

Wednesday, August 23, 2023		
9:00 - 9:05 am EDT	Kick-Off /Welcoming Remarks (DOE-EM)	Rod Rimando (Acting Director, Technology Development) – DOE EM-3.2
9:05 - 9:10 am EDT	Welcoming Remarks (DOE-LM)	Ms. Jalena Dayvault (Site Manager) – DOE LM
9:10 - 10:40 am EDT	Project 2: Environmental Remediation Science & Technology	FIU, DOE HQ, SRNL, PNNL, ORNL, LANL, LBNL, CBFO
10:40 am - 12:10 pm EDT	Project 1: Chemical Process Alternatives for Radioactive Waste	FIU, DOE HQ, PNNL, WRPS, SRNL, SRS
LUNCH BREAK [12:10 – 1:30 pm]		
1:30 - 3:00 pm EDT	Project 3: Waste and D&D Engineering & Technology Development	FIU, DOE HQ, SRNL, PNNL, LBNL, INL, ANL
Thursday, August 24, 2023		
9:00 - 10:30 am EDT	Projects 4 & 5: STEM Workforce Development and Training	FIU, DOE HQ (EM & LM), SRNL, PNNL, WIPP, SRS, ORP, LBNL, WRPS, INL, Grand Junction
BREAK [10:30 – 10:35 am]		
10:35 - 12:00 pm EDT	Wrap Up (FIU Projects 1, 2, 3, 4 & 5)	FIU, DOE HQ (EM & LM)

FIU

Applied Research
Center



DOE-FIU Cooperative Agreement Annual Research Review – FIU Year 3

PROJECT 4

DOE-FIU Science & Technology Workforce Development Initiative

Worlds
Ahead

Advancing the research and academic mission of Florida International University

FIU Personnel and Collaborators

Program Director: Leonel Lagos

Program Manager: Ravi Gudavalli

FIU Faculty/Staff: Walter Quintero, Clint Miller, Angelique Lawrence, Anthony Abrahao, Pieter Hazenberg

DOE-EM Fellows: Alejandro De-La-Novela, Aris Duani Rojas, Aubrey Litzinger, Aurelien Meray*, Brendon Cintas, Bryan Torres, Bryant Pineda, Caridad Estrada*, Carolina Trummer, David Rojas, Desmond Sinnott*, Douglas Baptiste, Fabiola Rivera-Noriega, Gabriel Cerioni, Hannah Aziz, Joel Adams, Josue Estrada Martinez, Kirsten Olson*, Mariah Doughman*, Melanie Sztybel*, Nicholas Espinal, Philip Moore, Phuong Pham*, Rafael Velasquez, Roger Boza*, Rohan Shanbhag*, Sebastian Story*, Stevens Charles*, Theophile Pierre

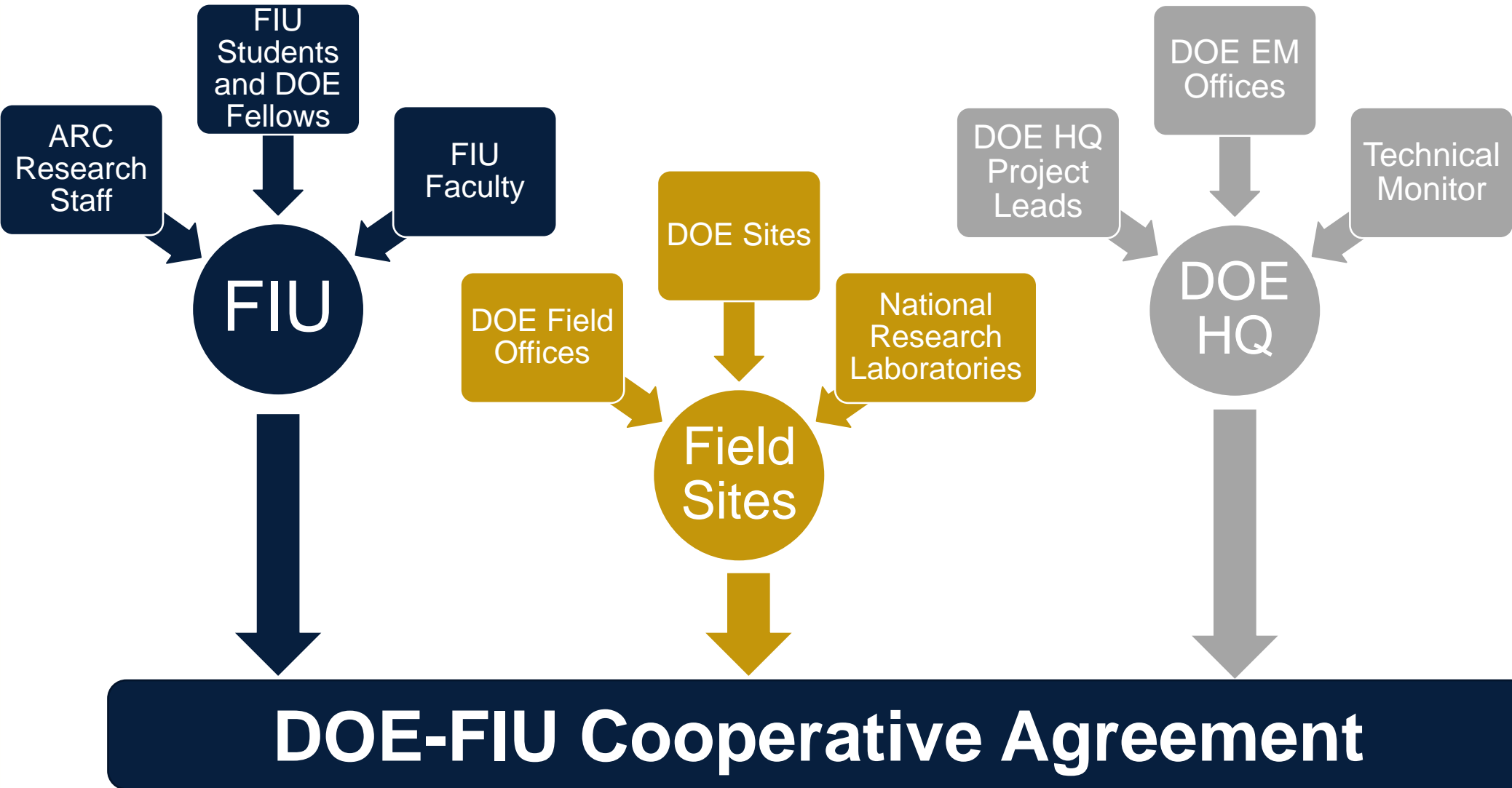
DOE-EM: Genia McKinley, Jean Pabon, Junita Turner Mary, Ann Maloney

DOE National Laboratories, Sites, Contractors

*Former staff/student contributors



Cooperative Agreement Team

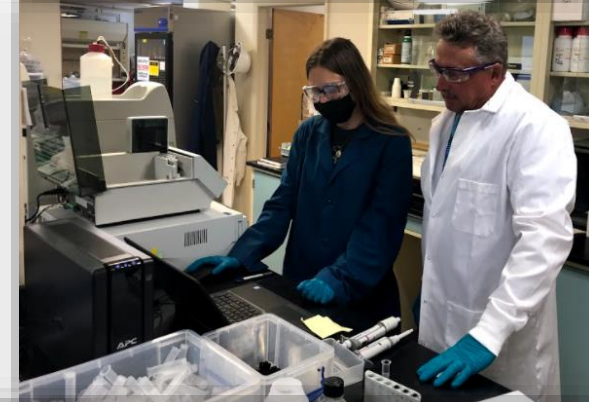


DOE Fellows Program Components



FIU Year 3 Highlights & Accomplishments:

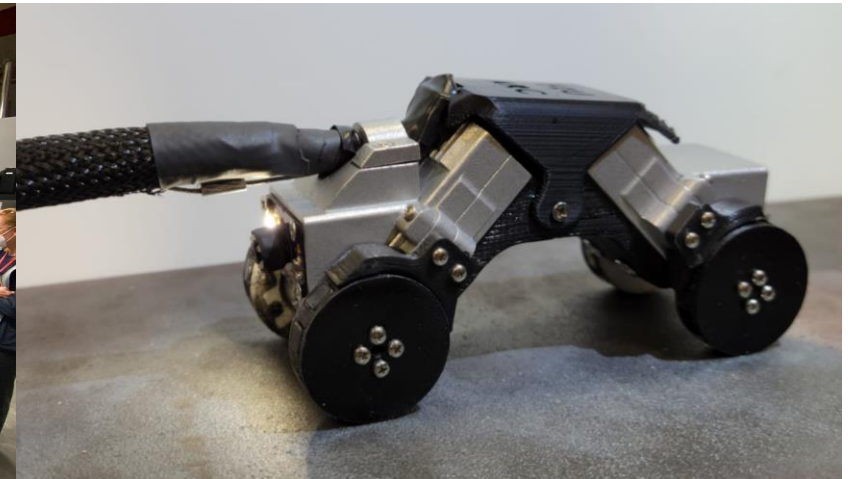
- Conducted recruitment campaigns and selected **11** FIU students to join the programs
- **31** Fellows supported FIU scientists and engineers in the development of the technical work
- Conducted induction ceremony and inducted DOE Fellows Class of 2022 (**10**)
- **15** summer internships were conducted across the DOE complex, including 1 LM Fellow Internship
- **18** DOE Fellows participated and presented posters during DOE Fellows Poster exhibition



Sebastian Story

M.S. Mechanical Engineering
Mechanical Engineer - LANL

- Developed robotic inspection devices for the Hanford Site.
 - Prototyped the Miniature Rover and 3" Pipe Crawler
- Presented at Waste Management Symposia



Joining the Workforce

Mariah Doughman
Ph.D. Chemistry
EM Graduate Fellowship - PNNL



- Participated in **2** internships at PNNL (2021 & 2022)
- Presented her research findings at numerous conferences, including the Waste Management Symposia, the American Chemical Society and RemPlex
- Recipient of Roy G. Post Foundation Scholarship

Joining the Workforce

Phuong Pham
Ph.D. Chemistry
Postdoctoral Researcher - SRNL

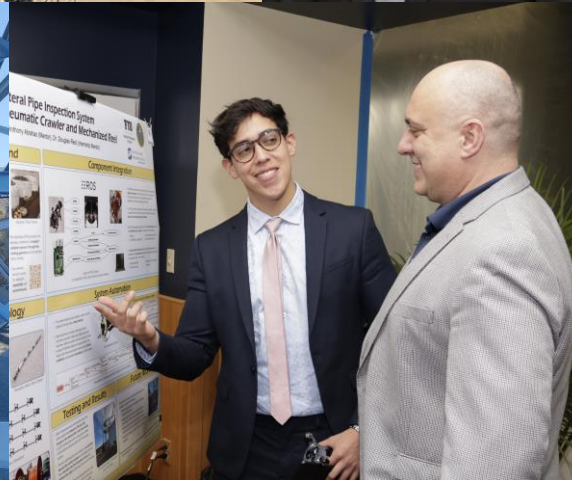


- Studied the effect of environmental factors on iodine attenuation and release at SRS wetlands
- Participated in two internships at SRNL (2021 & 2022)
- Presented her research findings at numerous conferences, including the Waste Management Symposia and the American Chemical Society

Joining the Workforce

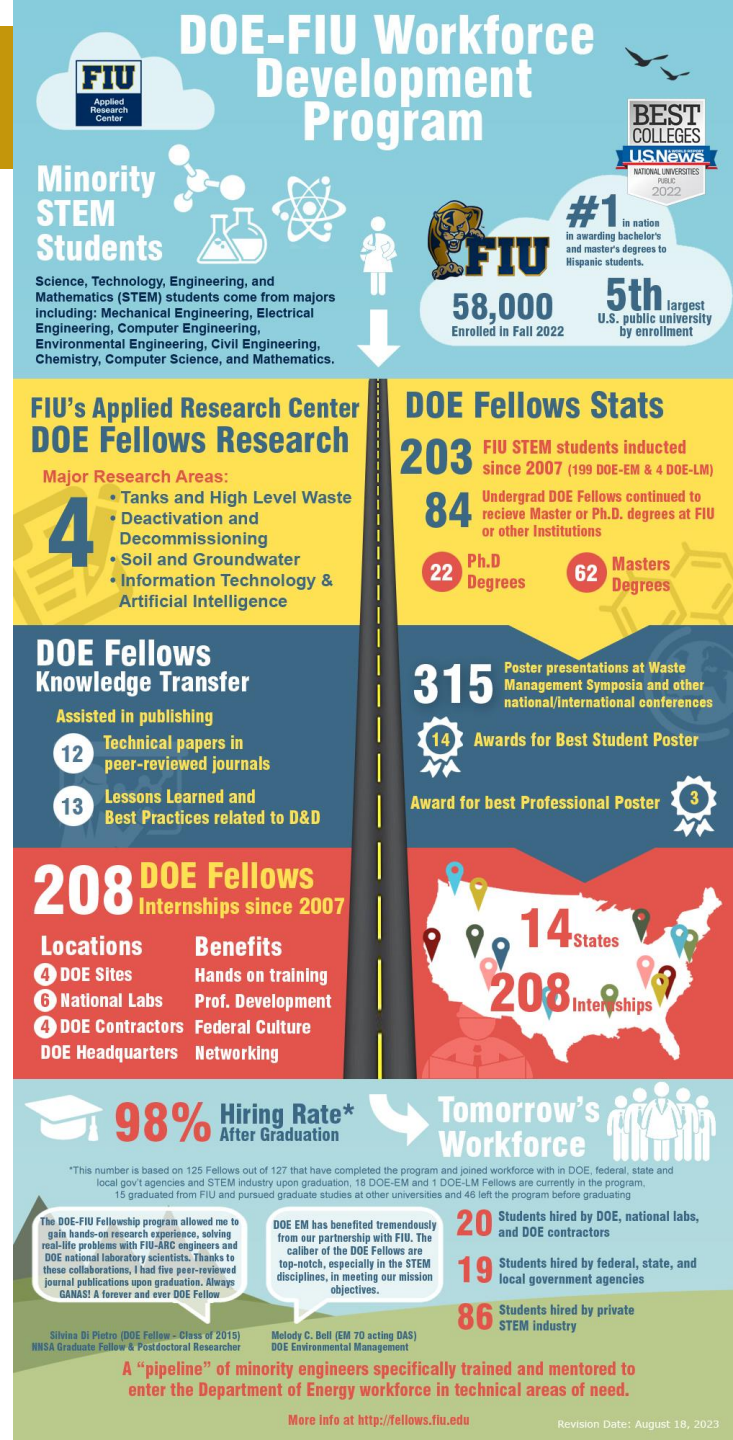
Josue Estrada
M.S. Mechanical Engineering
Mechanical Engineer - WRPS

- Developed peristaltic pneumatic crawler for SST's lateral pipe inspection.
- Participated in internships at DOE HQ (2021) and WRPS (2022 & 2023).
- Presented at Waste Management Symposia and co-authored several papers



Overall Accomplishments

- **203 FIU STEM** minority students (graduates and undergraduates) have been inducted as DOE Fellows since program inception.
- **20** DOE Fellows hired throughout the DOE Complex: DOE EM HQ (3), DOE national laboratories (14), NNSA (1), and DOE EM contractors (2).
- **19** Fellows have been hired by other federal, state or local governments including: Dept. of Defense, NASA, Army Corp of Engineers, Dept. of Commerce, Florida Dept. of Environmental Protection, DERM, Dept. of the Navy (NAVSEA).
- **86** DOE Fellows graduated FIU with bachelor's or master's degrees and obtained employment in STEM industry.
- **15** DOE Fellows graduated FIU and pursued graduate STEM degrees at other major Universities (MIT, Virginia Tech, Georgia Tech, Stanford, etc.).
- **19** are still pursuing their respective degrees at FIU and continue to be part of the DOE Fellows Program.
- DOE Fellows graduate FIU and immediately obtain employment with federal government, state/local government and STEM industry in general. The hiring rate upon graduation is approximately 98%.



FIU Year 4 Projected Scope

Active hands-on research assisting ARC scientists/engineers during the execution of DOE-EM research in order to integrate education with practical experience in the DOE-EM problem areas.

- Recruit qualified talented FIU minority STEM students
- Engage in DOE-EM research under the technical projects
- Conduct poster exhibition & competition
- Host DOE Fellows induction ceremony
- Coordinate summer internship program and internship technical reports
- Conference participation & presentations, including WM Symposia, American Nuclear Society, American Geophysical Union (AGU), Remplex
- DOE-EM HBCU collaboration/interactions - extend recruitment to include HBCU/MSI students interested in a Ph.D. at FIU
- Work closely with DOE nat. labs to identify opportunities for Ph.D. students including extended work assignments that can lead to post-doctoral positions





Thank You. Questions?