

Juan S. Mayorga

6530 El Colegio Rd – Santa Barbara – California
H 816-877-2410 _ B jmayorga@bren.ucsb.edu

Education

Bren School of Environmental Science & Management, University of California Santa Barbara

Master of Environmental Science and Management, expected June 2016
Coastal Marine Resources Management specialization

Award: Latin American Fisheries Fellowship; multi-year funding award for academic excellence

Sea Education Association (SEA) Woods Hole, Massachusetts

Oceans & Climate Sea Semester, Spring 2014

Award: Rafe and Kate Parker Presidential Scholarship

Faculty of Civil and Environmental Engineering, Universidad de los Andes in Bogota, Colombia

Bachelor of Engineering in Environmental Engineering, March 2014
Minors in Biology and Management

Relevant coursework: Environmental Modeling, Geographic Information Systems, Marine Ecology, Hydroclimatology, Environmental Chemistry, Biostatistics, Geosciences, Marine Ecology, Oceanography

Marine Research Projects

Analysis of Tuna Favorable Habitat in the Central Tropical Pacific

Conducted a group project on the suitable conditions for tuna habitat along a cruise track in the Central Tropical Pacific as part of participation in SEA. Collected vertical profiles of temperature, dissolved oxygen, and salinity; and collected samples of plankton and nekton while sailing on international waters. Processed and analyzed data using Ocean Data View (ODV) and presented findings to researchers and shipmates.

Spatio-Temporal Analysis of Sea Surface Chlorophyll in the Colombian Caribbean

Analyzed the spatial and temporal variability of sea surface chlorophyll in the islands and keys of the Colombian Caribbean for undergraduate thesis/internship project. Manipulated and interpreted satellite data (e.g., Ocean Color) obtained from NASA's SeaWiFS and MODIS missions and analyzed satellite data of Sea Surface Temperature and Wind Direction to address bio-physical interactions. Results suggest an "island effect" in the region and seasonal variation of the spatial distribution of chlorophyll.

Professional Environmental Experience

GRADEX Civil and Environmental Consulting – Bogota, Colombia

Junior Consultant, January 2013 – June 2014

- Developed environmental impact assessment (EIA) for oil and gas companies using geographic information systems (GIS) and aerial photography.
- Compiled a state of the art document on the development, advantages, and disadvantages of hydrofracking practices in Europe and the United States.
- Supported a risk assessment for an oil and natural gas company.

Universidad Nacional de Colombia – Medellin, Colombia

Oceanography and Coastal Engineering Research Intern, June 2013 – December 2013

- Collaborated with a preliminary feasibility study on the implementation of Ocean Thermal Energy Conversion (OTEC) in San Andres Island, Colombia; analyzed the potential marine environmental impacts of the project.
- Conducted a study on the spatio-temporal variability of sea surface chlorophyll in the islands and keys of the northern Colombian Caribbean using satellite-derived chlorophyll concentrations.

Associations

CliMates, students researching and advocating for innovative solutions to climate change, 2011 – 2012

- Proposed mitigation and adaptation strategies for the Colombian agricultural sector under a climate change scenario (<http://www.studentclimates.org/images/telechargement/publication%20s1%20colombia.pdf>)
- Developed an analysis on how Colombian economic and environmental policies are either to the benefit or detriment of the country's sustainable development, found online at http://www.studentclimates.org/images/telechargement/s2_colombia_final_20121028.pdf

Skills, Training, & Interests

- Proposed mitigation and adaptation strategies for the Colombian agricultural sector under a climate change scenario (<http://www.studentclimates.org/images/telechargement/publication%20s1%20colombia.pdf>)
- **Computer Skills:** Programming in MatLab, R and TeX; Geographic Information Systems (ArcGis) and spatial planning; Microsoft Office (Excel, PowerPoint, Word); Apple productivity software (Keynote, Pages, Numbers)
- **Additional Training:** Workshop on innovation/entrepreneurship, YouNoodle - Universidad de Los Andes (2013)
- **Diving:** Advanced Open Water Diver, Professional Association of Dive Instructors (PADI); over 60 dives recorded
- **Volunteerism:** Education and fundraising volunteer for Draw a Smile Foundation in Cairo, Egypt (Summer 2012)
- **Conferences:** National Seminar of Ocean Sciences–Cartagena, Colombia (October 2013)
- **Languages:** Fluent in Spanish (Native) and English