News, Opportunities and Deadlines for October 2020

LBRN wishing a Happy Halloween!

Plan now for a safe and happy halloween all LBRN!
At the LBRN annual meeting (January, 2020), Ms. Prerana Ramesh was presenting the poster to Dr. Yong-Hwan Lee. The title of poster is *How to Train Your AI: Quantification of R-Loop Expression in Anaplastic Thyroid Carcinoma using Immunohistochemistry and Automated Cell Segmentation Software.*

Abstract: Anaplastic Thyroid Cancer (ATC) is one of the most aggressive forms of thyroid cancer. Evidence from our lab suggests that R-loops may play a prominent role in ATC cell death. The process of manually quantifying r-loops can be physically taxing for the user. The Mantra Multispectral Imaging system incorporates multispectral imaging and the inFormTM Analysis software. Here we quantitatively analyzed R-loops expression in ATC cell lines using immunofluorescence and the Mantra TM and inForm TM systems. Comparisons were made between the accuracy, sensitivity, and specificity of the AI-generated masks to manually generated ones. The results show that the inFormTM software may be used to automate the process of detecting R-loops in ATC cell lines.
We pride ourselves on giving each other opportunities for progress when we value these past events. Ms. Prerana Ramesh, presenting her poster in this image, won first place in the undergraduate category for her poster presentation.

LBRN Title Reference: *The protein alphabet letters were curated from the PDB by Mark Howarth, Department of Biochemistry, Oxford University, Oxford, UK, Nature Structural & Molecular Biology [PDF], May 2015. Also highlighted in the NIGMS biobeat on October 21, 2020.*
The Impact of COVID-19 on Women in STEMM: Preliminary Results from Commissioned Papers
November 2-9, 2020
Register to Attend

Women in academic scientific, engineering, and medical (STEMM) fields face a myriad of systemic inequities that contribute to significant underrepresentation and disproportionate hardship, challenges amplified by the COVID-19 pandemic and subsequent changes to higher education. To help inform a National Academies fast-track consensus on the Potential Impact of COVID-19 on the Careers of Women in Academic STEMM, the committee commissioned five papers. In this series of public webinars, the authors of each of the five papers will present their preliminary results to the committee and address public questions.

Monday, November 2, 1-1:45 pm ET
Impact of COVID-19 on Academic Leadership and Decision-making for Women in STEMM

Presented by: Adriana Kezar (University of Southern California)

- Discussion will be moderated by committee members Beronda Montgomery (Michigan State University) and Elena Fuentes-Afflick (University of California, San Francisco).
Thursday, November 5, 3-3:45 pm ET
The Impact of COVID-19 on Tenure Clocks, the Evaluation of Productivity, and Academic STEMM Career Trajectories for Women in STEMM

Presented by: Felicia Jefferson (Fort Valley State University)

- Discussion will be moderated by committee members Leslie Gonzales (Michigan State University) and Erick C. Jones (University of Texas, Arlington).

Friday, November 6, 1-1:45 pm ET
The Impact of COVID-19 on Collaboration, Mentorship and Sponsorship, and the Role of Networks and Professional Organizations for Women in STEMM

Presented by: Rochelle Williams (National Society of Black Engineers) and Misty Heggeness (U.S. Census)

- Discussion will be moderated by committee members Renetta Tull (University of California, Davis) and Kyle Myers (Harvard Business School).

Friday, November 6, 3:30-4:15 pm ET
The Impact of COVID-19 on Mental Health and Wellbeing of Women in STEMM

Presented by: C. Neill Epperson (University of Colorado School of Medicine)

- Discussion will be moderated by committee chair Eve Higginbotham (Perelman School of Medicine at the University of Pennsylvania) and committee member Leah Jamieson (Purdue University).

Monday, November 9, 1-1:45 pm ET
The Impact of COVID-19 on Boundary Management, Work/Life Integrations, and Domestic Labor for Women in STEMM

Presented by: Ellen Kossek (Purdue University)

- Discussion will be moderated by committee members Reshma Jagsi (University of Michigan Medical School) and Jeni Hart (University of Missouri).

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LSU HPC Training: Introduction to Python
Next HPC training will be held on Wednesday, October 28 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.

**Wednesday, October 28, 2020: Introduction to Python**

Python is a high-level programming language, easy to learn yet extremely powerful. This training will provide an introduction to programming in Python. The subjects include basic Python syntax, Python classes used in object-oriented programming. Basic Python modules for scientific computing and plotting will also be introduced. During the training, simple Python programs will be provided for demonstration.

**Prerequisites:** Basic understanding of a programming language is assumed but not required.

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 will be provided with a zoom link in their registration confirmation email. Please see the system requirements at [https://support.zoom.us/hc/en-us/articles/201362023-System-Requirements-for-PC-Mac-and-Linux](https://support.zoom.us/hc/en-us/articles/201362023-System-Requirements-for-PC-Mac-and-Linux).
The National Association of IDeA Principal Investigators (NAIPI) is the collective voice of all of us in the IDeA community.

Dr. Gus K. Kousoulas, the LBRN PI, will serve NAIPI as a president for 3 years.

NAIPI aims to protect and promote the IDeA programs. It fosters interactions, promotes resource sharing, enhances the national visibility of the INBREs, COBREs, and CTRs, develops consensus on priorities, identifies and disseminates best practices, identifies opportunities and develops strategies.

NAIPI’s mission is to protect and promote the INBRE, COBRE, and CTR programs within the IDeA states. NAIPI provides leadership and communication across the IDeA community. As a Principal Investigator, Project Coordinator, Project Investigator, or Project Leader on an NIH IDeA award or an award co-funded by IDeA, you are a member of NAIPI.

The NAIPI represents you and the interest of your state in biomedical research education and infrastructure building. Our goals are to become stronger by:

- Sharing best practices
- Connecting researchers to facilities, collaborations, and colleagues
- Collecting and highlighting our IDeA successes
- Developing a consensus on priorities important to the IDeA community
- Identifying opportunities within the IDeA community

In addition to NAIPI members, this site helps the lay public, state and federal legislators, higher education administrators, and business communities learn about health-related research and
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.

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<tr>
<th>PI Name</th>
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<tr>
<td>Anup Kundu</td>
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<td>Kun Zhang</td>
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Additionally, we are pleased to inform that NIH:NIGMS has awarded the following Administrative 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.

Abstract: Pharmaco-omics, including pharmacoproteomics and pharmacometabolomics, is a general trend of contemporary pharmacological research suggesting the use of blood biomarkers for individualized medicine strategies. Recent advances in mass spectrometry methodologies serve as powerful platforms for hypothesis generation or discovery of novel targets involved in pharmacological actions. However, outcome measurement of pharmacological treatment in humans can be challenging, due to highly complex and interconnected heterogeneous cell populations, in addition to computing and validating the large amounts of data generated. Therefore, it is required to develop bioinformatics analysis to validate raw data quality and facilitate our understanding of the interest protein sets generated by both, metabolomics and proteomics approaches.

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.

Abstract: The Emergency Department (ED) at Louisiana State University Health Sciences Center in Shreveport (LSUHSC-S) serves a predominantly minority-based urban population with a large rural catchment area. Detection of substance abuse disorders among ED patients can serve as a first step in drug abuse intervention.

High percentage of opiate-positive patients in the LSUHSC-S ED is alarming considering the addictive nature of opiates. Our results reflect a common trend nationwide and in the State of Louisiana, showing an increase in opiate prescriptions and abuse. Between 2013 and 2017, Louisiana experienced a 36% increase in drug-related deaths, more than twice the national
increase. The high percentage of children testing positive for benzodiazepines raises concerns due to the adverse effects of long-term exposure to these drugs, leading to physical dependence and withdrawal. The increasing presence of opioids and cannabinoids, particularly in very young patients, should prompt policy makers and healthcare providers to develop intervention strategies to protect the most vulnerable populations.

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:

- Voltage regulated electrophoretic deposition of silver nanoparticles on halloysite nanotubes
  - [https://doi.org/10.1016/j.rinma.2020.100112](https://doi.org/10.1016/j.rinma.2020.100112)

- Surface Modification of 3D Printed PLA/Halloysite Composite Scaffolds with Antibacterial and Osteogenic Capabilities
  - [https://doi.org/10.3390/app10113971](https://doi.org/10.3390/app10113971)

- Differential antimicrobial and cellular response of electrolytically metalized halloysite nanotubes having different amounts of surface metallization
  - [https://doi.org/10.1039/D0MA00134A](https://doi.org/10.1039/D0MA00134A)

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**Louisiana Coronavirus (COVID-19) Information**

The following information was provided by [The New York Times Interactive Coronavirus website](https://www.nytimes.com/)

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Louisiana Coronavirus (COVID-19) Information

The following information was provided by [The New York Times Interactive Coronavirus website](https://www.nytimes.com/).
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 3. Information here: https://coronavirus.la.gov.
We remind everyone of the information provided here on our website: LBRN COVID-19.

The National Research Mentoring Network

NRMN Line-Up

October 19 - October 24: SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science)
NRMN Virtual Exhibitor Booth (must be registered for the SACNAS Conference to access the booth)
Schedule 1-on-1 appointments with NRMN Representatives

October 27 - October 30: NIH Virtual Seminar
NRMN Virtual Exhibitor Booth & Slack Channel
Jamboor Vishwanatha, PhD will present on Wednesday, October 28 at 11a CST
Chris Pfund, PhD, and Juan Pablo Ruiz, PhD cohosting a 1-hour live chat around best practices for mentors and mentees on Tuesday, October 27 from 11a-12p CST

November 9 - November 13: ABRCMS (Annual Biomedical Research Conference for Minority Students)
NRMN Virtual Exhibitor Booth
Schedule 1-on-1 appointments with NRMN Representatives
Jamboor Vishwanatha, PhD will present on Friday, November 13 at 12:30p CST

December 3: Western New Mexico University Career Fair
NRMN Virtual Exhibitor Booth

December 10: 8th annual San Antonio Postdoctoral Research Forum (SAPRF)
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
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 verses 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).

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IDeA Co-Funding

NIH National Institute of General Medical Sciences

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](https://www.nigms.nih.gov/Research/DRCB/IDeA/Pages/IDeA-Co-funding.aspx) for further information about this initiative.

**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.

**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.
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.
Developing a Culture of Safety in Biomedical Research Training

The National Institute of General Medical Sciences (NIGMS) is committed to supporting safety in the nation’s biomedical research and training environments. Last April, we shared with you resources for enhancing lab safety in biomedical research training environments. Now, in a Perspective in the current issue of Molecular Biology of the Cell (MBoC), we focus on strategies for improving laboratory safety. Some of these strategies are also applicable to other forms of safety including the prevention of harassment, intimidation, and discrimination. We frame the problem of laboratory safety using a number of recent examples of tragic accidents, highlight some of the lessons that have been learned from these and other events, discuss what NIGMS is doing to address problems related to laboratory safety, and outline steps that institutions can take to improve their safety cultures.

Lab safety is also the focus of an upcoming webinar for the training community, Developing a Culture of Safety in Biomedical Research Training, on Thursday, November 5, from 2:00-3:00 p.m. ET. Our featured speakers are Craig Merlic and Jyllian Kemsley. Craig is a professor of chemistry and biochemistry at the University of California, Los Angeles (UCLA), and is the executive director of the University of California Center for Laboratory Safety. The Center was established in March 2011 in the wake of a fatal lab accident at UCLA in 2008. Jyllian is executive editor, policy and content partnerships, at the American Chemical Society’s flagship publication, Chemical & Engineering News (C&EN), and the manager of C&EN’s Safety Zone blog.

We encourage you to read the MBoC article And to join us for our webinar on this critically important topic. Please share this opportunity with others in your institution and your network who may be interested.

Welcome the New RePORT and RePORTER Tools!

Ten years ago, NIH launched the RePORT (Research Portfolio Online Reporting Tools) website to serve as a one-stop shop for reports, data, and analyses of NIH research activities. Well, drum roll please, a new and modernized RePORT site as well as a faster and easier to use NIH RePORTER have now arrived.
The updated RePORT site strives to meet the needs of today’s users based on feedback received over the years. It is easier, simpler, and quicker to access the same information you have come to rely upon. Right from the homepage, for instance, you can jump into data with interactive charts that connect out to NIH Data Book, RePORTER, and other resources.

And, that’s not all! NIH RePORTER has many new features too. Let’s take a closer look at some of them.

**Quick Search**

More than two-thirds of the searches on RePORTER look for a single investigator, institution, or grant number. Recognizing this, we moved from a crowded search form to a more inviting single search box that brings relevant results. Designed around the most frequently searched items, the quick search box automatically queries across multiple fields (Figure 1), returning relevant results for common queries. For those who still prefer RePORTER’s original precise search approach, it too will still be around (see below).

You can enter information like the research area, a name of an investigator, or the specific organization, and the system will match it with projects in RePORTER. The projects matching your query will be sorted by relevance, with those best matching your query shown at the top of the page. As with other popular search engines, you can refine your search by adjusting your terms directly on the page or by using the sidebar search filters (Figure 2 and below). The Active filter will show the projects that are currently ongoing.

**Filterable results**

Most screens in RePORTER will now offer filters that allow results to be refined without having to re-run the search (Figure 2). For instance, when searching for an organization or investigator name, you can make sure you are matching exactly the person you intended. Simply expand the
Required Submission of Financial Conflict of Interest Policy into the eRA Commons Institution Profile (IPF) Module

Effective November 12, 2020, NIH funded recipients will be required to submit their publicly assessible Financial Conflict of Interest policy to NIH via the eRA Commons Institution Profile (IPF) Module (IPF Module). A PDF of the FCOI policy must be submitted by the institutional signing official (SO) via the IPF Module under a new tab labeled, “Policy Documents”.

While the automated requirement goes into effect in November, NIH recognizes that recipients will need to modify their internal systems in order to comply. Therefore, applicants and recipients have until December 1, 2020, to comply with this requirement.
T-21 Days Left Until the NIH Virtual Seminar on Program Funding and Grants Administration

As everything has gone virtual these days, so do we. Join us from your favorite chair, at your favorite table, and in your favorite room for the 2020 NIH Virtual Seminar on Program Funding and Grants Administration at the end of October.

This event is still geared towards administrators, early stage investigators, graduate students, and others new to working with the NIH grants process. Pros will be delighted to hear as well that there will still be in-depth sessions to learn more about the ins and outs of grants policies, processes and programs.

The most obvious is it is virtual this year. This is a great, unique way for those who have been unable to travel to one of our Regional Seminars in the past, to get the information and answers to questions they seek. We’ll meet in the afternoons (Eastern Standard Time) over four days, from Tuesday October 27 through Friday October 30.

Also new this year will be over 40 virtual booths for each of NIH’s institutes, centers, and offices, some trans-NIH programs, as well as policy, compliance, eRA, MyNCBI and more. As most booths will be staffed by NIH and HHS experts, this is an unprecedented opportunity to get your questions answered, learn more about NIH funding opportunities and programs, and download valuable resources to your personal “swag bag”.

.. Continue reading
New “All About Grants” Podcast – Research Misconduct

That’s a bit…odd. That gel image looks photoshopped. The data looks too 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.

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.

• In journal articles, oral or poster presentations, news releases, news and feature articles, interviews with reporters and other communications, acknowledge the IDeA program’s full or partial support of the research. The citation in scientific publications should use the following format:
Research reported in this publication was supported by an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health under grant number P20GM12345.

- If you wish to acknowledge NIH/NIGMS funding on your Web site or other communication product, you may use wording such as:

  Funded by an Institutional Development Award (IDeA) from the National Institutes of Health.
  or
  Funded by the LBRN (2P20GM103424-19) 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.