

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

**Leonel Lagos** 

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# **FIU Personnel and Collaborators**



**Principal Investigator:** Leonel Lagos

**Program Manager:** Ravi Gudavalli

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

DOE Fellows/Students: Alejandro Koszarycz, Alex Rivero, Alexis Suarez, Alexis Vento, Amanda Yancoskie, Anilegna Nunez Abreu, Christopher Excellent, Daniel Martin, David Mareno, Edward Nina, Frances Zengotita, Gisselle Gutierrez, Heily Revoll, Jason Soto, Jeff Natividad, Joshua Nuñez, Juan Morales, Katherine De La Rosa, Manuel Losada, Michael Thompson, Patrick Uriarte, Rocio Trimino Gort, Roger Boza, Ron Hariprashad, Ryan Cruz, Silvia Garcia, Silvina Di Pietro, Tristan Simoes-Ponce

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

**DOE National Laboratories** 



# **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 EM 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 EM's mission.

#### Year 9 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 research (Projects 1, 2, 3)
- 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 9:

- Provided hands-on research at FIU
- Started 15 internships for summer 2019 for a total of 151 internships
- DOE Fellow completed a one year internship with IAFA
- Conducted the 12<sup>th</sup> induction ceremony for a total of 152 inducted as DOE Fellows
- Fellows participated in WM19 and several other conferences and events. Have presented over 250 papers and posters at national/international conferences
- Held the 12<sup>th</sup> DOE Fellow Poster Exhibition at FIU at which 175 research posters have been presented.







# Hansell Gonzalez-Raymat



of 2013), accepted a position at the Department of Energy's Savannah River National Lab as Sr. Scientist.

- Hansell completed two summer internships at DOF's SRNL.
- Published his research in peer-reviewed journals and presented at numerous conferences.
- Won the best Student Poster Track at Waste Management Symposia 2018.











# **Workforce Development Program**



Proposed Scope for Year 10

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

- Recruitment of qualified talented FIU minority STEM students
- Engage in DOE EM research (Projects 1, 2, 3)
- Poster exhibition & competition (November 2019)
- Annual DOE Fellows induction ceremony (November 2019)
- Summer internship program
- Summer internship technical reports
- Conference participation & presentations, including WM Symposia 2020
- 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