



NEW JERSEY

# Association of State Colleges and Universities

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**QuickTakes!**

## **A Little Research Reveals a Lot of Research at NJASCU Schools**

July 17, 2017

The New Jersey Association of State College and Universities asked its members to provide one example of a significant research initiative taking place on their respective campuses. Even though some schools just provided one example, other schools provided several. One administrator said, “we couldn’t decide which project was more important.” All the projects are significant and impressive and illustrative of the fact that the NJASCU schools have extensive research portfolios.

### **William Paterson University of New Jersey**

- Emmanuel Onaivi, professor of biology, is a neurobiologist and pharmacist whose research has received national and international acclaim. His work, which has been funded by a grant from the National Institute of Drug Abuse, National Institutes of Health, is focused on the behavioral effects of specific cell membrane receptors in the brain called CB2 cannabinoids. The project seeks deeper insight into potential therapeutic drugs for pain, autoimmune, mental, and neurodegenerative disorders. Professor Onaivi has authored more than two hundred papers and abstracts and several book chapters, edited three books, and co-authored a laboratory manual for biology students in the Applied Anatomy and Physiology course. Most recently, he and WPU filed for a patent based on his research, which would mark the first patent for the institution.
- Psychology professors Janet Ahn and Elizabeth Haines, with a third collaborator from Columbia Business School, recently published a groundbreaking series of new studies that suggest that women also take on more of couples’ “mental housework” – the remembering of daily errands and to-dos. In a five-part series in the journal *Sex Roles*, the researchers found that members of both sexes assume that women will do more to help their partners remember outstanding tasks.

### **Stockton University**

- The Coastal Research Center is a nationally-known center that assists state, federal, county and municipal governments with coastal environmental issues related to recurring storm damage and shoreline retreat.

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[www.njascu.org](http://www.njascu.org)

*The College of New Jersey  
Kean University  
Montclair State University*

*New Jersey City University  
Ramapo College of New Jersey  
Rowan University*

*Stockton University  
Thomas Edison State University  
William Paterson University*

- FAA is collaborating with Stockton mathematics professor Dr. Chi Wu and his students on math in aviation research. To see recent presentation “Applications of Dynamic Density to Space Vehicle Operations, visit: <http://www.njascu.org/temp/Applications-of-Dynamic-Density-to-Space-Vehicle-Operations.pdf>

### **Kean University**

- “Improving Capacities in Microbial and Microbiome Research and Diagnostics” is the title of the research being conducted by Kean University’s Dr. Marshall Hayes at Kean’s NJ Center for Science, Technology and Mathematics. The funder is the Institute for Life Science Entrepreneurship (ILSE). This project is focused on the development of methods to apply CRISPR/Cas9 technology to engineer various strains of bacteria carrying specific chromosomal tags that allow for discrete identification when used in research contexts.
- The “New Jersey Personal Responsibility Education Program (NJPREP)” is funded by the New Jersey Department of Health, the U.S. Department of Health and Human Services, Administration for Children and Families. Dr. Consuelo Bonillas, associate professor of Health Education, is in charge of the project. NJPREP is a 10-year (2011-2021) research project aimed at reducing the rate of pregnancy and sexually transmitted infection (STI) among high school students in Jersey City and Newark.

### **Ramapo College of New Jersey**

- Published in the *Annals of Botany* in 2017 was the research conducted by Ramapo Professor E.F. Karlin who investigated Allo-allo-triploid *Sphagnum xfalcatulum*: single individuals contain most of the Holantarctic diversity for ancestrally indicative markers. *Annals of Botany* doi: <https://doi.org/10.1093/aob/mcw269>.
- Professor C. Chung does research into human behavior and marketing. In 2017, he looked into the effects of comparative advertising on young consumers’ perceptions: A cross-cultural comparison between U.S. and Taiwan. *Journal of Promotion Management*.

### **The College of New Jersey**

- Physics Professor Nathan Magee, who directs the experimental cloud physics lab at TCNJ, is unraveling scientific puzzles about cirrus clouds and unraveling the mysteries of climate change. TCNJ has purchased a scanning electron microscope with a cryo stage that allows Professor Magee to examine actual ice crystals harvested from cirrus clouds and the images he has produced are reportedly

groundbreaking as far as advancing the international scientific community's understanding of climate control.

### **Montclair State University**

- Below are links to several stories highlighting significant research taking place at Montclair State University, as well as links to *Forward Thinking* research newsletters from this academic year. In 2016, Montclair received \$11 million in externally sponsored grants.

[Tracking the Impact of Trauma](#)

[Studying the Impacts of Dust from the World Trade Center](#)

[Breaking Bad Bugs: Researchers fight bioterrorism with chemistry](#)

[Montclair State University Professor Receives Prestigious Presidential Award](#)

[Forward Thinking research newsletter, Spring 2017](#)

[Forward Thinking research newsletter, Fall 2016](#)

### **New Jersey City University**

- The Student Undergraduate Research Institute (SURI) comprises more than 20 faculty members in STEM departments. The Institute is an umbrella organization that fosters collaboration among faculty and provides a central clearinghouse to identify research opportunities for undergraduate students.
- Dr. Keith Feigenson, with a PhD in Neuroscience from the University of Pennsylvania, is engaged in several research projects in the area of neural and behavioral sciences.