

# FLORIDA GEORGIA LOUIS STOKES ALLIANCE

for Minority Participation in Science, Engineering, Technology, and Mathematics

## *Bridge to the Doctorate*

### **2008 UPDATES**

FGLSAMP





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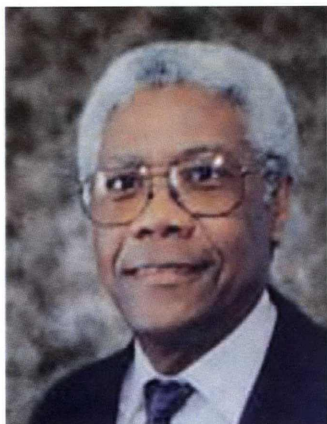
FGLSAMP

Future Bridge  
Candidates





# Message from the Director



*Greetings....*

We at the Florida – Georgia Louis Stokes Alliance for Minority Participation (FGLSAMP) are delighted for the opportunity to host the FLSAMP Bridge to the Doctorate (BD) supported by the National Science Foundation (NSF). The BD has proven to be one of the greatest forces for increasing the number of underrepresented populations that are pursuing Ph.D. degrees in science, technology, engineering, and mathematics (STEM) disciplines. The BD was created by way of the dynamic leadership at NSF under the direction of Dr. A. James Hicks, National Program Officer and his staff.

The BD Program serves as a major source of inspiration to our FGLSAMP undergraduate scholars and an avenue to pursue their dreams of attaining the STEM Ph.D. degree. We are proud of our 5 cohorts of talented FGLSAMP BD Fellows at the following FGLSAMP institutions:

- Florida State University
- University of South Florida
- University of Florida

These dynamic individuals are poised to be the next generation of scientists and researchers addressing the present and future needs of our country. The FGLSAMP BD Fellows also serve as a beacon of hope and shining examples to the many FGLSAMP undergraduate scholars that follow in the quest to become a part of the STEM enterprise.

We hope that you will gain greater insight to the program components; activities; student success within the pages of this booklet. The BD program is design with success in mind, with the framework employed we hope to establish some standards for best practices in the field of STEM graduate education.

We applaud the effort and commitment of the leadership at NSF and our FGLSAMP Bridge to the Doctorate Fellows for their contribution to advancing the science, research and scholarship.

A handwritten signature in black ink that reads "Ralph Turner". The signature is written in a cursive style with a horizontal line above the name.





**Bridge to the Doctorate-** The FGLSAMP Bridge to the Doctorate Initiative (BD), was conceived by the National; FLSAMP Office of NSF for the purpose of providing tremendous opportunities for LSAMP students to continue academic pursuits to obtain the Ph.D. degree in Stem disciplines. FGLSAMP has had the privilege to host 4 cohorts of Bridge to the Doctorate Fellows under this initiative. The FGLSAMP BD program has experienced great success. Many of our DB Fellows, within the 4 cohorts have continued beyond the M.S. degree and are currently Ph.D. candidates.

Florida State University was the host institution of the first FGLSAMP- BD cohort, under the guidance of Dr. Patricia Stith with an emphasis on the natural sciences and engineering. FGLSAMP BD cohorts 2-4 were hosted by the University of South Florida. These cohorts represented an effort to encourage underrepresented minorities to pursue STEM Ph.D. degrees in earth science (marine science) and engineering. Dr. Ashanti Pyrtle and Dr. Shekhar Bhansali serve as Co- Directors for the FGLSAMP BD program at USF.

**BD Mission....** To significantly increase the number of Ph.D. degrees awarded to underrepresented minorities in science, technology, engineering, and mathematics fields of study.

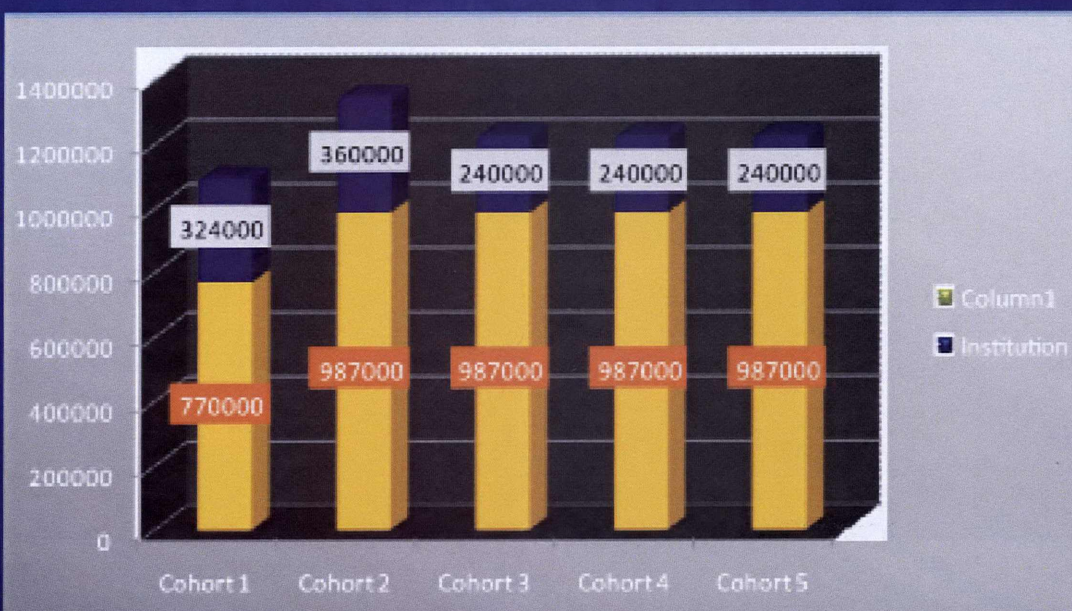
**BD Methodology.....** Provide funding to eligible LSAMP scholars for the first 2 years of graduate school. The funding support is provided by the National Science Foundation (NSF) that includes a generous stipend to the selected BD Fellow and other cost of education expenses. This approach allows the students to fully concentrate on acclimating to the rigors of graduate education by removing the stress that financing a STEM graduate education can bring.





## FGLSAMP-BD at -a glance.....

BD Sites	Cohort	NSF Awards	Matching Awards	Total FGLSAMP BD Fellows
Florida State University	1 (20032005)	12	6	16
University of South Florida	2 (20042006)	12	6	18
University of South Florida	3 (20052007)	12	4	16
University of South Florida	4 (20062008)	12	4	16
University of Florida	5 (20082010)	12	4	16
<b>Total</b>		<b>60</b>	<b>24</b>	<b>84</b>











## Profiles in Academic Achievement.....

One of the academic achievement and success is BD Fellows securing fellowships to continue their pursuit of the STEM Ph.D degree after the initial 2 years of funding. BD fellows have been successful in obtaining funding through a number of sources such as:

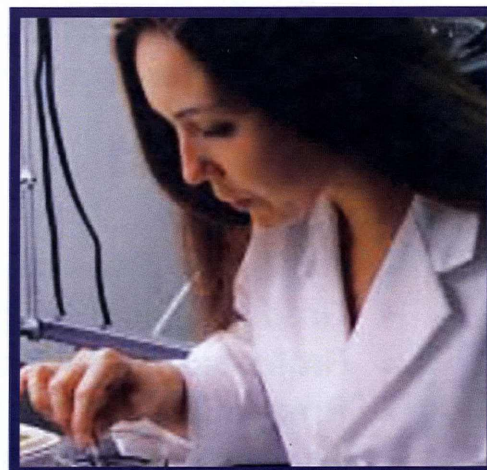
- Alfred P. Sloan Minority Fellowship - \$34,000/annual
- McKnight Doctoral Fellowship - \$12,000/annual (3-years)
- USF Multidisciplinary Fellowship - \$20,000/annual (2years)
- USA Scuba Scouts Fellowship - \$22,000/annual (3-years)
- USF Graduate Fellowship - \$12,000/annual (3-years)
- NSF G-K12 Fellowship
- GEM Fellowship - \$20,000/annual
- FSU Graduate Fellowship - \$18,000/annual
- NASA Fellowship - \$30,000/annual (3years)
- NSF Graduate Research Fellowship- \$40,000/annual
- Joint Oceanographic Institute Fellowship - \$20,000/annual



## BD Research Experiences

FGLSAMP BD Fellows have also engaged in a variety of research experiences. These experiences have occurred throughout the nation and abroad....

- Brookhaven National Laboratory
- NASA Ames Center
- NASA Langley Center
- Oak Ridge National Laboratory
- National Institutes of Standards and Technology
- NASA Johnson Space Center
- National Institutes of Health
- NSF PASI







### **Commitment to BD.....**

Each institution demonstrated commitment to the BD Initiative by providing funding and support through additional BD matching awards by the host institutions which increased the total number of BD Fellows. This commitment has helped FGLSAMP to have a greater impact on the production of STEM Ph.D. recipients.

### **FGLSAMP Bridge to the Doctorate....**

A Model for graduate education in STEM disciplines. The BD Fellows are developed as a team, which fosters a dynamic support system to significantly reduce anxiety and feelings of isolation. This is accomplished through specially designed graduate level seminars; monthly BD meetings designated study areas; social events; and high degree of interaction with STEM faculty.

### **Keys to Success.....**

- **Academic Enhancement**
- **Graduate Mentoring**
- **Professional Development**
- **Presentation at Professional Conference**
- **Academic Year & Summer Research Experiences**

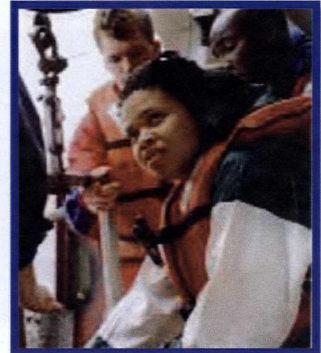




## Bridge to Doctorate Fellow Award

Selected candidates for FGLSAMP BD program received awards aimed at providing funding for the 1<sup>st</sup> 2-years of their graduate school careers. NSF provided an award that was both generous and comprehensive to better ensure success of the BD Fellows, allowing them to single mindedly focus on the academic pursuit. BD Fellows received the following.

- \$30,000 annual stipend (for 2 years)
- \$10,500 cost of education allowance for tuition, health care, and associates fees
- Funding for presenting research at professional conferences
- Participating in the annual NSF Annual Conference in Washington, D.C.
- Assistance with proposal writing/submission
- Participation "short courses" developed specifically for FGLSAMP– BD Fellows to enhance academic and research performance.
- Opportunities for international research experiences.



FGLSAMP Bridge to the Doctorate Fellows has experienced tremendous success within their respective graduate education careers. We are proud that FGLSAMP BD has a retention rate of BD Fellows 82%. One contributing factor for the successful outcomes stems from the academic support structure provided by the host institutions in properly addressing and anticipating some of the more common stumbling blocks for many graduate students looking to attain the Ph.D. degree in STEM disciplines. The other component of the model is that the institutions have embraced and committed to the success of the

BD Fellows in a holistic manner, providing support mechanisms that are designed for every stage of the graduate education process. BD Fellows have also played a key role in the success of the program through their abilities to engage in research, present research at professional conferences; obtain fellowships that will help to secure the financial resources needed to continue pursuing the STEM Ph.D. degree. Some of the high points of FGLSAMP BD Fellows are as follows.



**Kathryn Bailey**, *Environmental Eng.* – Brookhaven National Lab, Summer 2007, Summer 2008

**Quenton Bonds**, *Electrical Eng.* – NASA Ames Center, Summer 2007 | NASA Langley Center, Summer 2008

**Issa Ramirez**, *Mechanical Eng.* – NASA Ames Centre, Summer 2008

**Andrea Rocha**, *Environmental Engineering* – Oak Ridge National Lab, Summer 2007 and 2008

**Ebenezer Odu**, *Electrical Eng.* – National Institute of Standards and Technology (NIST) | Boulder, Summer 2008

**Dorielle Price**, *Electrical Eng.* – NASA Johnson Space Center, Summer 2008

**Javier Pulecio**, *Electrical Eng.* – National Institutions of Health, Summer 2008

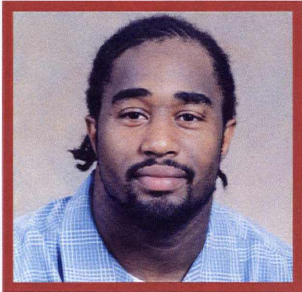
**Chenwi Zony**, *Electrical Eng.* – National Institute of Standards and Technology (NIST) | Boulder, Summer 2008



**Rojae Charly**  
B.S. Florida A&M University  
Research Interest: Industrial  
Engineering



**Sharon Escoriza**  
B.S. Florida State University  
Research Interest:  
Civil Engineering



# FLORIDA UNIVERSITY



**Dana Gardner**  
B.S. University of Florida  
Research Interest: Food Science &  
Nutrition

**Marcus Boone**  
B.S. Albany State University  
Research Interest: Chemistry

**Charmaine O'Brien**  
B.S. Florida A&M University  
Research Interest: Biochem-  
istry







**Yoshino Woodard**  
B.S. Florida State University  
Research Interest: Industrial  
Engineering

**Raymond Loiseau**  
B.S. Florida state University  
Research Interest: Computer  
Science



# FLORIDA STATE UNIVERSITY

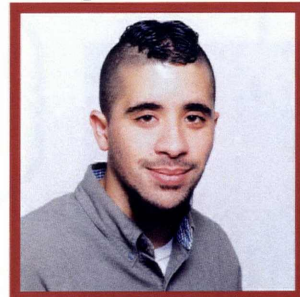
**Erin Harrell**  
B.S. Florida State University  
Research Interest: Cognitive  
Psychology



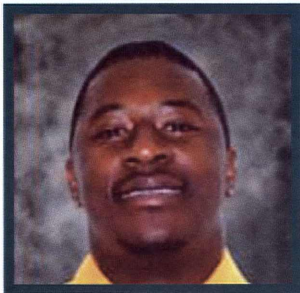
**Joshua De Leon**  
B.S. University of Central Florida  
Research Interest: Biomedical  
Mathematics



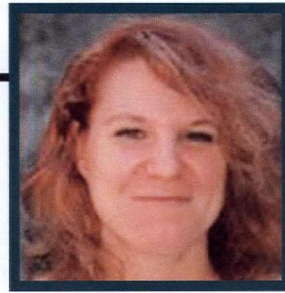
**Fanisha Wynne**  
B.S. Tougaloo College  
Research Interest: Chemistry







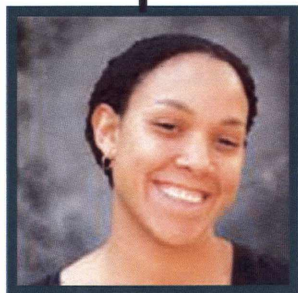
**Ransford Hyman Jr.**  
 B.S.— Mathematics and Computer  
 Engineering  
 Bethune-Cookman College, 2006



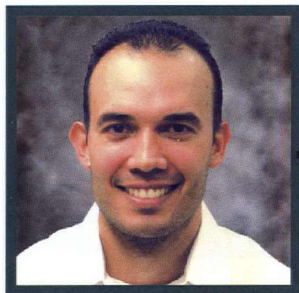
**Susana Mulikin**  
 B.S.— Chemistry  
 Fayetteville State University,  
 2001

**Karyna Rosario-Cora**  
 B.S.— Industrial Microbiology  
 University of Puerto Rico,  
 Mayagüez, 2002

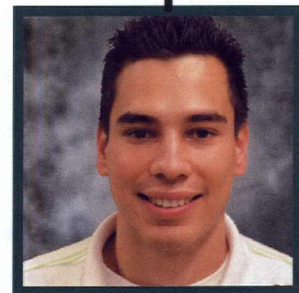
# UNIVERSITY SOUTH



**Javier Pulecio**  
 B.S. Electrical Engineering  
 University of south Florida 2005  
 Ph.D.Academic Goal: Chemical  
 Engineering

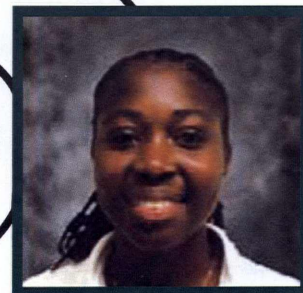
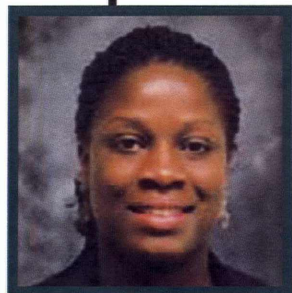


**Luis Rivera**  
 B.S. Chemical Engineering  
 University of Puerto Rico-  
 Mayaguez 2003  
 Ph.D.Academic Goal: Chemical  
 Engineering



**Natasha Cover**  
 B.S.— Biology  
 Virginia Union University, 2006

**Sheena Green**  
 B.S.— Physics  
 Delaware State University,  
 2006





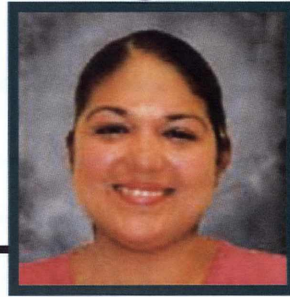


**Rufael Berhane**

B.S.— Mechanical Engineering  
University of North Carolina-Charlotte, 2006

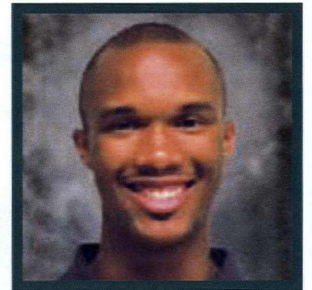
**Andrea Rocha**

B.S.— Biology  
Texas A&M University-Corpus Christi, 2000



**Marcus Marley**

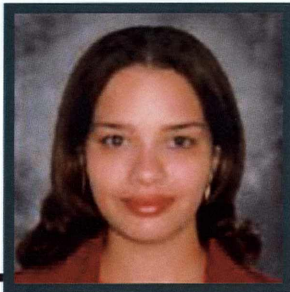
B.S.— Mechanical Engineering  
North Carolina A&T State University, 2006



# OF FLORIDA

**Issa Ramiréz**

B.S.— Mechanical Engineering  
Inter-American University of Puerto Rico, 2006



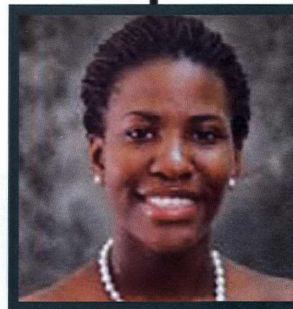
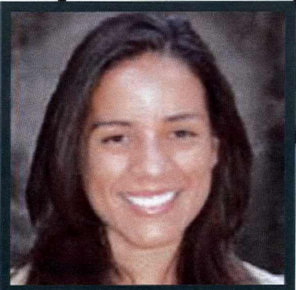
**Dayna Lee Martinez**

B.S.— Industrial Engineering  
University of Puerto Rico,  
Mayagüez, 2006



**Luz Raquel Hernández-Cruz**

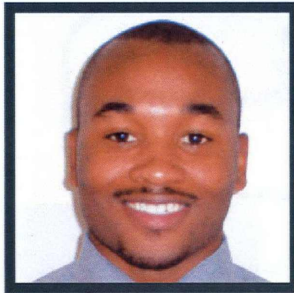
B.S. – Marine Biology  
University of Puerto Rico - Humacao, 2002



**Nicole Williams**

B.S.— Biology  
Florida A&M University, 2006





**Al-Aakhir Rogers**  
 B.S. Electrical Engineering North Carolina A&T University, 2003  
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**Brandon Henry**  
 B.S. – Biology, Albany State University, 2003  
 Ph.D. Academic Goal: Biomedical Engineering

**Kathryn Bailey**  
 B.S.—Biology  
 Ph.D. Academic Goal: Biological Oceanography, Albany State University, 2004

# UNIVERSITY SOUTH



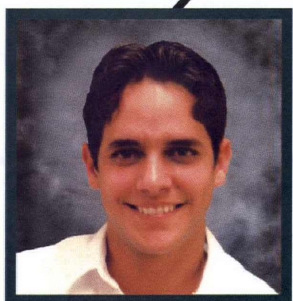
**Dorothy Jackson**  
 B.S Biomedical Engineering University of Miami 2005  
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**Camille Daniels**  
 B.S.—Biology, Louisiana State University, 2001  
 Ph.D. Academic Goal: Biological Oceanography



**Dayling Charparro**  
 B.S. Biomedical Engineering, University of South Florida, 2004  
 Ph.D. Academic Goal: Chemical Engineering



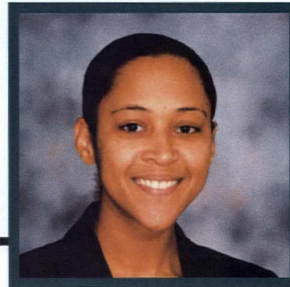
**Henry La Rosa**  
 B.S. Electrical Engineering, University of South Florida, 2004  
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**Jozan Powell**  
 B.A. English  
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**Yoli Jeune**  
 B.S. – Interdisciplinary Engineering Science,  
 University of South Florida, 1999  
 Ph.D.Academic Goal: Natural Sciences

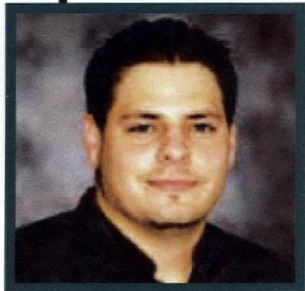


**Sennai Habtes**  
 B.S. – Environment Science,  
 Chapel Hill, 2003 University of North Carolina  
 Ph.D.Academic Goal: Biological Oceanography

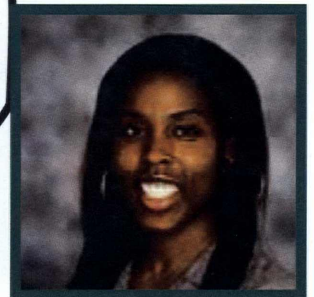


**Joniqua Howard**  
 B.S.Computer and Electrical Environmental Engineering, Hampton University 2004 Ph.D.Academic Goal: Environmental Engineering

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**Eddy Flores**  
 B.S.—Biology,  
 University of Central Florida, 2001  
 Ph.D.Academic Goal: Biological Oceanography



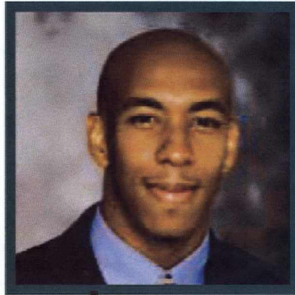
**Andrea Rocha**  
 B.S.Environmental Engineering,  
 Texas A&M University  
 Ph.D.Academic Goal: Environmental Engineering



**Inia Soto**  
 B.S. – Biology,  
 University of Puerto Rico,  
 Mayagüez, 2004  
 Ph.D.Academic Goal: Biological Oceanography







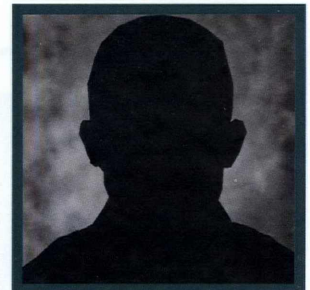
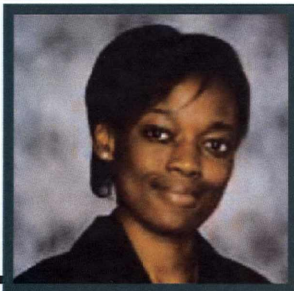
**Tony Price**  
Electrical Engineering,  
Ph.D.Academic Goal:Clark  
Atlanta University, 2004B.S.—  
Electrical Engineering



**Tracy Staton**  
Marine Science, Ph.D.Academic  
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University, 2003B.S.— Biology-  
Environ. Marine Science

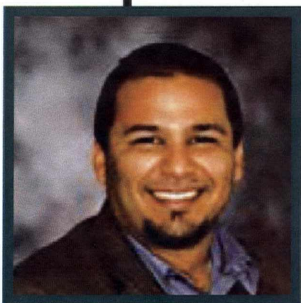
# UNIVERSITY SOUTH

**Erlande Omisca**  
Environmental Engineering,  
Ph.D.Academic Goal:University  
of South Florida, 2002B.S.—  
Environmental Science

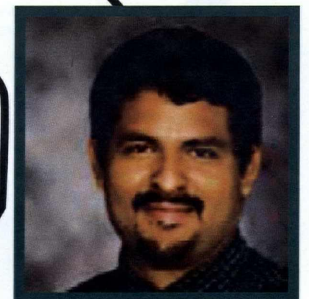


**Ophir Ortiz**  
B.S. Electrical Engineering  
University of South Florida  
Ph.D.Academic Goal:  
Electrical Engineering,

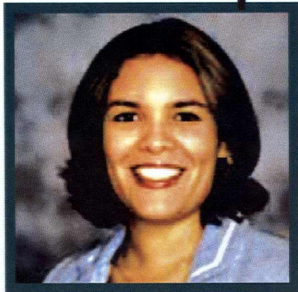
**Warner Ithier**  
Chemical Oceanography,  
Ph.D.Academic Goal:Puerto  
Rico, 1998Inter-American Uni-  
versity B.S.—Biology



**Juan Cruz**  
Mechanical Engineering,  
Ph.D.Academic Goal:University  
of South Florida, 2002B.S.—  
Mechanical Engineering





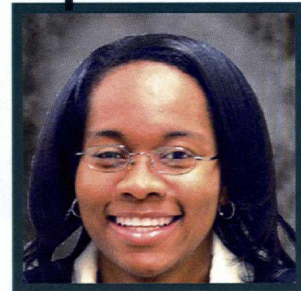


**Marietta Mayo**

B.S.Environmental Science  
University of South Florida, 2001  
Ph.D.Academic Goal:  
Chemical Oceanography

**Regina Easley**

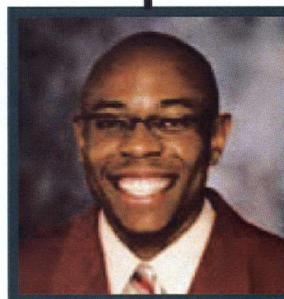
B.S. Chemistry  
Hampton University, 1999  
Chemical Oceanography,  
Ph.D.Academic Goal:



**Phaedra Thomas**

B.S. Biology  
Albany State University  
Ph.D.Academic Goal: Biology

# OF FLORIDA



**Quenton Bonds**

B.S. - Mathematics  
Alabama State Univer-  
sity, 2001Ph.D.Academic  
Goal:Electrical Engineering,

**Victoria Roberts**

B.S. Mathematics  
Florida A&M University  
Ph.D.Academic Goal:  
Physical Oceanography



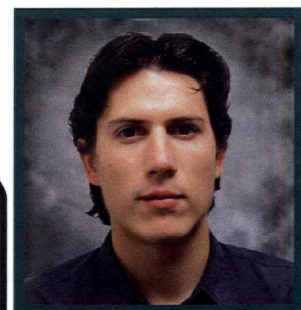
**Nekesha Williams**

B.S. – Environmental Stud-  
ies (SUNY-ESF), 2002State  
University of New York,  
Ph.D.Academic Goal:  
Chemical Oceanography



**Luis Diego Miranda**

B.S. Chemistry Oceanography,  
Florida A&M University  
Ph.D.Academic Goal: Chemical  
Oceanography



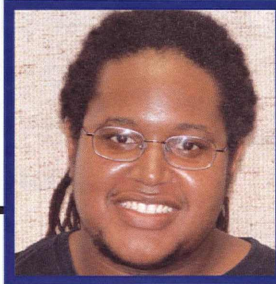




**Danye West**  
 B.S. Chemistry  
 Research Interest:  
 University of Florida



**Wendy Caracmo**  
 B.S. microbiology  
 Research Interest: Cytoplasmic  
 Rods/Rings  
 University of Florida

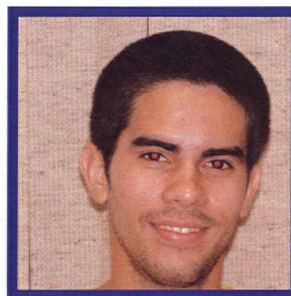


**Mark Cunningham**  
 B.S. Biology  
 Research Interest: Cancer, diabe  
 tes and cardiovascular  
 University of Florida



**Lois M. Colon Perez**  
 B.S. Physics  
 Research Interest: Theoretical or  
 Gravitation  
 University of Florida

# UNIVERSITY F L O



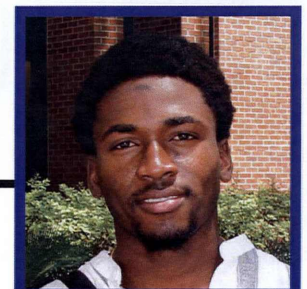
**Jean Elismo**  
 B.S. Electrical Engineering  
 Research Interest: Electrical &  
 Computer Science  
 University of Florida



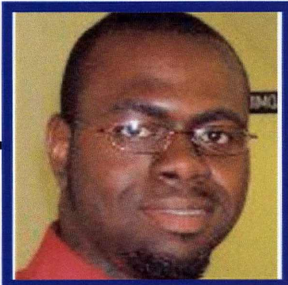
**Hugo Miranda**  
 B.S. Chemistry & Microbiology  
 and Cell Science  
 University of Florida



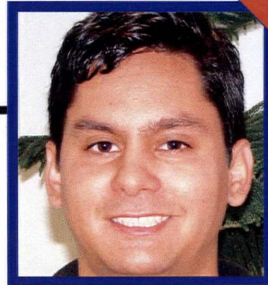
**Aziza Jefferson**  
 B.A. Mathematics  
 Research Interest: Combinatorial  
 Mathematics  
 University of Florida







**Daniel Vilceus**  
 M.S./B.S Dual Degree  
 Research Interest: Micro Electro-  
 mechanical Systems  
 University of Florida



**Brian Damit**  
 B.S. Environmental Engineering  
 Research Interest: Air Filtration/  
 sampling  
 University of Florida



**Raul Chinga**  
 B.S Electrical Engineering  
 Research Interest: Wireless  
 Power  
 University of Florida

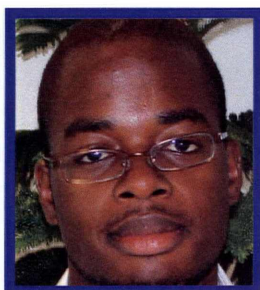


**Jacina Redden**  
 B.S. Chemistry  
 Research Interest: Analytical and  
 Forensic Science  
 University of Florida

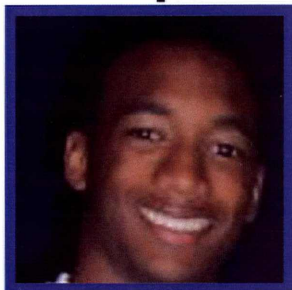
**OF**

**R I D A**

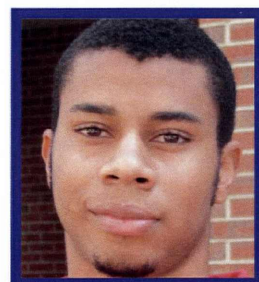
**Ira Hill**  
 B.S. Mechanical Engineering  
 Research Interest: Dynamic Sys-  
 tem and Control & Tribology  
 University of Florida



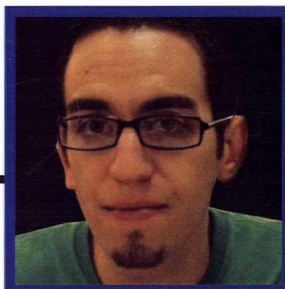
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FGLSAMP- the Florida- Georgia Louis Stokes Alliance for Minority Participation (FGLSAMP) is a coalition of 13 institutions of higher education with a mission to increase the number of undergraduate and graduate degrees awarded to underrepresented minorities in science, technology, engineering, and mathematics (STEM) disciplines. FGLSAMP is funded through the national Science Foundation (NSF) to address the critical need to increase the number of scientists and researchers adequately prepared to engage in the high level scientific needs that impact our nation and the world.



FGLSAMP