

BIOGRAPHICAL SKETCH

DINA PAOLA BRACHO-RINCON

Current Status

PhD Candidate

Dept. of Biology, UPR-Río Piedras

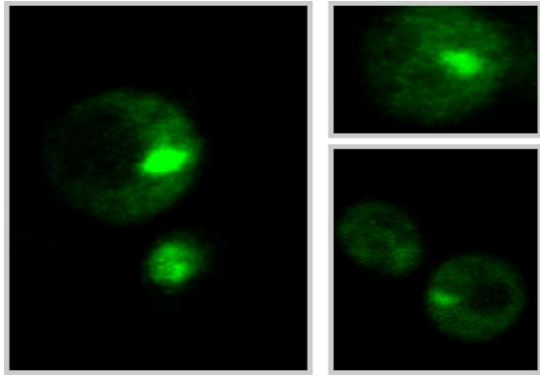
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Education

2000 BSc Microbiology, University of Pamplona.
Pamplona

2007 M.Sc. Biology University of Puerto Rico, Mayagüez

2010 PhD Biology UPR-RP University of Puerto Rico; Río Piedras (Expected, Dec 2016)



Current Research Interests: Prions are infectious protein associated with several fatal neurodegenerative diseases. Prions research is in its infancy and the mechanism triggering its aggregation is unknown. I am particularly interested in to identify and characterize a novel prion in *Saccharomyces cerevisiae* and elucidate its regulatory mechanism. The gained insights from our research might allow a better understanding against several conditions framed as aggregative diseases in humans.

Research Experience

- 2011-Present. Ph.D. Graduate Student. Characterization of Npl3 as a prion-like protein and its role in mRNA biogenesis in *Saccharomyces cerevisiae*. University of Puerto Rico at Río Piedras Campus.
- 2013 Ph.D. Graduate Student. Antibacterial Activity of Ag-Graphene Nanocomposite. University of Puerto Rico at Río Piedras Campus.
- 2010-2011. Ph.D. Graduate Student. Study of a novel UPF1-independent NMD pathway in *Saccharomyces cerevisiae*. University of Puerto Rico at Río Piedras Campus.
2009. Scientist/Instructor. Identification of pathogenic fungus in Heliconias crops. Centro Biotecnológico del Caribe (SENA) Valledupar, Colombia.
- 2004-2007. Master's Research: Bacterial Degradation of p-nitrophenol in water samples from Guanajibo, Añasco and Quebrada de Oro rivers.
- 2001 - 2003 Production of single cell protein. - Research associate - Universidad Popular del Cesar.

Other Research activities

- 2006 Advances in Tropical Microbial Ecology. Instituto Comunitario de Biodiversidad y Cultura, Casa Pueblo de Adjuntas. Puerto Rico.
2008. Volunteer at the bio-blitz day (Group: Microbiology). University of Puerto Rico, Bayamon Campus.
2012. The future of gene expression: Illumina RNASeq. The SNRP program of the University of Puerto Rico, Río Piedras.

2012 Proteomics Workshop. Puerto Rico Alliance for the Advancement of Biomedical Research Excellence (PRAABRE), Science and Technology Competency Enhancement Core (STCE) and Water Corporation. University of Puerto Rico, Río Piedras Campus

Honors and awards

2005 Travel Scholarship Award for "Science for America's Future" conference. Society for Advancing Hispanics/Chicanos & Native Americans in Science (SACNAS)

2012 Graduate and post-doctoral travel Award. American Society for Biochemistry and Molecular Biology

2012 Scholarship for trips to Conventions and Symposia from the Dean Office for Graduate Studies and Research. University of Puerto Rico, Río Piedras Campus

2013 Biology Graduate Student Association steering committee

2016 Research Initiative for Scientific Enhancement (RISE) Program Fellowship

Oral Presentations

2012 Characterization of npl3-95 as a prion-like protein involved in translation termination in *Saccharomyces cerevisiae*. American Society for Biochemistry and Molecular Biology Meeting. San Diego, California

2012 The shuttling protein Npl3-95 has prion-like properties. Bio-lunch. DEGI and UPRRP-Biology Graduate Student Association. University of Puerto Rico, Río Piedras Campus.

Poster Presentations

2012 Characterization of npl3-95 as a prion-like protein involved in translation termination in *Saccharomyces cerevisiae*. American Society for Biochemistry and Molecular Biology. San Diego, California

Publications

Rogelinda Barraza Cabarcas, **Dina Paola Bracho Rincon**, Enrique Meza Daza. *Producción de proteína unicelular a partir de subproductos de la naranja mediante la utilización de microorganismos nativos. Fase I: Identificación de levaduras aisladas de la naranja*. Perspectivas. Colombia. 2002.

Clarivel Lasalde, Andrea V Rivera, Alfredo J León, José A González-Feliciano, Luis A Estrella, Eva N Rodríguez-Cruz, María E Correa, Iván J Cajigas, **Dina P Bracho**, Irving E Vega, Miles F Wilkinson and Carlos I González. *Identification and functional analysis of novel phosphorylation sites in the RNA surveillance protein Upf1*. *Nucleic Acids Research* 42(3) November 2013

Khaled Habiba, **Dina P Bracho-Rincon**, José A González-Feliciano, Juan C Villalobos-Santos, Vladimir I Makarov, Darinel Ortiz, Javier A Avalos, Carlos I González, Brad R Weiner and Gerardo Morell. *Synergistic antibacterial activity of PEGylated silver-graphene quantum dots nanocomposites*. *Applied Materials Today* 1 (2015) 80-87

Daysi Díaz-Diestra, Juan Beltran-Huarac, **Dina P. Bracho-Rincon**, José A. González-Feliciano, Carlos I. González, Brad R. Weiner and Gerardo Morell. *Biocompatible ZnS:Mn quantum dots for reactive oxygen generation and detection in aqueous media*. *Journal of Nanoparticle Research* 17(12). December 2015