



TOP STORY

Aimin Zhou to Receive NIH R15 Award



Dr. Aimin [Zhou](#), a professor in the Department of [Chemistry](#) and a member of the Center for Gene Regulation in Health and Disease ([GRHD](#)), will be awarded a research grant from the National Institutes of Health. The \$445,500 Academic Research Enhancement Award (AREA) for Dr. Zhou’s project, titled “RNase L contributes to lipid homeostasis,” will be funded over a three year span, and will expose undergraduate and graduate

students to hands-on research.

Dr. Zhou’s team will study the enzyme RNase L and its impacts on [atherosclerosis](#), the narrowing of arteries due to the buildup of plaque. Atherosclerosis is the primary cause of cardiovascular disease and strokes, and Dr. Zhou’s research is expected to lead to a better understanding of the development of atherosclerosis and to potential novel therapeutic strategies to treat the disease.

[\[RETURN TO TOP\]](#)

IN THIS ISSUE

[Top Story](#)

[Meet CSU's New Faculty](#)

[Featured Researcher Video](#)

[Research Guidance](#)

[CSU Scholar News](#)

[Inspired Creativity](#)

[Technology Transfer News](#)

[Research Events](#)

[Office of Research News](#)

[Internal Research Opportunities](#)

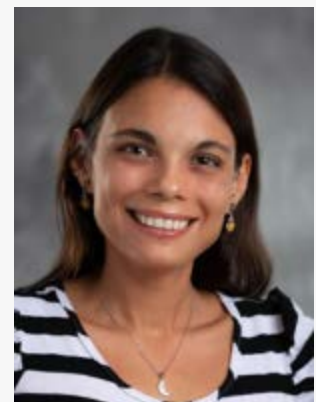
[Happy Holidays](#)

MEET CSU'S NEW FACULTY

Jessica Nobile, Social Work

Dr. Jessica [Nobile](#), an assistant professor in the School of [Social Work](#), received her Ph.D. in social work from the University of Georgia in 2017. She has been a licensed clinical social worker (LCSW) in Pennsylvania since 2012 and is a licensed independent social worker (LISW) in Ohio. In addition to teaching and research, she is a psychotherapist for a group private practice.

Dr. Nobile is currently implementing a qualitative research study in Cleveland that focuses on how institutional and environmental risk factors, such as racism, impact higher education aspirations for young African American women. In the future, she plans to research social work education, race relations, and mental health service provisions. She also writes the bi-weekly blog [Let's Talk About Social Change](#).



[\[RETURN TO TOP\]](#)

FEATURED RESEARCHER VIDEO SERIES

Holly Holsinger, Theatre and Dance

RESEARCH GUIDANCE

NIH Revision to AREA/R15 Program

The National Institutes of



Holly [Holsinger](#), an associate professor in the Department of [Theatre and Dance](#), is the subject of this month's featured video.

Prof. Holsinger specializes in teaching acting, voice, and movement, as well as devised theatre techniques. She has been a Cleveland theatre artist for over fifteen years and has created/performed in numerous original plays including "Blue Sky Transmission" and her solo piece "Frankenstein's Wake," both of which toured off-Broadway.

Click [here](#) to watch.

Health ([NIH](#)) recently issued a [notice](#) regarding changes to the NIH Academic Research Enhancement Award (AREA)/R15 Program that will take effect in January 2019. As NIH's [Open Mike](#) blog explains in detail, two key changes are being made:



- In addition to AREA grants, NIH will also offer R15 opportunities to support graduate schools of arts and sciences and health professional schools that grant baccalaureate or advanced degrees. The new program will be called the Research Enhancement Award Program (REAP).
- R15 applications will require a signed letter from a university official with institution-wide responsibility verifying the eligibility of the applicant institution. CSU applicants are not responsible for obtaining the letter. Sponsored Programs & Research Services (SPRS) will write the memo on behalf of the applicant and obtain the appropriate signature.

[\[RETURN TO TOP\]](#)

CSU SCHOLAR NEWS

Gregory Lupton, Mathematics

Dr. Gregory [Lupton](#) is a professor in the Department of [Mathematics](#). His research is in an area of pure mathematics called algebraic topology, which focuses on algebraic tools and methods for studying geometric problems of a mostly theoretical nature. He has recently focused on the new, rapidly expanding field of applied algebraic topology, which is being applied to topics of contemporary interest such as big data, robotics, analysis of sensor networks, and more.

Dr. Lupton's work in [topological complexity](#) is motivated by a practical problem in robotics, called the motion planning problem, while his research in digital topology applies to the study of digital images. In 2016, Dr. Lupton and his colleagues organized a workshop on topological complexity at the Oberwolfach Research Institute for Mathematics ([MFO](#)). The institute invited Dr. Lupton and his colleagues to conduct research on topological complexity in a small group at the institute in 2017.

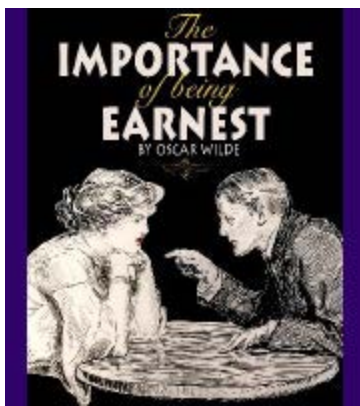


[\[RETURN TO TOP\]](#)

INSPIRED CREATIVITY

Russ Borski to Direct in February

Russ [Borski](#), an associate professor in the Department of [Theatre and Dance](#), will direct the upcoming production of *The Importance of being Earnest*. *The "trivial comedy for serious people" is a high farce and one of Oscar Wilde's most popular works.*



Prof. Borski adapted, directs, and created the lighting design for the play, which will be performed in the [Outcalt Theatre](#) at Playhouse Square. *The Importance of being Earnest* will be performed from February 21 – March 3, 2019. Ticket information can be found [here](#).

[\[RETURN TO TOP\]](#)

NEWS FROM THE TECHNOLOGY TRANSFER OFFICE

Invention Disclosure Pipeline



REPORT AN INVENTION

An invention disclosure was received from Dr. Geyou [Ao](#), an assistant professor in the Department of [Chemical and Biomedical Engineering](#), disclosing a process for producing

highly aligned boron nitride nanotube (BNNT) films. The process includes effectively dispersing, purifying, and inducing self-assembly of nanotubes by solvent evaporation. Functionalized and aligned BNNTs are ideal candidates for a variety of applications, such as protective shields, mechanical and/or thermal reinforcements for a range of composites, self-cleaning materials, biology, and medicine.

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

I-Corps@Ohio 2019

The Ohio Department of Higher Education ([ODHE](#)) announced the release of the 2019 Request for Proposals for the fifth year of the [I-Corps@Ohio](#) Program.

The I-Corps@Ohio program incorporates Lean Startup, Customer Discovery and Business Model Canvas methodologies to accelerate the commercialization of technologies from Ohio universities, colleges, and research institutions while expanding the business acumen and networks of faculty and students across the state. The resulting companies will drive sustainable technology-based economic development in Ohio. The deadline to register is January 15, 2019. The RFP can be viewed [here](#), and the application portal can be found [here](#).



[\[RETURN TO TOP\]](#)

RESEARCH EVENTS

Erie Hack 2019 Kicks Off in January



[Erie Hack](#) is an innovation challenge that accelerates technology solutions to Lake Erie's most pressing problems. The Erie Hack competition was launched in 2017, and resulted in more than 40 innovative solutions and engagement with over 100 partner organizations.

A number of [challenge statements](#) have been created for the 2019 competition, and it is expected that CSU students will form a number of teams that will enter the competition. CSU faculty have the opportunity to [register](#) to serve as mentors, using their experience to guide student teams and enhance their projects.

Watch for details regarding additional Erie Hack events on campus at the start of the spring semester.

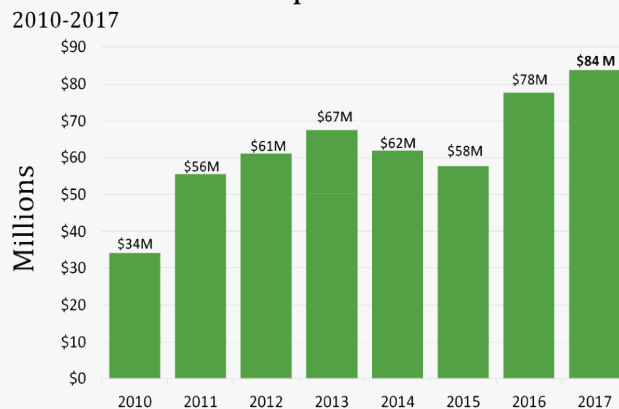
[\[RETURN TO TOP\]](#)

Research Funding Continued to Grow in 2017

Research expenditures at CSU increased to \$84 million in 2017, the largest in our history and an increase of 8% (\$6 million) over 2016, as reported in the recently released NSF Higher Education Research and Development ([HERD](#)) Survey.

CSU ranked #164 nationally in total R&D expenditures, and #5 among Ohio institutions. In terms of federal expenditures, CSU's \$53 million ranked #145 nationally and also #5 in Ohio.

CSU Total R&D Expenditures



Now Online: 2018 Edition of @CSUresearch Magazine



The Office of Research is pleased to announce the publication of the latest edition of [@CSUresearch](#), which can be accessed by clicking [here](#). This year, CSU's research magazine focuses on the uniqueness of CSU's research and scholarship.

[\[RETURN TO TOP\]](#)

INTERNAL RESEARCH OPPORTUNITIES

Internal Funding Proposals Due Feb. 1: USRA, FRD, FSI, & GSRA



The Office of Research is pleased to remind faculty that the call for proposals for the 2019-2020 internal funding programs has been released, and the deadline for applications is February 1.

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

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, j.yard@csuohio.edu or Dan Simon, 687-5171, d.j.simon@csuohio.edu.

[\[RETURN TO TOP\]](#)



The Office of Research wishes all faculty, staff, and students a peaceful and joyful holiday season.

[\[RETURN TO TOP\]](#)

The holiday card used in this edition was designed by Gia Paulovich, a Graphic Design student 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.

Support CSU Research

This newsletter is compiled and published by
The Office of Research

Visit The Office of Research



[View in Browser](#) | [View as PDF](#) | [Newsletter Archive](#)

© 2018 Office of Research - Cleveland State University
2258 Euclid Avenue, PH 200 | 216-687-9364