The Sixth Annual Meeting of the Puerto Rico Physiological Society (PRPS) was held on Friday, February 12, 2016 in San Juan. The meeting was hosted by the University of Puerto Rico (UPR) Medical Sciences Campus and brought together over 120 faculty and trainees from all universities and research institutions of Puerto Rico. Meeting participants were welcomed by Edgar Colon, Dean of the UPR School of Medicine and Sabzali Javadov, President of PRPS, who described the main objectives of the meeting and relevance of the topic: “Pathophysiological mechanisms of stress on different levels: from cells to organisms”.

The first speaker was Dr. Martin Frank, Executive Director of APS who gave a detailed presentation on the role of APS in the development of the physiological sciences through its interaction with Chapters affiliated to the Society. He discussed the issue of member’s access to publications, meetings, and education programs, and the role of the Society in the professional development of physiologists by providing access to career-related services and through scientific interactions in meetings and conferences.
The scientific sessions were moderated by Dr. Javadov and Dr. Sylvette Ayala-Peña (Secretary/Treasurer PRPS), and included the following presentations: Dr. Peter Lauf from the Department of Pathology, Boonshoft School of Medicine, Wright State University, (Dayton, OH), who presented recent data on the role of Bcl-2 proteins and the sodium-potassium ATPase in cell survival and death. The presentation was followed by an exciting talk on the possible evolutionary role of sialic-acid recognizing I-type lectins (Siglecs) in inflammation and aging by Ajit Varki from the Departments of Medicine, and Cellular and Molecular Medicine, UC San Diego (La Jolla, CA). Then Dr. Charles Steenbergen from the Department of Pathology, Johns Hopkins University (Baltimore, MD) highlighted the mechanisms of adverse effects of mitochondrial microRNA overexpression in the heart. Dr. Kevin Davy from the Department of Human Nutrition, Foods, and Exercise, and Fralin Translational Obesity Center, Virginia Tech (Blacksburg, VA) discussed the results obtained by his group on the interindividual variability in metabolic and cardiovascular adaptation to the stress by caloric excess. He was followed by Dr. Caroline Appleyard from the Department of Basic Sciences, Ponce Health Sciences University (Ponce, PR) who described novel interventions for targeting stress-induced exacerbation of endometriosis. Dr. Norma Adragna from the Department of Pharmacology & Toxicology, Boonshoft School of Medicine, Wright
State University (Dayton, OH) talked about the mechanisms of oxidative stress-modulation of potassium-chloride co-transporters, and finally Dr. Edward Hall from the Department of Anatomy & Neurobiology, University of Kentucky Chandler Medical Center (Lexington, KY) presented new data on pathophysiological mechanisms and treatment of oxidative stress in central nervous system injury.

During the meeting, Dr. Pablo Altieri, a Professor of Medicine and Cardiology at the UPR School of Medicine was awarded with a “Distinguished Service Award” for his outstanding contributions to the society and the physiological sciences in Puerto Rico. Dr. Altieri has contributed to improve education and healthcare in Puerto Rico through the training of new physicians and biomedical scientists. He has been a strong supporter of the PRPS since its creation in 2009.

PRPS honors Pablo Altieri with a Distinguished Service Award (from left to right): Martin Frank, Sabzali Javadov, Pablo Altieri, Nelson Escobales, and Guido Santacana.

The main session was followed by a poster session where undergraduate students together with graduate students and postdoctoral fellows from academic institutions in Puerto Rico presented the most recent results of their research. The posters were evaluated by a Judge Committee to estimate the overall quality of the presentations. Following the poster session, the Committee announced the winners of the presentations that included: Raymond Isidro from the Department of Basic Sciences Ponce Health Sciences University, who received the Pablo I. Altieri Research Recognition Award for his work entitled “The probiotic mixture VSL#3
attenuates colitis and decreases macrophage infiltration in an acute colitis model.” Pablo González from the Department of Physiology, UPR Medical Sciences Campus received the First PRPS Award for his work “Effects of tamoxifen on secondary damage and regenerative proteins after spinal cord injury.” Omar Soler-Cedeño from the Basic Sciences Department, Ponce Health Sciences University received the Second PRPS Award for his presentation on “Fear conditioning and extinction induce plasticity of ventral hippocampus synapses in the medial prefrontal cortex” and Annelyn Torres-Reverón from the Department of Basic Sciences, Ponce Health Sciences University received the Third PRPS Award for her presentation entitled “Changes in CRF and CRF-receptor type 1 within endometriotic vesicles and uterus during early endometriosis.”

*Poster session of PRPS meeting.*

Following the poster session, President of the PRPS Dr. Sabzali Javadov gave the business report to the Chapter. He informed about the PRPS new webpage (www.prps-aps.org) that contains detailed information about past, current and future activities of the Society. PRPS established the “Pablo I. Altieri Research Recognition Award” that will be awarded every other year. It is alternated with the “Peter Lauf and Norma Adragna Travel Award” created in 2011. Both awards, recognizing quality and outstanding contributions to the physiological sciences, are presented to students and young investigators during the Annual PRPS meetings. The awards support travel expenses of awardees to attend scientific meetings on biomedical research.

Dr. Javadov also reported on outreach activities by the Chapter conducted last year by PRPS members from the Department of Physiology, University of Puerto Rico School of Medicine, the Department of Basic
Sciences, Ponce Health Sciences University, and the Pontifical Catholic University of Puerto Rico. These activities included the PhUn Week activity at four elementary and high schools of the island that involved more than two hundred students. These activities were conducted at Caribbean School, Colegio San Conrado and Academia Santa Maria Reina in Ponce, and the Colegio del Espiritu Santo in Hato Rey. During the outreach activities faculty members and graduate students gave a talk about general principles of physiology, major physiological systems in human body, and how important to be a physiologist in research and academic area. They also presented basic concepts of physiological systems with demonstrations that involved the participation of school students. At the end of activities, PRPS members responded questions from interested students.

PhUn Week activity for high school students at Holy Spirit School in Hato Rey, Puerto Rico organized by faculty members and graduate students of the Department of Physiology, UPR School of Medicine.

Finally, Dr. Javadov acknowledged the sponsors of the meeting that included the UPR School of Medicine and the Department of Physiology, the American Physiological Society, Ponce Health Sciences University, and Central University of the Caribbean. He also expressed his gratitude to the Department of Physiology, the Poster’s Judge Committee members, and volunteers for their assistance in organizing and helping to make the meeting a success.
The business meeting of the PRPS finished with the selection of the new Executive Committee members for 2016-2017: Priscila Sanabria - President (Universidad Central del Caribe), Carliluz Santiago -President-Elect (Pontifical Catholic University of Ponce), Gladys Chompre - Secretary/Treasurer (Pontifical Catholic University of Ponce), Rebecca Parodi - Councilor (UPR School of Medicine), and Yaileen Quiñones - Councilor (Universidad Central del Caribe).