

FIU PROJECT 4 & 5: DOE-FIU SCIENCE AND TECHNOLOGY WORKFORCE DEVELOPMENT PROGRAM

Leonel Lagos

Florida International University





FIU Personnel and Collaborators



Principal Investigator: Leonel Lagos

Program Manager: Ravi Gudavalli

Faculty/Staff: Walter Quintero, Clint Miller, Angelique Lawrence

DOE Fellows/Students: Adrian Muino, Alejandro Koszarycz, Alexis Vento, Alicia Maratos, Amanda Yancoskie, Anilegna Nunez Abreu, Aurelien Meray, Christopher Excellent, Daniel Martin, David Mareno, Derek Gabaldon, Edward Nina, Frances Zengotita, Gisselle Gutierrez, Heily Revoll, Jason Soto, Jeff Natividad, Joel Adams, Joshua Nuñez, Juan Morales, Katherine De La Rosa, Manuel Losada, Mariah Doughman, Michael Thompson, Nathalie Tuya, Patrick Uriarte, Philip Moore, Phuong Pham, Raymond Piloto, Rocio Trimino Gort, Roger Boza, Ryan Cruz, Ryan Ocampo, Sebastian Story, Silvia Garcia, Silvina Di Pietro, Stevens Charles, Tristan Simoes-Ponce

DOE LM Fellows: Olivia Bustillo, Beatriz Perraso, Eduardo Rojas

DOE-EM: Melody Bell, Kurt Gerdes, Mary Ann Maloney, Genia McKinley, Jean Padon, Todd Shrader, Junita Turner, Ike White

DOE-LM: Carmelo Melendez, Jalena Dayvault, David Shafer

DOE National Laboratories, Sites, Contractors



Program Description



FIU's Applied Research Center (ARC) and the US Department of Energy's Office of Environmental Management have established a workforce development program for the training of FIU STEM, minority students in an effort to create a "pipeline" of scientists and engineers that will enter DOE's workforce upon completing their degrees and research at FIU.



Workforce Development Program



Site Needs:

A significant portion of the DOE workforce, including DOE as well as contractors, is at or nearing retirement age, contributing to a shortage of a well-trained technical workforce to continue DOE EM and LM mission.

Year 10 Objectives:

Providing a pipeline of FIU STEM minority students trained and mentored to enter the DOE workforce in technical areas of need - the DOE Fellows traineeship program.

Present Tasks:

- Recruitment of qualified talented FIU minority STEM students as new DOE Fellows
- Engagement in DOE EM & LM research (Projects 1, 2, 3 and 5)
- Poster exhibition & competition
- Annual DOE Fellows induction ceremony
- Summer internship program and summer internship technical reports
- Conference participation & presentations
- DOE Fellows lecture series forum
- Promote career opportunities



Workforce Development Program



Accomplishments Year 10:

- Provided hands-on research at FIU
- Started 8 internships for summer 2020 for a total of 159 internships
- Conducted the 13th induction ceremony for 12 EM and 2 LM Fellows (total of 166 inducted as DOE Fellows)
- Fellows participated in WM20 and other conferences and events. Have presented over 275 papers and posters at national/international conferences
- Held the 13th DOE Fellow Poster Exhibition at FIU at which showcased 21 research posters







Tristan Simoes-Ponce



Second DOE Fellow Joins SRNL:

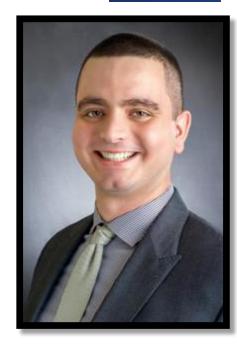
Mr. Tristan Simoes-Ponce (Class of 2017), accepted a position at the Department of Energy's Savannah River National Lab as Mechanical Engineer.





- Tristan completed two summer internships at DOE's SRNL.
- Presented research at various conferences including Waste Management Symposia.
- Won the best Student Poster and Fellow of the year award during 13th annual induction ceremony.







Workforce Development Program



Proposed Scope for Year 1

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

- Recruitment of qualified talented FIU minority STEM students
- Engage in DOE EM & LM research (Projects 1, 2, 3 and 5)
- Poster exhibition & competition (November 2020)*
- Annual DOE Fellows induction ceremony (November 2020)*
- Summer internships 2021/ Site visits
- Summer internship technical reports
- Conference participation & presentations, including WMS 2021, AGU
- DOE Fellows lecture series forum
- DOE EM HBCU collaboration/interactions
- Extend recruitment to include HBCU/MSI students interested in PhD at FIU
- Work closely with DOE nat. labs to identify opportunities for PhD students
- Identify extended work assignments for FIU graduate students at DOE nat. labs that can lead to post-doctoral positions