TOP STORY

Nithya Gnanapragasam Joins CSU with NIH K01 Grant

Dr. Merlin Nithya Gnanapragasam, an assistant professor in the Department of Biological, Geological and Environmental Sciences (BGES) and a member of the Center for Gene Regulation in Health and Disease (GRHD), joined CSU from the Icahn School of Medicine at Mount Sinai (ISMMS) in New York City this year and will continue work on a recently awarded NIH K01 grant. Her research is supported by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), and is titled “Delineating the Functions of EKLF During Mammalian Terminal Erythroid Differentiation.” Her research has received $292,836 over the first two years, and will receive additional funding through 2022.

NIH K01 awards provide an intensive, supervised, research and career development experience for nonclinical, doctoral researchers as they transition to independent research careers. Dr. Gnanapragasam’s research focuses on understanding cell divisions known as differentiation divisions, which are coupled with morphological changes such as a dramatic decrease in cell and nuclear size. These types of cell divisions are associated with a blood disorders like congenital dyserythropoietic anemia (CDA).

MEET CSU'S NEW FACULTY

Josiah Owusu-Danquah, Civil and Environmental Engineering

Dr. Josiah S. Owusu-Danquah is an assistant professor in the department of Civil and Environmental Engineering (CEE). He started at CSU in fall 2018. He received his undergraduate training from the University of Science and Technology (KNUST) in Ghana and his Ph.D. from the University of Akron. Over the past few years, Dr. Owusu-Danquah’s research has focused on computational mechanics, finite element simulation and the optimization of engineering structures. His work on shape memory alloy biomedical bone staples, stents and aerospace actuators has been published in Computers in Biology and Medicine, the European Journal of Mechanics-A/Solids, the Journal of Aerospace Engineering, and Finite Elements in Analysis and Design.

Dr. Owusu-Danquah combines analytical simulations with experiments to study and improve the long-term performance of sustainable concrete materials and structures under extreme temperatures, and under static and dynamic mechanical loads. He is also collaborating with other researchers at CSU on the design of a functionally optimized orthopedic device for
fracture fixation in pediatric patients. He currently serves as the director of the Structures and Foundation Graduate Program in the Civil and Environmental Engineering Department. Click here to see a list of his publications.

FEATURED RESEARCH ALUMNI

Danielle Ripich

Dr. Danielle N. Ripich recently retired as the fifth president of the University of New England (UNE), serving in that role from 2006-2017. Dr. Ripich is a noted linguistics researcher, known for her efforts to improve communication with Alzheimer’s and dementia patients. She earned her B.A. and M.A. in speech pathology at Cleveland State and began her academic career at CSU, teaching voice and diction from 1980 to 1982. Prior to taking the reins at UNE, she held positions at Case Western Reserve University and the University of South Carolina. In 2007, she received the Distinguished Alumni award from CSU.

If you know a former Cleveland State student researcher who has gone on to career success, please email Dan Simon or Joy Yard to let us know.

RESEARCH RESOURCES

Proposal Review Service Launches

The Office of Research supports efforts by our Centers, academic departments, and individual faculty by providing feedback to faculty members’ grant proposals. Early peer review can identify potential weaknesses with sufficient time for the proposer to address them. The Office of Research will provide assistance to faculty seeking external funding to find suitable reviewers for their proposals. Details on proposal review services can be found here.

Contact Ben Ward in the Office of Research for assistance with proposal review services or to register your interest in serving as an internal reviewer.

CSU SCHOLAR NEWS

Kiril Streletzky, Physics

Dr. Kiril Streletzky (aka Dr. S) is an associate professor in the Department of Physics and the PI for the Synthesis, Assembly and Characterization of Soft Matter Systems (Soft Matter REU) Site, a National Science Foundation-funded Research Experiences for Undergraduates (REU) Site hosted at Cleveland State. He holds a B.S. degree from the Moscow Institute of Physics and Technology and a Ph.D. from Worcester Polytechnic Institute.

Dr. Streletzky is a strong believer in the exceptional educational value of undergraduate student research. He has mentored 60+ undergraduates in soft matter research through independent studies, honors theses, McNair projects, and summer research projects in his state-of-the-art light scattering lab. These efforts, supported by $660,000 in funding, have led to numerous peer-reviewed papers co-authored by undergraduates. Each summer, the Soft
Matter REU site guides a cohort of undergraduates through the research enterprise by immersing them in a 10-week mentored research experience. Dr. Streletzky also has a unique role in training CSU STEM students as a faculty advisor to the Choose Ohio First Scholarship Program (COFSP) and to the CSU chapter of the Society of Physics Students (SPS). He also served for six years as an elected member of the National SPS Council, where he advocated for a greater emphasis on undergraduate student research nationwide.

INSPIRED CREATIVITY

Angelin Chang Joins 2020 Class of Leadership Music

Dr. Angelin Chang, a professor and Coordinator of Keyboard Studies and Chamber Music in the School of Music and a professor in the Cleveland-Marshall College of Law, has been selected to participate in the 2020 Class of Leadership Music. The prestigious program brings together artists and music industry executives from across the country for a year-long intensive training seminar in leadership, innovation and creative thinking.

Dr. Chang, who is also a Grammy-winning pianist, was one of 49 individuals selected for the 2020 Class.

NEWS FROM THE TECHNOLOGY TRANSFER OFFICE

Commercialization Updates

The CSU Patent Review Committee has approved the invention disclosure of Dr. Moo-Yeal Lee, an associate professor in the Department of Chemical and Biomedical Engineering (CBE), titled Perfusion Plate for Microarray 3d Bioprinting. The invention relates to using a unidirectional flow perfusion plate to support growth of 3D printed miniature cell constructs on a pillar plate. The highly specific cell constructs provide very accurate toxicity screening capabilities for drug compounds as well as screening of other biological substances. The miniaturized plate is more cost-effective than current large-scale tissue constructs.

Contact Jack Kraszewski for assistance with a disclosure to begin the process of protecting your invention or intellectual property.

Patents for Humanity Awards

The U.S. Patent and Trademark Office (USPTO) is seeking applications for the 2020 Patents for Humanity awards. The award honors innovators who use game-changing technology to meet global humanitarian challenges, including medicine, nutrition, living standards, sanitation, and energy. Winners receive public recognition of their work and a patent acceleration certificate to expedite select proceedings at the USPTO. The award is open to academic institutions, government agencies, nonprofit organizations, small businesses, government agencies, and corporations. The deadline to apply is January 31.

RESEARCH EVENTS
Interdisciplinary Digital Research Faculty Meetup January 31

As part of our mission to enhance collaboration across the University and promote engaged research activities, the Office of Research launched a new series of faculty meetups for the 2019-2020 academic year. Meetup topics can be found here.

On January 31 at 12:00 p.m., Dr. Shelley E. Rose, an associate professor in the Department of History, will lead the meetup discussion on the topic of Interdisciplinary Digital Research. All panels are held in PH-200, the Office of Research conference room.

RESEARCH AND SCHOLARSHIP HIGHLIGHTS

2019 Edition of @CSUresearch Now Available

The Office of Research is pleased to announce the publication of the latest edition of @CSUresearch, which can be accessed by clicking here. Physical copies will be distributed across campus in December.

@CSUresearch showcases the outstanding scholarship conducted by faculty and students as well as the efforts CSU has taken to transfer technology, innovation, and knowledge to the marketplace and Northeast Ohio. This year, CSU’s research magazine focuses on the innovative people, research, and teaching across campus.

Previous editions of the magazine that highlight our high-impact, community-centered, and unique research can be found around campus or accessed online.

RESEARCH FUNDING

Mark your Calendar! Internal Funding Proposals Due February 1

Make a note to get an early start on your proposals in response to these 2019-2020 internal funding programs:

- Undergraduate Summer Research Award (USRA)
- Graduate Student Research Award (GSRA)
- Faculty Research and Development (FRD)
- Faculty Scholarship Initiative (FSI)

The deadline for applications is Saturday, February 1. To assist in the preparation of successful applications, the forms that will be used to evaluate the proposals are included at the above web sites.

For more information, please contact Joy Yard, 687-9364, or Dan Simon, 687-5171.
The Office of Research wishes all faculty, staff, and students a peaceful and joyful holiday season.

The holiday card used in this edition was designed by Miranda Tulciewicz, a Department of Art & Design Merit Scholar majoring in Design at CSU.

Please share with us important news or updates on your research, scholarly, or creative activities. Updates may be related to a paper that has been accepted for publication in a high-impact journal, a book you've just published, your work that will be exhibited at a prominent institution, or other updates you wish to share with our office. Send details to j.yard@csuohio.edu and d.j.simon@csuohio.edu.

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