

Miller School Medical Students, Graduate Students and Residents Shine at Research Conference

Ernesto H. Weisson, a medical student at the University of Miami Miller School of Medicine, won the Alving Award – the top prize – at the 2019 Eastern-Atlantic Student Research Forum, an annual four-day international conference held at the Miller School.



Alving Award-winner Ernesto H. Weisson.

The award, now in its 12th year, was established through a \$100,000 gift from Miller School alumnus Carl Alving, M.D. '66,

and his wife, Barbara Alving, M.D., and is given to one medical student who is judged to have produced the most outstanding research achievement of the year. Weisson won this year's award for his research project "Rapid and Cost-effective Orbital Prosthesis Fabrication via Automated Non-contact Facial Topography Mapping and 3D Printing."

Eight additional Miller School students won first-place or second-place awards in the conference's competitive events.

Each year, the Eastern-Atlantic Student Research Forum (ESRF) selects medical, graduate, and M.D./Ph.D. students and resident physicians from throughout the country to present original basic science and clinical research in multiple biomedical fields. In addition to formal presentations, the forum includes the informal exchange of scientific ideas among students and faculty preceptors, the encouragement of student-initiated research, and the professional development of future leaders in biomedical research. This year, students from 15 other medical schools joined the Miller School at ESRF.



From left, Andria Williams, M.B.A., Ginelle Bou Nassar, M.P.A., Carlen Duncombe, M.P.A., Barbara Galvez, M.B.A., Rosa Verdeja, M.Ed., Viviana Horigian, Ph.D., Renita Revere, M.B.A., and Megan Garber, M.Ed., with Sebastian the Ibis.

“For the past 45 years, ESRF has provided an opportunity for medical students, graduate students, interns and residents to present their research before a group of peers and esteemed faculties,” said ESRF Director Isabel Perez. “The program continues to make important strides each year.”

Her student co-director of ESRF, M.D./Ph.D. candidate Sze Kiat Tan (Owen), thanked the presenters, committee chairs, faculty advisors, support staff and student volunteers for their hard work, but he singled Perez out for special praise.

“I want take this opportunity again to give my special thanks to Isabel Perez, who works year-round to make this conference successful,” he said. “She was extremely supportive during the planning process and is a valued advocate of student research. I can say without hesitation that without her there would be no ESRF.”

One way ESRF has grown has been through its integration with the Department of Public Health Sciences and Office of Graduate Studies. Students earning their M.P.H., M.S.P.H. or M.D./M.P.H. degrees, and biomedical graduate students also have the opportunity to showcase their research work while enhancing their research experience at an international conference. For the first time this year, the Miller School’s Medical Scientist Training Program partnered with ESRF to create a day during the conference to highlight M.D./Ph.D.s, including a two-hour panel with physician-scientists who have taken a variety of career paths. The goal of the session was to show that physician-scientist training can be applied in many different ways.



From left, Jacqueline Baikovitz, Eric D. Green, M.D., Ph.D., Sze Kiat Tan (Owen), and Samara Vilca.

ESRF 2019 kicked off with an inspiring welcome address by Henri R. Ford, M.D., M.H.A., dean and chief academic officer of the Miller School. The Haitian-born pediatric surgeon, speaking to students who are at the preparatory stages of their careers, described his own career path and how it led to his “dream job” as dean of the Miller School.

This year, ESRF’s keynote speaker was Eric D. Green, M.D., Ph.D., the director of the National Human Genome Research Institute at the National Institutes of Health, a position he has held since late 2009. While directing independent research programs for almost two decades, Dr. Green was at the forefront of efforts to map, sequence and understand eukaryotic genomes.

His work included significant, start-to-finish involvement in the Human Genome Project. These efforts eventually blossomed into a highly productive program in comparative genomics that provided important insights about genome structure, function and evolution. Dr. Green presented “From the Human Genome Project to Precision Medicine: A Journey to Advance Human Health.”

For the second time this year, ESRF provided graduate students the opportunity to host their own Graduate Student Research Day (GSRD). With support from the Office of Graduate Studies, ESRF-GSRD invited its own speaker, and graduate student presenters were eligible to receive topic-specific awards and waived registration fees.



Students listen to a genomics presentation at ESRF.

Tracy L. Bale, Ph.D., professor of pharmacology and psychiatry at the University of Maryland School of Medicine, presented the Distinguished Lecture to a sizable audience of ESRF presenters

and UM students at large. The title of her talk was “Parental Stress Contributions to Changes in Neurodevelopment.” Dr. Bale’s research focuses on understanding the role of stress dysregulation in neurodevelopmental and neuropsychiatric diseases, and the sex differences that underlie disease vulnerability, using mice as the model organism. She is particularly interested in developing models of parental stress and the germ cell involvement in transgenerational epigenetic programming of neurodevelopment.

The interdisciplinary panel of guest speakers included:

Melinda Merchant, M.D./Ph.D. ’96, senior medical director in oncology at AstraZeneca and a pediatric oncologist at the National Cancer Institute and Memorial Sloan-Kettering Cancer Center.

David Brody, M.D., Ph.D., director of the Center for Neuroscience and Regenerative Medicine at the Uniformed Services University of the Health Sciences.

Rafael Campo, M.D., senior director for public health and medical affairs within the Access Operations and Emerging Markets Group at Gilead Sciences, Inc.

Richard K. Lee, M.D./Ph.D. ’98, associate professor of ophthalmology, director of community ophthalmology and medical director for outpatient operations at Bascom Palmer Eye Institute.

Shu Wu, M.D., professor of pediatrics in the Division of

Neonatology at the Miller School.

The ESRF conference concluded with the Awards Banquet address by Erin Kobetz, Ph.D., M.P.H., professor of medicine, public health sciences, and obstetrics and gynecology, and associate director of Sylvester Comprehensive Cancer Center for population science and cancer disparities. Her talk, “Lessons from the Road Less Traveled: Looking Back over 14 Years,” detailed the challenges of establishing Patne en Aksyn (Partners in Action), the first campus-community partnership between the University of Miami and community-based organizations in Little Haiti. She is currently the principal investigator of multiple grants from the National Cancer Institute and National Institute of Minority Health and Health Disparity, which collectively have garnered more than \$30 million in extramural funding.

“We would like to thank the presenters, faculty advisors and judges, committee members, and invited speakers for making the 45th annual ESRF a successful and stimulating program for all Miller School students and visiting students,” Perez said.

Schools Represented

Albany Medical College

Albert Einstein College of Medicine

Brody School of Medicine

Columbia University Vagelos College of Physicians and Surgeons

Florida International University Herbert Wertheim College of Medicine

Medical University of South Carolina

New York University School of Medicine

Rutgers Robert Wood Johnson Medical School
University of Cincinnati
University of Kentucky
University of South Florida Morsani School of Medicine
University of Tennessee School of Medicine
University of Texas Medical Branch
University of Toledo School of Medicine
Weill Cornell Medical College

Additional 2019 Eastern-Atlantic Student Research Forum Award Recipients

Sponsored by ESRF

Clinical Science Poster Presentation

1st Prize: Dickran Nalbandian, Florida International University
Wertheim College of Medicine

“An Overview of Emergency Medical Protocol and Challenges Faced
by Emergency

Medical Services in Republic of Artsakh”

2nd Prize: Rebecca D. Lichtin, Columbia University Vagelos
College of Physicians and Surgeons

“White Matter Tract Integrity Moderates the Association Between
Parental Stress

and Internalizing Symptoms in Children”

Clinical Science Oral Presentation

1st Prize: Aleem Khan, Weill Cornell Medical College

“Redefining the Obesity Paradox in Renal Cell Carcinoma”

2nd Prize: Alexandra Alvarez, University of Miami Miller School

of Medicine

“High Rates of Underlying Thyroid Cancer in Patients Undergoing Thyroidectomy for Hyperthyroidism”

Basic Science Poster Presentation

1st Prize: John Wiltshire, University of Miami Miller School of Medicine

“Effects of Sleep Quality on aMCI Vulnerable Brain Regions in Cognitively

Normal Elderly Individuals”

2nd Prize: Khyati Y. Mehta, University of Cincinnati School of Medicine

“Identifying Consistent Differences in Treatment and Control Comparisons from Single-Cell RNA-Seq Studies”

Basic Science Oral Presentation

1st Prize: Narek Israelyan, Columbia University Vagelos College of Physician and Surgeons

“Examining the Link Between Constipation and Depression: A Novel Role for Neuronal Serotonin in the Brain-Gut Axis”

2nd Prize: Alexa Semonche, Rutgers Robert Wood Johnson Medical School

“Combinatorial Therapeutic Strategies for Enhancement of 5-Aminolevulinic Acid-Based Photodynamic Therapy for Treatment of Glioblastoma”

Department of Public Health Sciences Awards

Sponsored by the Department of Public Health Sciences

Poster Awards

1st Prize: Jennifer Chavez, University of Miami Miller School of Medicine

“Needs Assessment and Preliminary Outcomes of the Student Emerging Leaders Program”

2nd Prize: Harry Levine, University of Miami Miller School of Medicine

“Comparison of the Number and Geographical Location of Inappropriately Discarded Syringes Pre- and Post-Implementation of a SEP in Miami, FL”

Oral Award

Rajika Jindani, University of Miami Miller School of Medicine

“The Role of Artificial Intelligence Technology and Telemedicine in Diabetic Retinopathy Screening in Low-Resources Settings”

Best Overall Public Health Sciences Presentation

Hampton Ocon, University of Miami Miller School of Medicine

“Voluntary HIV Testing and Self-Realization of Risk of HIV Infection among Young Men-Who-Have-Sex-With-Men in the Miami-Dade Area”

Graduate Student Research Day

Sponsored by the Office of Graduate Studies

Outstanding Basic Science Poster Presentation

Cho Hee Shrader, University of Miami Miller School of Medicine

“Understanding How Social Network Configurations Can Improve HIV Knowledge Among Underserved Latinas in South Florida”

Outstanding Basic Science Oral Presentation

Clara I. Troccoli, University of Miami Miller School of Medicine
“The ROS Duality in Castration-Resistant Prostate Cancer Emergence and Progression”

Outstanding M.D./Ph.D. Trainee Presentation

Sponsored by MSTP

1st Prize: Daniel A. Rodriguez, University of Miami Miller School of Medicine

“The Influence of Genetic Ancestry on Risk, Prognosis, and Outcomes in Uveal Melanoma”

2nd Prize: Kristina Boguslawski, New York University School of Medicine

“Exploiting Receptor-Toxin Interactions to Understand the Species Specificity of the Staphylococcus Aureus Toxin LUKAB”