

CARLOS J. MILÁN TORRES

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EDUCATION

- Master of Science, Environmental Health, June 2013
University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health
- Bachelor of Science, Natural Sciences, May 2008
University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences

WORK AND RESEARCH EXPERIENCE

USDA Forest Service, Research & Development, Washington, DC, October 2013 to present
ORISE Fellow: Science delivery specialist and web content manager.

- Work as Science Delivery and Communications Specialist for the Knowledge Management and Communications Staff.
- Prepare science summaries and outreach materials.
- Developed several communication materials like briefing papers, factsheets, press releases, and presentations for internal and external audience.
- Maintain Forest service R&D's web presence as web content developer and webmaster.
- Developed web content for the Forest Service National R&D website, Forest Service website on Drupal, and Forest Service R&D Intranet.
- Developed SharePoint sites for data gathering and internal communications.
- Utilized different technologies for web development: Drupal, PHP, HTML.
- Gathered, analyzed, and interpreted statistical data from the Forest Service R&D National website using tools like Google Analytics, ForeSee, and Site Improve.
- Provided support to National Program Leaders and other staff on content development and the identification of the best channel for communicating it.
- Posted blogs on the Forest Service R&D Science Stories blog.
- Presented projects, results, and statistics to leadership at several meetings.
- Developed content for social media (Facebook, Twitter, eNewsletters)
- Executed a Public Affair Officer position as a temporary assignment at Forest Service Pacific Southwest Research Station where I worked developing content for social media, press releases, internal communication, responded to media request.
- Provided English to Spanish, and Spanish to English translation orally, and written to several Forest Service products and documents.
- Coordinate all logistics related to Conference attendance, representing the Agency.
- Engage in communications activities and initiatives supporting the Forest Service R&D mission area.

Automated Remote Biodiversity Monitoring Network (ARBIMON), University of Puerto Rico, Río Piedras Campus, 2008-2013

Laboratory Technician

- Research assistant, served on leadership board.

- Conducted research on amphibian's acoustic patterns. Studied the differences in dial acoustic pattern of *Eleutherodactylus coqui* on two different sites – a close canopy forest and a wetland.
- Developed, maintained, and deployed permanent and portable acoustic monitoring systems on the field.
- Contributed to the development of web applications for acoustic detection using HTML, PHP, MySQL, and others.
- Executed as System Administrator maintaining servers running different flavors of LINUX and UNIX for web services and data storage.
- Configured embedded computer systems and developed custom programming for them using Shell scripting, PHP scripting, and cross-compiling tools.
- Experience developing web content and analyzing, interpreting and displaying scientific statistical data and maintaining critical scientific computing systems.
- Provided support to the ARBIMON customers on the use of our acoustic monitoring systems hardware and software.
- Managed procurement and developed budget.
- Trained incoming students.

Directors of Health Promotion and Education (DHPE), Centers for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry, January – April 2013

Intern

- Conducted research project: Geographical distribution and correlation of selenium levels in human blood and soil.
- Used ArcGIS tools to map geographical data and run statistical analysis of selenium levels in blood and soil.
- Presented results to the Environmental Medicine Branch leadership.

University of Puerto Rico, Medical Sciences Campus, November – February 2013

Graduate Research Assistant

- Conducted graduate research: Spatial analysis of flood vulnerability of health facilities in Puerto Rico and the susceptible population at risk.
- Used ArcGIS tools to map geographical data and run statistical analysis of flood vulnerability.

University of Puerto Rico, Rio Piedras Campus, 2007-2008

Undergraduate Research Assistant

- Project: Automated Remote Biodiversity Monitoring Network (ARBIMON) project
www.arbimon.net

University of Puerto Rico, Rio Piedras Campus, 2006-2007

Undergraduate Research Assistant

- Provided assistance to doctoral candidate on investigation and dissertation:
Sphaerodactylus phylogenetic reconstruction using dynamic homology
- Provided assistance to principal investigator on study: *Abundance of native and introduced frogs in the field and their interspecific interactions in captivity*

University of Puerto Rico, Rio Piedras Campus, 2003-2004
Undergraduate Research Assistant

- Provided assistance to graduate student on investigation and thesis: *Birds community dynamics in a coastal landscape mosaic*

PUBLICATION

Aide, T. M., Corrada-Bravo, C., Campos-Cerqueira, M., **Milan, C.**, Vega, G., and Alvarez, R. (2013). *Real-time bioacoustics monitoring and automated species identification*. PeerJ 1:e103; DOI 10.7717/peerj.103

PRESENTATIONS

August 2013, Directors of Health Promotion and Education (DHPE) Annual Members' Meeting, Minneapolis, MN

- *Study of selenium concentrations in blood serum and soil content using the Third National Health and Nutrition Examination Survey*

June 2012, Association of Tropical Biology and Conservation Annual Meeting, Bonito-MS, Brazil

- *A comparison of Eleutherodactylus coqui calling activity in two sites in Puerto Rico using ARBIMON's automated species identification software*
- *Automated species identification of birds, frogs, insects, and monkeys from audio recordings using ARBIMON software*

SKILLS

Languages

- English, proficient/fluent
- Spanish, native/fluent

COMPUTER LITERACY

- Statistical Packages: R, MINITAB, SPSS, SAS, Excel
- Languages: C++, PHP, MySQL, HTML, Shell Scripting, Applescript
- GIS: ArcInfo 10, ArcView
- Sound Analysis: Raven, Audacity, ARBIMON Acoustics
- Office: Word, Excel, Power Point, Publisher, SharePoint, Pages, Numbers and Keynote
- Design: Adobe Photoshop, In Design, Illustrator, Dreamweaver
- Others: Linux/Unix System Administration, Embedded Linux Systems

EXTRACURRICULAR ACTIVITIES

Student Council, University of Puerto Rico, Graduate School of Public Health

- 2011-2012 – Past-president of public relationships, educational activities of health promotion and awareness; organized socio-cultural activities for the school's community

- 2010-2012 – Informatics Committee, University of Puerto Rico, Graduate School of Public Health; student representative in charge of survey creation, data collection and community's feedback
- 2010, 2011 and 2012 Ocean Conservancy – Participated at the International Coastal Cleanup Day by collecting and recycling solid waste at the San Jose Lagoon in Río Piedras and at La Esperanza Park in Cataño, Puerto Rico; part of the team in charge of the data collection and survey

2006-2008, President, Computer Science Students' Association

2005-2007, President, Biology Students' Association

RECOGNITIONS

- 2013, Directors of Health Promotion and Education Awardee
- 2002-2004, Dean's List University of Puerto Rico, University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences