Top Story

Anton Komar Receives NIH R01 for Gene Expression Research

Dr. Anton A. Komar, a professor in the Department of Biological, Geological, and Environmental Sciences (BGES) and Director of the Center for Gene Regulation in Health and Disease (GRHD), has received a four-year R01 grant from the National Institute of General Medical Sciences (NIGMS) at the National Institutes of Health (NIH). The project is titled “eIF2A in translational control” and is funded for a total amount of $1,177,720. eIF2A, or eukaryotic initiation factor 2A, is a protein involved in the process of protein synthesis, but its precise role, as well as the precise mechanism of its action, still remain largely enigmatic. Recently, eIF2A has been reported to be involved in the integrated stress response (ISR) and tumor initiation and progression. Research from Dr. Komar’s lab has also shown that eIF2A is an important player in the development of metabolic syndrome. Obesity, hypertension, and diabetes form a cluster of biochemical dysfunctions that constitute metabolic syndrome. The NIH project seeks to uncover how eIF2A functions and affects the physiological and pathophysiological processes in mammals.

Dr. Komar was the recipient of a 2018 Faculty Research Development (FRD) award to support his work on a eIF2A Knockout mouse model that led to the acquisition of this R01 award. He was also previously a recipient of the Human Frontier Science Program (HFSP) grant award, one of the most prestigious and competitive research grants in life sciences. Dr. Komar is also a co-founder and Chief Scientific Officer for DAPCEL, Inc., a company that develops and supports innovative gene redesign strategies allowing production of correctly folded, soluble and active recombinant proteins and a co-founder and Chief Technology Officer for SATOR Therapeutics LLC, a company that develops a range of non-pathogenic, attenuated or engineered strains of individual viruses for the treatment of various types of cancer.

Milestone

The Office of Research Newsletter Begins its 7th Year

The Office of Research Newsletter was launched in January 2014, meaning that we are celebrating the start of the monthly Newsletter’s 7th year! The Newsletter has evolved over the years, but has
always focused on highlighting CSU faculty and student research, research-related events on campus, and information relevant to researchers on campus. From its inception, the Newsletter’s goal has been to serve all CSU faculty and address the broad spectrum of our University research and scholarship profile through featured items such as Top Story, Meet CSU’s New Faculty, CSU Scholar News, and Inspired Creativity. Thank you to all faculty that we have featured and to those who will appear in future issues – your creative endeavors make it possible to publish noteworthy articles every month.

The Newsletter, Featured Researcher Videos, and @CSUresearch magazine are just some of the ways we are getting the word out about CSU’s productive scholars, and we look forward to continuing to promote the growth and recognition of CSU’s important research and scholarship to the community.

MEET CSU’S NEW FACULTY

Heather Rice, Nursing

Dr. Heather M. Rice, PhD, APRN-CNP, PMHS is an assistant professor and researcher who joined the Cleveland State University School of Nursing in August 2018. Dr. Rice received her PhD from CWRU in 2017 and her dissertation was titled "Neighborhood disorganization, social support, substance use and functioning amongst adolescents: An Analysis of the Ohio Behavioral Health Juvenile Justice Initiative." Her research focus at CSU addresses maternal health, toxic stress, neighborhood conditions, and infant mortality.

Dr. Rice also works as a pediatric nurse practitioner specializing in child and adolescent psychiatry. She has received several prestigious awards recognizing her work in the community as well as in her field, including: YWCA Distinguished Young Woman Award, CWRU Legacy Fellow, CWRU Civic Engagement Scholar, and Jonas Nurse Leaders Scholar by the American Association of Colleges of Nurses. In 2019, she was selected as one of Ohio’s 100 Great Nurses by the Ohio Nurses Foundation and Ohio Nurses Association.

FEATURED RESEARCHER VIDEO SERIES

Cigdem Slankard,

RESEARCH GUIDANCE

AHRQ Guidance on Common IRB
Film and Media Arts

The School of Film and Media Arts at Cleveland State University is Ohio’s first standalone film school. Hands-on opportunities immerse students in best practices across writing, directing, producing, acting, cinematography, post-production and interactive media.

This month’s featured research video focuses on how CSU’s filmmakers, like Assistant Professor Cigdem Slankard, create original film and media content.

Click here to watch.

The Agency for Healthcare Research and Quality (AHRQ) has issued guidance to investigators regarding the implementation of the use of a single Institutional Review Board (IRB) for cooperative research under the Revised Common Rule (RCR). In brief, for cooperative research applications and contract proposals submitted on or after January 20, 2020, the Single IRB plan should be identified and included by the applicant within the grant application. The adequacy of the Single IRB plan will not factor into the peer review score or overall rating of the Protection of Human Subjects section, but the Request for Proposals will include requirements about what must be provided to AHRQ regarding the Single IRB prior to the time of award and beyond.

The CSU IRB webpage and the CAYUSE application process were updated to comply with the RCR.

CSU SCHOLAR NEWS

Bill Bowen, Urban Studies

Dr. William M. Bowen is a professor in the Maxine Goodman Levin College of Urban Affairs, and currently serves as the President of the Faculty Senate. His research focuses on public sector decision making and problem solving in regional economic development, energy policy, environmental issues and higher education. His scholarship impacted the landmark environmental justice lawsuit, South Camden Citizens in Action vs. the New Jersey Department of Environmental Protection, decided by the United States Court of Appeals, Third Circuit. At the state level, his research has been pivotal in decisions such as the 2016 decision by the Public Utilities Commission of Ohio to not reregulate the state’s electric generation markets.

Dr. Bowen’s current research includes two energy-related studies: “The Impact of Intergovernmental Grants on Innovation in Clean Energy and Energy Conservation: Evidence from the American Recovery and Reinvestment Act (ARRA)” and “Consumer Price Effects of Deregulated Electric Generation Markets: The Case of Ohio and the Midwestern United States.” He remains a productive researcher and scholar, including many books and articles co-authored with Levin College colleagues, and his many publications can be found here.
Russ Borski Directs "The Real Inspector Hound" at the Outcalt Theatre

Russ Borski, an associate professor in the Department of Theatre and Dance, will direct Tom Stoppard's The Real Inspector Hound at Playhouse Square next month. Prof. Borski will bring CSU's second theatre production of the year to the Outcalt Theatre.

This play within a play is part parody, part farce, part whodunit, and explores the ideology of free will and fate. The murder mystery with a twist ending intertwines classic characters of melodrama with the commentary and insecurities of modern critics.

The Real Inspector Hound appears at the Outcalt from February 27 - March 8, with evening shows Thursdays through Saturdays, and matinee shows on Sundays. Ticket information can be found here.

NEWS FROM THE TECHNOLOGY TRANSFER OFFICE

Invention Disclosure Pipeline

The CSU Patent Review Committee has approved the invention disclosure of Dr. Geyou Ao, an assistant professor in the Department of Chemical and Biomedical Engineering (CBE), titled "Liquid Dispersions of Boron Nitride Nanomaterials and Sunscreen Applications." The invention creates an environmentally friendly and cost-effective sunscreen product.

The Patent Review Committee also approved the invention disclosure of Dr. Brian Davis, Interim Associate Dean of the Washkewicz College of Engineering and a professor in the Department of Mechanical Engineering (MCE), and Josiah S. Owusu-Danquah, an assistant professor in the department of Civil and Environmental Engineering (CEE), titled "Self-Lengthening Metal Orthopedic Plate." The invention will facilitate the healing of bone breaks to the growth plate areas in adolescents.

Contact Jack Kraszewski for assistance with a disclosure to begin the process of protecting your innovation.

Innovation Fund Info Session

Innovation Fund America is a nonprofit partnering with community colleges to accelerate the growth of technology startups through early-stage funding and education. The Innovation Fund assists technology startups led by entrepreneurs who want to create jobs in their communities and inspire the next generation of entrepreneurs.

The first step in applying for the Innovation Fund awards is to attend a no-cost Information Session. A session will be held on January 30, 2020 at 9:30 a.m. at Jumpstart's offices at 6701 Carnegie Avenue, Cleveland, OH 44103. Participants will learn the ins and outs of Innovation Fund's application process, and will hear from one of the Innovation Fund’s recent award winners who will share their experience going through the application process.

Registration is required and can be found here.
invention or intellectual property.

RESEARCH EVENTS

Interdisciplinary Digital Research Faculty Meetup Jan. 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 12:30 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.

Additional Upcoming Research Events

Grant Writers’ Seminars & Workshops: An all day workshop focused on writing competitive NSF grant proposals will take place Tuesday, February 18 at Ohio University’s Athens Campus. Registration is required by January 17 and the estimated cost for the workshop is $150.

Note: CSU will host a Grant Writers’ workshop on September 18, 2020. Details will be announced in upcoming newsletters.

CSU Giving Day: Save the Date! CSU’s seventh annual giving day is February 12, 2020: This year, the Office of Research will be raising funds to support student research projects related to public interest technology, a growing field focused on leveraging technology to improve the lives of the general public by addressing issues like protecting the environment, human rights, child welfare, and reforming criminal justice.

RESEARCH CENTERS

New Center for Applied Data Analysis and Modeling

Big data is changing the world around us, yet we have only scratched the surface of what we can be learn and apply using the massive amounts of information being acquired across industry, government, and other entities. This ongoing revolution needs new methods to analyze large data sets, new models to utilize that data to address real-world problems, and a trained workforce that is ready to work in this data-centric environment.

The Center for Applied Data Analysis and Modeling (ADAM) at Cleveland State intends to address those needs. Led by co-directors Dr.
Shawn Ryan, an assistant professor in the Department of Mathematics and Statistics, and Dr. Thijs Heus, an assistant professor in the Department of Physics, ADAM will be a methods-driven research center that brings faculty together from across disciplines to share approaches and ideas, and collaborate on novel non-discipline specific publications and funding. ADAM is actively recruiting faculty affiliates, and more information on the center is coming soon!

**INTERNAL RESEARCH OPPORTUNITIES**

**Final Reminder: Internal Funding Proposals Are Due Feb. 1**

The Office of Research is pleased to remind faculty that the call for proposals for the following 2019-2020 internal funding programs has been released:

- 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.

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.