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EDUCATION

1996	Ph.D. in Oceanography, University of South Florida
1992	M.S. in Marine Sciences, University of Puerto Rico at Mayagüez
1988	B.S. in Biology, University of Puerto Rico at Mayagüez

WORK EXPERIENCE

Jul 2012-Present	Professor, Department of Geology, UPRM
Aug 2003-Present	Director, Center for Hemispherical Cooperation in Research and Education in Engineering and Applied Science (CoHemis), UPRM
Apr 2020-Apr 2026	Dean, College of Arts and Sciences, UPRM
Aug 2016-Mar 2020	Interim Dean, College of Arts and Sciences, UPRM
Feb 2015-Aug 2016	Associate Dean of Research, College of Arts and Sciences, UPRM
Jul 2005-Jun 2012	Associate Professor, Department of Geology, UPRM
Aug 2009-Jan 2012	Director, Department of Geology, UPRM
Jan 2002-Jun 2005	Assistant Professor, Department of Geology, UPRM
Aug 2002-Jul 2003	Co-Director, Center for Hemispherical Cooperation in Research and Education in Engineering and Applied Science (CoHemis), UPRM
Oct 2000-Dec 2001	Post-Doctoral Investigator, UPRM Center for Subsurface Sensing and Imaging Systems (CenSSIS)
Jan 1998-Dec 2001	Post-Doctoral Investigator, UPRM Tropical Center for Earth and Space Studies (TCESS)
Jan 1997-Dec 2000	Post-Doctoral Investigator, UPRM-Department of Marine Sciences
Aug 1992-Dec 1996	Research Assistant in Remote Sensing Department of Marine Science, University of South Florida
Apr 1990-Jul 1992	Biological Assistant & Clerk, Cabo Rojo National Wildlife Refuge U.S. Fish and Wildlife Service, Caribbean Field Office, Boquerón, P. R.
Aug 1990-May 1991	Research Advisor (International Scientific Fair) Science Research Academy for Gifted Students Inter-American University-San Germán Campus, San Germán, P. R.

January 1991	Consultant to U.S. Geological Survey USGS - Caribbean Office
May-Dec 1988	Research Assistant in Phytoplankton Dynamics Center for Energy and Environment Research, Marine Ecology Division
Jul-Aug 1987	Biological Technician (Wildlife), U.S. Fish and Wildlife Service Caribbean Field Office - Boquerón, P. R.
Aug 1986-May 1988	Volunteer of the Scientific Research Auxiliaries Corps Department of Natural Resources Chapter of Ponce, Puerto Rico
Summer 1986	Field Work Assistant (Wildlife), U.S. Fish and Wildlife Service Cabo Rojo National Wildlife Refuge
Aug 1985-Jun 1986	Biology Workshop Assistant UPRM-Department of Biology
Summer 1985	Research Assistant (Water and Soil Quality) UPRM-Dep. of Biology

TEACHING EXPERIENCE

Aug 2026-Present	BIOL 6040 - Biogeography
Aug 2019-Present	BIOL 5038 - Biological Applications of Remote Sensing and GIS
Aug 2016-Present	GEOL 5996 - Special Topics in Geographic Information Systems
Aug 2003-Present	GEOL 6993 - Special Topics in Remote Sensing
Aug 2002-Present	GEOL 6225 – Advanced Geological Remote Sensing
Aug 2002-Present	GEOL 4048 - Geological Applications of Remote Sensing
Jan 2002-Present	GEOL 3105 - Images of the Earth
Jan 2002-Present	GEOL 4049 & 4055 - Undergraduate Research
Jan-Dec 2013	GEOL 4011 & 4012 – Seminar in Geology
Jan-May 2013	GEOL 4001 - Special Topics in Geographic Information Systems
Summer 2004	NOAA-NCAS Advanced Course of Remote Sensing
Aug 1998-Dec 2001	CMOF 6445 - Oceanographic Remote Sensing I
Aug 1998-Dec 2001	CMOF 8446 - Oceanographic Remote Sensing II
December 2002	Bio-Optical Oceanography and Satellite Remote Sensing Facultad de Ciencias, Universidad de la República, Uruguay
November 2000	Bio-Optical Oceanography and Satellite Remote Sensing Facultad de Ciencias Exactas y Naturales Universidad Nacional del Mar Del Plata, Argentina
July 1997	Remote Sensing in Coastal Environments Instituto Geográfico Agustín Codazzi Santa Fe De Bogotá, Colombia

PUBLICATIONS

Rodríguez-Guzmán, V. and **F. Gilbes** (2009) Using MODIS 250 m Imagery to Estimate Total Suspended Sediment in a Tropical Open Bay. International Journal of Systems Applications, Engineering and Development, 3(1):36-44.

Rodríguez-Guzmán, V. and **F. Gilbes** (2009) Estimating Total Suspended Sediments in Tropical Open Bay Conditions using MODIS. In: Proceedings of the 8th WSEAS International Conference on Instrumentation, Measurement, Circuits and Systems, Hangzhou, China, May 2009, pp 83-86.

Guild, L., B. Lobitz, R. Armstrong, and **F. Gilbes** , J. Goodman, Y. Detres, R. Berthold1, and J. Kerr (2008) NASA Airborne AVIRIS and DCS Remote Sensing of Coral Reefs. In: Proceedings of the 11th International Coral Reef Symposium, Ft. Lauderdale, Florida, 7-11 July 2008, Session number 17, pp 1-5.

Armstrong, R.A., H. Singh, S. Rivero, and **F. Gilbes** (2008) Monitoring Coral Reefs in Optically-Deep Waters. In: Proceedings of the 11th International Coral Reef Symposium, Ft. Lauderdale, Florida, 7-11 July 2008, Session number 17, pp 1-5.

Armstrong R., L. Guild, **F. Gilbes**, B. Lobitz, and Y. Detrés (2007) Water Column Corrections of AVIRIS Data for Hyperspectral Characterization of Benthic Marine Communities in Puerto Rico. In: Proceedings 5th EARSeL Workshop on Imaging Spectroscopy, Bruges, Belgium, April 23-25, 2007, pp. 1-6.

Torres J.L., R.A. Armstrong, J.E. Corredor, and **F. Gilbes** (2007) Physiological Responses of *Acropora cervicornis* to Increased Solar Irradiance, J. of Photochemistry and Photobiology, 83:839-850.

Guild, L., B. Lobitz, R. Armstrong, and **F. Gilbes**, A. Gleason, J. Goodman, E. Hochbergg, M. Monaco, and R. Berthold (2007) NASA Airborne AVIRIS and DCS Remote Sensing of Coral Reefs. In: Proceedings of 32nd International Symposium on Remote Sensing of Environment, San Jose, Costa Rica, June 25-29, 2007, pp. 1-4.

Gilbes F., R.A. Armstrong, J. Goodman, M. Velez, and S. Hunt (2006) CenSSIS SeaBED: Diverse Approaches For Imaging Shallow And Deep Coral Reefs. In: Proceedings of Ocean Optics XVIII, Montreal, Canada, October 9-13, 2006, pp. 1-8.

Schellekens, J.H., **F. Gilbes**, G.D. Rivera, Y.C. Ysa, S. Chardon, and Y. Fong (2005) Reflectance spectra of tropical vegetation as a response to metal enrichment in the substrate of West-central Puerto Rico, Caribbean Journal of Earth Sciences, 39:9-12.

Ramirez-Beltran, N.D., **F. Gilbes**, and J.M. Castro. (2004) A stochastic-Dynamic Model to Predict Fecal Coliforms at the Mouth of the Añasco River, Coastal Environment V, Incorporating Oil Spill Studies. C.A. Brebbia J.M. Saval Perez, and L. Garcia Audion (Editors), WIT Press.

Singh, H., R. Armstrong, **F. Gilbes**, R. Eustice, C. Roman, O. Pizarro, and J. Torres (2004) Imaging Coral I: Imaging Coral Habitats With The SeaBED AUV, Subsurface Sensing Technology and Applications, 5(1):25-42.

Gilbes, F. and R. A. Armstrong (2004) Phytoplankton Dynamics In The Eastern Caribbean Sea As Detected With Space Remote Sensing. International J. of Remote Sensing, 25(7-8): 1449-1452.

Armstrong, R.A., **F. Gilbes**, R. Guerrero, C. Lasta, and H. Miazán. (2004) Validation Of SeaWiFS-Derived Chlorophyll For The Rio De La Plata Estuary And Adjacent Waters. International Journal of Remote Sensing, 25(7-8):1501-1505.

Gilbes, F., R. Armstrong, R.L. Miller, C.E. Del Castillo, M. Rosado, and N. Ramirez (2002) Bio-Optical Evidence Of Land-Sea Interactions In The Western Coast Of Puerto Rico. In: Proceedings of Ocean Optics XVI, Santa Fe, Nuevo Mexico, pp. 1-12.

Lee-Borges, J., **F. Gilbes** and R.A. Armstrong (2002) Seawifs Validation At The Caribbean Time Series Station. In: Proceedings of Ocean Optics XVI, Santa Fe, Nuevo Mexico, pp. 1-7.

Jiménez-Rodriguez, L. O., E. Rodriguez-Diaz, M. Velez-Reyes, **F. Gilbes**, and C. A. DiMarzio. (2002) Automatic Coral Reef Detection By The Application Of Tikhonov Regularization To Inverse Modeling In Hyperspectral Images. In: Ocean Remote Sensing and Applications, Proceedings of SPIE, Vol. 4892.

Gilbes, F., F. E. Müller-Karger, and C. E. Del Castillo. (2002) New Evidence For The West Florida Shelf Plume. Continental Shelf Research, 22:2479-2496.

Gilbes, F., R. A. Armstrong, R. M. Webb, and F. E. Müller-Karger (2001) Seawifs Helps Assess Hurricane Impact On Phytoplankton In Caribbean Sea. EOS, Transactions, American Geophysical Union, 82(45):529 and 533.

Alfonso, E., J. M. López, A. Dieppa, **F. Gilbes**, J. E. Corredor, and J. M. Morell (2001) Trayectoria Anual De La Producción Primaria Diaria En El Caribe Oriental (Programa CaTS). Electronic version of the journal titled "Serie Oceanológica".

Cruz-Pol, S., M. Velez-Reyes, S. Hunt, H. Parsiani, J. Colon-Ustariz, L.O. Jimenez, R. Vasquez, and **F. Gilbes**. (2001) The Laboratory For Applied Remote Sensing And Image Processing At The University Of Puerto Rico At Mayagüez. IEEE Geoscience and Remote Sensing Society Newsletter, 121:15-19.

Gilbes, F. and R. A. Armstrong (2000) Inherent Optical Properties At The Caribbean Time Series Station (CaTS). In: Proceedings of Ocean Optics XV, Monaco, pp. 1-13.

Armstrong, R. A., J. M. López, and **F. Gilbes** (2000) Apparent Optical Properties At The Caribbean Time Series Station (CaTS). In: Proceedings of Ocean Optics XV, Monaco, pp. 1-5.

Del Castillo, C. E., **F. Gilbes**, P. G. Coble and F. E. Müller-Karger (2000) On The Dispersal Of Riverine Colored Dissolved Organic Matter (CDOM) Over The West Florida Shelf. Limnology and Oceanography, 45(6):1425-1432.

Del Castillo, C. E., **F. Gilbes**, P. G. Coble and F. E. Müller-Karger (1998) Optical Characteristics Of Dissolved Organic Matter During A Bloom On The West Florida Shelf. In: Proceedings of Ocean Optics XIV, Kailua-Kona, Hawaii, pp. 1-6.

Gilbes, F. and J. I. Vélez-Arocho (1998) The Caribbean Countries And The Inter-American Institute For Global Change Research. National Printers Inc., Mayagüez, P.R. 151 pp.

Gilbes, F., C. Tomas, J. J. Walsh, and F. E. Müller-Karger (1996) An Episodic Chlorophyll Plume On The West Florida Shelf. Continental Shelf Research, 16(9):1201-1224

Gilbes, F., J. M. López, and P. M. Yoshioka (1996) Spatial And Temporal Variations Of Phytoplankton Chlorophyll-A And Suspended Particulate Matter In Mayagüez Bay, Puerto Rico. Journal of Plankton Research, 18(1):29-43.

Gilbes, F. (1987) Cowbirds Control Project In Roosevelt Roads, Ceiba, Puerto Rico. U.S. Fish and Wildlife Service, Caribbean Field Office. Final Project Report, 50 pp.

MEETING PRESENTATIONS

Seijo, L.R. and **F. Gilbes** (2015) Investigación-Acción Participativa (IAP) De Impacto Ambiental, Poster presentation at the "Primer Congreso Internacional de Economía Ecológica en Puerto Rico (CONECEC 2015)", Mayaguez, Puerto Rico.

Gilbes, F. (2013) Improving Climate Change Education in the Caribbean, Poster presentation at the Southeastern Section, GSA 62nd Annual Meeting, San Juan, Puerto Rico.

Gilbes, F. (2013) Experience of a Collaborative Partnership to Improve the Education about Climate Change in Puerto Rico, Oral presentation at XII Puerto Rican Congress on Research in Education, UPR-Rio Piedras.

Gilbes, F. (2012) Challenges and Opportunities of Ocean Color Remote Sensing in Caribbean Coastal Waters, Plenary Lecture at Ibersensor 2012 Meeting, San Juan, Puerto Rico.

Gilbes, F. (2012) Detection of Suspended Sediments using Remote Sensing. Primer Simposio de GIS y Percepción Remota, Escuela Graduada de Planificación, UPR-Rio Piedras.

Gilbes, F. and W. Hernández (2011) Understanding Bioluminescent Bays using Web-based Tools. ASLO 2011 Aquatic Sciences Meeting. San Juan, Puerto Rico.

Muller-Karger, F., J. Ryan, A. Feldman, and **F**. **Gilbes** (2011) The CACCE Climate Education Partnership for the Southeast US And Caribbean Sea. ASLO 2011 Aquatic Sciences Meeting. San Juan, Puerto Rico.

Gilbes, F. (2009) Comparative study of the conditions in La Parguera and Puerto Mosquito: the dangers of sedimentation and development pressure, First Symposium on Bioluminescence of Puerto Rico, Vieques, Puerto Rico.

Gilbes, F. and R. Armstrong (2009) Remote Sensing of Benthic Habitats in Southwestern Puerto Rico, XXVIII Symposium of Caribbean Flora and Fauna, University of Puerto Rico at Humacao, Puerto Rico.

Gilbes, F. and W. Hernández (2008) New Web Tool for Understanding Bioluminescent Bays, Oral Presentation, 3rd Annual Symposium for Coastal and Marine Applied Research, University of Puerto Rico Sea Grant College Program, Mayagüez, Puerto Rico.

Gilbes F., V. Rodriguez, J. Martinez, and E. Gonzalez (2008) Monitoring Suspended Sediments In Mayaguez Bay Using Remote Sensing, Oral Presentation, 24th Annual Symposium of Caribbean Geology, Mayagüez, Puerto Rico.

Gilbes, F., W. Hernández, N. Hernández, J. Martínez, and V. Rodriguez (2008) MODIS Validation for Water Quality Parameters in Mayagüez Bay, Oral Presentation, Annual NOAA-CREST Symposium, Mayagüez, Puerto Rico.

Hernández, W. J. and **F. Gilbes** (2007) GERSVIEW: A New Database for Web Mapping, Oral Presentation, 5th Conference of ESRI Users in Puerto Rico, Caguas, Puerto Rico.

Schellekens, J.H., **F. Gilbes**, A. Rodriguez, and B. Deliz (2007) Developing A Protocol To Use Remote Sensing As A Cost Effective Tool To Monitor Contamination Of Mangrove Wetlands, Oral Presentation, Annual Symposium of the Puerto Rico Department of Natural and Environmental Resources, San Juan, Puerto Rico.

Torres, D., S. Adréfouët, **F. Gilbes**, and F. Müller-Karger (2007) Comparing Methods and Sensors for Coral Reef Habitat Mapping in South Florida, USA. Oral Presentation, 32nd International Symposium on Remote Sensing of Environment, San Jose, Costa Rica.

Guild, L., B. Lobitz, R. Armstrong, **F. Gilbes**, A. Gleason, J. Goodman, E. Hochbergg, M. Monaco, and R. Berthold (2007) NASA Airborne AVIRIS and DCS Remote Sensing of Coral Reefs. Oral Presentation, 32nd Int. Symposium on Remote Sensing of Environment, San Jose, Costa Rica.

Zayas, C., **F. Gilbes**, R. Armstrong, and M. López (2007) Mapping Benthic Communities in Southwestern Puerto Rico using IKONOS. Poster Presentation, ASLO 2007 Aquatic Sciences Meeting, Santa Fe, New Mexico.

Gilbes F., R.A. Armstrong, J. Goodman, M. Velez, S. Hunt (2006) CenSSIS SeaBED: Diverse Approaches For Imaging Shallow And Deep Coral Reefs. Poster Presentation, Ocean Optics XVIII Conference, Montreal, Canada.

Gilbes, F. and Chiques, G. (2005) Spectral Characterization of Sandy Beaches in Western Puerto Rico. Oral Presentation, 17th Caribbean Geological Conference, San Juan, PR.

Arce, J., **Gilbes, F.**, and Goodman, J. (2005) Validation of Remote Sensors for Benthic Habitats Studies in Southwestern Puerto Rico. Poster Presentation, 8th International Conference of Remote Sensing for Marine and Coastal Environments, Halifax, Nova Scotia.

Gilbes, F. and Arce, J. (2004) Remote Sensing of Benthic Habitats in Southwestern Puerto Rico. Oral Presentation, ASLO/TOS Ocean Research Conference, Honolulu, Hawaii.

Gilbes, F., Armstrong, R., Miller, R.L., Del Castillo, C.E., Rosado, M., and Ramirez, N. (2002) Bio-Optical Evidence of Land-Sea Interactions in the Western Coast of Puerto Rico. Oral and Poster Presentation, Ocean Optics XVI Meeting, Santa Fe, Nuevo Mexico.

Lee-Borges, J., **Gilbes, F.**, and Armstrong, R. (2002) SeaWiFS Validation at the Caribbean Time Series Station. Poster Presentation, Ocean Optics XVI Meeting, Santa Fe, Nuevo Mexico.

Rosado, M., **Gilbes, F.**, Armstrong, R. and Lee-Borges, J. (2002) Validation of Bio-Optical Algorithms in the Western Coast of Puerto Rico. Poster Presentation, Ocean Optics XVI Meeting, Santa Fe, Nuevo Mexico.

Schellekens, J.H., **Gilbes, F.**, Rivera-Rivera, G.D. and Ysa, Y. (2002) Remote sensing of mineral deposits in tropical terranes. Porphyry copper deposits in west-central Puerto Rico. Oral Presentation, 16th Caribbean Geological Conference, Barbados.

Gilbes, F. (2002) Percepción Remota: Una Forma Diferente de Observar Nuestro Planeta. Oral Presentation, BIOS '02, La biología revolucionando el nuevo siglo. UPRM-Biología. 1-mayo-02.

Schellekens, J.H., **Gilbes, F.**, Rivera-Rivera, G.D., Chardon. S., Fong, Y., and Ysa, Y. (2002) Remote sensing of Metal Enriched Areas in Tropical Terranes. - Differences in Vegetation Reflectance. Oral presentation, 22nd Anniversario de Casa Pueblo, Adjuntas, PR.

Gilbes, F. (2002) Percepción Remota: Una forma diferente se Observar la Tierra. Presentación Oral, Simposio de Ciencias y Tecnología. Programa Upward Bound Ciencias y Matemáticas. Universidad Interamerica de Puerto Rico, Recinto de Ponce. 12-abril-2002

Gilbes, F. (2002) Hyperspectral Remote Sensing of Coral Reefs. Oral Presentation, Research and Industrial Collaboration Conference of the Center for Subsurface Sensing and Imaging Systems. Northeastern University, Boston, MA. January 29-30, 2002

Schellekens, J.H., **Gilbes, F.**, Rivera-Rivera, G.D., and Ysa, Y. (2001) Remote sensing of mineral deposits in tropical terranes. Porphyry copper deposits in west-central Puerto Rico Poster Presentation, PRSGC First Congress on Integrating NASA Research and Education Projects in Puerto Rico, Hyatt Regency Cerromar Beach Resort. November 14-17, 2001

Gilbes, F. and Armstrong, R. (2000) Space Remote Sensing Of The Eastern Caribbean Sea. Poster Presentation) Oceans From Space Meeting, Venice, Italy.

Armstrong, R. and **Gilbes, F.** (2000) Validation of SeaWiFS Chlorophyll Algorithm For The Rio De La Plata Estuary. Poster Presentation, Oceans From Space Meeting, Venice, Italy.

Gilbes, F. and Armstrong, R. (2000) Inherent Optical Properties At The Caribbean Time Series Station (CaTS). Poster Presentation, Ocean Optics XV Meeting, Monaco.

Armstrong, R. and **Gilbes, F.** (2000) Apparent Optical Properties At The Caribbean Time Series Station (CaTS). Oral Presentation, Ocean Optics XV Meeting, Monaco.

Del Castillo, C., **Gilbes, F.** and Coble, P. (1998) Optical Characteristics Of Dissolved Organic Matter During A Bloom On The West Florida Shelf. Poster, Ocean Optics XIV, Hawaii.

Gilbes, F. (1996) Analysis of Episodic Phytoplankton Blooming and Associated Oceanographic Parameters on the West Florida Shelf using Remote Sensing and Field Data. Ph.D. Dissertation, University of South Florida, 138 pp.

Gilbes, F. and Armstrong, R. (1996) AVHRR Detection of Orinoco River Plume Waters In The Eastern Caribbean Sea. Oral Presentation, ASLO Ocean Sciences Meeting, California.

Gilbes, F. (1992) The Relationship Between Phytoplankton Chlorophyll-A and Suspended Particulate Matter in Mayagüez Bay, Puerto Rico. Master Thesis, UPR-Mayagüez, 53 pp.

Gilbes, F. (1989) Estudio Preliminar Sobre el Análisis del Patrón de Distribución de Favia fragum en el Cayo San Cristobal en La Parguera, Puerto Rico. Oral presentation, XVI Symposium of Department of Natural Resources, San Juan, PR

Gilbes, F. (1989) Abundancia y Distribución de los Erizos De Mar (Clase Echinoidea) en la Costa Rocosa de la Isla Caja De Muertos. Oral presentation, IX Symposium of Wildlife of Puerto Rico. University of the Sacred Heart, San Juan, PR

SPONSORED RESEARCH

Remote Sensing and GIS Toolbox: Promoting Career Readiness in Puerto Rico (2026-Present) USDA-National Institute of Food and Agriculture.

Equitable Pathways to STEM Graduate Education in Energy Research for University of Puerto Rico Mayagüez Students (2025-Present) Alfred P. Sloan Foundation.

Coastal Areas Climate Change Education (CACCE) Partnership (2010-2013) NSF.

Application of the Soil and Water Assessment Tool Model (SWAT) to Estimate Discharge and Sediment Yields from the Río Grande de Añasco Watershed, Puerto Rico (2010-2013) Puerto Rico Sea Grant College Program.

High-Precision GPS Monitoring for Land Stability Evaluation in the Cerca del Cielo Urbanization, Ponce, Puerto Rico (2010-2012) Municipality of Ponce.

Bio-Optical Properties and Remote Sensing of Coastal Waters (2002-2011) NOAA Cooperative Remote Sensing Science and Technology Center (CREST).

Detection of Submerge Features Using Hyperspectral Remote Sensing (2000-2010) NSF Engineering Research Center for Subsurface Sensing and Imaging Systems (CenSSIS).

Developing A Protocol To Use Remote Sensing As A Cost Effective Tool To Monitor Contamination Of Mangrove Wetlands (2006-2009) Puerto Rico Sea Grant College Program.

Monitoring Nutrients Content In The San Juan Bay Estuary Using Hyperspectral Remote Sensing (2005-2008) Puerto Rico Water Resources and Environmental Research Institute.

Contaminant and Erosion Control Baseline Database for the Puerto Mosquito Watershed, Vieques, PR. (2003-2007) Puerto Rico Sea Grant.

Characteristics of Mesoscales Caribbean Eddies (2003-2007) U.S. Office of Naval Research.

Monitoring the Water Quality Parameters of Mayagüez Bay. (2001-2004) EPA Grant through the Puerto Rico Water Resources and Environmental Research Institute.

Remote Sensing of the Eastern Caribbean Sea (1995-2005) Tropical Center for Earth and Space Studies (TCESS). NASA

Development and Validation of Bio-Optical Algorithms in Coastal Waters. (1999-2002) NASA

Analysis of the Inherent and Apparent Optical Properties in Case 1 and Case 2 Waters of the Caribbean. (1998-2001) NASA

ACHIEVEMENTS AND AWARDS

1998 Sackett Prize for Innovative Research
Department of Marine Science, University of South Florida

1998 Cited in Who's Who in Science and Engineering. 4th Edition

1995 Fellowship in the Global Change Research Program
NASA Grant No. NGT-30316

1992 Fellowship in the Graduate Student Researchers Program
NASA Grant No. NGT-70260

1989 Fellowship in the Graduate Student Researchers Program
NASA Grant No. NGT-70099

1993 JPL Summer Scholarship to attend the course "Processes of Global Change"
NASA Earth Science Summer School

1992 BBSR Summer Scholarship to attend the course "Remote Sensing in Oceanography"
Bermuda Biological Station for Research

1991 Young Investigator Award to attend the course "Primary Productivity in the Sea"
Brookhaven National Laboratory

ORGANIZATIONS AND COMMITTEES

- Member of several committees at the UPRM-Geology Department (2002-Present)
- Coordinator of Outcomes Assessment. UPRM-Geology (2002-2009; 2013)
- Member of American Geophysical Union (1996-2008)
- Member of the Society of Latin American Remote Sensing Specialists (1996-2000)
- Member of Cousteau Society (1989-1992)
- Member of The Oceanography Society (1988-1991)
- Chairman of Bios'87, Department of Biology, November 2-13, 1987
- Chairman of the Biological Student Society UPR - Mayagüez Campus, 1986-1987
- Founding Member of the Scientific Research Auxiliaries Corps, DNR, 1986-1988

SPECIAL SKILLS

- Bilingual: Spanish and English
- Digital image processing: IDL, ENVI, SeaDAS, SNAP, and DSAS
- Geographic Information Systems: ArcGIS Pro
- Computer systems: Windows, Mac OS, Unix, Linux
- Oceanographic, Bio-optical, and Remote Sensing Techniques
- Advanced Scuba Diving (NAUI Certified)
- Development of Web Pages using Adobe CS6 and Wordpress
- Coordination of multiple conferences and workshops

LIST OF ACADEMIC COLLABORATORS

- Dr. Salvador Acuña, UPRM
- Dr. Fernando Tormos, UPitt
- Dr. Amanda Godley, UPitt
- Dr. Roy Armstrong, UPRM
- Dr. Carlos Del Castillo, NASA
- Dr. Ramón López, JHU
- Dr. Jeffrey Ryan, USF
- Dr. Luis Jiménez, UPRM
- Dr. Frank Muller-Karger, USF
- Dr. Allan Feldman, USF
- Dr. Carlos E. Ramos Scharrón
- Dr. Elisabeth Hamin Infield, UMASS
- Dr. Rebecca Fricke, UMASS

ACADEMIC ADVISORS

- Master Degree: Dr. Paul Yoshioka, University of Puerto Rico at Mayagüez
- Doctoral Degree: Dr. Frank Müller-Karger, University of South Florida

GRADUATE ADVISEES

- Karen Santana
- Yanira Santiago
- Gwendelyn Monge
- Lorena Vázquez
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- Jorge Wichy
- Natlee Hernández
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- Yvette Ludeña
- Jeannette Arce
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- Damaris Torres