheduled to highlight sponsored research projects from partnered campuses across the state.

Oral Presenters: Full Project PIs, INBRE / COBRE Collaboration Supplemental Project PIs, LBRN Maternal Health Supplemental Project PIs, LBRN Graduate Students (Flash talks), and invited guests.

Poster Sessions: All projects currently funded by the LBRN, Summer Graduate students are required to submit an abstract to participate in the poster session. LBRN Undergraduate Summer students and all biomedical researchers within the state of Louisiana are also expected to submit abstracts. Poster abstract submission form will be sent after your registration.

To recognize the efforts, we will continue the tradition of awarding:
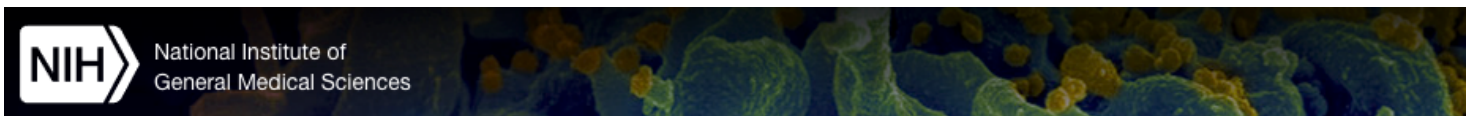
- 1st and 2nd place award for Graduate and Undergraduate Posters,
- 1st place award for Graduate Flash talks,
- 1st and 2nd place awards for Project Posters and finally,
- 1st place award for Oral Presentations by Full project PIs."

Please register on the link below

News: Division for Research Capacity Building, NIH

The Division for Research Capacity Building (DRCB) supports research, faculty development, research training, and research infrastructure improvements in states where levels of NIH research funding have historically been low through administering the Institutional Development Award (IDeA). It also supports research directed by and research capacity building in Native American and Alaska Native tribal organizations through the Native American Research Centers for Health (NARCH) program, faculty development at institutions that primarily serves students from underrepresented groups in biomedical research through the Support for Research Excellence (SuRE) program, and science education through the Science Education Partnership Awards (SEPA) program. The division also oversees the STTR Regional Technology Transfer Accelerator Hubs for IDeA States.

NIH Funding Opportunity and/or Policy Announcements

- Administrative Supplements to INBRE Awards to Fund Research Collaborations (NOT-GM-22-001).
- NIGMS National and Regional Resources (PAR-22-065).
- Administrative Supplements to NIGMS Funded Awards for Building Cloud-Based Learning Modules (NOT-GM-22-004).
- Innovation Corps (I-Corps) at NIH Program for NIH and CDC Translational Research (PAR-22-073).

Upcoming Events

- Webinar: Building Cloud-Based Learning Modules (NOT-GM-22-004), Thursday, December 9, 2:00-3:30 p.m. ET; Zoom information to follow.
- Pre-application webinar to discuss developing collaborative applications for INBRE supplements, December 20, 2:00-3:30 pm ET; Zoom information to follow.
- NIH UNITE's listening sessions to discuss racial & ethnic equity, December 2021-February 2022.

Reports/News/Program Messages

- Bristol Myers Squibb Foundation (BMSF) Diversity in Clinical Trials Career Development Program for early career physician investigators: informational webinars December 7 and January 6. For more information.
- Extramural Nexus: New Site for Small Business Program and Academic Entrepreneurship Resources.
- Extramural Nexus: Capacity Building for the Future of Biomedical Research Webinar: Recording Available.
- Extramural Nexus: Resources & Recordings Available from the Recent 2021 NIH Virtual Grants Seminar.

LBRN Achievement

At LSU Health in Shreveport, Ms. Prerana Ramesh is being hired by Dr. J. Steven Alexander in the [Department of Molecular and Cellular Physiology, LSU Health Shreveport](#), to work on the collaborative project entitled: "'*STABILITY' (symptomatic review during biologic therapy) in Inflammatory Bowel Disease*," which is a joint collaborative project between Dr. Alexander (LSU Health Shreveport) and Dr. Urska Cvek (LSU Shreveport). Ms. Prerana is being hired through the Administrative Supplements for Research on Women's Health in the IDeA States grant award from NIH/NIGMS (NIBIB, 3P20GM103424-20S2; FAIN: P20GM103424). In addition to her many training experiences, Ms. Ramesh was previously in the LBRN Undergraduate Scholars Program (08/2019 – 12/2019) where she worked on "*Protein Target Prediction for Sepantronium Bromide using Computational Reverse Screening Techniques*" where she gained experience with online databases and virtual programs (this work was presented as a competitive poster at LSU Health's 2020 IDEAS Day). Ms. Ramesh was also in the LBRN Summer Undergraduate Research Program at LSUHSC Shreveport where she worked on "*R-loop and double-strand DNA break levels in anaplastic thyroid cancer (ATC) and normal thyroid cell lines using quantitative immunohistochemistry and automated AI-driven pattern recognition*" (05/2019 – 07/2019).

Ms. Ramesh will enter Medical School at LSU Health Shreveport in July as part of the 2022 entering class.
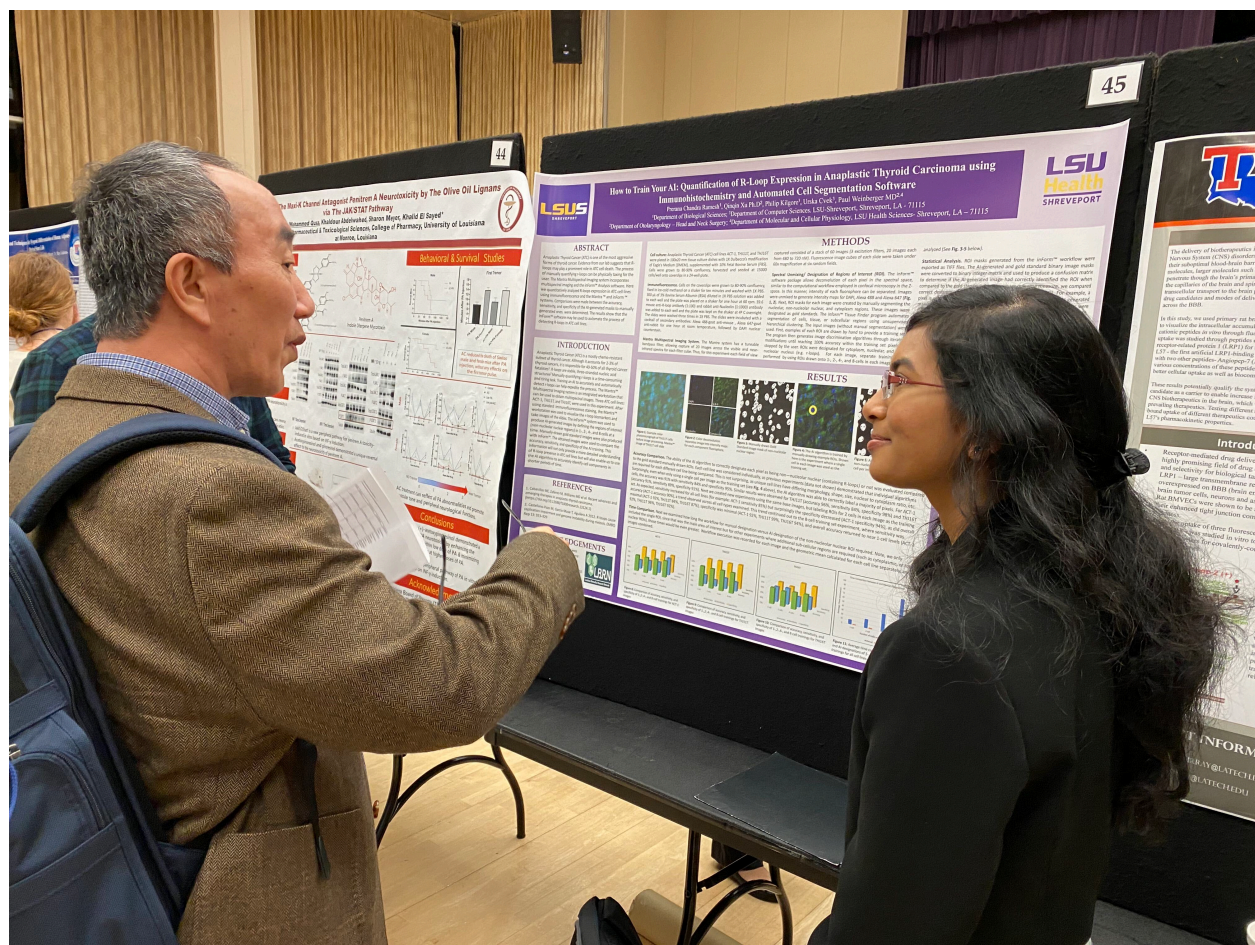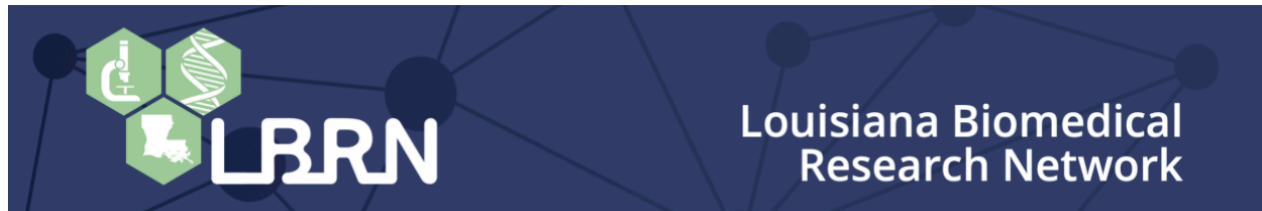
Photo: Prerana Ramesh presenting her work to Dr. Young-Hwan Lee at the 18th Annual LBRN Meeting in January 2020.

LBRN "Core Bucks"

The BBC Core and MCBR Core offer researchers the opportunity to earn "Core Bucks" to support faculty and students upto $1500. Requests for Core Bucks from Member Institutions must be initiated through the respective Core Contact on campus.

- The Bioinformatics, Biostatistics, and Computational Biology Core (BBC Core)

The BBC Core serves to train and support project investigators and their teams across Louisiana. It works to enable Louisiana Biomedical Research Network project PIs and their teams to employ Louisiana cyberinfrastructure (especially high performance computing), and to provide bioinformatics services, training, and educational support.

The core provides bioinformatics training, conducts workshops, and provides bioinformatics analysis services. The core also provides access to the IBM Delta Cluster and has a dedicated BBC allocation for the high performance computing resources at LSU. The BBC Core maintains software licenses and access to Ingenuity Pathway Analysis (IPA), Partek Flow, DNASTAR, and Ion Torrent analysis software. In addition, several open source tools for bioinformatics such as bowtie, tophat, cufflinks, samtools, GATK, QIIME, DADA2, Phyloseq, etc. are installed and maintained.

Some examples of standard bioinformatics workflows that can be supported through core bucks requests:

- Gene Pathway Analysis
- RNA-Sequencing Processing and Analysis
- 16S rRNA Microbial Community Analysis
- ITS2 Fungal Community Analysis

Other workflows can be developed or adapted from existing software on an as needed basis.

For more information, see: https://lbrn.lsu.edu/cores.html#corebucks

- The Molecular and Cell Biology Resources Core (MCBR Core)

MCBR Core Services include both one-on-one training for faculty and students as well as workshops on topics like bioinformatics and protein purification.

Sample services:

1. Molecular Biology Reagent Equipment and Services

- GeneLab provides conventional and next generation nucleic acid sequencing (NGS), and recombinant DNA Service. NGS equipment includes Torrent PGM, Ion Proton etc
- NGS Services provides a reliable connection between NGS experiments and the analysis of NGS data

2. Protein Production, Purification and Characterization Laboratory

- Protein Purification and Characterization includes semi automated Bio-rad profinia affinity chromatography system, AKTA Explorer FPLC system, and HPLC and ultracentrifugation equipment
- Peptide Synthesis and purification
- Protein-protein interactions are investigated using primarily Surface Plasmon Resonance (SPR) implemented on Biacore and ForteBio SPR equipment. Additional physicochemical characterization of protein-protein interactions is available through collaborations with the LSU Department of Chemistry.
- Gene-to-Protein-to-Antibody Services – you provide the gene, we return an antibody

3. Molecular Immunopathology Laboratory Services

- Pathology Services including necropsy procedures, gross and histopathological examinations and interpretation of immunohistochemistry and special stains performed by veterinarians and histology specialists
- Flow Cytometry and immunophenotyping Services
- Multiplex/Luminex complements immunophenotyping services for rapid and standardized analysis of soluble factors e.g., lymphokines, using bead based array technology.
- Microscopy – contains transmission and scanning electron microscopes, a laser dissection microscope, a Leica TCS SP2 for 3D fluorescence microscope, and a high-throughput digital slide-scanner.

For more information, see: https://lbrn.lsu.edu/cores.html#corebucks

Coronavirus (COVID-19) Information

Information from CDC: https://www.cdc.gov/coronavirus/2019-ncov/index.html

Who Is Eligible for a COVID-19 Vaccine Booster Shot?

What You Need to Know

COVID-19 Vaccine booster shots are available for the following Pfizer-BioNTech vaccine recipients who completed their initial series at least 6 months ago and are:

- 65 years and older
- Age 18+ who live in long-term care settings
- Age 18+ who have underlying medical conditions
- Age 18+ who work and live in high-risk settings

Data Supporting Need for a Booster Shot

Studies show that after getting vaccinated against COVID-19, **protection against the virus may decrease** over time and be less able to protect against the Delta variant. Although COVID-19 vaccination for adults aged 65 years and older remains effective in preventing severe disease, recent data pdf icon[4.7 MB, 88 pages] suggest vaccination is less effective at preventing infection or milder illness with symptoms. Emerging evidence also shows that among healthcare and other frontline workers, vaccine effectiveness against COVID-19 infections is decreasing over time. This lower effectiveness is likely due to the combination of decreasing protection as time passes since getting vaccinated (e.g., waning immunity) as well as the greater infectiousness of the Delta variant.

Data from a small clinical trial show that a Pfizer-BioNTech **booster shot increased the immune response** in trial participants who finished their primary series 6 months earlier. With an increased immune response, people should have improved protection against COVID-19, including the Delta variant.

Booster Shots Are Only Available for Some Pfizer-BioNTech Vaccine Recipients

Employees and residents at increased risk for COVID-19 exposure and transmission

People aged 18–64 years at increased risk for COVID-19 exposure and transmission because of occupational or institutional setting **may get a booster shot of Pfizer-BioNTech vaccine based on their individual benefits and risks.** Adults aged 18–64 years who work or reside in certain settings (e.g., health care, schools, correctional facilities, homeless shelters) may be at increased risk of being exposed to COVID-19, which could be spreading where they work or

reside. Since that risk can vary across settings and based on how much COVID-19 is spreading in a community, people aged 18–64 years who are at increased risk for COVID-19 exposure and transmission because of occupational or institutional setting may get a booster shot after considering their individual risks and benefits. This recommendation may change in the future as more data become available.

We remind everyone of the information provided here on our website: LBRN COVID-19.

NIH Extramural Nexus

- # NIH Grants YouTube Channel

Can't get enough of NIH grants content? On our YouTube channel we have bingeable playlists all about grants! Whether you're looking for an introduction to NIH fundamentals, insight into the peer review, information on NIH policy and compliance or applying for grant funding, an orientation to special funding programs, eRA systems, or any of the grants administrative topics covered by our seminars and webinars, you can find it here.

Subscribe to keep up with the latest from the NIH Grants YouTube channel – and share with a colleague!
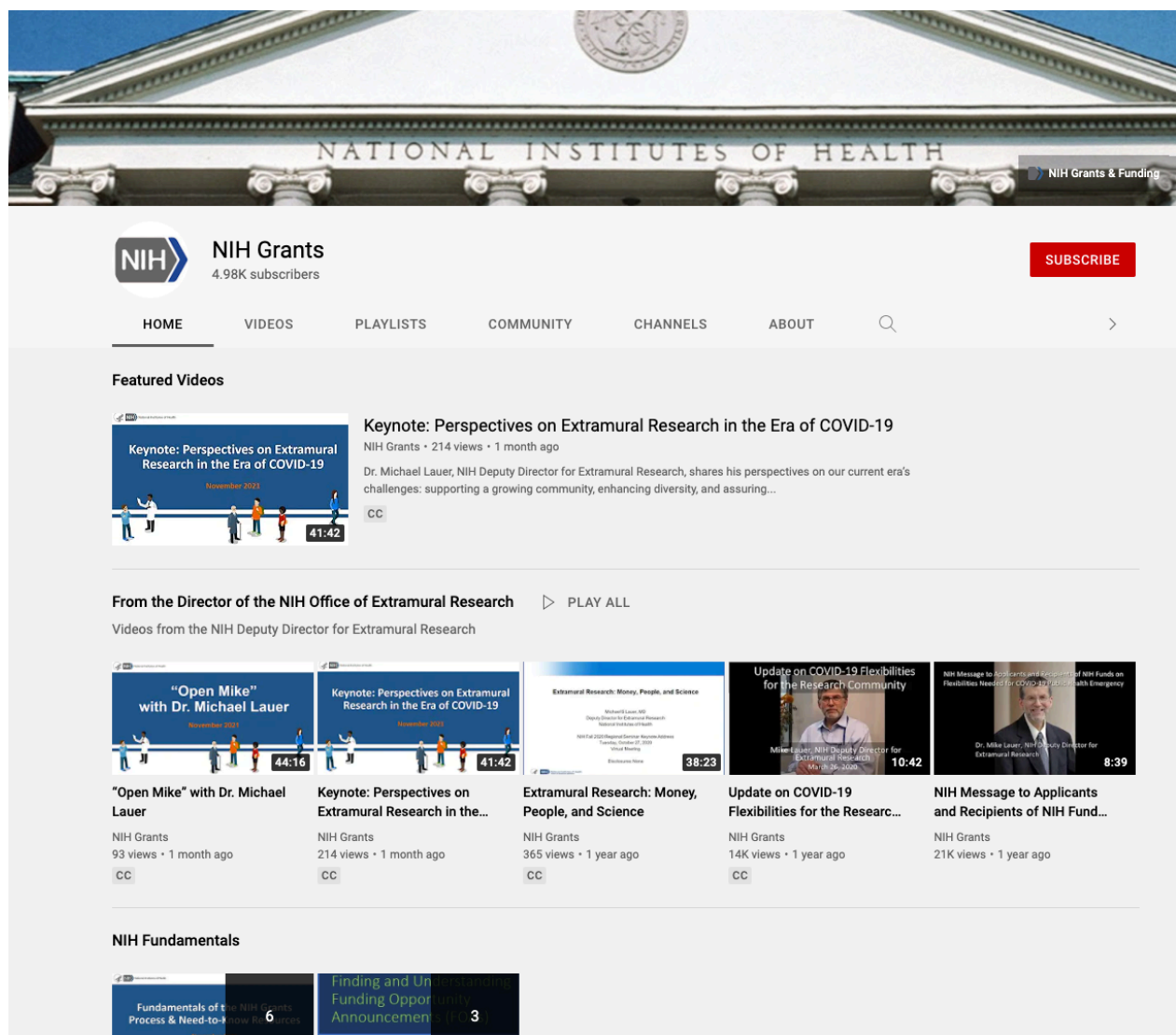
- # ClinicalTrials.gov Modernization Effort: Beta Releases Now Available

Earlier this year, we [provided an update](#) on NLM's efforts to modernize ClinicalTrials.gov, the world's largest publicly accessible database of privately and publicly funded clinical trials. NLM released a [request for information](#), hosted public webinars, and adopted a user-centered design approach intended to help ensure that modernization is responsive to user needs.

These activities, together with input from the [NLM Board of Regents Public Service Working Group](#) on ClinicalTrials.gov Modernization, supported the development of beta versions of a new ClinicalTrials.gov website and components of the information submission system, also known as the [Protocol Registration and Results System (PRS)](#). The beta releases feature a modern look and feel and provide updated technology to support users.

NLM is pleased to announce the public availability of these beta releases, which present the first of many new features to come.

ClinicalTrials.gov Website and PRS Goals and Implementation
The goals of the beta releases of the ClinicalTrials.gov website and components of the PRS are to:

- Introduce users to the new technology platforms and evaluate their real-world performance,
- Provide foundational features that will be expanded over time,
- Provide PRS users with improved functionality to manage their record portfolios and workflows, and
- Collect user input to inform future development activities.
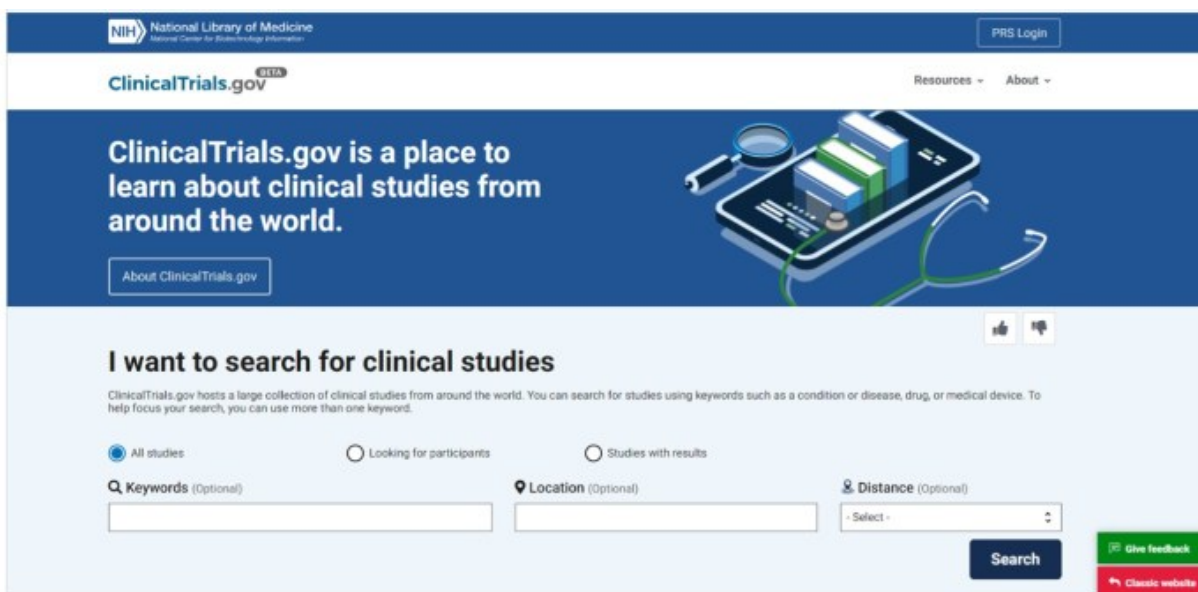
... to see more details

- # UNITE Wants to Learn from You: Join an Upcoming Listening Session

What is the NIH UNITE initiative about? How can you become involved? The UNITE initiative was established to identify and eliminate structural racism in biomedical research, and was publicly unveiled February 26, 2021, at a special meeting of the NIH Advisory Committee to the Director (ACD). On Friday, December 10, 2021, UNITE committee members provided an update to the ACD on progress and future directions for the initiative. Among the exciting advances presented were plans to further enhance health disparities research, internal NIH efforts to role model institutional culture change to achieve racial and ethnic equity, and plans for new funding opportunities to enhance diversity of the scientific workforce. In addition, committee members captured the ethos of UNITE through The Power of an Inclusive Workplace Recognition Project—

the latest effort to promote a sense of inclusivity and belonging among the NIH workforce and scientific community by diversifying art and images within NIH buildings and digital spaces.

How can you become involved in this important initiative? UNITE invites external stakeholders from the biomedical research community who work in diverse settings to participate in its online listening sessions. Sessions began on December 1 and continue through February 2022. To date, more than 1,400 people have registered to participate, and UNITE hopes many more will sign up to lend their voices for the remaining events.

UNITE welcomes participants from all levels of the biomedical research community and those who partner and collaborate with research teams. The listening sessions are organized by audience, including people employed by or affiliated with Historically Black Colleges and Universities, tribal communities, and foundations and professional societies. There is also a session for students and trainees and one for research staff.

Readers can view the listening session schedule and register now for the one that best aligns with their affiliation. All registrants will receive a Zoom link the day before their scheduled session.

UNITE is committed to understanding the perspectives and experiences of the full range of contributors to the biomedical research enterprise. Through the listening sessions, UNITE seeks to deepen its knowledge of the issues and challenges underrepresented groups face in the scientific workforce.

Listening session discussion topics include the following:

- changing culture to promote equity, inclusivity, and justice
- improving policies, transparency, and oversight
- strengthening career pathways, training, mentoring, and the professoriate
- ensuring fairness in review and funding deliberations
- enhancing funding and research support for diverse institutions and historically under-resourced research areas
- identifying structural racism in the biomedical research enterprise

UNITE will foster an environment where participants feel safe contributing their perspectives candidly, rather than seeking group or consensus advice in the sessions. An independent contractor will capture detailed notes, which will not include identifying information.

The input UNITE receives will inform the development of its priorities and an action plan. If you have questions about the listening sessions or require a language interpreter or reasonable accommodation (e.g., closed captioning) to participate, please contact UNITEInitiative@nih.gov.

• Tips for the Next Generation of Researchers

If you are a trainee, graduate student, post-doc, or faculty in the early stages of your career, you might be interested in the recording of a presentation from the [2021 NIH Virtual Seminar on Program Funding and Grants Administration](#) in which prominent NIH leaders offer a variety of tips for junior investigators and discuss funding targets for early state investigators, keeping our attention on at-risk investigators, getting that second R01, and more.

Here are some tips from the discussion to pique your interest!

- **Use your networks as you develop your application**
    - *"I would say take advantage of all of the resources available to you in terms of mentors and advisers within your own institution and get people who aren't at your institution to review and get feedback on what it is that you're preparing to submit to help you in figuring out how to place your emphases. If you weren't an English major, get your friend who was an English major to take a look at [your application], get your aunt to read it. As I was told early on in my career, If your aunt can read it and understand it, then you have a good clear application."*

        – Dr. Marie A. Bernard, Chief Officer for Scientific Workforce Diversity, NIH

    - *"One of the best pieces of advice I ever got during an early stage of my career was that one of my mentors told me that I needed to serve on a committee for professionals society, and he said you should do this for two reasons.*
    One reason is that they need your help and the work may be interesting. But the second reason, which is far more important, is you'll meet people. This invariably helped with developing research efforts, developing research collaborations, and eventually putting together proposals."
    – Dr. Michael Lauer, Deputy Director for Extramural Research, NIH

- **Learn how reviewers approach the review of an application**
    - *"Some institutions, they run […] mock study sections, I was very lucky at my institution. We did that. Here you've got the advantage of people who are experienced in the world of getting scientific grants, and […] we would listen to our proposals get torn apart by our colleagues. If your institution [hosts mock study sections], I would strongly encourage you to take advantage of that. If it's done right, it is a distinctly unpleasant experience, but it is the kind of thing that you do want to do because it makes it more likely that you're going to turn in a high quality application."*

        – Dr. Michael Lauer, Deputy Director for Extramural Research, NIH

- **Aim high and go for the R01, if possible**

- *"The success rates for R21s is [actually a bit lower](#) than that for R01s. So, R21 gives you a small amount of money for 2 years and R01 gives you a more substantial amount of money for 4 years or 5 years, I'd say go for the R01."*
      – Dr. Michael Lauer, Deputy Director for Extramural Research, NIH

- **Don't worry if your institution does not have much NIH funding yet – resources are available**
    - "*There are some programs around NIH in which we try to bring together people who work at less well-resourced institutions with more well-resourced institutions, and so if you're able to take advantage of that, that's something I would strongly consider.*" (See [R15](#), [R16](#), and [R25](#) programs).
      – Dr. Michael Lauer, Deputy Director for Extramural Research, NIH

- **Keep going!**
    - "We were all at that earlier stage in our career at one point, and understanding those underlying *things that helped you to keep going, and to persevere, and to pivot in your careers is such an important lesson learned that we need to share more often, because…people looking at us as being a part of NIH [might not] understand, 'Hey, they've been there, they understand, and they actually care too.*"
      – Dr. Ericka Boone, Acting Director of Division of Biomedical Research Workforce, NIH

    - "*Science is fabulous. I can't imagine anything more exciting, but it's also, perseverance is also incredibly important, just keep plugging along.*"
      – Dr. Michael Lauer, Deputy Director for Extramural Research, NIH

For the full conversation, check out the [recording](#) of the NIH Next Generation Research Initiative Training the Future of the Biomedical Research Workforce presentation, [slides](#), & [transcript](#). To get updates on the next NIH grants seminar, [subscribe](#) to our email list.

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 2021/2022.

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 GM103424-20.

• 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 P20GM103424-20.

• 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 (2P20GM103424-20) 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.