

Division of Research & Federal Relations



2013-2014
Annual Report

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About Jackson State University

Jackson State University, founded in 1877, is a historically black, “high research activity” university located in Jackson, the capital of Mississippi. Jackson State’s nurturing academic environment challenges individuals to change lives through teaching, research and service. Officially designated as Mississippi’s Urban University, Jackson State continues to enhance the state, nation and world through economic development, technological, health-care and educational initiatives.

Jackson State, with seven satellite locations, is the only comprehensive public university in the metropolitan area.

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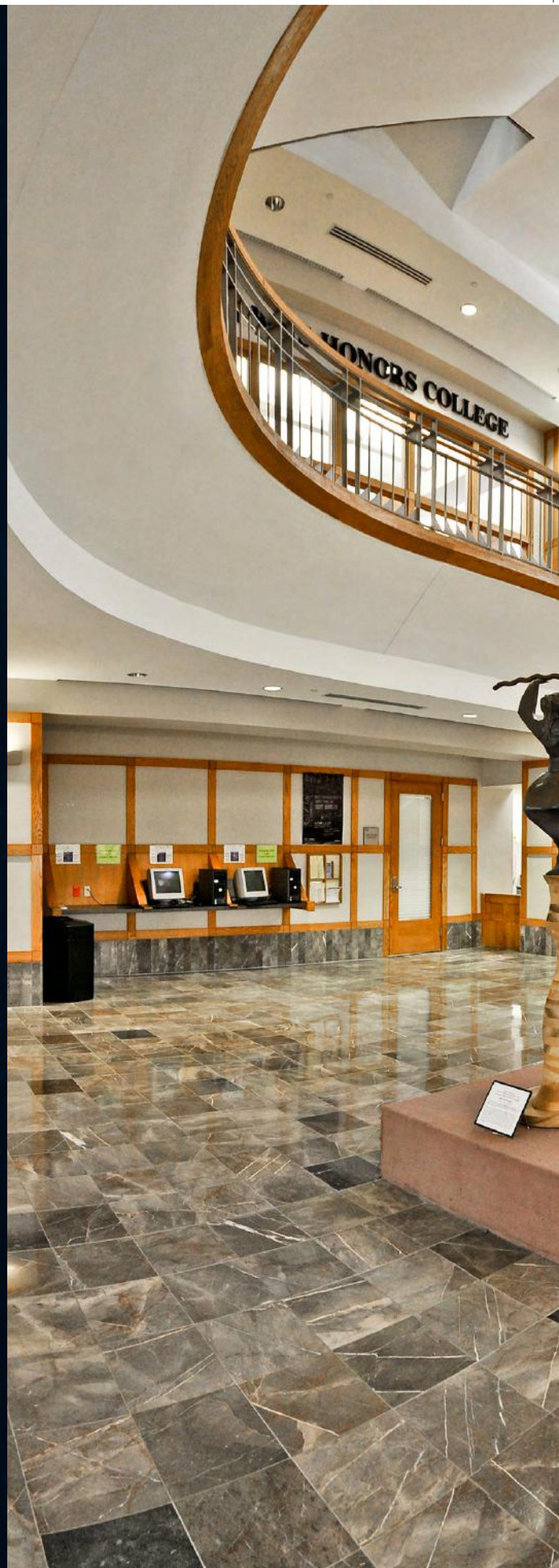


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Division of Research & Federal Relations

Vision and Mission

Vision

The Division will serve as a leader in promoting excellence among all university scholars and be recognized as a model in developing multidisciplinary collaborations throughout the campus, local, national, and international communities.

Mission

The Division has primary responsibility for nurturing excellence and advancing research, scholarly engagement, creative endeavors, and innovation at the university. The Division fulfills its mission by working proactively with faculty and staff to develop their external funding interests, identifying appropriate funding opportunities from public and private sources, and providing assistance with all of the elements of proposal development, submission, and acceptance of contracts, grants, and other awards. The Division encourages collaboration and partnerships through interdisciplinary research activities on campus and externally. The Division effectively protects and manages the intellectual property of the University and its researchers. The Division also implements and ensures compliance with University, agency, state, and federal policies pertaining to grants and contracts related to sponsored activities.

Funding Sources

FY 2013 – 2014

FUNDING SOURCES	COUNT	TOTAL
U.S. Department of Commerce	4	\$491,893
U.S. Department of Defense	14	\$1,031,486
U.S. Department of Education	8	\$4,330,718
U.S. Department of Energy	1	\$412,500
U.S. Department of State	1	\$36,119
U.S. Department of Health and Human Services	6	\$1,003,584
U.S. Department of Homeland Security	5	\$1,128,700
U.S. Small Business Administration	1	\$132,692
U.S. Department of Transportation	6	\$266,183
National Aeronautics & Space Administration	1	\$30,000
National Endowment for the Humanities	1	\$185,547
National Institutes of Health	29	\$10,988,228
National Science Foundation	20	\$6,181,308
TOTAL FEDERAL	97	\$26,218,958
TOTAL STATE AGENCIES	25	\$1,304,895
TOTAL FOUNDATIONS/CORPORATIONS	10	\$794,748
TOTAL NON-PROFIT AGENCIES	2	\$45,080
GRAND TOTAL	134	\$28,363,681

Funding Distribution

2013 - 2014

COLLEGE/DIVISION	COUNT	TOTAL
Office of the President	4	\$3,830,722
Division of Academic and Student Affairs	7	\$407,919
Division of Business and Finance	2	\$27,820
Division of Institutional Advancement	6	\$882,450
Division of Research and Federal Relations	4	\$1,436,527
College of Business	1	\$132,692
College of Education & Human Development	14	\$592,549
College of Liberal Arts	8	\$895,527
College of Public Service	24	\$5,064,431
College of Science, Engineering & Technology	64	\$15,093,044
GRAND TOTAL	134	\$28,363,681



Institutional Change Through Faculty Advancement in Instruction and Mentoring (ICFAIM)

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Jackson State University was awarded almost \$1 million for the implementation project entitled “Institutional Change Through Faculty Advancement in Instruction and Mentoring.” This project is designed to increase the retention of undergraduate students in the College of Science, Engineering and Technology by helping the faculty and graduate students to improve teaching and mentoring.

The initial efforts of ICFAIM will focus on the Department of Physics, Atmospheric Sciences and Geoscience. ICFAIM will pilot faculty development workshops in student-centered pedagogy and delivering professional mentoring. Through this project, the Department’s content of entry-level physics courses and labs will be revised.

This project has the potential to become a successful model, which will be shared with the broader community of colleges and universities that are working to increase the number of minorities entering the scientific and technological workforce.



Dr. Mehri Fadavi is the principal investigator of ICFAIM and interim chair, Department of Physics, Atmospheric Sciences and Geoscience.



Dr. Paul Tchounwou is the director and principal investigator of the RCMI-Center for Environmental Health at JSU.

Jackson State University RCMI-Center for Environmental Health Addresses Environmental and Public Health Issues Impacting Vulnerable and Underserved Communities

Jackson State University's Research Centers at Minority Institutions (RCMI) Center for Environmental Health (CEH) has been awarded a \$10.7 million grant from the National Institutes of Health-National Institute on Minority Health and Health Disparities to conduct research to address environmental and public health issues impacting vulnerable and underserved communities.

For the past 15 years, the RCMI-CEH has focused its efforts to study the biochemical and physiological effects resulting from exposure to environmental compounds. The Center deploys innovative laboratory and sensitive analytical technologies to understand how such exposure to toxins and carcinogens compromises human health and contributes to disease and death that disproportionately affect minority populations in the United States.

Since its inception in 1998, the RCMI-CEH has had a tremendous impact on JSU's College of Science, Engineering and Technology (CSET), and the university as a whole. The number of publications in peer-reviewed journals evidences this impact by RCMI investigators, who have also delivered presentations at scientific meetings, served as invited speakers at seminar series, and organized workshops in core laboratories.

"Our vision is to continue to develop and implement new approaches and cost-effective strategies for the prevention, detection, and control of toxic and carcinogenic environmental contaminants and the resultant diseases that they cause," said Paul Tchounwou, Ph.D., associate dean for Graduate and International Programs at CSET.

By leveraging the RCMI support, investigators have obtained more than \$20 million in external grants. As a result of the center's mentoring program, one of the pilot project investigators received a prestigious National Science Foundation CAREER grant award in 2011. More than 100 masters of science and Ph.D. students have been able to complete their research and graduate from Jackson State University thanks to the existence of RCMI-supported resources.

New scientific discoveries made at the CEH are making a substantial contribution to advancing the understanding of the role played by the environment in the development of human diseases, and to developing cost-effective strategies to prevent and control these illnesses.

The new award will support several key activities including the enhancement of existing core laboratories: Analytical, Animal, Bioinformatics and Biostatistics, Confocal Microscopy, Cellomics and Toxicogenomics, Molecular and Cellular Biology, and Molecular Magnetic Resonance. The award also will support the development of strong biomedical research collaborations and the implementation of a pilot project program that provides financial support for the conduct of scientifically meritorious and innovative pilot projects in environmental health and health disparities research through a competitive process with open solicitation, peer-review. It also will support funding in two grant mechanisms, including career development and creative partnership awards; and the recruitment/hiring of junior investigators to strengthen the critical mass of biomedical research at JSU.

The grant will support research projects on environmentally induced diseases such as cancer, cardiovascular disease, hypertension, diabetes, asthma, chronic obstructive pulmonary disease, and/or neurobehavioral diseases.

The mission of the Center is to continue to develop an innovative biomedical research program in which faculty becomes highly competitive and successful in winning mainstream National Institute of Health, National Science Foundation, and other federal grants.



Homeland Security

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JSU Wins \$589,000 Homeland Security Grant

Jackson State University has won a \$589,000 Scientific Leadership Award from the U.S. Department of Homeland Security to bolster its Emergency Management Technology (EMT) program.

The grant will fund collaborative interdisciplinary efforts to promote and encourage undergraduate students to pursue a bachelor's degree in Homeland Security-related Science, Technology, Engineering and Mathematics (HS-STEM) field. The EMT program is designed to ensure that students have the skills needed to manage a crisis.

"This is a team effort, in collaboration with different departments," said Technology Department Professor Dr. Pao-Chiang Yuan, Ph.D., principle investigator for the grant.

To be spread over five years, the SLA grant for Minority Serving Institutions Granting Bachelor Degrees will fund two phases. The first phase primarily will go toward developing new courses – including remote sensing and social media technologies – as well as upgrading

laboratories. The second phase will increase recruitment and exposure of the EMT program as well as continue to strengthen ties with the Department of Homeland Security Coastal Hazards Center of Excellence (DHSCOE) housed at JSU. The EMT program was approved in fall 2010 and began admitting students in Spring 2011.

The Homeland Security Coastal Hazards Center for Excellence at Jackson State University was established in 2008 to develop hazards-related curricula, concentrations, and minors within existing degree programs, ranging from engineering to sociology, at nine institutions of higher learning.

Project Access funded over \$1 million from U.S. Department of Education

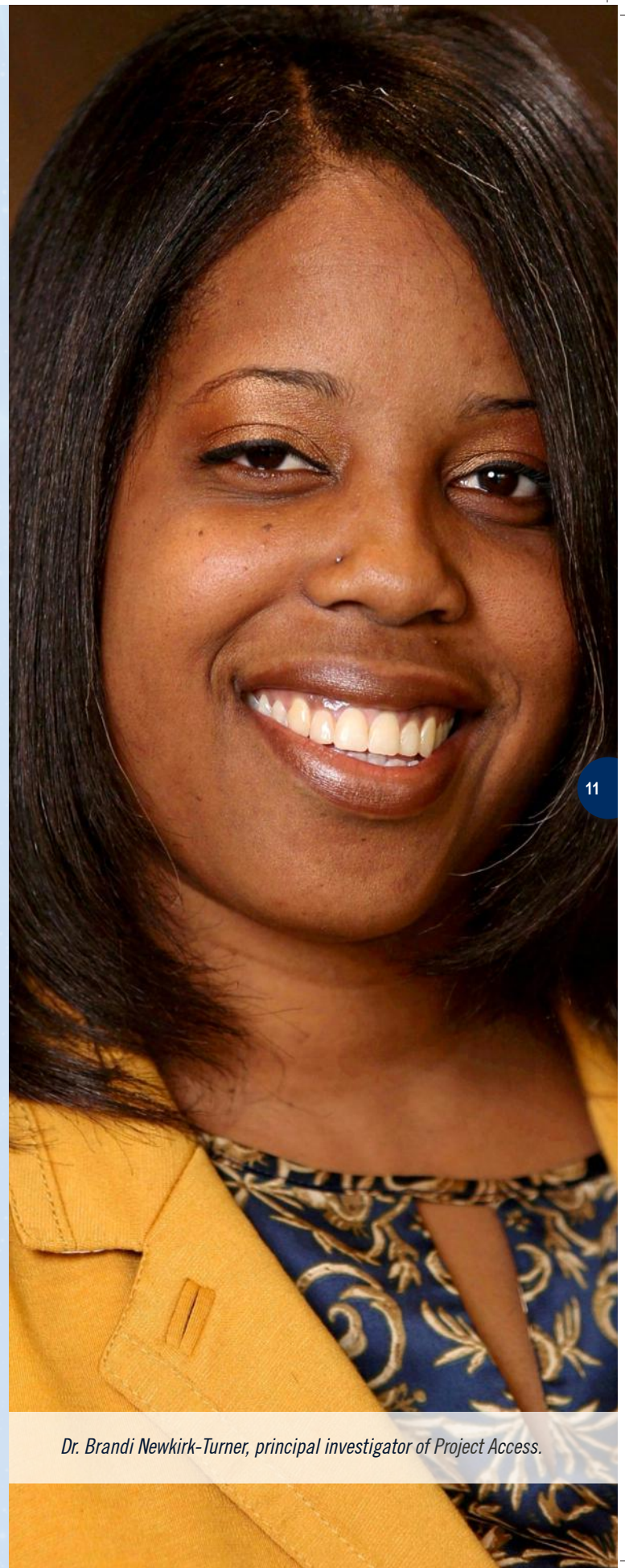
The School of Health Sciences in the College of Public Service at Jackson State University was awarded a Personnel Preparation Grant Award amounting to over \$1 million from the United States Department of Education, Office of Special Education Programs.

Project Access is designed to address the critical shortage of fully credentialed speech-language pathologists, including persons from culturally and linguistically diverse groups, who can provide specialized instruction and intervention to children with language and literacy disabilities in public schools. Project Access is designed to enhance the existing Communicative Disorders Master of Science degree program at Jackson State University by enrolling scholars in specialized courses and providing them with specialized clinical learning opportunities involving school-age children. Graduate students who participate in the project receive tuition, monthly stipends, book allowances, and conference registration fees.

Dr. Brandi L. Newkirk-Turner, assistant professor and interim chairperson in the Department of Communicative Disorders, is the principal investigator for Project Access. According to Dr. Newkirk-Turner, Project Access has the capability to help Mississippi's public schools address the critical shortage of fully credentialed speech-language pathologists. "The impact of this project is expected to be significant," says Newkirk-Turner.

Newkirk-Turner added, "In Mississippi, a school-based speech-language pathologist's caseload, on average, is comprised of 45 students. If 20 fully credentialed speech-language pathologists who were trained as part of Project Access serve a caseload of 45 children, they will serve 900 children with disabilities annually."

One of Project Access areas of focus is collaborative service delivery model, so it is expected that the project participants will share their specialized knowledge and skills of language and literacy with other personnel in their schools – further expanding the impact of the project.



Dr. Brandi Newkirk-Turner, principal investigator of Project Access.



Achieving Excellence

**Identified Research
Focus Areas based on:**

- Current strengths
- Strategic future areas
- Funding potential
- Inclusiveness

**This encourages
cross collaboration
on proposal
development**



Research Focus Areas

1) Computational and Data Enabled Science and Engineering

- ▶ **The RTRN Data Coordinating Center (\$1,614,830)** – This center provides the technology infrastructure and data management resources to facilitate inter-institutional collaborations, including community engagement, information and data sharing, and dissemination across the diverse RCMI communities to improve health outcomes, especially in underserved populations.
- ▶ **EPSCoR (\$710,191)** – The funding is part of the Mississippi EPSCoR program, which identifies, develops, and uses academic science and technology resources to increase Mississippi's research and development competitiveness and support economic growth.
- ▶ **Interdisciplinary Center for Nanotoxicity (\$501,955)** – This Center develops new approaches to enhance knowledge of the practical applications and toxic effects of nanomaterials on living organisms.

2) Cyber Security, Warfare, Maritime Port Security, and National Intelligence

- ▶ **Massie Chair in Computer Science (\$412,500)** - This program provides an opportunity to further develop the skills and knowledge of minority students and faculty in the area of cyber security, which includes subareas such as information assurance, computer security, computer/digital forensics, and intelligence analysis.
- ▶ **Intelligence Consortium (\$199,430)** – In Consortium with University of Mississippi, this program designs and develops intelligence-related curricula.

3) Environmental Science, Civil and Environmental Engineering

- ▶ **RCMI Center for Environmental Health (\$3,552,440)** – The Center deploys laboratory and sensitive analytical technologies to understand how exposure to toxins and carcinogens compromises human health and contributes to disease and death that disproportionately affect minority populations in the United States.
- ▶ **The Coastal Hazards Center of Excellence (\$900,000)** – The Center produces educational curricula focused on natural disasters that will serve as a firm and enduring foundation for producing the next generation of highly educated, creative and innovative researchers to help solve current and future Department of Homeland Security challenges related to natural disasters in coastal areas.
- ▶ **National Center for Biodefense Communications (NCBC) (\$111,712)** – The Center works with a broad range of first-responders, policy makers, and citizens to effectively use our DISCOVER MS GIS tool to evaluate the impact of disasters and plan response and recovery activities.

4) Public Health, Health Sciences and Health Disparities

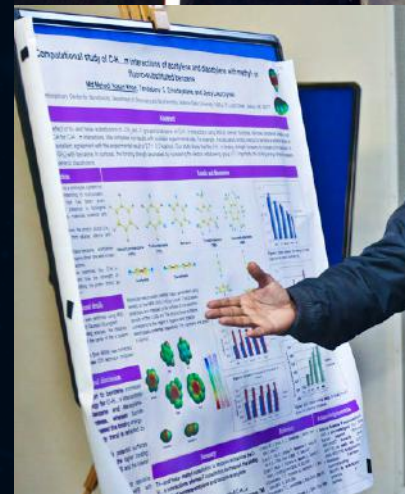
- ▶ ***Institute of Epidemiology and Health Services Research (\$1,355,366)*** - The Institute addresses and works to eliminate health disparities and build viable, healthy communities in the State of Mississippi.
- ▶ ***Jackson Heart Study (GTEC) (\$1,210,505)*** - This project is designed to contribute to building evidence-based approaches to training graduate students in the social, behavioral, and medical sciences to implement a robust education training program.

5) Social Work and Community Engagement and Community Outreach

- ▶ ***Jackson Heart Study Community Outreach Center (CORC) (\$1,174,035)*** - the focus of CORC is to perform community health education activities to disseminate health promotion and prevention messages in the Jackson community.
- ▶ **Metro Community Prevention Coalition 2015 Substance Abuse Block Grant (\$331,690)** - sponsored by the Mississippi Department of Mental Health, this project delivers prevention services to youth, adolescents, adults and communities within the Jackson Metropolitan area as well as delivers prevention services to Jackson State University constituents.
- ▶ **Mentors Instructing Students Toward Effect Role Models (Call me MISTER) (\$135,000)** - these outreach efforts focus on specific aspects of the education, and psychosocial development of African American males.

6) CyberLearning, STEM Education and Workforce Development

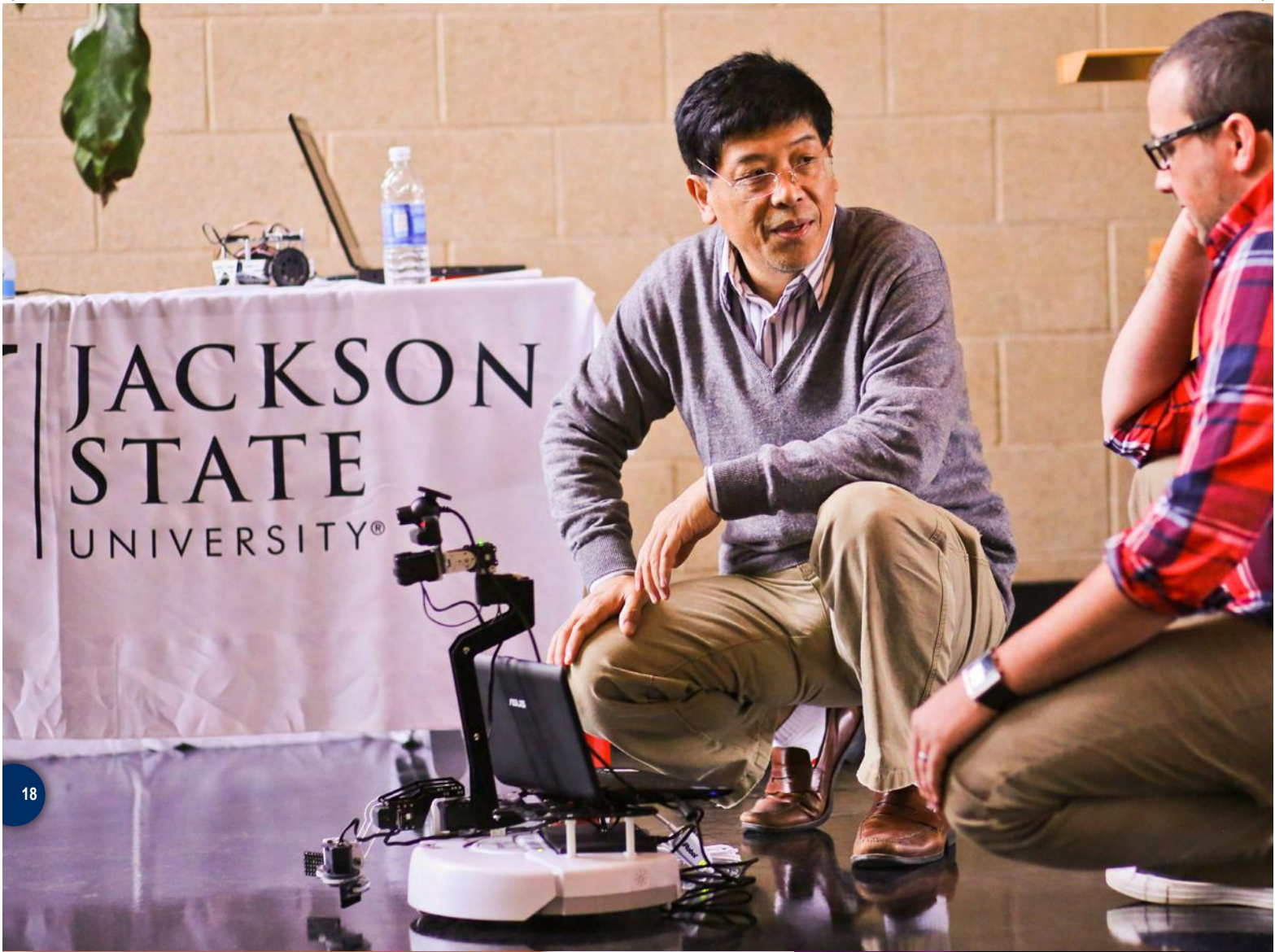
- ▶ ***LSAMP Bridge to the Doctorate (\$1,487,000)*** - the goal of the LSMAMP BD program is to establish a secure pathway for underrepresented minority students to obtain doctoral degrees in STEM disciplines.
- ▶ ***Institutional Change through Faculty Advancement in Instruction and Mentoring (ICFAIM) (\$989,238)*** - this project is designed to increase the retention of undergraduate students in the College of Science, Engineering and Technology by helping the faculty and graduate students to improve teaching and mentoring.
- ▶ ***Transforming the Climate and Advancing STEM Women at JSU (JSU ADVANCE) (\$614,624)*** - this project is designed to enhance the overall work climate for women faculty in the Science, Technology, Engineering, and Mathematics (STEM) and the Social and Behavioral Science (SBS) disciplines, while informing the larger academic community about issues that are relevant to women at HBCUs.
- ▶ ***EXTREEMS-QED Laboratory for Interdisciplinary Statistical Analysis and Mathematics Learning through Quantitative Exploration (\$600,000)*** - the focus of the project is on the design of efficient pedagogical pathways to utilizing big data to educate the next generation of mathematics and statistics undergraduates to confront new challenges in computational and data-enabled science and engineering (CDS&E).



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Emerging Areas

1) Materials Science and Engineering and Nanoscale Science and Technology

Jackson State University is working to establish an interdisciplinary materials science and engineering program that will focus on the development of undergraduate and graduate students proficient in research and activities related to materials science. The program will have the potential to benefit society and to contribute to the achievement of specific, desired and social outcomes. It will also establish a core of faculty and researchers with expertise that provide support for areas of national priority and provide the potential to develop novel materials and processes that promote advancing technologies.

2) Innovation, Entrepreneurship and Economic and Small Business Development

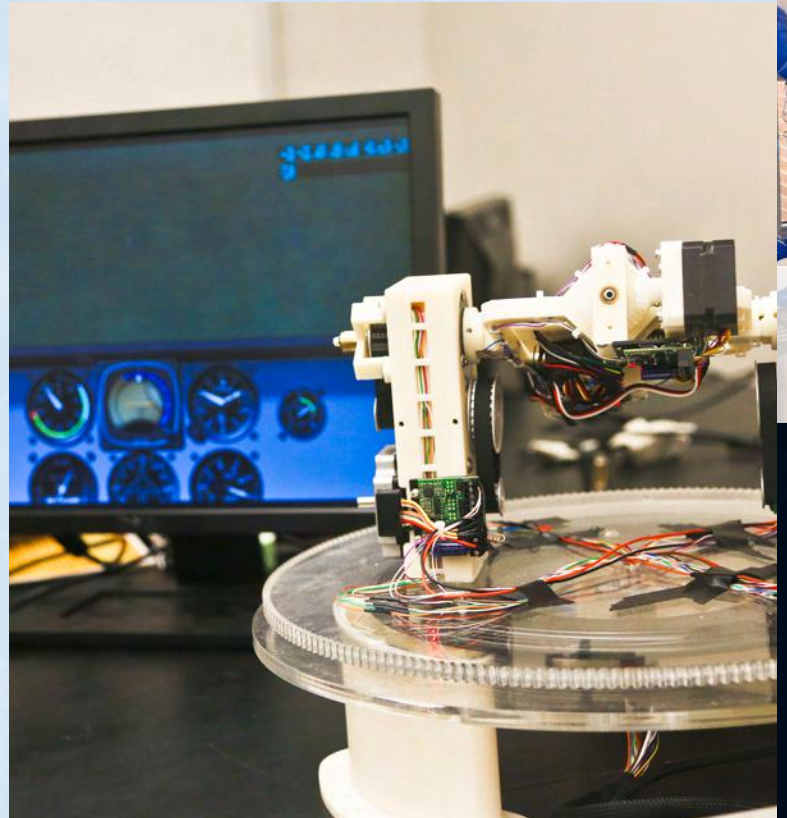
Jackson State University is positioned as a one-stop innovation campus, with the Mississippi e-Center @JSU serving as an incubator. The e-Center houses the Small Business Development Center, which provides technical and expert business knowledge to ensure that those who desire assistance with business development receive it. The Department of Entrepreneurship and Professional Development prepares graduates to start new business ventures that create economic growth and sustainable new jobs. With the establishment of the Institute of Government, Jackson State University is working towards the advancement of small to mid-size urban regions through problem solving and opportunities for growth, development and community sustainability.

3) Biomedical Research and Education

The goal of the biomedical research and education at Jackson State University is to improve human health through excellence in research and education at the interface of biology, chemistry, computer science, engineering, mathematics, statistics, and medicine. The University is working to create a dynamic environment, which will foster significant basic and translational research into the many diseases and conditions that plague our communities.

Promoting Innovation and Entrepreneurship

- ▶ Dr. Kamal Ali was named co-inventor on a patent for the Hardware in the Loop Simulator. A copy of the prototype is with the U.S. Army.
- ▶ Dr. Hari Cohly was named co-inventor on a patent named Oxygen Displacement Technology to Remove Rust from Iron and Iron-Based Tools and Structures.
- ▶ JSU Innovation Day was established to recognize innovation at JSU. This was celebrated as part of Mississippi Innovation Month.
- ▶ JSU participated in the 14th. Annual Conference on Technology Innovation hosted by Innovate Mississippi.
- ▶ JSU hosted four webinars on Innovation, academic entrepreneurship and technology transfer.
- ▶ JSU coordinated Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) collaborations for two Mississippi small businesses.



Gimbal platform created by Dr. Kamal Ali and student Justin Shumaker



President Dr. Carolyn W. Meyers with Dr. Gloria Dansby-Giles, Dr. Lennie Little and Dr. Daniel Watkins during JSU Innovation Day reception held November 2013.



Dr. Nicholas J. Hill, Jabulile Gumedé (student), Dr. Gwendolyn Catchings and Dr. Mary M. White pose with JSU President Dr. Carolyn W. Meyers and Dr. Jean Claude Assad during JSU Innovation Day reception held November 2013

JSU President Dr. Carolyn W. Meyers with CSET awardees (Drs. Himangshu Das, Tor Kwembe, Kamal Ali) and Dr. Paul Tchounwou during Innovation Day reception.

Hari Cohly: New Method for Removing and Preventing Rust

Dr. Hari Cohly, associate professor of biology in the Jackson State University Department of Biology, has recently been named an inventor on a patent for a new method of removing and preventing rust.

Cohly says the new technology, which employs a hydrogen-based gas, is economical to produce, non-invasive, environmentally friendly and can be mass-produced. The process could revolutionize numerous industries that now must rely on the current costly and labor-intensive rust removal methods, as well as prevent corrosion on objects ranging from small tools to automobiles, massive bridges and ocean-going ships.

Cohly says that the potential savings to consumers and industry are incalculable.

“Just consider a company that cleans rust from the bottoms of huge ships. The ship must be pulled from the water, chemicals applied and then scraped. It takes a very long time and is very labor-intensive and costly,” he says.

When the gas developed by Cohly and his colleagues is applied to a corroded surface, the rust falls off, particle by particle. “There is no scraping, and you can then just vacuum up the rust that has fallen off,” Cohly says. Cohly acknowledges the contributions of the following individuals who are also named on the patent: Bharat Subodh of India; Dr. Rajendram V. Rajnarayanan of East Amherst, N.Y.; and Hui Chu Tsai of Singapore.

A native of India, Cohly holds a bachelor’s degree in chemistry from the University of Toronto and a master’s and Ph.D. in microbiology from the State University of New York at Buffalo. He has done post-doctoral work at the University of Toronto and with Baylor College of Medicine and NASA Johnson Space Center in Texas.

Dr. Loretta A. Moore, interim vice president for Research and Federal Relations at JSU, said university officials are excited about the project.



Hari Cohly, associate professor of biology, named inventor on patent for rust removal and prevention



Kamal Ali, professor of engineering, named inventor on patent for simulator used for drones

Kamal Ali: Awarded Patent for Simulator Used for Drones

Dr. Kamal S. Ali, a Computer Engineering professor at Jackson State University, has been awarded a patent for his Hardware in the Loop Simulator (HILS) for small autopilots used in unmanned aerial vehicles or drones.

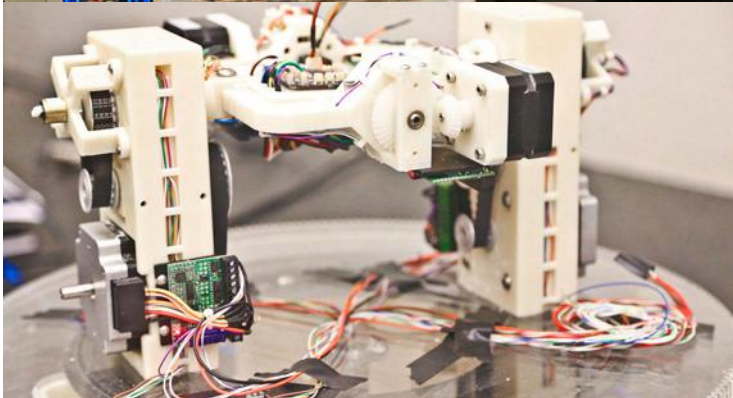
HILS are systems that combine the best of software flexibility and hardware accuracy, providing the user with a powerful and realistic evaluation tool. The system allows the user to compare how a plane is flying under different autopilots and weather conditions. The project is a collaboration of JSU and the U.S. Army Research Laboratory. Ali collaborated with his student, Justin Shumaker, who currently works for the Army Research Laboratory. A copy of the system was delivered to the U.S. Air Force.

“I’ve been working on this for five years. When I came to JSU, I started doing research with unmanned aerial vehicles,” Ali said. “It actually flies the plane inside the computer. You can look at the plane and how it’s flying. If it crashes, you can just reset and do it again.”

Ali received his master of science in engineering from West Virginia University, Morgantown, W. Va., and his Ph.D. in solid waste physics from Reading University, Reading, England.

“This is a great example of what can result from strong partnerships, such as the one between Jackson State University and the Army Research Laboratory. This patent is a demonstration of the great things that our faculty, staff and students are doing at Jackson State University,” says Dr. Loretta A. Moore, vice president for Research and Federal Relations.

Through its Technology Transfer and Commercialization unit, Jackson State University facilitates the invention disclosure and patent application process and provides both technical and financial support to ensure that the intellectual property rights to the invention are protected.



Promoting Scholarly Engagement

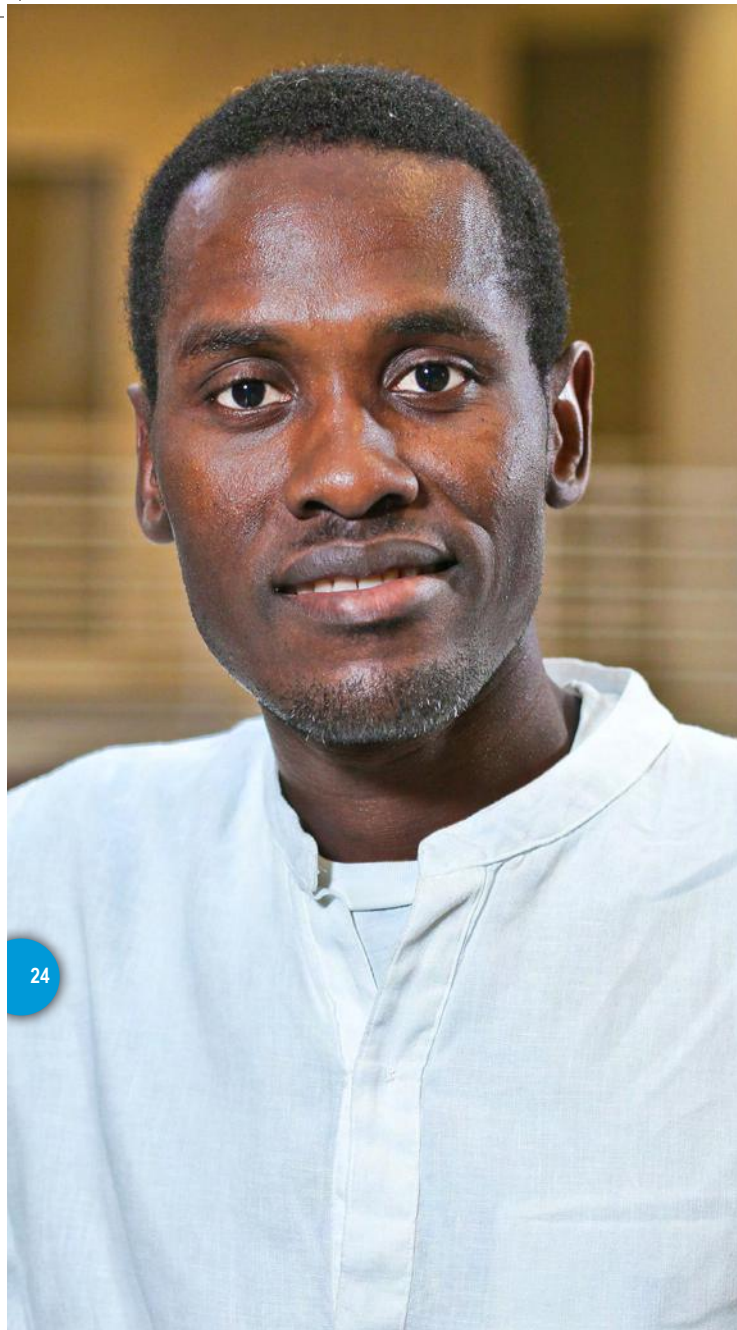
- ▶ Inaugurated in the 2012-2013 academic year, the Academy for Research and Scholarly Engagement helps faculty leverage their scholarly expertise and skills into external funding for their research agendas. At its core is a series of year-long dynamic workshops that guide faculty through the steps of the grant proposal development process. Those workshops are supplemented by engagement with program officers, including travel to funding agencies and foundations as well as coaching by senior JSU faculty with established records of grantsmanship.
- ▶ Though its focus is on the development of successful grant proposals, the Academy also includes activities that assist faculty in conceptualizing compelling research ideas, designing and implementing research agendas and developing inter-institutional partnerships.
- ▶ Fifteen scholars completed the year-long Academy. (To date: Four proposals were funded; 13 proposals were submitted; one scholar invited to be a guest lecturer at Princeton; two have presented their research at conferences).
- ▶ Through the Center for University Scholars, 77 travel awards were awarded to faculty members and 9 Brown Bag Research Talks were hosted. The Center also provided a number of graduate assistantships.



Cohort III of the Academy for Research and Scholarly Engagement pose with Division of Research and Federal Relations staff.



The Academy for Research and Scholarly Engagement participants share ideas during one of the Academy's working sessions.



Victor Ogungbe, assistant professor of chemistry and biochemistry, awarded three grants as a member of the Academy

Academy for Research and Scholarly Engagement Scholar Awarded Three Grants

Jackson State University assistant professor of Chemistry and Biochemistry, Dr. Victor Ogungbe, has recently been awarded three grants to support his research in the areas of chemical biology, drug discovery and structural biology. The grants include close to \$400,000 from the National Institutes of Health, National Institute of General Medical Sciences, for the project, "Solution Structure and Novel Inhibitors of T. brucei Cathepsin L."

Ogungbe also was awarded a \$36,224 National Science Foundation Mississippi ESPCoR (Experimental Program to Stimulate Competitive Research/Institutional Development Award) grant for the project, "Cheminformatics and Biomolecular Structure Simulation." The ESPCoR award complements Ogungbe's current project on dietary polyphenols, which is supported by the Jackson State University Center for Environmental Health (RCMI).

Ogungbe's third grant comes from the Burroughs Wellcome Fund. This grant will support his collaboration with partner institutions in West Africa to develop a chemical library at Jackson State University. The chemical library has the potential to serve as a treasure trove for the discovery of new antibiotics and chemical compounds that can serve as templates for new therapeutic drugs.

Ogungbe, who joined the faculty in January 2013, credits JSU's Academy for Research and Scholarly Engagement for helping him develop his winning proposals.

"The Academy gave me an opportunity to think about my projects, describe them to others who are not in my field, and convey the message for them to understand," Ogungbe said. "The other important component was that I got to see what the university requires in terms of conducting research, bringing in money to support research and engaging the community."

Launched in 2012, the JSU Academy for Research and Scholarly Engagement is an academic-year program that includes a series of workshops, collaboration with Academy coaches and scheduled interactions with program officers

from funding agencies and foundations. Each faculty participant is paired with an academy coach selected from active researchers at JSU.

Ogungbe participated in Cohort II of the Academy, which concluded in April 2014

The purpose of the Academy is to advance the careers of promising young researchers and emerging scholars by ensuring that they establish a compelling research agenda, participate in a community of scholars, and obtain external funding.



Increasing Engagement and Building Strategic Alliances

- ▶ Jackson State University hosted NASA Days from September 24-26, 2013. Seven students were offered internship opportunities with NASA.
- ▶ The Secretary of the Department of Homeland Security visited Jackson State University on April 17, 2014. Secretary Jeh Johnson met with JSU administration, as well as key personnel at the Coast Hazards Center of Excellence.
- ▶ On November 15, 2013, Dr. Loretta A. Moore presented at the National Science Foundation as part of its Investing in Diversity Series. Dr. Moore's discussion focused on Supporting Scholarly Careers of Underrepresented Faculty.
- ▶ Jackson State University hosted a number of conferences focusing on the University's research focus areas. Conferences included the International Symposium on Recent Advances on Environmental Health, Conference on Eliminating Health Disparities, Conference on Current Trends in Computational Chemistry, and Southern School on Computational Chemistry & Material Science Conference.
- ▶ Jackson State University researchers collaborated on major research projects such as the Department of Defense Prostate Cancer Project, Jackson Heart Study, and the RCMI Translational Research Network (RTRN).



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Left to Right: Dr. Sheon H. Mendoza, internal medicine physician at St. Dominic's Hospital, Dr. Marinelle Payton, Director and PI, Institute for Epidemiology and Health Services Research, Dr. Carl V. Hill, Director, NIH National Institute of Aging Office of Special Populations, and Dr. Ricardo Brown, Dean, College of Public Service

The National Institute of Aging Teams with Jackson State University to Celebrate Men's Health Month

Men's Health Month is celebrated nationally every year with health screenings, health fairs, health education and outreach activities. The goal of Men's Health Month is to bring awareness of preventable health problems that affect men and boys and to encourage them to seek early decision and treatment of these diseases.

Under the direction of Dr. Marinelle Payton, Jackson State University (JSU) is in its sixth year of celebrating Men's Health Month by holding its annual Men's Health and Healthcare Conference. According to Dr. Payton, principal investigator and director of the National Institute of Health's JSU Center for Excellence on Minority Health and Health Disparities/Institute for Epidemiology and Health Services Research, "the purpose of the annual Men's Health and Healthcare Conference is to provide a forum to educate and empower men to take a proactive approach to improve the quality of their lives. The conference is designed to address major issues and diseases facing men."

This year, Dr. Sheon H. Mendoza, internal medicine physician of St. Dominic's Hospital in Jackson, Mississippi, served as the opening speaker. Dr. Mendoza provided conference participants with best practices in interacting with men about protecting their health. "We all can play a role in identifying correctable men's health problems in our everyday lives if we learn what to look for. I use my time to teach people how to spot potential health problems

in casual situations," said Dr. Mendoza.

The National Institute on Aging (NIA), an institute of the National Institutes of Health, contributed to the success of this year's conference. Dr. Carl V. Hill, director of NIA's Office of Special Populations, served as keynote speaker for the luncheon meeting held at the Jackson Convention Complex. "It was great to visit Jackson State University and speak with community members, graduate students and faculty that have a real passion for improving the health of men in Mississippi. We hope to continue our collaboration with Jackson State by motivating faculty to apply for the Butler Williams Scholars Program and working specifically with Jackson State's Center for Excellence in Minority Health and Health Disparities," said Dr. Hill.

The Butler-Williams Scholars Program provides participants will valuable information in research design relative to aging, including issues relevant to aging of ethnic and racial minorities.



U.S. Homeland Security Secretary Jeh Johnson and U.S. Rep. Bennie Thompson Visit JSU

On Thursday, April 17, 2014, the Secretary of the United States Homeland Security, Jeh Johnson and U.S. Rep. Bennie Thompson, D-Miss., visited the Coastal Hazards Center (CHC), a Department of Homeland Security Science and Technology Center of Excellence.

Johnson told a gathering of media that his visit to Mississippi also included a visit to the Ingalls shipyard on the Gulf Coast and a round-table discussion with community and emergency management officials. “From the time I was sworn into office in December, I recognized the importance of the state of Mississippi to the Department of Homeland Security and the importance of the Department of Homeland Security to the state. I promised the congressional delegation that I would visit here early on in my tenure,” Johnson said.

“I feel at home at JSU as a graduate of an HBCU myself, Morehouse College. I visited with students and faculty here, the DHS Center of Excellence is a terrific program. I saw motivated, capable, talented students,” he said.

The center was established in 2008 in response to Hurricane Katrina, and it is the only DHS Center of Excellence solely dedicated to the study of natural disasters. During the visit, the federal officials met with JSU President Dr. Carolyn W. Meyers, Dr. Loretta Moore, JSU vice president for Research and Federal Relations, and Dr. Robert Whalin, director of the CHC.

Graduate and undergraduate students gave presentations on the research they’ve conducted at the center. Standing next to his display, Tony Saracino, a sophomore computer science major, explained how his team used ARC GIS

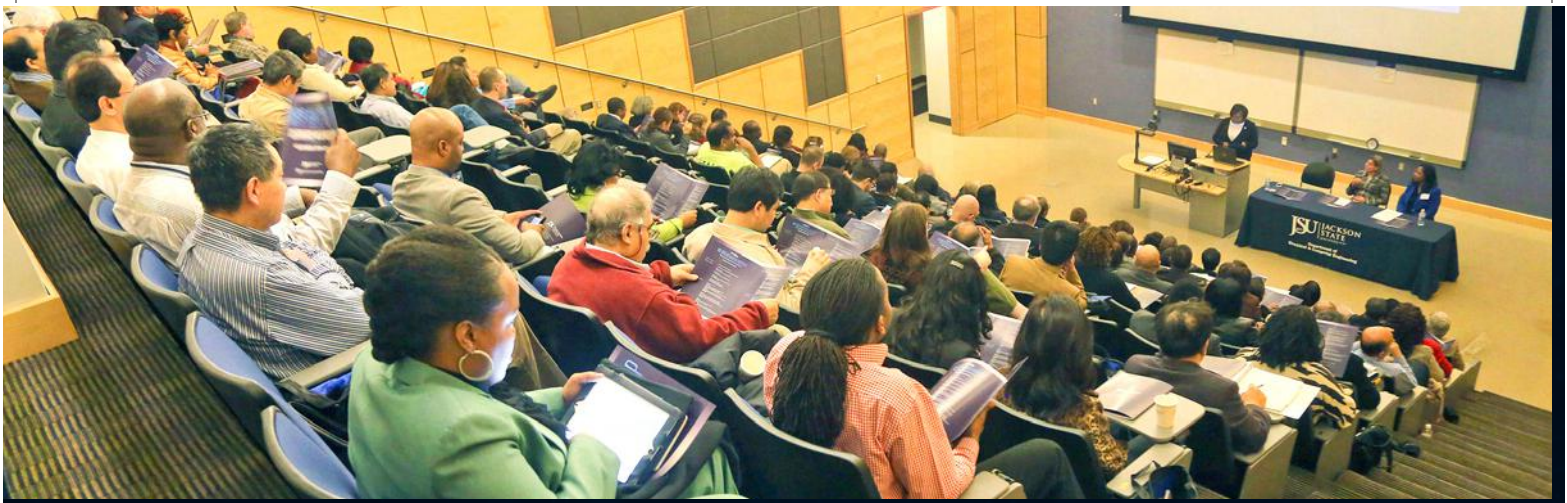
software to map areas of the state impacted by natural disasters. The research showed that black communities were the hardest hit by the 2011 flood and that white communities bore the brunt of Hurricane Katrina in 2005.

“This technology is open to anybody. It can be downloaded from the Internet. There are multiple uses for this information, such as which routes are best for ambulance assistance,” Saracino told the officials.

The information also showed areas that lacked medical clinics or acute medical facilities, which Thompson said was a concern in parts of the district he represents. Thompson is the ranking Democrat on the House Homeland Security Committee.

Whalin said there are 12 DHS Centers of Excellence in the country, but JSU’s center is the first Johnson has visited. At the center, students work directly with Homeland Security practitioners, both in the classroom and in the field. The Center has developed 39 new courses and seven new concentrations in hazards-related studies, from coastal engineering to social sciences, at 14 colleges and universities. The Center is co-led by the University of North Carolina at Chapel Hill.

“Hopefully, we’ve set the standard. It’s quite an honor that he came,” Whalin said.



JSU hosts the First NSF HBCU-UP Outreach Workshop

Jackson State University faculty and staff, along with dozens of representatives from other universities, learned how to apply for grants from the National Science Foundation during the HBCU-UP Outreach Workshop held at Jackson State University on November 20, 2014.

More than 150 people attended the NSF HBCU-UP Outreach Workshop at the Engineering Building to learn best practices for applying for NSF grants, said Dr. Loretta Moore, vice president, JSU Division of Research and Federal Relations.

Dr. Sylvia James, division director, NSF Division of Human Resource Development, from Washington, D.C., kicked off the workshops by saying that while the program supported science, technology, engineering and mathematics (STEM) programs, there are funding opportunities across the spectrum of academic disciplines. In fact, she said, part of the NSF's strategic plan is to collaborate with social, behavioral and economic sciences.

It is the hope that events such as NSF HBCU-UP Outreach Workshop will involve more historically black colleges and universities (HBCUs) to apply for grants, and particularly core research (ECR) grants, James said. Pointing to funding levels for the agency, James noted that the budget for ECR grants has increased from \$21 million to \$73 million. "That should give you incentive to make a proposal," she said.

Claudia Rankins, a NSF program officer with the Division of Human Resource Development, said she was "overwhelmed" by the number of people at the workshop. Attendees came from Alcorn State University, Hinds Community College, Grambling University, Mississippi Valley State University, Prairie View A&M University, Tougaloo College, Tennessee State University and the University of Mississippi. This is the first regional NSF outreach workshop to be held at JSU, Moore said.

One classroom was packed with academics intent on funding programs to broaden participation and

improve learning environments given by Gul Kremer, a program officer with the NSF Division of Undergraduate Education. In her talk on "Improving Undergraduate STEM Education," she said, it's imperative "to build the professional STEM workforce for tomorrow."

"One of the pressing issues is how are we going to keep the U.S. competitive," she said.

Tasha Inniss, a program officer with the NSF Division of Human Resource Development, said that a way to promote competitiveness is through capacity building. That is, bringing people into the STEM field, meeting together, holding workshops and conferences. Among the outreach programs NSF promotes: the Louis Stokes Alliance for Minority Participation (LSAMP), which has a program on the JSU campus (see: <http://www.jsu.edu/csetsss/lsmamp/>); grants for education and human resources (EHR); and core research (ECR).

Capacity building is specifically eligible for NSF grants up to \$300,000, she said. "We need broader minority participation" as primary investigators for these grants, Inniss said. Inniss also gave tips for writing winning grant proposals. Among them:

- ▶ Start early, at least six months prior to the deadline
- ▶ Contact the program officer to discuss your idea
- ▶ Read carefully the grant solicitation, so that all requirements are met
- ▶ Attend webinars about the programs
- ▶ Keep abreast of updates on the NFS website

Grants are available for a wide array of services, NSF personnel noted. For example, Earnestine Easter, program officer with the NSF Division of Graduate Education, said Graduate Research Fellowships are available that provide stipends of \$32,000 per year for three years. Also available are professional development grants and internships, as well as “traineeship,” which presupposes a broader range of experience than an internship. A hot area now, she said, is CyberCorps, or cyber security education, where a student can get a scholarship in return for service to the government. “It’s a growing area,” she said, “and we do not have nearly enough participation in the program.”

The cyber education grants provide funds for both students and institutions, Easter said, with funding caps of \$300,000 to \$900,000 for capacity building projects and \$1 million to \$1.5 million for scholarship projects. “Not enough HBCUs are applying,” she said. In addition, grants are available for STEM workforce development for up to \$2.5 million for 5-year proposals. HBCUs can receive heightened NSF grant attention through the HBCU Undergraduate Program (HBCU-UP) and through the Centers for Research Excellence in Science and Technology (CREST) program, said Andrea Johnson, program officer of the NSF Division of Human Resource Development. CREST enhances research capabilities of minority serving institutions, promoting development of STEM in traditionally underserved populations, Johnson said.

Additionally, HBCUs with STEM doctoral degrees can also receive funding through HBCU Research Infrastructure for Science and Engineering (RISE) grants, she said. JSU has won both HBCU-RISE and CREST funds.



Dr. Sylvia James, division director, NSF Division of Human Resource Development.



Claudia Rankins, NSF Program Officer



Rashawn Farris, NSF Program Officer



Gul Kremer, NSF Program Officer

Establishing a Transparent Pipeline



Ensuring Compliance and Organizational Efficiency

- ▶ A position was created for a Time & Effort Administrator.
- ▶ The Time & Effort reporting became fully electronic in Fall 2013 in an effort to increase reporting accuracy and to be in compliance with state and federal regulations. The reporting is done through the Banner system.
- ▶ A position was created for a Fiscal Compliance Officer.
- ▶ Cayuse 424 was implemented.
- ▶ The Division has increased its training sessions in Time & Effort, Responsible Conduct of Research, Institutional Review Board (IRB) and Financial Conflict of Interest to ensure that faculty and staff are knowledgeable about state and federal guidelines governing their research activities.
- ▶ The Compliance Unit reported no unresolved incidents for general compliance, HAZMAT, and other protocols.
- ▶ A new policy on Extra Compensation was approved and implemented.
- ▶ A new policy on the Redistribution of Indirect Cost Dollars was approved.



2014- 2015 Goals

- ▶ The Division will be recognized as a leader in securing external funding, promoting excellence among University scholars, and fostering multidisciplinary collaborations throughout the campus, local, national, and international communities.
- ▶ The Division will promote innovation, academic entrepreneurship, scholarly engagement, and student-faculty research teams.
- ▶ The Division will increase engagement with funding agencies, strengthen federal relations, and build strategic alliances and collaborations with other institutions.
- ▶ The Division will establish a transparent pipeline of the entire proposal development and project management process, from concept development and proposal submission to project implementation and research sustainability.
- ▶ The Division will ensure compliance with University, state, federal, and agency regulations and improve organizational efficiency.

Researchers With Active and New Grants and Awards (2013 – 2014)

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William McHenry

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Angela Gobar
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Lurlene Irvin
Priscilla Slade
Sydney Brown

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Daniel Watkins
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Gloria Smith
Gwendolyn S. Dawkins
Milliard Bingham
William Brown

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Dawn McLin
Ernestine McNeal
Kaye F. Sly
Lawrence T. Potter
Marino Bruce
Rico D. Chapman
Robert E. Luckett

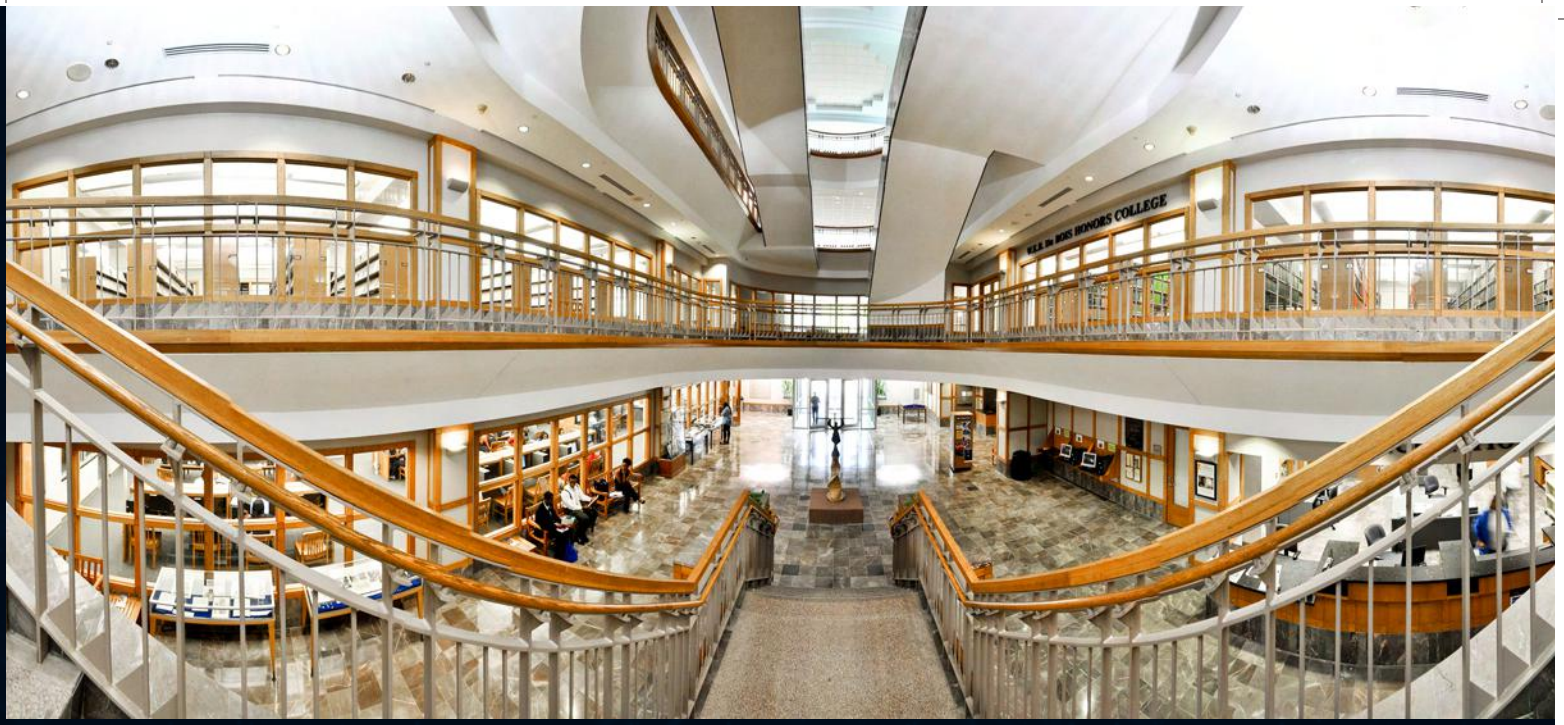
College of Public Service

Anthony R. Mawson
Bennett A. Odunsi
Brandi L. Turner
Clifton Addison
Daniel Sarpong
DeMarc Hickson
Donna Antoine-Lavigne
Ester W. Stokes
Gerri Cannon Smith
Leon Chestang
Lynette Ekunwe
Marinelle Payton
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Sarah Buxbaum
Sophia S. Leggett

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Abdul K. Mohamed
Alamgir Hossain
April L. Tanner
Ashton T. Hamme
Danuta Leszczyńska
David Bandi
Edna L. Holbrook
Edwina Barnett
Ezat Heydari Laibidi
Farshad Amini
Feng Wang
Francis Tuluri
Francois Modave
Glake A. Hill
Gordon Skelton
Hafiz A. Ahmad
Himangshu S. Das
Hongtao Yu
Huey-Min Hwang
Huiru Shih
Hyun-ju Kim
Ifedayo Ogungbe
Jacqueline Moore-Jackson
Jacqueline J. Stevens
James Perkins
Jerzy R. Leszczynski
John Watts
Joseph A. Cameron
Kamal S. Ali
Khalid H. Abed
Lin Li
Loren D. White
Maria Fatima Begonia
Mehri Fadavi
Ming-Ju Huang
Naomi F. Campbell
Natarajan Meghanathan
Pao-Chiang Yuan
Paresh Chandra Ray

Paul B. Tchounwou
Quinton L. Williams
Raphael Isokpehi
Remata S. Reddy
Richard A. Alo
Robert W. Whalin
Serguei Goupalov
Shahrouz Aliabadi
Shaneka S. Simmons
Shuang Z. Tu
Sudha Yerramilli
Thomas W. Richardson
Tigran Shahbazyan
Tor A. Kwembe
Wei Zheng
Wilbur W. Walters
Yadong Li
Yiming Liu



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Dr. Vivian L. Fuller – Director of Athletics

Dr. William E. McHenry – Executive Director for the Mississippi e-Center @ JSU

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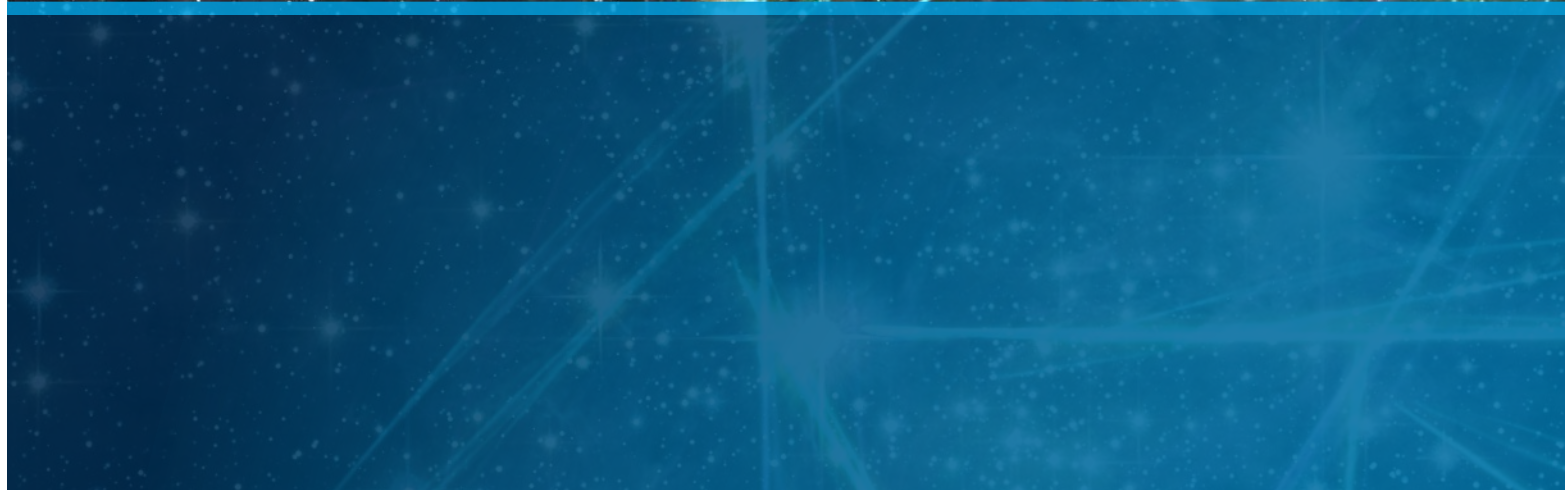
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Dr. Daniel Watkins – College of Education and Human Development



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