



For the past 30 years, José R. Rodríguez-Medina, Ph.D., has served as a faculty member at the Department of Biochemistry, University of Puerto Rico Medical Sciences Campus (UPR-MSC). During this time, he has accrued extensive administrative and academic experience, having served as: Biochemistry Department Chair since 1997, President of the Association of Medical and Graduate Departments of Biochemistry in 2013, Associate Director of the UPR-MSC Center for Research Compliance and Development (2015), Interim Associate Vice-President for Research and Innovation at the University of Puerto Rico from 2017-2018, and more recently as Interim Dean for Research at the UPR-MSC from 2018-2019.

In addition to his current position as Principal Investigator of the Puerto Rico IDeA Network of Biomedical Research Excellence (PR-INBRE) since 2013, he also holds leadership and advisory roles in other NIH-sponsored infrastructure and training programs at the UPR, such as the NIMHD-sponsored Puerto Rico Clinical and Translational Research Consortium (PRCTRC); Innovative Programs to Enhance Research Training (NIGMS-IPERT); Research Training Initiatives for Scientific Enhancement Program (NIGMS-RISE); and the Louis Stokes Alliance for Minority Participation (NSF-LSAMP) program at the University of Puerto Rico.

His first contributions to science were made as a graduate student at Brandeis University between 1980-1986, by furthering our understanding of the mRNA splicing mechanism of the yeast *Saccharomyces cerevisiae* in the laboratory of Nobel Prize Laureate, Michael Rosbash. Using yeast mutants, we were the first to demonstrate the formation of a lariat splicing intermediate during early steps in eukaryotic mRNA splicing. As a Post-doc in the Laboratory of Biochemistry at the NCI, under the guidance of Bruce M. Paterson, between 1986-1989, and later as an independent investigator at the UPR-MSC, he focused his research on the functional role of myosin type II protein in yeast. In the process, they discovered that a deficiency for myosin II impacted fungal cell wall biogenesis, induced by the accumulation of chitin at the septum as part of an alternative cytokinesis mechanism. Cell wall stress in myosin II mutants was discovered by detection of an activated stress-signaling mechanism mediated by the Mitogen Activated Protein Kinase (MAPK) Mpk1p, characteristic of cell wall mutants. This stress signaling mechanism was linked to five transmembrane sensors of the Wsc-family and Mtl-family also linked to this MAPK module.

Currently, his laboratory is devoted to identifying novel interacting protein partners of these transmembrane stress sensors and identifying their role in stress signaling. These research projects have allowed him to mentor thesis dissertation projects in Biochemistry for 13 Ph.D. students, 2 M.S. students, two Postdoctoral Fellows, and ~45 undergraduate and graduate research students and medical residents. His commitment to the INBRE program is founded on the principles of service and collaboration with the research community by providing them with the best possible environment for research, and developing faculty, student and postdoctoral researchers at undergraduate and graduate institutions in Puerto Rico.