

FIU—USAID—Africa: increasing sustainable access to safe drinking water and sanitation¹

In Africa, women and girls are primarily responsible for the collection of water for their families, an activity that is time-consuming and limits their ability to make money or attend school. For this reason, it is especially important for them to have a voice in WASH policies and activities.



FIU's West Africa Water Supply, Sanitation and Hygiene ([WA-WASH](#)) program is working to develop practical models of sustainable water, sanitation and hygiene (WASH) service delivery and to introduce innovative and low-cost water and sanitation technologies in West Africa. As of August 2015, the program enhanced access to potable water by constructing or rehabilitating water points and delivering improved water sources for more than 65,000 people. The project began in 2011 and is expected to end in 2017, with an estimated total funding of \$24 million.

The program has also had significant success in promoting gender equality. As of August 2015, WA-AWASH had trained 7,198 people on mainstreaming gender into WASH. The program helped hundreds of women gain access to plots for gardening and identified male gender champions, men who see value in working with women to address water access and management issues. Discussions have focused on the roles and positions of women in the management and maintenance of water infrastructure and village savings and loan associations. As a result, WA-WASH supported the establishment of 203 village savings and loan associations.

"In the past, we (women) wasted lots of time to fetch water. Currently, most of the women use the same time to carry out activities such as livestock or to practice trade that enable them to generate income," said Binta Keita, a woman whose village in Burkina Faso benefited from a public tap installed by the program. To further these efforts, WA-WASH has engaged stakeholders at the local and national levels to discuss strategies, national policies, and WASH in its target countries. The program has increased the involvement of women in water point management committees, with women now accounting for nearly 40 percent of the membership in those groups.

In Tanzania, inadequate access to water and sanitation services has enormous health, economic, and social consequences. Each year approximately 600,000 children under the age of 5 die from diarrheal disease related to lack of clean water and sanitation. Tanzania is one of the 15 countries responsible for 74 percent of the global burden of diarrhea and pneumonia mortality in these young children. A significant proportion of diarrheal disease can be prevented through safe drinking water and adequate sanitation and hygiene. The Tanzania Integrated Water Supply, Sanitation and Hygiene ([iWASH](#)) program focused on activities to increase access to safe drinking water, sanitation facilities, and hygiene services for rural communities in three districts in southern Tanzania. In FY 2015, iWASH used Open Data Kit, a tool that allows data collection using mobile devices, to monitor and verify sanitation data. This new data showed that more than 4,000 people gained access to improved sanitation facilities, mostly through the construction and rehabilitation of school latrines. The project strengthened the capacity of the private sector to provide WASH-related products and services that stimulate the supply side of the WASH services delivery chain, a critical component for sustainability. The project led to the creation of rope-pump fabrication workshops and low-cost drilling companies active in Tanzania, and the use of approximately 10,000 rope pumps, 60 percent of which are due to iWASH. From 2010 through 2016, the i-WASH project was funded at \$18.4 million.



The above are just two examples of projects led by [Maria Donoso](#) and [Lakhdar Boukerrou](#). An initiative funded by USAID, coordinated by FIU and implemented around the world, these programs focus on providing water management services to people and ecosystems, including integrated water management policies, water supply, sanitation and hygiene improvements, and research and education programs in the water sector.

¹ adapted from USAID Report of Water Sector Activities Fiscal Year 2015—Safeguarding the World's Water

March 2017

Upcoming Events
(page 2)

Awards Received
January 2017
(page 2)

Funding Opportunities
(page 9)

Contact Us
(page 9)

Upcoming Events

March

- **March 1, 8:30 am to 12:30 pm, FIU in DC, [Health Disparities Symposium](#)**
- **March 3, 9 am to 5:30 pm, EC 2300, 7th Annual Undergraduate Research Day, with [Jonathan Vande Geest](#) as keynote speaker**
- **March 3, 2 to 3 pm, ECS 241, [Trillion Sensors Technology: Research, Commercialization and Education](#), presented by [Albert Pisano](#)**
- **March 6, 11 am to 1 pm, AHC5 #300, NIH Colloquium presented by [Adelaida M. Rosario](#)**
- **March 7, 12 to 1 pm; AHC4 #402, [Blocking Mitochondrial Fission as Potential Therapy for Parkinson's Disease](#), presented by [Kim Tieu](#)**
- **March 8, 1 to 3 pm, Naples Botanical Garden, [Nature's Bounty: Exploring Plants as Food in History, Conservation and Our Future](#), presented by FIU's Center for Tropical Botany**
- **March 10, 9 to 10 am, EC 1109, [Unconventional Applications of Conventional Imaging Methods](#), presented by [Arvind Pathak](#)**
- **March 10, 6:30 – 8:30 pm, SACS #160 (Student Academic Success Center auditorium), [Our Common Future—Speaking Science: Communicating the Climate Story](#), presented by [Gavin Schmidt](#)**
- **March 22, 11 am to 12 noon, PG5 #134, [Applications of ergonomics for lifting and transferring patients: Evidence from intervention studies](#), presented by [Arun Garg](#)**
- **March 29-30, 10 am to 4 pm, GC Ballrooms, [Conference for Undergraduate Research at FIU](#)**
- **March 30 & 31, 8:30 am to 5 pm, MARC Pavilion, 19th Annual Biomedical and Comparative Immunology Symposium, [registration required](#)**

April

- **April 7, 2 to 3 pm, ESC 241, [Procedural and Analytic Tools for the Development and Evaluation of Game Environments](#), presented by [Magy Seif El-Nasar](#)**
- **April 12, 10 to 11 am, Naples Botanical Garden, [Eating Plants to Save Them](#), presented by FIU's Center for Tropical Botany**
- **April 14, 2 to 3 pm, ECS 241, [Terahertz Systems-On-Chip Based on Nanotechnologies](#), presented by [Frank Chang](#)**

Awards Received—January 2017

FIU researchers were awarded \$5,055,638 in January 2017. Below is a listing of awards received.

Ahmed Salah Ibrahim Mohamed

College of Engineering and Computing, Elec and Computer Engineering
Texas A&M University

Initial

Optical Wireless Communications: Complementary Technology for Solving \$6,912

Alexander Mebel

College of Arts, Sciences & Education, Chemistry
University of Hawaii

Continuation

A Combined Experimental and Theoretical Study on the Unimolecular Decomp \$60,000

Anthony De Caprio

College of Arts, Sciences & Education, Chemistry

Vapor Shark

Agreement

Service Authorization Request between the FIU Board of Trustees and Vapor Shark

\$648

Arif Selcuk Uluagac

College of Engineering and Computing, Elec and Computer Engineering

National Science Foundation

Initial

Collaborative Research: SuRPASS: NSF SFS Unique Scholarship Program

\$5,860

Arindam Gan Chowdhury

College of Engineering and Computing, Civil and Environ Engineering

Sigmatech Inc

Agreement

Service Authorization Request between the FIU BoT and Sigmatech Inc.

\$21,011

Casey P Steadman

Academic Affairs - The Wolfsonian

City of Miami Beach

Initial

2016-2017 General Operating Support

\$27,614

Catherine Camille Coccia

Stempel College of Public Health Social Work, Dietetics and Nutrition

Florida State University Foundation

Initial

Helicopter Parenting of College Students: Strengthening Family

\$5,000

Cheng-Tin Gan

College of Engineering and Computing, Civil and Environ Engineering

Florida Department of Transportation

Initial

FSUTMS Portal Redesign and Maintenance Monitoring

\$28,600

Daniel Bagner

College of Arts, Sciences & Education, Psychology

Child Health and Human Development

Initial

Effect of Parent Emotion-Related Talk on Infant Behavior and Regulation

\$37,176

Daniel Blaeuer

College of Communication, Architecture + The Arts, Communication

Kettering Foundation

Initial

Discussion materials for adaption actions in southern Florida

\$10,000

Daniel Blaeuer

College of Communication, Architecture + The Arts, Communication

Kettering Foundation

Initial

Learning exchange to explore framing options in community adaptation

\$5,000

David Garber

College of Engineering and Computing, Civil and Environ Engineering
Oceans Technology Group

Initial

Behavior of Algae-Based Binder Concrete

\$11,787

Demian D Chapman

College of Arts, Sciences & Education, Biology
Paul G. Allen Family Foundation

Initial

Fin DNA Toolkit project

\$10,000

Elizabeth Cramer

College of Arts, Sciences & Education, Teaching and Learning
U.S. Department of Education

Increase

Project EDUCATE

\$288

Evelyn E Gaiser

College of Arts, Sciences & Education, SEAS
National Science Foundation

Increase

LTER: FCE LTER III - Coastal Oligotrophic Ecosystems Research

\$585,731

F Javier Francisco Ortega

College of Arts, Sciences & Education, Biology
Les Cayes Botanic Garden

Initial

DNA fingerprinting of the Haitian Palm ATTALEA CRASSISPATHA

\$3,875

Fabian Cevallos

College of Engineering and Computing, Civil and Environ Engineering
City of Doral

Increase

Transportation Engineering Technical and Research Support Services

\$1,942

Francisco Alberto Fernandez Lima

College of Arts, Sciences & Education, Chemistry
Beckman Coulter

Agreement

Service Authorization Request between the FIU Board of Trustees and Beckman Coulter

\$1,381

Francisco Alberto Fernandez Lima

College of Arts, Sciences & Education, Chemistry
National Science Foundation

Initial

CAREER: Development of gas-phase, post-ionization structural tools

\$18,000

Francisco Alberto Fernandez Lima

College of Arts, Sciences & Education, Chemistry
Berkshire Holding Corporation

Agreement

Service Authorization Request between the FIU Board of Trustees and Berkshire

\$302

Henry Briceno

College of Arts, Sciences & Education, SERC

National Science Foundation

Increase

LTER: FCE LTER III - Coastal Oligotrophic Ecosystems Research

\$30,468

Hitendra Singh Chand

Herbert Wertheim College of Medicine, Immunology

National Institutes of Health

Initial

Targeting Hyperplastic Airway Cells Using a Small Molecule Inhibitor

\$183,125

Ines Triay Melendez

Academic Affairs - Other Units

ARC Applied Research Center

Florida State University

Initial

Center for Actinide Science and Technology

\$44,025

Ines Triay Melendez

Academic Affairs - Other Units

ARC Applied Research Center

Florida State University

Initial

Center for Actinide Science and Technology

\$135,339

Ines Triay Melendez

Academic Affairs - Other Units

ARC Applied Research Center

Florida State University

Pre-Award

Center for Actinide Science and Technology

\$6,000

Jacqueline Bueno Sousa

College of Business

COB Deans Office

Miami Bayside Foundation

Initial

SBDC-Miami Bayside Foundation

\$15,000

Jacqueline Bueno Sousa

College of Business

COB Deans Office

University of West Florida

Initial

SBDC FIU 2017

\$653,026

Jeffrey Allen Boyd

Herbert Wertheim College of Medicine, Human and Mol Genetics

Fox Chase Cancer Center

Supplemental

Identifying Determinants of PARP Inhibitor Sensitivity in Ovarian Cancer

\$16,526

John Kominoski

College of Arts, Sciences & Education, Biology
National Science Foundation
Increase

ILTER: FCE LTER III - Coastal Oligotrophic Ecosystems Research \$70,913

Jose R Almirall

College of Arts, Sciences & Education, Chemistry
CTTSO Technical Support Working Group
Supplemental

Heroin Origin Determination using High-Resolution ICP-MS \$83,371

Julio E Ibarra

Academic Affairs - Other Units, CIARA
National Science Foundation
Initial

IRNC: Backbone: Americas Africa Research and eduCation Lightpaths (AARCLight) \$200,000

Kevin Boswell

College of Arts, Sciences & Education, Biology
Mote Marine Laboratory and Aquarium
Increase

Integration of acoustic methods for assessing fish spawning aggregations \$88,431

Konstantinos Kavallieratos

College of Arts, Sciences & Education, Chemistry
Savannah River Nuclear Solutions LLC
Increase

Development of an Alternative Solvent Extraction Technology for Combined Cesium \$312,344

Laura H Dinehart

College of Arts, Sciences & Education
School of Education
Business & Leadership Inst Early Learning
Initial

2016-2017 BLI Coordinating and Research Services \$61,026

Leonel Lagos

Academic Affairs - Other Units, ARC Applied Research Center
University of Texas at Austin
Initial

Robust and Remote Radiation Hardened Robotic System for Tunnel Inspection \$12,000

Lorraine Bahrck

College of Arts, Sciences & Education, Psychology
Child Health and Human Development
Increase

Intersensory Processing, Developmental Trajectories, and Longitudinal Outcomes \$530,702

Maria Jose Miguez

College of Arts, Sciences & Education, SISH
Brown University
Continuation

Alcohol and HIV: Bibehavioral Interactions and Intervention - Research Component \$146,105

Marisela Agudelo

Herbert Wertheim College of Medicine, Immunology

National Institutes of Health

Continuation

EtOH-induced Immunomodulation: Role of Histone Deacetylases and Cannabinoid Genes \$216,974

Matthew DeGennaro

College of Arts, Sciences & Education, Biology

University of Florida

Initial

Southeastern Regional CoE in Vector-Borne Diseases: The Gateway Program \$242,897

Michael Cheng

Chaplin School of Hosp and Tourism Mgmt

Howell Infused Spirits LLC

Initial

Flavored Pearls \$22,643

Michael Heithaus

College of Arts, Sciences & Education

National Science Foundation

Increase

LTER: FCE LTER III - Coastal Oligotrophic Ecosystems Research \$67,830

Michael Heithaus

College of Arts, Sciences & Education

Paul G. Allen Family Foundation

Increase

THE GLOBAL FIN-PRINT: a worldwide underwater video survey of shark \$240,000

Mohammed A Hadi

College of Engineering and Computing, Civil and Environ Engineering

Florida Department of Transportation

Initial

SW 8th Street Adaptive Signal Control Evaluation - Phase 2 \$50,000

Nezih Pala

College of Engineering and Computing, Elec and Computer Engineering

University of Utah

Increase

3D Simulation of THz Plasmonic Structures \$28,895

Priyanka Alluri

College of Engineering and Computing, Civil and Environ Engineering

University of North Florida

Initial

Evaluation of Incident Response Improvements for Statewide Application \$50,000

Rene Price

College of Arts, Sciences & Education, Earth and Environment

National Science Foundation

Increase

LTER: FCE LTER III - Coastal Oligotrophic Ecosystems Research \$71,521

Rudolf Jaffe

College of Arts, Sciences & Education, Chemistry
National Science Foundation
Increase

LTERR: FCE LTER III - Coastal Oligotrophic Ecosystems Research \$71,937

Ruogu Fang

College of Engineering and Computing, Computer Info Sciences
Cornell University
Initial

Minimal Radiation Exposure Technology for Acute Stroke Assessment in CTPerfusion \$5,000

Shanna L Burke

Stempel College of Public Health and Social Work
School of Social Work
Neuroscience Centers of Florida Foundation
Initial

Development of a Battery of Measurement Instruments to Assess Caregiver Wellbeing \$2,500

Shimon Wdowinski

College of Arts, Sciences & Education, Earth and Environment
National Science Foundation
Initial

Collaborative research: Space-based detection of sinkhole activities in central Florida \$33,594

Shimon Wdowinski

College of Arts, Sciences & Education, Earth and Environment
National Science Foundation
Increase

LTERR: FCE LTER III - Coastal Oligotrophic Ecosystems Research \$19,038

Tiffany Troxler

College of Arts, Sciences & Education, SERC
National Science Foundation
Increase

LTERR: FCE LTER III - Coastal Oligotrophic Ecosystems Research \$66,722

Todd Crowl

College of Arts, Sciences & Education, SERC
University of New Hampshire
Increase

Luquillo CZO: the role of hot spots and hot moments in tropical landscape evolution \$57,574

William E Pelham Jr

College of Arts, Sciences & Education, Psychology
National Institute of Mental Health
Pre-Award

Examining Tolerance to CNS Stimulants in ADHD \$128,985

Xia Jin

College of Engineering and Computing, Civil and Environ Engineering
Florida Department of Transportation
Initial

Large Truck Crash Analysis for Freight Mobility and Safety Enhancement in Florida \$250,000

Funding Opportunities

ORED has a new, improved and interactive webpage for funding opportunities. Please visit <http://research.fiu.edu/funding/#current>.

Limited Submissions

Current limited submission opportunities are available at <http://research.fiu.edu/funding/limited-submissions/>.

Contact ORED Senior Leadership

Name	Title	Email Address
Andrés G. Gil	Vice President for Research & Economic Development	Andres.gil@fiu.edu
Tonja Moore	Associate Vice President, Strategic Planning & Operations	Tonja.moore@fiu.edu
Luis P. Salas	Associate Vice President, International Research, Space Optimization and Compliance	Luis.salas@fiu.edu
Mirtha Alberto	Director, Budget & Cost Analysis	Mirtha.alberto@fiu.edu
Henry Artigues	Director, External Partnerships & Economic Development	Henry.artigues@fiu.edu
David Driesbach	Assistant Vice President, Research Information Systems	David.driesbach1@fiu.edu
Christopher Grayson	Director, Research Integrity	Christopher.grayson@fiu.edu
Emily Gresham	Assistant Vice President, Innovation & Economic Development	Emily.gresham@fiu.edu
Robert Gutierrez	Assistant Vice President, Research Development & Pre-Award	Robert.gutierrez@fiu.edu
Pedro Hernández	Director, Technology Management & Commercialization	Pedro.hernandez7@fiu.edu
Regnier Jurado	Director, Research Management Solutions	Regnier.jurado@fiu.edu
Maureen Pelham	Director, Research Development	Maureen.pelham@fiu.edu
Aida Reus	Director, Post-Award	Aida.reus@fiu.edu
Horatiu Vinerean	Director, Laboratory Animal Research ; Attending Veterinarian	Horatiu.vinerean@fiu.edu
Susan Webster	Director, Training & International Research Initiatives	Susan.webster@fiu.edu



OFFICE OF RESEARCH AND ECONOMIC DEVELOPMENT
 11200 SW 8th Street—MARC 430
 Miami, FL 33199
<http://research.fiu.edu>