

University of Puerto Rico, Medical Sciences Campus

Advancing Knowledge, Transforming Health



45th Annual Research and Education Forum



April 9 - 11, 2025





45th Annual Research and Education Forum



WELCOME MESSAGE

Chancellor of the Medical Sciences Campus



It is with great pleasure and pride that I welcome you to the 45th. Annual Research and Education Forum of the University of Puerto Rico's Medical Sciences Campus (UPR-MS). This event is a testament to our unwavering commitment to scientific discovery, innovation, and academic excellence in the health sciences. Year after year, this Forum serves as a platform for researchers, faculty, students, and professionals to exchange knowledge, share groundbreaking discoveries, and foster interdisciplinary collaboration, all with the shared goal of advancing healthcare and improving the well-being of our communities.

This year's Forum holds special significance as we dedicate it to the School of Medicine on its 75th anniversary. Since its founding, the School of Medicine has played a pivotal role in shaping the medical landscape of Puerto Rico and beyond, training thousands of healthcare professionals, pioneering research in critical areas, and expanding access to high-quality medical education and services. Its contributions to public health, biomedical sciences, and clinical practice have positioned it as a leader in medical education and research in the Caribbean and Latin America. We take this opportunity to celebrate its rich history, achievements, and lasting impact on the advancement of healthcare.

We also take great pride in honoring Dr. Norman Maldonado, a distinguished physician, researcher, educator, and leader, whose career has left an indelible mark on Puerto Rico's medical and academic communities. His contributions to hematology, medical education, and institutional leadership have shaped generations of healthcare professionals and researchers. His tenure as Chancellor of the Medical Sciences Campus and President of the University of Puerto Rico was characterized by a steadfast dedication to academic excellence, institutional growth, and the promotion of scientific inquiry. Through this well-deserved recognition, we express our profound gratitude for his invaluable contributions and enduring legacy.

I would like to extend my deepest appreciation to the Organizing Committee, particularly Dr. Yasmín Pedrogo Rodríguez, Chair of the Committee, and Dr. Efraín Flores Rivera, Coordinator, for their outstanding leadership and dedication in making this event a reality. Their tireless efforts have ensured that this year's Forum provides an enriching and engaging experience for all participants.

As we embark on these days of academic exchange and discovery, I encourage each of you to take full advantage of the sessions, discussions, and networking opportunities. May this Forum inspire new ideas, collaborations, and innovations that will continue to advance scientific knowledge and improve healthcare in Puerto Rico and beyond.

Welcome to the 45th. Annual Research and Education Forum!

Myrna L. Quiñones Feliciano, MD, JD
Chancellor
University of Puerto Rico, Medical Sciences Campus

45th Annual Research and Education Forum

WELCOME MESSAGE

Dean for Academic Affairs and Chair of the Organizing Committee

It is with great enthusiasm that I welcome you to the 45th Annual Research and Education Forum of the Medical Sciences Campus, University of Puerto Rico. This year, under the theme "Advancing Knowledge, Transforming Health," we reaffirm our commitment to fostering scientific discovery, academic excellence, and collaboration in the health sciences.



This Forum brings together a diverse and talented group of researchers, faculty, students, and professionals from various institutions and disciplines, reflecting the strength and breadth of our academic community. We are honored to present 288 presentations, including oral sessions and scientific posters, showcasing innovative research spanning biomedical sciences, clinical practice, public health, pharmacy, dental medicine, nursing, and allied health professions. These contributions reflect the dedication and creativity of our participants, who strive to address pressing healthcare challenges and advance scientific knowledge.

Additionally, we are privileged to welcome distinguished keynote speakers who will deliver plenary sessions on cutting-edge topics. This year's Forum features renowned experts whose research and contributions have significantly impacted their respective fields. Their presence enriches the Forum, creating a unique space for the exchange of ideas, fostering new collaborations, and inspiring future research endeavors.

As we engage in discussions, presentations, and networking opportunities, I invite you to embrace the spirit of innovation, collaboration, and scientific excellence that defines this Forum. May this event inspire new discoveries and partnerships that contribute to transforming health and improving the quality of life.

Welcome to the 45th Annual Research and Education Forum!

A handwritten signature in blue ink, reading "Yasín Pedrogo".

Yasmín Pedrogo Rodríguez, MD, FAAP, MSc MEdL

Dean for Academic Affairs

Chair, Organizing Committee

Medical Sciences Campus, University of Puerto Rico



ORGANIZING COMMITTEE

Yasmín Pedrogo Rodríguez, MD, FAAP, MSc MEDL
Dean for Academic Affairs & Chair of the Forum
Deanship for Academic Affairs

Efraín Flores Rivera, MLS, EdD
Librarian IV
Interim Library Director
Forum Coordinator

Amariliz Burgos Santiago, MBA
Library Administrator

Carlos A. Ortiz Reyes, PhDc
Director
RCM Online Division

SCIENTIFIC COMMITTEE

School of Medicine

Natalia Valentín Carro, MS, PhD
Assistant Professor
Department of Anatomy & Neurobiology

Antonio H. Martins, PhD, MSc
Associate Professor
Department of Pharmacology and Toxicology

School of Dental Medicine

Milagros J. Toro Arrivillaga, DDS, MSD, PhD
Associate Professor
Surgical Sciences Department
Diagnostic Sciences Section

Augusto Elías Boneta, DMD, MSD
Professor
Assistant Dean for Research

School of Pharmacy

José O. Colón Sáez, PhD
Associate Professor
Department of Pharmaceutical Sciences

Deanship of Student Affairs

Carlos J. Cañuelas Pereira, EdD, CPL
Counselor II & Director
Student Center for Counseling and Psychology
(CECSI)

School of Health Professions

Elinette M. Albino Rodríguez, MT, PhD, MSc
Associate Professor
Clinical Laboratory Sciences Program

Rosa Román Oyola, PhD, MEd, OTR/L
Professor
Occupational Therapy Program

School of Nursing

Carmen Mabel Arroyo Novoa, PhD, MSN,
MSc, RN, FCCM
Professor
PhD in Nursing Program

María Celeste Larriuz Serrano, MS, MPH
Director
Center for Evidence-Based Research and
Practice (CIPBE)

Graduate School of Public Health

Ana M. Parrilla Rodríguez, MD, MPH, FABM,
IBCLC, FACCE, LCCE
Professor
Human Development Department

45th Annual Research and Education Forum

PRE FORUM

Tuesday, April 8, 2025

11:00 am to 12:30 pm

63rd. BAILEY K. ASHFORD MEMORIAL LECTURE

Location: School of Medicine Amphitheater I

3rd. floor, Dr. Guillermo Arbona Building

The Pathogenesis of Fatal Cerebral Malaria: Pieces of the Puzzle

Keynote Speaker:

Terrie Ellen Taylor, DO

University Distinguished Professor

Dept. of Osteopathic Medical Specialties, Michigan State University

Moderator:

Nivia L. Pérez-Acevedo, MS, PhD

Associate Dean of Biomedical Sciences

Director of Graduate Program School of Medicine

UPR – Medical Sciences Campus



Dr. Terrie Taylor has, with the full support of the Michigan State University College of Osteopathic Medicine, been living and working in Malawi for six months each year since 1986. There, she has coordinated a series of studies into the pathogenesis of fatal cerebral malaria in Malawian children, providing care on the Paediatric Research Ward whilst exploring a series of different hypotheses. She has been fortunate to work with a wide variety of collaborators over the years: neurologists, pathologists, radiologists, ophthalmologists and, most recently, pediatric intensivists. At the same time, she has hosted final year medical students from Michigan State, providing them with an opportunity to care for patients in a vastly different setting. Her work has been recognized by numerous awards over the years. In December of 2024, Dr. Taylor stepped away from the bedside and is now a Senior Advisor to the Dean for Research Initiatives and Global Scholarship.

Conference summary: Beginning in 1986, Drs. Terrie Taylor and Malcolm Molyneux, at the behest of the Malawi Ministry of Health, began studying cerebral malaria in Malawian children. In her lecture, Dr. Taylor will discuss nearly forty years of clinical research during which the team in Malawi has combined bedside observations, autopsy findings, neuroimaging, EEGs and transcranial doppler data to understand how *P. falciparum* kills over 500,000 African children annually. Work on the Paediatric Research Ward produced the Blantyre Coma Score, enshrined in the WHO's clinical case definition of cerebral malaria. The clinicopathological study showed that the standard clinical case definition of cerebral malaria misclassified ~23% of patients --- but when 'malarial retinopathy', a constellation of up to three clinical features observable on ocular funduscopy, was included, the specificity of the standard clinical case definition, which misclassifies ~25% of cases, increases to 88%. The autopsy study failed to identify the cause of death in the retinopathy-positive cases of true cerebral malaria, but when magnetic resonance imaging became available, the importance of increased brain volume became apparent. The heterogeneity in this patient population has recently been revealed by transcranial Doppler studies; there are five different clinical phenotypes, suggesting that a single "silver bullet" to treat increased brain volume is unlikely. Potential mechanisms underlying the TCD phenotypes and potential treatments will be discussed. The puzzle is nearing completion, but work remains to be done.



FORUM SCIENTIFIC PROGRAM

First Day - Wednesday, April 9, 2025

REGISTRATION

7:00 to 8:00 am

*Location: Hallway & Foyer
adjacent to the School of Medicine Amphitheaters
3rd. floor, Dr. Guillermo Arbona Building
Continental breakfast at the registration site*

INAUGURAL SESSION AND DEDICATIONS

8:00 to 9:00 am

*Location: School of Medicine Amphitheater I
3rd. floor, Dr. Guillermo Arbona Building*

Moderator:

Enid J. García Rivera, MD, MPH
Assistant Professor
Director of Endowed Health Services Research Center
Director of Office of Clinical and Community Health Research
School of Medicine, UPR – Medical Sciences Campus

Welcoming Remarks by University Academic Leaders

Miguel A. Muñoz Muñoz, PhD
University of Puerto Rico Interim President

Myrna L. Quiñones Feliciano, MD, JD
Medical Sciences Campus Chancellor

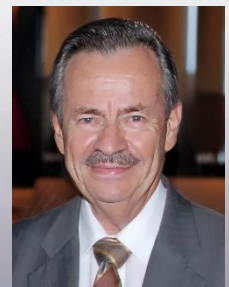
Yasmín Pedrogo Rodríguez, MD, FAAP, MSc MEDL
Dean for Academic Affairs
Chair of the Forum Organizing Committee
45th. Annual Research and Education Forum

DEDICATION OF THE 45TH. ANNUAL RESEARCH AND EDUCATION FORUM



To the **School of Medicine**
of the Medical Sciences Campus on
its **75th. Anniversary.**

To **Dr. Norman I. Maldonado Simons**,
for his legacy in education and research
at the Medical Sciences Campus.





45th Annual Research and Education Forum

PLENARY SESSION – DEANSHIP FOR ACADEMIC AFFAIRS

9:00 to 10:00 am

*Location: School of Medicine Amphitheater I
3rd. floor, Dr. Guillermo Arbona Building*

From Touch to Action: Neural Circuit Mechanisms of Tactile Processing and Behavior

Keynote Speaker:

Andrew Michael Seeds, PhD

Associate Professor
Director of the Institute of Neurobiology
UPR - Medical Sciences Campus

Moderator:

Bianca A. Torres Hernández, PhD, MSc
Assistant Professor
Pharmaceutical Sciences Department
School of Pharmacy, UPR - Medical Sciences Campus

RECESS AND COFFEE BREAK

10:00 to 10:30 am

PLENARY SESSION – GRADUATE SCHOOL OF PUBLIC HEALTH

10:30 to 11:30 am

*Location: School of Medicine Amphitheater I
3rd. floor, Dr. Guillermo Arbona Building*

Essential Competencies for Public Health Teaching: A Regional Framework for the Americas

Keynote Speaker:

Lic. Gabriel Listovsky

Head of the Special Program on Virtual Campus for Public Health
Department of Health Systems and Services
Pan American Health Organization

Moderator:

Edgardo Ruiz Cora, PhD, MPH
Dean of the Graduate School of Public Health
UPR - Medical Sciences Campus

1st. POSTER SESSION

11:30 am to 1:00 pm

*Location: Dr. Ramón Emeterio Betances Student Center
See the list of posters at the end of this program.*



1st. ORAL CONCURRENT SESSION

1:20 to 3:00 pm

Location: A 469 (Room 3)

Graduate School of Public Health

4th. floor, Dr. Guillermo Arbona Building

Moderator:

Antonio H. Martins Baccin, PhD, MSc
Associate Professor & Graduate Program Coordinator
Department of Pharmacology and Toxicology
School of Medicine, UPR - Medical Sciences Campus

- 001 Pericyte Secretion of LPS Induced TNF- Alpha Factor in Pulmonary Arterial Hypertension.** Alexander I. Acevedo Jetter¹; Prakash Chelladurai, PhD²; Vinicio De Jesús Pérez, MD². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR; ²Stanford University School of Medicine, Department of Pulmonary, Allergy and Critical Care Medicine, Palo Alto, CA.
- 002 Three Mutations on a Gene Leading to Autosomal Recessive Cone-Rod Dystrophy: A Case Report.** Roxana López-Yazdani¹; Rosaliz Portela, MD²; Natalio J. Izquierdo, MD³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Medicine, San Juan, Puerto Rico; ²Centro Oftalmológico Metropolitano, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Associate Professor Department of Surgery, San Juan, Puerto Rico.
- 003 Identification of a Novel MLH1 Gene Pathogenic Variant with Stable MSI and Intact MMR Status in a Patient with Lynch Syndrome.** Juan O. González Velázquez, MD¹; Noridza Rivera Rodríguez MD¹⁻³; Hilmaris Centeno-Girona MS²; Marcia Cruz- Correa, MD, PhD¹⁻³. ¹University of Puerto Rico, Medical Sciences Campus, San Juan, PR; ²University of Puerto Rico, Comprehensive Cancer Center, San Juan, PR; ³Pan American Center for Oncology Trials, San Juan, PR.
- 004 Prevalence of Chronic Conditions Among Patients with Long COVID (LC) in Puerto Rico Using the 2024 LC Definition of the NASEM.** Victoria A. Blaiotta-Vázquez, MPH¹; Omar A. Benítez-Esteva, BS¹; Miciely C. Aponte-Reyes BS¹; Natalia A. Alvarado- Ramos, BS¹; Allen A. Román-Roubert, BS¹; Bárbara A. Ramos-Sanfiorenzo, MS¹; Enid J. García-Rivera, MD, MPH^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center, San Juan, PR.
- 005 Fungi Matter: Understanding Cervical Yeast Diversity in HPV Infection and Cervical Lesions.** Natalia Pagán-Zayas^{1#}, Daniela Vargas-Robles¹, Andrea Cortés¹, Josefina Romaguera², Filipa Godoy-Vitorino¹. ¹University of Puerto Rico, Medical Sciences Campus, Department of Microbiology and Medical Zoology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico.
- 006 Unveiling the Silent Invader: A Rare Case Report of Sphingomonas Paucimobilis Ventriculitis.** Juan C. Camacho, MD¹; Inés Esquilín, MD²; Sanet Torres, MD². ¹San Juan City Hospital, Department of Pediatrics, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Department of Pediatrics, Pediatrics Infectious Disease, San Juan, Puerto Rico.



45th Annual Research and Education Forum

2nd. ORAL CONCURRENT SESSION

1:20 to 3:00 pm

Location: A 491 (Room 9)

Graduate School of Public Health

4th. floor, Dr. Guillermo Arbona Building

Moderator:

Ana Luisa Dávila Román, PhD

Professor, Demography Program

Department of Social Sciences

Graduate School of Public Health, UPR - Medical Sciences Campus

- 007 Prevalence of Hip Osteoarthritis in a General Population Subset in Puerto Rico.** Keysha González-Ramos¹, Santiago Saldaña-Méndez², Lilliana Serrano-Arroyo¹, Edgar Colón-Negrón², Luis M. Vilá¹. ¹University of Puerto Rico, Medical Sciences Campus, Division of Rheumatology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Diagnostic Radiology Section, San Juan, Puerto Rico.
- 008 Cervical Cancer Care Delay among Women Living with HIV in Puerto Rico.** Marievelisse Soto-Salgado, DrPH, MS¹; Verónica García-Ramírez, MS¹; Lorena González-Sepúlveda, MS¹; Sharee Umpierre, MD^{1,2}; Carlos Torres-Cintrón, MPH¹; Axel Gierbolini, DrPH¹; Melisa Ramos-Sepúlveda, MPH¹; Vivian Colón-López, PhD, MPH¹; Maritza Cruz, MS³; Edna Marrero, MS³; Ana P. Ortiz, PhD, MPH^{1,2}. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico; ²University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ³Puerto Rico Department of Health, HIV/AIDS Surveillance Program, San Juan, Puerto Rico.
- 009 Vitamin D Levels and Severe Early Childhood Caries in Puerto Rican Children.** Cheryl Paulo Malavé, DMD. University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine, San Juan, Puerto Rico.
- 010 Genetics Etiologies of Autism Spectrum Disorder in Puerto Rico.** Miriam Rivera Hernández, MD¹; Alexa Castrodad Caraballo, MD¹; Génesis A. Sánchez, MD¹; Frances Vélez Bartolomei, MD². ¹San Juan City Hospital, Department of Pediatrics, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Science Campus, San Juan, Puerto Rico.
- 011 La Integración de la Simulación Virtual como Estrategia Instruccional por la Facultad de un Programa Subgraduado de Enfermería.** Leonor M. Rivera Rosa. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería.
- 012 Risk Factors for Major Adverse Limb Events in Patients with Minor Amputations.** Crystal González Font, MS¹; Madelyn Zapata Valentín, MD²; Ana Rivera, MD³; Gabriel Pereira Torrellas, MD, FACS⁴; Jorge Martínez Trabal, MD, FACS⁵; Rafael Santini-Domínguez, MD, FACS⁶. ¹Universidad Central del Caribe, School of Medicine, Bayamón, PR; ²PGY-2 General Surgery Resident St. Luke's Medical Center, Ponce, PR; ³PGY-4 General Surgery Resident St. Luke's Medical Center, Ponce, PR; ⁴Vascular Surgeon, St. Luke's Medical Center, Ponce, Puerto Rico; ⁵Vascular Surgeon, St. Luke's Medical Center, Ponce, Puerto Rico; ⁶Vascular Surgeon, St. Luke's Medical Center, Ponce, Puerto Rico.



3rd. ORAL CONCURRENT SESSION

1:20 to 3:00 pm

Location: B 463 A (Room 13)

Graduate School of Public Health

4th floor, Dr. Guillermo Arbona Building

Moderator:

Félix J. Román Hernández, DNP, MSN, RN

Assistant Professor

Graduate Department

School of Nursing, UPR - Medical Sciences Campus

- 013 Evaluating Climate Risk for Puerto Rico's Elderly: A Spatial Vulnerability Analysis and Exposure.** Mónica V. Sánchez-Sepúlveda¹, Pablo A. Méndez Lázaro¹, Laura T. Cabrera Rivera¹, Manuel Heredia Morales¹, Pedro I. Matos Llavona², K. Stephen Hughes². ¹University of Puerto Rico, Medical Sciences Campus, Department of Environmental Health-Graduate School of Public Health, San Juan, Puerto Rico; ²Puerto Rico Landslide Hazard Mitigation Office, University of Puerto Rico Mayagüez, Department of Geology, Mayagüez, Puerto Rico.
- 014 Understanding Water Resources Management in Puerto Rico and the US Virgin Islands.** Pablo A. Méndez Lázaro¹, Gregory Guannel², Giovannie Echevarría Feliciano¹, Mairinete López Santiago¹, Dianivette Rolón Cruz¹, Laura T. Cabrera Rivera¹, Manuel Heredia Morales¹, Mónica V. Sánchez Sepúlveda¹, Erika I. Escabí Wojna¹. ¹University of Puerto Rico Medical Sciences Campus, Puerto Rico; ²University of Virgin Islands, United States.
- 015 Assessing Heat Vulnerability in the Municipality of Ponce: Combining Earth Observation Data and the Social Determinants of Health (SDH).** Laura T. Cabrera-Rivera¹, Manuel Heredia-Morales¹, Mónica V. Sánchez-Sepúlveda¹, Pablo A. Méndez-Lázaro^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus, School of Public Health, Department of Environmental Health; ²Cancer Biology Division and Environmental Translational Cancer Program, UPR-Comprehensive Cancer Center.
- 016 Environmental Contaminant Accumulation in the Gut of *Diadema antillarum* Across Four Puerto Rican Sites: A Metabolomics Study.** Karina Marín Hernández^{1,2}, Alejandra Vázquez Medina¹, Elif Kardas^{2,3}, Juliana Ruiz Barrionuevo⁴, Danniela Rivera Ortiz^{1,5}, Briana Bello Rivera^{1,2}, Marcos Quiñones Otero⁶, Ruber Rodríguez Barreras⁷, Claudia P. Ruiz-Díaz⁶, Carlos Toledo-Hernández⁶, Filipa Godoy Vitorino³, Nataliya Chorna¹. ¹Department of Biochemistry, University of Puerto Rico, School of Medicine, San Juan, PR; ²Department of Biology, University of Puerto Rico, Río Piedras Campus, San Juan, PR; ³Department of Microbiology, University of Puerto Rico, School of Medicine, San Juan, PR; ⁴Instituto de Ecología Regional, Universidad Nacional de Tucumán, Tucumán, Argentina; ⁵Interdisciplinary Department, University of Puerto Rico, Río Piedras Campus, San Juan, PR; ⁶Sociedad Ambiente Marino, San Juan, PR; ⁷Department of Biology, University of Puerto Rico at Bayamón, Bayamón, PR.
- 017 Cases of Imported Malaria in Puerto Rico (1992-2020): Low Incidence in a Tourism Hotspot.** Rafael A. Ortiz, Adelfa E. Serrano. University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.



45th Annual Research and Education Forum

4th. ORAL CONCURRENT SESSION

1:20 to 3:00 pm

Location: B 463 C (Room 15)

Graduate School of Public Health

4th. floor, Dr. Guillermo Arbona Building

Moderator:

Jorge Duconge Soler, PhD

Assistant Dean for Research and Graduate Programs

School of Pharmacy, UPR - Medical Sciences Campus

- 018 Synthesis, Structure, and In-Vitro Anti-Cancer Activity of (E)- and (Z)-2-Substituted-3-Carbazole-Acrylonitrile Hybrid Derivatives.** Maryangeli Calderón-Sánchez, Zulma Ramos, Eliud Hernández. University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmaceutical Sciences, San Juan, Puerto Rico.
- 019 Top-Down and Bottom-Up Metabolomics Pipeline Reveals Shared Neurogenic Metabolic Signatures Across In Vitro and In Vivo Models.** Alejandra Vázquez Medina¹, Karina Marín Hernández^{1,2}, Danniela Rivera Ortiz^{1,3}, Briana Bello Rivera^{1,2}, Sebastián Rodríguez Soto^{1,4}, David Ruiz Bolívar^{1,3}, Francisco Vizcarrondo^{1,2}, Brendimar Sierra Medina^{1,3}, Nataliya Chorna¹. ¹Department of Biochemistry, University of Puerto Rico, Medical Science Campus, San Juan, PR; ²Department of Biology, University of Puerto Rico, Río Piedras Campus, San Juan, PR; ³Interdisciplinary Department, University of Puerto Rico, Río Piedras Campus, San Juan, PR; ⁴Department of Chemistry, University of Puerto Rico, Río Piedras Campus, San Juan, PR.
- 020 Targeting Matrix Metalloproteinase-3 to Reverse Chemotherapy Resistance in High-Grade Serous Ovarian Cancer.** Víctor G. Reyes Burgos^{1,2}, Marienid Flores Colón^{1,2}, Eliud Hernández-O'Farrill², Luis E. Vázquez Colón³, Pablo E. Vivas Mejía^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus; ²University of Puerto Rico, Comprehensive Cancer Center; ³Interamerican University, Arecibo Campus.
- 021 Real-Time Analysis of Rac1 Activity: Effects of Cancer Inhibitors and Cellular Host Factors.** Sebastián A. Díaz Colón¹, Jessica Colón González², Myrna Morales¹, Yailiz A. Vélez¹, Ariana Rodríguez¹, Cornelis V. Vlaar³, Suranganie Dharmawardhane², Marvin J. Bayro¹. ¹Department of Chemistry and Molecular Sciences Research Center, University of Puerto Rico, Río Piedras Campus, San Juan, Puerto Rico; ²Department of Biochemistry, University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ³School of Pharmacy, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 022 Short-Chain Fatty Acids and Immune Phenotypes: Implications for HIV-Related Inflammation.** Jurelis Torres-Reyes¹, Juliana M. Serrano-Rodríguez^{1,2}, Kamila A. Andino-Del Valle¹, Stephanie M. Dorta-Estremera^{1,3}, Gabriel Borges-Vélez¹, Jeannette L. Salgado-Montilla¹, Josué Pérez-Santiago^{1,3}. ¹University of Puerto Rico, Comprehensive Cancer Center, San Juan, PR; ²University of Puerto Rico, Río Piedras Campus, San Juan, PR; ³University of Puerto Rico, Medical Science Campus, San Juan, PR.
- 023 Drug Delivery Using Layered Zirconium Phosphate Nanomaterials.** Jorge L. Colón, PhD. University of Puerto Rico, Río Piedras Campus, Department of Chemistry, San Juan, Puerto Rico.



Second Day – Thursday, April 10, 2025

REGISTRATION

8:00 to 9:00 am

*Location: Hallway & Foyer
adjacent to the School of Medicine Amphitheaters
3rd. floor, Dr. Guillermo Arbona Building*

PLENARY SESSION – SCHOOL OF DENTAL MEDICINE

9:00 to 10:00 am

*Location: School of Medicine Amphitheater I
3rd. floor, Dr. Guillermo Arbona Building*

Community Outreach for Health Across the Lifetime: Our Path to Action Oriented Transdisciplinary Research

Keynote Speaker:

Maribel Campos Rivera, MD, MSc, MBA-HCM, FAAP, Dipl ABOM, ABLM

Professor

School of Dental Medicine, UPR – Medical Sciences Campus

Moderator:

Augusto R. Elías Boneta, DMD, MSD

Assistant Dean of Research

School of Dental Medicine, UPR - Medical Sciences Campus

RECESS AND COFFEE BREAK

10:00 to 10:30 am

PLENARY SESSION – SCHOOL OF PHARMACY

10:30 to 11:30 am

*Location: School of Medicine Amphitheater I
3rd. floor, Dr. Guillermo Arbona Building*

Bridging the Evidence Gap to Support Healthcare Decision Making: The Case for Observational Studies

Keynote Speaker:

Homero A. Monsanto, RPh, PhD

Professor (*Ad Honorem*), Department of Pharmacy Practice,

School of Pharmacy, University of Puerto Rico

Professor, International Health Specialty,

Master in Public Health Program, Ponce Health Sciences University

Moderator:

Manuel Delgado Vélez, PhD

Assistant Professor

Pharmaceutical Sciences Department

School of Pharmacy, UPR - Medical Sciences Campus



45th Annual Research and Education Forum

2nd. POSTER SESSION

11:30 am to 1:00 pm

Location: Dr. Ramón Emeterio Betances Student Center

See the list of posters at the end of this program.

5th. ORAL CONCURRENT SESSION

1:20 to 3:15 pm

Location: A 469 (Room 3)

Graduate School of Public Health

4th. floor, Dr. Guillermo Arbona Building

Moderator:

Wilitza Martínez Rivera, PT, DPT, CGG

Assistant Professor

Physical Therapy Program

School of Health Professions, UPR - Medical Sciences Campus

- 024 The Effects of Physically and Affectively Exaggerating Hand Gestures on L2 Mandarin Tone Production.** Elizabeth Velázquez Fernández¹, Paige Ávila², Madeline Chernavsky³, Bailey Cooper⁴, Yukari Hirata⁴, Spencer D. Kelly⁴. ¹University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ²Grace Medical Home, Orlando, Florida, USA; ³Stony Brook Dermatology Associates, Stony Brook, New York, USA; ⁴Center for Language and Brain, Colgate University, Hamilton, New York, USA.
- 025 Supporting Occupational Therapists in Assistive Technology Service Delivery through Digital Tools.** Elsa M. Orellano-Colón, PhD¹; Frances E. Colón-Peña, OTS¹; Justin J. Hugger Olavarrieta, OTS¹; Karelisse Fernández Morales, OTS¹; Elizabeth M. Palleja Valentín, OTS¹; Yania M. Velázquez De Jesús, OTS¹; Abiel Roche-Lima, PhD². ¹University of Puerto Rico, Medical Sciences Campus, School of Health Professions, Occupational Therapy Program; ²University of Puerto Rico, Medical Sciences Campus, RCMI-RCC.
- 026 Factors Associated with Occupational Participation and Occupational Performance in a Sample of Students of Health Professions.** Arnaldo Cruz-Rivera, Génesis Burgos, Cynthia Freytes, Yarianna Moreno, Evelyn Rodríguez, Camille Torres. University of Puerto Rico, Medical Sciences Campus, School of Health Professions, San Juan, Puerto Rico.
- 027 Intervención sobre Aspectos Suprasegmentales a Pacientes con Disartria luego de un Accidente Cerebrovascular.** Verónica Andrea López Figueroa. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Profesiones de la Salud, Programa de Patología del Habla-Lenguaje, San Juan, Puerto Rico.
- 028 Procalcitonin in Veterans with HFpEF and Concomitant Pro Inflammatory Co-morbidities Hospitalized with Acute Decompensated HF.** María A. Cabrera-Echevarría^{1,5}; Sergio A. Vidal-Rosa, MS⁵; Stephanie Ortiz-Troche, MD⁴; Sonia Vicenty-Rivera, MD, FACC³; Ingrid Bonilla-Mercado, PhD^{1,2,5}. ¹University of Puerto Rico, Río Piedras Campus; ²University of Puerto Rico, School of Medicine, Department of Pharmacology and Toxicology; ³Veterans Affairs Miami, FL, Cardiology Department; ⁴Veterans Affairs Caribbean Healthcare System, Cardiology Department, San Juan, PR; ⁵Veterans Affairs Caribbean Healthcare System, Research and Development Department, San Juan, PR.



- 029 Empowering Anesthesia Care through Evidence-based Practice: Elevating Outcomes with High Flow Nasal Cannula in Obese Surgical Patients Undergoing General Anesthesia.** Wendy K. Mancia, Cadeem S. Marcelino, Jessie B. Valdez, Elfren A. Colón Rodríguez, Albert J. Albors, Milagros Figueroa. University of Puerto Rico, Medical Sciences Campus, School of Nursing.
- 030 Factors Contributing to Noncompliance with 60-minutes Door-to-Needle Time in Acute Ischemic Stroke Patients Treated with Tenecteplase in the UPR Hospital Emergency Department.** Víctor Ramos De Jesús, BS, MS-IV¹; Jael E. Camacho Matos, MD, PGY-2²; Juan González Sánchez, MD². ¹UPR School of Medicine; ²UPR School of Medicine, Emergency Medicine Department.

6th. ORAL CONCURRENT SESSION

1:20 to 3:00 pm

Location: A 491 (Room 9)

Graduate School of Public Health

4th. floor, Dr. Guillermo Arbona Building

Moderator:

Bianca A. Torres Hernández, PhD, MSc
Assistant Professor
Pharmaceutical Sciences Department
School of Pharmacy, UPR - Medical Sciences Campus

- 031 Incidental Discovery of Asymptomatic Pulmonary Artery Stenosis during Management of STEMI with Right Atrial Thrombus: A Case Study.** Eduardo S. Pérez, BS¹; Jorge F. García, BS²; Christopher A. Rodríguez, BS²; Edwin Rodríguez, MD³. ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ²San Juan Bautista School of Medicine, Caguas, Puerto Rico; ³Cardiovascular Center of Puerto Rico and the Caribbean, San Juan, Puerto Rico.
- 032 Right Shoulder Pain in a Female Water Polo Player: A Case of Paget-Schroetter Syndrome.** Pedro E. Rodríguez-Ortiz, MD, MPH¹; Saribel Torres-Ortiz, MD²; Fernando Zayas, MD²; William Micheo, MD¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Physical Medicine, Rehabilitation & Sports Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Family Medicine, San Juan, Puerto Rico
- 033 Subdural Hematoma and Traumatic Meningeal Enhancement in Patients with Acute Traumatic Brain Injury.** Alejandro Arbona-Lampaya^{1,2}; Nicole Peterkin¹; Lawrence L. Latour, PhD¹; L. Christine Turtzo, MD, PhD¹. ¹Acute Cerebrovascular Diagnostics Unit, National Institute of Neurological Disorders and Stroke, Bethesda, MD; ²University of Puerto Rico, School of Medicine, San Juan, Puerto Rico.



45th Annual Research and Education Forum

- 034 Ruptured Ovarian Cyst-Induced Hemoperitoneum Complicated by Antiphospholipid Syndrome and Antithrombin III Deficiency.** Adrian A. Naoun¹, Yandy García¹, Max Ramírez Vázquez¹, Raysa López Torres², Ernesto García³. ¹San Juan Bautista School of Medicine, Caguas, PR, USA; ²University of Medicine and Health Sciences, Basseterre, St. Kitts & Nevis; ³Hospital Menonita, Caguas, PR, USA.
- 035 A Complex Case of Congenital Anomalies: Diaphragmatic Hernia, Pulmonary Hypoplasia, and Hypoplastic Left Heart Syndrome in a Newborn.** Miriam Rivera Hernández, MD¹; Vicente Jiménez Llovera, MD¹; Amanda Díaz Méndez, MD¹; Génesis A. Sánchez, MD¹; Amarilis Rivera, MD². ¹San Juan City Hospital, Department of Pediatrics, San Juan, Puerto Rico; ²San Juan City Hospital, Department of Neonatology, San Juan, Puerto Rico.
- 036 Severe Hemolytic Anemia Reported at Birth: A Case Report.** Fiorella Raffucci Velázquez, MD; Katherine Carrero Martínez, MD; Norma Claudio, MD; Amarilis Rivera Marrero, MD; Israel Matías, MD; Álvaro Santaella, MD. Department of Neonatology, San Juan City Hospital, San Juan, Puerto Rico.

7th ORAL CONCURRENT SESSION

1:20 to 3:00 pm

Location: B 463 A (Room 13)

Graduate School of Public Health

4th floor, Dr. Guillermo Arbona Building

Moderator:

Carlos J. Cañuelas Pereira, EdD, CPL

Counselor II & Director

Student Center for Counseling and Psychology (CECSi)

UPR - Medical Sciences Campus

- 037 Social Determinants of Health Associated with Perceived Discrimination in Medical Settings among Cancer Survivors in Puerto Rico and Virginia.** Stephanie Cameron-Maldonado¹, Hilmaris Centeno-Girona¹, Marievelisse Soto-Salgado¹, Claudia X. Boneu¹, Claudia Rachid Batlle¹, Juan Diego González¹, Arnethea L. Sutton², Katherine Tossas², Robert Winn², Marcia Cruz-Correa^{1,3}. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico; ²Virginia Commonwealth University Massey Comprehensive Cancer Center, Virginia, United States; ³University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico.
- 038 Supporting Public Policy for Healthcare Transition Process from Pediatric to Adult Services for Special Health Care Needs Population.** Giannina López-Pérez^{1,2}, Carol Salas-Pagán¹, Mariela Avilés-Font^{1,2}, Ilia Torres-Avillán¹. ¹Institute on Developmental Disabilities, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Puerto Rico Family to Family Center.
- 039 Intimate Partner Violence among Hispanic Women in Puerto Rico during COVID-19 Pandemic.** Natalia Cárdenas-Suárez, Kvrismar González-Castillo, Josefina Romaguera. Department of Obstetrics and Gynecology, University of Puerto Rico.



- 040 Experiences of Violence Around the Time of Pregnancy: Prevalence and Associated Health Factors from the PR Pregnancy Risk Assessment Monitoring System.** Enid Quintana Torres, MD, MPH¹; Paola B. Giménez Cabranes, BS, MS²; Wilfredo J. Villafañe Ortiz, BS³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Family Medicine Department, San Juan, Puerto Rico; ²Ponce Health Sciences University, Ponce Campus, School of Medicine, Ponce, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 041 Abortion History and Its Impact on Depression in Mothers with Infants Admitted to the NICU.** Yessica E. Areche Serrano¹, Roberto Y. Rodríguez Lozada¹, Paula Román Villamil¹, Darielie L. Rivero Colón¹, Yelenis Díaz Vicioso¹, Keimaris Colón Díaz², Polaris González-Barrio³, Lourdes García Fragoso², José Martínez González³, Zayhara Reyes Bou², Inés García García². ¹University of Puerto Rico, Río Piedras Campus, Natural Sciences Faculty, Department of Biology, Río Piedras, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics, Neonatology Section, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Psychiatry, San Juan, Puerto Rico; ⁴Albizu University, Department of Clinical Psychology, San Juan, Puerto Rico.
- 042 Posttraumatic Stress Symptom Severity and Impairment Indicators in Minors Who Lived Traumatic Experiences with and without a History of Sexual Abuse.** Valeria S. Claudio-Rivera, BS; Eduardo Cumba-Avilés, PhD; Emily-Sáez-Santiago, PhD. University of Puerto Rico, Río Piedras Campus, Institute for Psychological Research, College of Social Sciences, San Juan, Puerto Rico.

8th. ORAL CONCURRENT SESSION

1:20 to 3:00 pm

Location: B 463 C (Room 15)

Graduate School of Public Health

4th. floor, Dr. Guillermo Arbona Building

Moderator:

Danilly Ramos Llera, MBA, MIS, EdD

Librarian I

Conrado F. Asenjo Library

UPR – Medical Sciences Campus

- 043 Exploración de Estrategias de Autocuidado Utilizadas por Profesionales de Enfermería.** Kathleen Manso Dávila, RN, BSN, MSNs; Débora N. Canales Santana, RN, BSN, MSNs. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería.
- 044 El Significado Atribuido por los Profesionales de Enfermería a la Experiencia de Cuidar Pacientes Moribundos y a sus Familiares.** Marta N. Almenas Hernández, EdD, MSN. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería.



45th Annual Research and Education Forum

- 045 "Todavía Están al Margen de Nuestra Conciencia los Niños con Deficiencias en el Desarrollo": Las Experiencias de un Grupo de Profesionales de Enfermería de Sala de Emergencia en la Identificación y el Reporte del Maltrato y Abuso Infantil.** Floridalia Vidal-Irizarry, DNS. Universidad Interamericana de Puerto Rico, Recinto Metropolitano, San Juan, Puerto Rico.
- 046 Enhancing HIV Care for Women in Puerto Rico: Addressing Barriers through Telehealth Integration.** Carmen D. Zorrilla, MD¹; Hiram Santiago, MPH²; Ana M. Mosquera, PhD²; Jessica Ibarra, MD²; Vicmarie Vargas, PhD²; Lourdes De Jesús². ¹Obstetrics and Gynecology Department, University of Puerto Rico School of Medicine, San Juan, Puerto Rico; ²Maternal Infant Studies Center (CEMI), Obstetrics and Gynecology Department, University of Puerto Rico School of Medicine, San Juan, Puerto Rico.
- 047 Tejiendo Colaboraciones para la Equidad en Salud: Investigación Participativa en Puerto Rico.** Edna Acosta Pérez, PhD, MSc¹; Yari Valle-Moro, DrPH, MPH, GCG²; Yashira Marie Sánchez Colón, PhD, MS³; Mayra Roubert Rivera, DrPH, MS³; Christine Miranda-Díaz, PhD, MPH⁴; Valeria M. Schleier Albino, BS¹; Carlamarie Noboa, PhD²; Enid García, MD²; Laura Vélez²; Marizaida Sánchez, PhD¹. ¹Graduate School of Public Health & Hispanic Alliance Clinical and Translational Research, University of Puerto Rico, Medical Science Campus; ²Hispanic Alliance Clinical and Translational Research, University of Puerto Rico, Medical Science Campus; ³Ponce Health Sciences University & Hispanic Alliance Clinical and Translational Research, University of Puerto Rico, Medical Science Campus; ⁴Universidad Central del Caribe & Hispanic Alliance Clinical and Translational Research, University of Puerto Rico, Medical Science Campus.
- 048 Co-Creación Serie Educativa ECHO Promotores de Salud Comunitaria.** Bridgette N. Troche Santana, Wilma Rivera Rodríguez, Anaís López Colón, Helena Gifford, Yaritza Arroyo, Israel Román, Karla Justiniano, María Virginia Carrasquillo, Frances K. Valentín, Miriam Matos, Aracelis Cruz, Gabriela A. Algarín Zayas, Marianyoly Ortiz, José F. Cordero. Fideicomiso de Salud Pública de Puerto Rico, un programa del Fideicomiso para Ciencias, Tecnología e Investigación de Puerto Rico.



Third Day – Friday, April 11, 2025

REGISTRATION

9:30 to 10:30 am

*Location: Hallway & Foyer
adjacent to the School of Medicine Amphitheaters
3rd. floor, Dr. Guillermo Arbona Building
Continental breakfast at the registration site*

PLENARY SESSION – SCHOOL OF HEALTH PROFESSIONS

10:30 to 11:30 am

*Location: School of Medicine Amphitheater I
3rd. floor, Dr. Guillermo Arbona Building*

The Role of Research in Improving Health. Type 2 Diabetes in 2025: A Global Disease

Keynote Speaker:

Dominic Reeds, MD

Professor of Medicine

Geriatrics and Nutritional Science

Director, Barnes Jewish Nutrition Support Service

Associate Dean of Research Goldfarb School of Nursing

Washington University School of Medicine

Moderator:

Lourdes E. Soto de Laurido, EdD, MPHE

Dean

School of Health Professions

UPR - Medical Sciences Campus

3rd. POSTER SESSION

11:30 am to 1:00 pm

*Location: Dr. Ramón Emeterio Betances Student Center
See the list of posters at the end of this program.*



45th Annual Research and Education Forum

9th. ORAL CONCURRENT SESSION

1:20 to 3:00 pm

Location: A 469 (Room 3)

Graduate School of Public Health

4th. floor, Dr. Guillermo Arbona Building

Moderator:

José R. Ubieta Santiago, MIS

Librarian I

Conrado F. Asenjo Library, UPR - Medical Sciences Campus

- 049 Empowering the Next Generation of Cancer Researchers: The Cancer Prevention and Control (CAPAC) Research Training Program in Puerto Rico.** Ana P. Ortiz, PhD, MPH^{1,2}; Nadia Centeno-Alvarado, MPHE, MPH¹; Mirza Rivera-Lugo, MS³; Lizbeth Medina, MS³; Marievelisse Soto-Salgado, DrPH, MS¹. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico; ²Department of Biostatistics and Epidemiology, Graduate School of Public Health, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ³Center for Evaluation and Sociomedical Research, Graduate School of Public Health, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 050 Advancing Health Research Through Library-Led Training: The *All of Us* Researcher Workbench Initiative at the University of Puerto Rico Medical Sciences Campus.** Efraín Flores Rivera¹, Charles W. Seguí Caballero¹, Abiel Roche Lima², Joshua S. Meléndez Berríos², José R. Ubieta Santiago¹, Danilly Ramos Llera¹, Pedro A. Del Valle López¹, Rossana Barrios Llorens¹, Teresa Meléndez Ayala¹, Arlene Cruz Zayas¹, María Santiago Hernández¹. ¹Conrado F. Asenjo Library, Medical Sciences Campus, University of Puerto Rico; ²RCMI Program, Medical Sciences Campus, University of Puerto Rico.
- 051 The Research Education Program on Microbes, Infections, and Cancer (REPMIC): Mentoring the Next Generation of Cancer Researchers.** Ana P. Ortiz^{1,2}, Tanialy Rivera-Santiago¹, Lizbeth Medina³, Marievelisse Soto-Salgado¹. ¹University of Puerto Rico, Comprehensive Cancer Center, Division of Cancer Control and Population Sciences, San Juan, Puerto Rico; ²University of Puerto Rico Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology; ³University of Puerto Rico Medical Sciences Campus, Graduate School of Public Health, Center for Evaluation and Sociomedical Research.
- 052 Innovación y Educación a Distancia: Experiencia en el Fortalecimiento de Programas Académicos a Distancia.** Luis E. Estremera De Jesús¹, Ivelisse García Meléndez², Ana Parrilla Rodríguez². ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Decanato de Asuntos Académicos; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública.
- 053 Video Games and Blood Pressure: Exploring Variations Before and After Play.** Pablo J. Agrait-Marrota¹; Lorenzo A. Torres-Figueroa¹; Angélica S. Sueiro-Colón¹; Emmanuel J. Rivera-Cuevas¹; Nuria I. Díaz-Fischbach¹; Julián A. Aponte¹; Valeria Rodríguez, BA¹; Alanis Maldonado, BS¹; Andrea P. Torres, BA^{1,2}; Alondra G. García, BA¹; Alejandro Villegas¹; Ismael Castillo-Reyes, PhD¹; Yamil O. Ortiz, PhD^{1,2}. ¹University of Puerto Rico, Río Piedras Campus; ²Centro de Investigaciones Sociales.



10th. ORAL CONCURRENT SESSION

1:20 to 3:15 pm

Location: A 491 (Room 9)

Graduate School of Public Health
4th floor, Dr. Guillermo Arbona Building

Moderator:

Ramón F. González García, DDS, MPH
Professor

School of Dental Medicine, UPR - Medical Sciences Campus

- 054 Promoting Dental Care Accessibility for the Special Needs Population in Puerto Rico through “Sonrisas Especiales”.** Belmarí Méndez Santiago, DMD. University of Puerto Rico, Medical Science Campus, School of Dental Medicine, General Practice Residency, San Juan, Puerto Rico.
- 055 Probiotic Intervention: Investigating the Tumor Suppressing Properties of Streptococcus salivarius K-12 in Oral Cancer.** Liz Ireiza Velázquez-Rivera¹, Anjanique Mercado-Feliciano³, Stephanie Dorta-Estremera, PhD^{1,2}. ¹University of Puerto Rico Medical Science Campus, School of Medicine, Department of Microbiology, San Juan, Puerto Rico; ²Comprehensive Cancer Center UPR, San Juan, Puerto Rico; ³University of Puerto Rico, Río Piedras Campus, San Juan, Puerto Rico.
- 056 Preconception Contraceptive and Folic Acid Consumption and the Risk of Orofacial Clefts.** Ana Pagán¹, Mairim Soto¹, Lydia López¹, María Salcedo¹, Natalio Debs¹, Azeez Butali², Carmen Buxó¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine, San Juan, Puerto Rico; ²University of Iowa College of Dentistry, Department of Oral Pathology Radiology and Medicine, Iowa City, Iowa.
- 057 Liquid Biopsies for Determining Molecular Resistance to Anti-EGFR Therapy in Patients with Metastatic Colorectal Cancer: A Case Series.** Miguel M. Girod, BS^{*1}; María C. Pérez, BS^{*1}; Kimil Acosta, MSc²; Marlys Massini, MS²; Roberto Barletta, MD^{2,4}; Noridza Rivera Rodríguez, MD^{1,2,4}; Hilmaris Centeno-Girona, MS³; Marcia Cruz-Correa, MD, PhD^{1,2,3,4}. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Internal Medicine, Division of Gastroenterology, Department of Biochemistry, Division of Hematology Oncology, San Juan, Puerto Rico; ²Pan American Center for Oncology Trials, San Juan, Puerto Rico; ³University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico; ⁴Isaac González Martínez Oncologic Hospital, San Juan, Puerto Rico. *Equal contribution of first authors.
- 058 Distinct Activation of Four Cell Death Pathways in Ischemia-Reperfusion Injury in Rat Hearts Subjected to Different Times of Reperfusion.** Valeria Villarín-Ayala, Josh Dávila-Matos, Jorge García-Báez, Sehwan Jang, Carlos Torres-Ramos, Sabzali Javadov. University of Puerto Rico, School of Medicine, Department of Physiology, San Juan, PR.
- 059 Exploring Ferroptosis Resistance in Human Brain Endothelial Cells and Microglia: Insights into Cellular Interactions.** Ian Olmeda¹, Liwei Lang², Zsolt Bagi². ¹Universidad Central del Caribe School of Medicine, Bayamón, PR; ²Physiology Department, Augusta University, Augusta, Georgia.



45th Annual Research and Education Forum

- 060 Apurinic/Apyrimidinic Endonuclease 1 (APE1) Activity in Blood from Huntington's Disease Patients.** Andrea Beauchamp Fábregas, María del Rocío Castro, Sylvette Ayala-Peña. University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pharmacology, San Juan, Puerto Rico.

11th ORAL CONCURRENT SESSION

1:20 to 3:15 pm

Location: B 463 A (Room 13)

Graduate School of Public Health

4th floor, Dr. Guillermo Arbona Building

Moderator:

Yancy Ferrer Acosta, PhD

Assistant Professor

Department of Anatomy & Neurobiology

School of Medicine, UPR - Medical Sciences Campus

- 061 Impact of High-Fat Diet-Induced Obesity on Steroid Hormone Receptor Expression in the Endometrial Stroma: Implications for Endometrial Hyperplasia.** Amanda G. López Espinosa¹, Ronald Chandler², Hilary Skalski², Shannon Harkins². ¹University of Puerto Rico, Humacao, Puerto Rico; ²Michigan State University.
- 062 Haptic Feedback and Gait Sensing with an Inflatable Soft Haptic Sensor.** Emiliano Quiñones Yumbla¹, Jahnav Rokalaboina², Amber Kanechika², Souvik Poddar³, Tolemy M. Nibi³, Wenlong Zhang². ¹University of Puerto Rico, Carolina Campus, Department of Engineering Technologies, Carolina, Puerto Rico; ²Arizona State University, School of Manufacturing Systems and Networks, Mesa, Arizona, United States of America; ³Arizona State University, School for Engineering of Matter, Transport and Energy, Tempe, Arizona, United States of America.
- 063 Novel Imaging Modalities for Diagnosing Brain Arteriovenous Malformations: A Systematic Review.** Joyce Campos, BS¹; Morsal Mosallami Aghili, MD²; Nicholas Kordic, BS²; Ali-Raza Hassan-Abdi²; Rithika Jayaraman²; Heshwin Singh, BS²; Sima Mofakham, PhD²; Charles Mikell, MD². ¹San Juan Bautista School of Medicine; ²Department of Neurosurgery, Stony Brook Medicine.
- 064 GABAergic Neurons in the Ventral Pallidum Balance Approach/Avoidance Conflict.** Alanis Delgado-Suárez¹, Cristina María-Ríos¹, Angelys Rivera-Hernández², Pamela Pérez-Vázquez³, Vanelisse Rivera-Marzán², José Pérez-Torres¹, Roberto Vázquez-Alicea², Christian Bravo-Rivera¹. ¹University of Puerto Rico, Medical Science Campus, School of Medicine Department of Anatomy and Neurobiology, San Juan, PR; ²University of Puerto Rico, Río Piedras Campus, San Juan, PR; ³University of Puerto Rico, Mayagüez Campus, Mayagüez, PR.
- 065 Transportation and Quality of Life in a Sample of College Students.** Ayelet Del Toro Comulada¹; Fabiana Rosado Rodríguez¹; Yalibeth Rivera González¹; Christian Hower Rodríguez¹; Bexaida Díaz Pérez¹, PhD. ¹University of Puerto Rico, Río Piedras Campus, Social Sciences Faculty, Department of Psychology, San Juan, Puerto Rico.



- 066 Type 1 Diabetes Youth with Childhood-Onset Versus Adolescent-Onset Depression Have Different Psychosocial and Health-Related Outcomes.** Mónica C. Nieves-Molina, HSDG; Eduardo Cumba-Avilés, PhD; Marleana M. Rolón-Sanfeliz, BA; Sebastián A. Quintana-Rodríguez, BA. University of Puerto Rico, Río Piedras Campus, Institute for Psychological Research, College of Social Sciences, San Juan, Puerto Rico.
- 067 Social Determinants of Obsessive-compulsive Symptoms and Depression among First-year Medical Students in Puerto Rico.** María del Mar Conde-Álvarez³; Matilde Grosso García²; Ricardo Calderón²; Alondra Soto²; Eliut Rivera-Segarra, PhD¹; Alíxida Ramos-Pibernus, PhD¹; Erik Vélez-Pérez¹. ¹Health Equity Research Lab, Ponce Health Sciences University, Ponce PR; ²University of Puerto Rico in Río Piedras, San Juan PR; ³University of Puerto Rico Graduate School of Public Health, Medical Sciences Campus, San Juan PR.

12th. ORAL CONCURRENT SESSION

1:20 to 3:15 pm

Location: B 463 C (Room 15)

Graduate School of Public Health

4th. floor, Dr. Guillermo Arbona Building

Moderator:

Zayhara Reyes Bou, MD, FAAP

Program Director

Neonatal-Perinatal Medicine

School of Medicine, UPR - Medical Sciences Campus

- 068 A Choice in Controversy: Surgical Intervention of a Pediatric Arachnoid Cyst.** Priscilla M. Dávila-Pérez, BS¹; Esteban R. Rivera-Rivera, BS¹; Iván J. Sosa, MD². ¹University of Puerto Rico, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, School of Medicine, Department of Neurosurgery, San Juan, Puerto Rico.
- 069 Raising Awareness for Early Amyotrophic Lateral Sclerosis Detection.** Frances Aponte-Caraballo, Sylvia Dávila-Nieves, Valerie Wojna, Brenda Deliz. University of Puerto Rico, Medical Sciences Campus, School of Medicine, Neurology Section, Caribbean Hispanic Amyotrophic Lateral Sclerosis Center for Clinical Trials, San Juan, Puerto Rico.
- 070 Adults with Diabetes in Puerto Rico During the Pandemic: Rates of Mental Disorders and Treatment.** Marleana M. Rolón-Sanfeliz, BA; Alexzandra Mojica-Román, BA; Eduardo Cumba-Avilés, PhD; Paola M. Rivera-Arroyo, BA; Sebastián A. Quintana-Rodríguez, BA. University of Puerto Rico, Río Piedras Campus. Institute for Psychological Research, College of Social Sciences, San Juan, Puerto Rico.



45th Annual Research and Education Forum

- 071 Community Health Workers Addressing Health and Social Gaps through Referrals.** Sandra L. Otero Morales, Gabriela A. Algarín Zayas, Marianyoly Ortiz, José F. Cordero. Puerto Rico Public Health Trust, Puerto Rico Science Technology and Research Trust.
- 072 Transition and Self-Efficacy of Adolescents with Irritable Bowel Disease (IBD): A Quantitative Retrospective Study.** Emanuel E. Díaz-Ortiz¹, Marilyn K. Simon², Karen Johson², Marcia Hill². ¹University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ²University of Phoenix, Arizona, USA.
- 073 Evaluación de la Viabilidad de la Implementación de Acciones de Responsabilidad Social Corporativa entre los Hospitales en Puerto Rico.** Karen Agosto Valentín, JD, MPH, DrPH HSAM, GCG; Ruth Ríos Motta, PhD, MS; Mario H. Rodríguez Sánchez, PhD, MSEH, MPH, MDiv; Roberto Ramírez García, PhD, MHSA. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Facultad de Ciencias Biosociales y Escuela Graduada de Salud Pública, Departamento de Administración de Servicios de Salud, San Juan, Puerto Rico.
- 074 Infection Prevention and Control at Mainland U.S. and Puerto Rican Home Health Agencies During COVID-19: A Mixed-Methods Study.** Jasmin R. Martínez, BS^{1,2}; Ashley M. Chastain, DrPH, MPH¹; Uduwanage G. E. Perera, PhD, MS¹; Robert Weech-Maldonado, PhD³; Patricia W. Stone, PhD, RN, FAAN, CIC¹; Jingjing Shang, PhD, RN, FAAN, OCN¹. ¹Columbia University School of Nursing, Center for Health Policy, New York, NY; ²Columbia University Mailman School of Public Health, Department of Epidemiology, New York, NY; ³University of Alabama at Birmingham, School of Health Professions, Department of Health Services Administration, Birmingham, AL.



PLENARY SESSION – DEANSHIP FOR ACADEMIC AFFAIRS

*School of Medicine Amphitheater I
3rd floor, Dr. Guillermo Arbona Building*

Wednesday, April 9, 2025

9:00 to 10:00 am

From Touch to Action: Neural Circuit Mechanisms of Tactile Processing and Behavior

Andrew Michael Seeds, PhD

Associate Professor

Director

Institute of Neurobiology

UPR - Medical Sciences Campus



Dr. Andrew Michael Seeds is an Associate Professor at the Institute of Neurobiology at the University of Puerto Rico Medical Sciences Campus, where he investigates how neurons in the brain connect to produce complex behavior. After earning his Ph.D. in Pharmacology from Duke University, Dr. Seeds conducted postdoctoral research at Janelia Research Campus of Howard Hughes Medical Institute, uncovering fundamental mechanisms of sensorimotor processing and behavioral sequencing. His lab integrates genetic, imaging, and computational tools to map and manipulate neural pathways that control highly coordinated grooming actions, shedding light on how networks in the brain orchestrate animal movement. A recipient of multiple grants, including a BRAIN Initiative award, Dr. Seeds is also a dedicated mentor and conference organizer, advancing the frontiers of neurobiology while fostering the growth of the next generation of scientists.

Conference summary:

How does the body translate a simple touch into a precise, location-specific response? This process involves the activation of specialized neural circuits, starting with sensory neurons that detect mechanical stimuli and progressing to the processing networks that integrate this information and generate appropriate behavioral responses. In our work, we investigate these circuits in detail, using tools like synaptic resolution electron microscopy, live imaging, and computational modelling to map the flow of activity and connectivity through these pathways. By studying these processes in fruit flies—an ideal model system for exploring neural circuit function—we uncover insights into the fundamental mechanisms that govern how the nervous system processes touch and drives behavior.

45th Annual Research and Education Forum

PLENARY SESSION – GRADUATE SCHOOL OF PUBLIC HEALTH

*School of Medicine Amphitheater I
3rd floor, Dr. Guillermo Arbona Building*

Wednesday, April 9, 2025

10:30 to 11:30 am

Essential Competencies for Public Health Teaching: A Regional Framework for the Americas



Lic. Gabriel Listovsky

Head of the Special Program
on Virtual Campus for Public Health
Department of Health Systems and Services
Pan American Health Organization

Gabriel Listovsky holds a bachelor's degree in educational sciences, a specialization in Trainer Training, and a master's degree in public health, all from the University of Buenos Aires, Argentina. He has extensive international experience in adult education within the workforce. He has worked as an instructional designer, tutor, and coordinator of various virtual education projects, with a particular focus on training healthcare personnel. He previously served as Director of Training and Development

at the Ministry of Health of the Government of the City of Buenos Aires. Currently, he is the Head of the Special Program for the Virtual Campus of Public Health within the Department of Health Systems and Services at the Pan American Health Organization (PAHO). The Virtual Campus of Public Health (VCPH) is PAHO's educational platform. Its mission is to lead strategic collaborative efforts among Member States and other partners in the Americas to promote human resource training in health, ensuring access to education for everyone, everywhere. Lic. Listovsky also contributed to the development of the Regional Framework of Teaching Competencies in Public Health.

Conference summary:

The Regional Framework of Teaching Competencies in Public Health is a joint initiative of the Virtual Campus for Public Health of the Pan American Health Organization and the Association of Schools and Programs of Public Health. This conference aims to present the collaborative process, the working methodology, and the resulting competencies that make up the framework, with the goal of promoting regional training practices in public health through the development of transversal competencies among educators. These competencies seek to foster debates and connect regional thinking and action in public and collective health with a transdisciplinary and participatory vision. The Regional Framework of Teaching Competencies in Public Health was developed through an iterative consultation process involving 123 experts from public health institutions and schools, primary care professionals, and pedagogy and teaching specialists from 19 Latin American countries. The framework consolidates 10 domains and 40 essential competencies, which are offered as a regional tool to be used from multiple perspectives.



PLENARY SESSION – SCHOOL OF DENTAL MEDICINE

*School of Medicine Amphitheater I
3rd floor, Dr. Guillermo Arbona Building*

Thursday, April 10, 2025

9:00 to 10:00 am

Community Outreach for Health Across the Lifetime: Our Path to Action Oriented Transdisciplinary Research

**Maribel Campos Rivera, MD, MSc, MBA- HCM
FAAP Dipl ABOM and ABLM**
Professor
School of Dental Medicine
UPR – Medical Sciences Campus



Dr. Maribel Campos Rivera is a board-certified physician-scientist in Pediatrics, Neonatal and Perinatal Medicine, Obesity Medicine, and Lifestyle Medicine, with expertise in healthcare administration and clinical research. A Robert Wood Johnson Interdisciplinary Research Leaders alumna, she has over 20 years of experience in clinical and translational research. She founded the Center for Community Outreach for Health Across the Lifespan at the UPR School of Dental Medicine and has mentored trainees to address social determinants of health. Her research focuses on fetal and early childhood exposures and their lifelong health effects. She has led community health initiatives, spoken at the White House Conference on Hunger, and serves on the President's Council on Sports, Fitness, and Nutrition. Formerly a NICU Medical Director, she founded Emerge, a public benefit corporation for integrated family-centered healthcare.

Conference summary:

As a Physician Scientist with a broad network of collaborators, Dr. Maribel Campos-Rivera has led and/or collaborated with the implementation of research to transform health services. Her contributions range from achieving the only Neonatal Intensive Care Unit with rooming-in services in Puerto Rico, leading an interdisciplinary team of volunteers deployed to provide services during the aftermath of Irma and Maria while supporting government agencies in the development of and adaptation of their action plans to address the needs of the communities we serve. Her focus on the developmental origins of health and disease has provided a framework for her contributions to research across the lifespan and her partnership with community-based organizations to develop and implement action-oriented projects. Our contributions to the Voices for Healthy Kids efforts to inform the campaign to improve existing food security programs deepened the narrative and dissemination strategies used by the Institute for Youth Development and Furia, Inc. as partners of the advocacy program. She is the Principal Investigator of Semilla, a transdisciplinary STEM+M capacity-building program that has been implemented in partnership with the Mayo Clinic and Boys and Girls Clubs of Puerto Rico. This work has provided the opportunity for stakeholders of diverse age groups, affiliations, and backgrounds to join as members of the SemillaPR Community to address the impact of toxic stress for all.

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PLENARY SESSION – SCHOOL OF PHARMACY

*School of Medicine Amphitheater I
3rd floor, Dr. Guillermo Arbona Building*

Thursday, April 10, 2025

10:30 to 11:30 am

Bridging the Evidence Gap to Support Healthcare Decision Making: The Case for Observational Studies



Homero A. Monsanto, RPh, PhD

Professor (Ad Honorem), Department of Pharmacy Practice,
School of Pharmacy, University of Puerto Rico
Professor, International Health Specialty,
Master in Public Health Program, Ponce Health Sciences University

Dr. Homero A. Monsanto holds a B.S. in Pharmacy from the University of Puerto Rico, an M.S. and Ph.D. in Pharmacy Administration from Purdue University, and an Advanced Certificate in Health and Public Policy from the University of Maryland, Baltimore County. He began his career as a community pharmacist and later joined the faculty of the UPR School of Pharmacy, where he is now a Professor (Ad Honorem). He worked at

Merck & Co., Inc. as Outcomes Research Manager and later as Director of Market Access for Puerto Rico and the Caribbean. In 2014, he transitioned to regional roles in Latin America, supporting observational studies on vaccine-preventable diseases, diabetes, and infectious diseases. After retiring in 2022, he now collaborates with the UPR School of Pharmacy, VOCES Puerto Rico, and the Master of Public Health program at Ponce Health Sciences University.

Conference summary:

Real-world evidence (RWE) is increasingly being used to bridge the gap between evidence generation and actionable decision-making, such as regulatory and reimbursement decisions for new technologies. RWE studies use existing data to answer research questions. They are used as a complement to randomized clinical trials (RCTs) to generate deeper insights into treatment effectiveness, expand findings to broader patient populations, and improve decision-making across diverse settings. This presentation will highlight the importance of real-world observational studies in addressing public healthcare problems by providing examples of different types of studies that can be conducted within the evidence ecosystem, discussing their advantages and limitations, and describing tools for their evaluation. The presentation will end with a few examples drawn from observational studies conducted in Puerto Rico.



PLENARY SESSION – SCHOOL OF HEALTH PROFESSIONS

*School of Medicine Amphitheater I
3rd floor, Dr. Guillermo Arbona Building*

Friday, April 11, 2025

10:30 to 11:30 am

The Role of Research in Improving Health: Type 2 Diabetes in 2025 – A Global Disease

Dominic Reeds, MD

Professor of Medicine
Associate Dean of Research, Goldfarb School of Nursing
Director Barnes Jewish Hospital Nutrition Support Service
Geriatrics and Nutritional Science



Dr. Dominic Reeds received his undergraduate degree in biochemistry from the University of Texas at Austin. He completed his doctorate in medicine at Texas Tech University Health Sciences Center and his residency and chief residency in Internal Medicine at the University of Rochester, New York. He subsequently completed a fellowship in endocrinology, diabetes and metabolism at Washington University School of Medicine in St. Louis, Missouri in 2003. Dr Reeds has several NIH grants centered on workforce development, training, and diabetes prevention and management within the United States and globally. He is nationally known for his expertise in diabetes and nutrition.

Conference summary:

Type 2 diabetes has ceased being a disease of affluent, high-income countries and is emerging as a major health threat. This condition afflicts 500 million people globally and will increase to 750 million by 2045. Unfortunately type 2 diabetes is increasing not only in young people but in low- and middle-income countries (LMIC); indeed, ¾ of people with diabetes live in LMICs. For more than 70 years, type 2 diabetes has been viewed as a disease caused by obesity and inactivity however recent studies show that this is a heterogeneous disease with a variety of causes in differing populations. In order to address this emerging epidemic, there will have to be a global commitment to increase the number of healthcare workers and efforts to train researchers to better understand the causes of type 2 diabetes in differing populations. This workforce will require skillsets ranging from basic cellular methods to implementation studies. Dr. Reeds will discuss differing presentations of type 2 diabetes from across the globe, the underlying pathophysiology and the unanswered questions of this global emergency. He will also discuss training opportunities and pathways for scholars interested in becoming engaged in research in diabetes and nutrition.

Acknowledgement: UPR MSC Endowment Hispanics in Research Capability: SoHP & SoM Partnership (HIREC), NIH /NIMHD S21MD001830



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1ST. POSTER SESSION

*Dr. Ramón Emeterio Betances Student Center
UPR - Medical Sciences Campus*

Wednesday, April 9, 2025

11:30 am to 1:00 pm

- 075 Integrando Salud Ambiental en la Guía Curricular del Sistema Público de Enseñanza Puertorriqueño: Promoviendo Estilos de Vida Saludables.** Eduardo M. Llegus-Santiago¹, Gilmarie Rivera-Castellar², José Norat-Ramírez¹. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Departamento de Salud Ambiental, San Juan, Puerto Rico; ²Organización Reverdece y Educa tu Comunidad, Ponce, Puerto Rico.
- 076 A Unique Anatomical Variant of the Fibularis Brevis Muscle Tendon with the Presence of an Accessory Band and its Clinical Implications.** Jorge C. Carrillo; Eliomar Ros; Wilson Veras, MD. San Juan Bautista School of Medicine, Caguas, PR.
- 077 Prevalence of Comorbidities and Factors Associated among a Sample of Hispanic Cancer Survivors in Puerto Rico.** Alejandra Díaz-Rohena, BS^{1,2}; Karina Rivera-Mejía, BS, MPH¹; Lorena González- Sepúlveda, MS^{1,3}; Yadielis Arce-Rivera⁴; Noedly Ayala- Sánchez⁴; Natalia Domínguez-Betancourt⁵; Liamarys Ortiz-Torres, BS¹; María Vázquez- Torres, BS¹; Stephanie Cameron-Maldonado, MS¹; Marievelisse Soto-Salgado, MS, DrPH¹. ¹University of Puerto Rico, Comprehensive Cancer Center, San Juan, PR; ²University of Puerto Rico, Medical Science Campus, School of Medicine, San Juan, PR; ³University of Puerto Rico Medical Sciences Campus, Graduate School of Public Health, San Juan, PR; ⁴University of Puerto Rico, Cayey Campus, Cayey, PR; ⁵University of Puerto Rico, Río Piedras Campus, San Juan, PR.
- 078 Optimizing Perioperative Anesthesia Handoff: Implementing an Evidence-Based Tool for Enhanced Compliance and Patient Safety.** Danisha Ayala-Ruiz, Mathew J. Marín-Pagán, Elizabeth M. Ramos-Ramos, Sherily Pereira-Morales, José L. Bonilla- García, Milagros I. Figueroa-Ramos. University of Puerto Rico, Medical Sciences Campus, School of Nursing.
- 079 Hypocomplementemic Urticarial Vasculitis: A Rare Manifestation of SLE.** Shakira Bou Rolón, BS¹; José R. González Chávez, MD, FAAD². ¹San Juan Bautista School of Medicine, Caguas, PR; ²Private Practice, San Juan, PR
- 080 Extraño Caso de Colangiocarcinoma Intrahepático en Joven de 23 años con Metástasis en Vértebra, Pulmones, Pleura y Cerebro.** Adamaris Maldonado-Irizarry¹, Yadiris López-Rivera¹, Jessyca Santiago^{2,3}, María Marcos-Martínez^{2,3}, Aracelly Rivera³, Astris Pérez³, Ivanisse Ortiz Vélez⁴, Ricardo Fernández⁴. ¹University of Puerto Rico, Recinto de Ciencias Médicas, Escuela de Profesiones de la Salud, Programa de Citotecnología, San Juan, Puerto Rico; ²University of Puerto Rico, Recinto de Ciencias Médicas, Escuela de Medicina, Departamento de Patología y Medicina de Laboratorio, San Juan, Puerto Rico; ³Laboratorio de Patología-ASEM, Centro Médico de Puerto Rico, San Juan, Puerto Rico; ⁴Pneumología y Medicina de Cuidado Crítico, Hospital San Juan, San Juan, Puerto Rico.



- 081 Pembrolizumab-Induced Hypertrophic Lichen Planus with Oral and Nail Manifestations: A Rare Immune-Related Adverse Event.** Natalia M. Pelet del Toro, MD¹; Claudia Dubocq Ortiz, BS²; Francisco Colón Fontáñez, MD¹. ¹University of Puerto Rico Medical Sciences Campus, Department of Dermatology; ²University of Puerto Rico Medical Sciences Campus, School of Medicine.
- 082 Association between Loneliness and Suicidal Behavior in a Representative Sample of 6th-12th Grade Students, Puerto Rico, 2022-24.** Linnette Rodríguez-Figueroa¹, Margarita R. Moscoso-Álvarez², Juan C. Reyes-Pulliza¹, Héctor M. Colón¹. ¹Department of Biostatistics and Epidemiology, Graduate School of Public Health, University of Puerto Rico, San Juan, Puerto Rico; ²Department of Family Medicine, School of Medicine, Universidad Central del Caribe, Bayamón, Puerto Rico.
- 083 Exogenous GJA1-20k Rescues Gap Junction Formation in Cardiomyocytes with Desmoplakin Knock-Down.** Jeremy J. González¹, Daisuke Shimura², Mario Maalouf², Robin M. Shaw². ¹University of Puerto Rico, Medical Science Campus, San Juan, Puerto Rico; ²Nora Eccles Harrison Cardiovascular Research and Training, University of Utah, Salt Lake City, UT, United States.
- 084 Social Determinants of Health Associated with Perceived Social Support among Cancer Survivors Living in Puerto Rico.** Natalia Domínguez-Betancourt¹, María Vázquez-Torres³, Stephanie Cameron-Maldonado³⁻⁴, Lorena González-Sepúlveda³, Karina Rivera-Mejía³, Liamarys Ortiz-Torres², Noedly Ayala-Sánchez², Yadielis Arce-Rivera², Alejandra Díaz Rohena⁵, Marievelisse Soto-Salgado³. ¹University of Puerto Rico Rio Piedras Campus, San Juan, PR; ²University of Puerto Rico Cayey Campus, Cayey, PR; ³University of Puerto Rico Comprehensive Cancer Center, San Juan, PR; ⁴University of Puerto Rico Medical Sciences Campus, Graduate School of Public Health, San Juan, PR; ⁵University of Puerto Rico Medical Sciences Campus, School of Medicine, San Juan, PR.
- 085 A Case Report of a Toddler with Chronic Renal Disease in Shock: Suspected MIS-C Presentation.** Gabriela K. Gibbs-Vargas, BS²; Jayson Cotto-Del Valle, BS²; Andrés E. Fossas-De Mello, BS²; Keishla M. Figueroa-Colón, MD¹; Charles Castro, MD¹; Ricardo L. García, MD¹. ¹University of Puerto Rico-School of Medicine, Department of Pediatrics, San Juan, PR; ²Universidad Central del Caribe-School of Medicine, Bayamón, PR.
- 086 Erinacine as a Potential Immune Modulator in T-Lymphocytes for Counteracting HIV-1 Infection.** Nashalie M. Hernández Paniagua²; Abigail M. Rivera-Berganzo²; Glamiris Rosario-Sanfiorenzo³; Giovanni O. Alicea-Pérez³; Ileanmarie Santana-Costas²; Victoria Bermúdez-Fosse²; Naiara Hernández²; Fabiola I. Colón-Santiago¹; Khristian R. Belavan Rosado²; Betsy Santos²; Jeshua J. Colón²; Amanda C. Rivera²; Andrea S. Rodríguez De La Rosa²; Elaine Ruiz⁴; Eduardo Alvarez-Rivera, PhD¹. ¹Department of Microbiology and Immunology; ²Department of Science and Technology, Universidad Interamericana de Puerto Rico, San Juan; ³Department of Biology, Universidad de Puerto Rico, Bayamón; ⁴Department of Medical Images Technology, Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico.
- 087 Glucocorticoid and Aryl Hydrocarbon Receptors Signaling in Osteoblasts: Crosstalk and Implications for Bone Health.** Corally López¹, Husam Bensreti², Colby Gross², Dima Alhamad², Alok Tripathi², Shabiha Sultana², Christopher L. Yearwood², Jennifer Dorn², Caihong Dai², Wendy B. Bollag², Carlos M. Isales², Meghan E. McGee-Lawrence². ¹Universidad Central del Caribe; ²Augusta University Medical College of Georgia.



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- 088 New-Onset Seizures as the Manifestation of a Cerebral Abscess Due to Odontogenic Bacteria: A Clinical Case Report.** Ian Báez-Martínez¹, Gary A Toranzos¹, Frankie Báez-Matos², Bernard Christenson³. ¹University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences, Department of Biology, San Juan, Puerto Rico; ²Auxilio Mutuo San Pablo Hospital, Neurosurgery Section, Bayamón, Puerto Rico; ³Auxilio Mutuo San Pablo Hospital, Department of Internal Medicine, Infectious Diseases Section, Bayamón, Puerto Rico.
- 089 Evaluating a Deep Learning Model for Optic Nerve Axon Counting.** Génesis Alina Otero-Rivera^{1,3}, Benjamin Mitchell, MS²; Michael Robichaux, PhD²; Joel R. Palko MD². ¹University of Puerto Rico, Río Piedras Campus; ²West Virginia University, Department of Ophthalmology and Visual Sciences, Morgantown, WV; ³Summer Undergraduate Vision Research Fellowship, West Virginia University, Morgantown, WV.
- 090 Structural Flexibility of the HIV-1 Capsid Analyzed by NMR Spectroscopy.** Raixie Meléndez¹, Jeremy J. González¹, Guivert Michele², Marvin J. Bayro². ¹University of Puerto Rico-Medical Science Campus, School of Medicine, Department of Medicine, San Juan, PR; ²Department of Chemistry, Molecular Sciences Research Center, University of Puerto Rico, Río Piedras Campus, San Juan, PR.
- 091 Readiness, Perceptions, and Barriers to Implementing Area Under the Curve-Based Vancomycin Monitoring in Puerto Rican Hospitals.** Jorge A. Rodríguez¹, Rachelle Crespo¹, Wesley Kufel², Sayel Rivera¹. ¹University of Puerto Rico, Medical Sciences Campus, Department of Pharmacy Practice, San Juan, Puerto Rico; ²Binghamton University, School of Pharmacy and Pharmaceutical Sciences, Department of Pharmacy Practice, Binghamton, New York.
- 092 Calcium Scoring and Beta-Amyloid Detection on Rat Cardiovascular Disease Models: Transforming Coronary Artery Disease Screening in Women.** Raymond Sánchez-Robles¹, Sofía Sánchez-Franceschini², Dennise M. Parapar-Anzalota³, Mikhail Inyushin⁴, Janaina M. Alves³, Juan Pérez-Ocasio⁵, Quiriat J. Torres-Rosario⁵. ¹School of Medicine, University of Puerto Rico - Medical Sciences Campus, PR, 00921, U.S.A; ²School of Medicine, Universidad Central del Caribe, Bayamón, PR, 00960, U.S.A; ³Dept. of Microbiology & Immunology, Universidad Central del Caribe, Bayamón, PR, 00960, U.S.A; ⁴Dept. of Physiology, Universidad Central del Caribe, Bayamón, PR, 00960, U.S.A.; ⁵Dept. of Medical Images and Technology, Universidad Central del Caribe, Bayamón, PR, 00960, U.S.A.
- 093 Riché-Cannieu Anastomosis at San Juan Bautista School of Medicine, in Caguas PR. A Cadaveric Study.** Mileny E. Cedeño Landi¹; David X. Carmona Burgos¹; Carmen Hernández, MD¹; Wilson R. Veras T., MD¹. ¹San Juan Bautista School of Medicine, Department of Anatomy, Caguas, Puerto Rico.
- 094 An Integrative Evidence-Based Approach for Hypotension Control in Spinal Anesthesia.** Adnan Rodríguez Rivera, Ángel Santana Ortiz, Wilfredo Velasco Vargas. University of Puerto Rico, Medical Sciences Campus, School of Nursing, Doctor of Nursing Practice with Specialty in Anesthesia Program.
- 095 Políticas Públicas y Prevención de Riesgos Ocupacionales en Puerto Rico: Un Análisis Crítico de Retos y Oportunidades.** Eduardo A. Matos Vidal. Centro de Estudios del Trabajo y las Relaciones Laborales (CET-RELA), Instituto de Relaciones del Trabajo, Facultad de Ciencias Sociales, Universidad de Puerto Rico, Recinto de Río Piedras.



- 096 Causas Principales de Mortalidad entre Hombres Jóvenes en Puerto Rico entre 2015 y 2019.** Alejandra Achaval, Gabriela Carrasquillo y Ana Luisa Dávila. Programa de Demografía, Escuela Graduada de Salud Pública, UPR – Recinto de Ciencias Médicas.
- 097 Patrones de Acceso y Utilización de Servicios de Salud: Estudio Transversal en la Comunidad de La Perla, San Juan, Puerto Rico.** Mariela Torres Cintrón, DrPH; Ruth Ríos Motta, PhD; Juan Negrón Ayala, PhD; Natalia Antúnez Serrano; Alejandro Carro Mendoza; Gloria Cuevas Rodríguez; Victoria Finkel Aguilar; Jessica Jaramillo Criado; Gabriel A. Laracuenta Toro; Ámbar Marrero Sierra; Jeymeliz Martes Vargas; Kariely Martínez Gómez; Tatiana Martínez Merle; José Mercado Navarro; Fabiola Morales Muñiz; Raymond Robles Laguna; Juleika L. Torres O' Neill; Sofía Vega Mercado; Marisol Peña Orellana, EdD, MSc. University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Health Services Administration, San Juan, Puerto Rico.
- 098 Expression of the Neuropeptide Myomodulin in the CNS of *Biomphalaria Glabrata*, an Intermediate Host for Human Schistosomiasis.** Andrea I. Franco-Martínez, Natali M. Colón-Santiago, Mark W. Miller^{1,2}. ¹Institute of Neurobiology and ²Department of Anatomy & Neurobiology, University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 099 Compliance with the 60-Minute Treatment Goal in Acute Ischemic Stroke Patients Treated with Tenecteplase at the Hospital UPR Emergency Department.** Jael E. Camacho Matos, MD, PGY-2; Víctor Ramos De Jesús, BS, MS-IV; Juan González Sánchez, MD. Emergency Medicine Department, UPR School of Medicine.
- 100 Unveiling the Hidden Culprit: Undetected Perforator Vein Incompetence Responsible for a Case of Recalcitrant Leg Ulcers.** Adrian A. Naoun^{1,2}, Carol Sánchez Santana¹, Srinivas Rao². ¹Department of Medicine, San Juan Bautista University, Caguas, PR, USA; ²Texas Vein & Wellness Institute, Houston, TX, USA.
- 101 Análisis del Turnover en Hospitales Académicos de Puerto Rico: Un Estudio de Casos.** Griselle Hernández Rivera, Ruth Ríos Motta, Mario H. Rodríguez Sánchez, Heriberto Marín Centeno, Mariela Torres Cintrón. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, San Juan, Puerto Rico.
- 102 Mitochondrial DNA Abundance Is Reduced in Whole Blood from Huntington's Disease Patients and People at Risk.** Sebastián E. Vidal¹, María del Rocío Castro² and Sylvette Ayala-Peña². ¹University of Puerto Rico, Río Piedras Campus, Faculty of Natural Science, Department of Biology, Río Piedras, PR; ²University of Puerto Rico, Medical Sciences Campus, Department of Pharmacology and Toxicology, San Juan, PR.
- 103 Detection of H5N1 Virus in Pasteurized Commercial Milk and Surveillance in Response to Outbreaks in US Dairy Cattle.** Elyse Stachler¹, Kyle McMahon¹, Charelisse P. Guevara-Reyes^{1,2}, Pardis Sabeti^{1,3}. ¹Broad Institute of MIT and Harvard, Cambridge, MA; ²UPR Río Piedras Campus, San Juan, PR; ³Harvard University, Boston, MA.

- 104 Abordando el Tabaquismo: Iniciativa Liderada por Promotora de Salud Comunitaria en Puerto Rico.** María L. Colón Berríos, Bridgette Troche Santana, Paola Figarella Canario, Lizeiry M. Rivera Angulo, Frances K. Valentín Vázquez, Gabriela A. Algarín Zayas, Marianyoly Ortiz-Ortiz, José Cordero. Fideicomiso de Salud Pública de Puerto Rico, un programa del Fideicomiso para Ciencias, Tecnología e Investigación de Puerto Rico.
- 105 Atypical Presentation of Primary Cutaneous Diffuse Large B-Cell Lymphoma, Leg Type: A Case Report.** Natalia Pelet del Toro, MD¹; Claudia Dubocq Ortiz, BS²; Diana Valentín Colón, MD, FAAD³. ¹Department of Dermatology, University of Puerto Rico School of Medicine; ²University of Puerto Rico School of Medicine; ³Department of Dermatology, University of Puerto Rico School of Medicine.
- 106 Bariatric Surgery in People Living With HIV: A Retrospective Chart Review.** María F. Rojas^{1,2}, Ola Mohamed², William R. Short², Pablo Tebas². ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²University of Pennsylvania, Philadelphia, Pennsylvania, United States of America.
- 107 Protocolo Hospitalario para el Manejo de Pérdida en la Unidad Neonatal de Cuidado Intensivo: Apoyo a los Padres.** Zilkia M. Rivera-Orraca, PhD, PMH-C¹; Liza C. Sánchez-Plazas, MD, FAAP²; Marianela Rodríguez-Reynaldo, PhD, PMH-C³; Amalie Torres-Domínguez, MSW¹; María E. Centeno-Ramos, MPH¹; Nereida Santana, BSN¹; Lourdes García-Fragoso, MD, FAAP². ¹Hospital Pediátrico Universitario, San Juan, Puerto Rico; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Medicina; ³Departamento de Salud, San Juan, Puerto Rico.
- 108 Chemotherapy-Induced Pancytopenia and Idiopathic Immune Thrombocytopenia in a Breast Cancer Patient with HPV-Associated Squamous Cell Carcinoma: Challenges in Diagnosis and Management.** Marcel Grau Rodríguez, BS¹; Sebastián Hernández Candelario, BS¹; Héctor Mercado, MD^{1,2}. ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ²Hospital Universitario Ramón Ruiz Arnau, Bayamón, Puerto Rico.
- 109 Initial Experience with 5-Aminolevulinic Acid (5-ALA) Fluorescence-Guided Surgery for Glioblastoma in Puerto Rico.** Odaly S. Balasquide Odeh, BS¹; Carlos E. Calderón Valero, BS, MS¹; Esteban Rivera, BS¹; Gianni Morales, BS¹; Miguel Mayol Del Valle, MD². ¹University of Puerto Rico School of Medicine; ²The Section of Neurological Surgery of the University of Puerto Rico School of Medicine.
- 110 Rising Myelomeningocele Incidence in Puerto Rico May be Linked to Ineffective Sexual Education and Prevention Planning.** Eric Pérez, BS; Natasha L. Frontera, MD; Miguel Mayol del Valle, MD; Ashlie Maldonado-Pérez, MD; Michael Ortiz, MD; Juan Vigo, MD. University of Puerto Rico Medical Sciences Campus, School of Medicine, Department of Neurosurgery, San Juan, Puerto Rico.
- 111 A Computational Investigation on the Validity of Mean Arterial Pressure Formulas.** Mía Fraile Merediz, Alanis Vu Vicente, Yurimar de Jesús Mansueta, Mathew Mojer, Patricia Arroyo Galarza, Francisco Arencibia-Albite. Universidad del Sagrado Corazón, Escuela de Salud y Ciencias, San Juan, Puerto Rico.



- 112 Localization of Caudodorsal Cell Hormone (CDCH)-like Expression in the Central Nervous System of Biomphalaria, an Intermediate Snail Host for Human Schistosomiasis.** Yaniushka Fernández Roche³, Natali M. Colón-Santiago¹, Mark W. Miller^{1,2}. ¹Institute of Neurobiology; ²Department of Anatomy & Neurobiology, University of Puerto Rico, Medical Sciences Campus, San Juan, PR; ³University of Puerto Rico, Río Piedras Campus.
- 113 Hexanoate Reduces the Viability of Oral Squamous Cell Carcinoma Model.** Oscar A. Loperena González¹, Ángel J. Amaral-Maisonet^{1,2}, Jeannette L. Salgado-Montilla¹, Gabriel Borges-Vélez¹, Josué Pérez-Santiago^{1,3}. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, PR; ²University of Puerto Rico, Río Piedras Campus, San Juan, PR; ³University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 114 Social Isolation and its Role in Clinical Trial Awareness among Hispanic/Latino and Black Cancer Survivors in Puerto Rico and Virginia.** Claudia X. Boneu¹, Hilmaris Centeno-Girona¹, Marievelisse Soto-Salgado¹, Stephanie Cameron-Maldonado¹, Claudia Rachid Batlle¹, Juan Diego González-Mayoral¹, Arnethea L. Sutton², Katherine Tossas², Robert Winn², Marcia Cruz-Correa^{1,3}. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, PR; ²Virginia Commonwealth University Massey Comprehensive Cancer Center, Virginia, US; ³University of Puerto Rico Medical Sciences Campus, School of Medicine, Department of Biochemistry and Surgery, San Juan, Puerto Rico.
- 115 Clinical and Pathological Analysis of Mucoepidermoid Carcinoma in a Parotid Tumor: A Case Study.** Vianca M. Ortiz Rivera¹; Yadiris López-Rivera, DrPH, CT(ASCP)¹; Jennifer Correa, CT(ASCP)²; Javier Rodríguez-Becerra, MD². ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Profesiones de la Salud - Programa de Citotecnología; ²Atlantic Pathology Manatí, Puerto Rico.
- 116 Unveiling the Silent Sinus Syndrome: A Familial Case Series Exploring Chronic Maxillary Atelectasis and the Potential Genetic Link.** Giovanni E. Pérez-Ortiz, MD¹; Antonio Burés, MD¹; Ana L. Melero-Pardo, MS²; Francisco Garratón, MD¹; Gabriel A. Hernández-Herrera, MS³; Juan C. Portela-Arraiza, MD¹. ¹University of Puerto Rico, Medical Sciences Campus, Department of Otolaryngology, San Juan, PR; ²Universidad Central del Caribe, School of Medicine, Bayamón, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR.
- 117 Expanding Research Opportunities for Second-Year Medical Students: The First RCM MS2 Annual Summer Research Symposium.** Estefanía Rivera Pedraza¹; Andrea Rivera Rosario¹; Natalia Alvarado Ramos¹; María J. Crespo, PhD^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 118 Characterizing Immune Responses in Cervical Cancer Progression in Hispanic Women.** Aryanne C. Torres Ventura¹; Jorge R. Galán Ortiz²; Diana Viridiana Flores³; Kamila A. Andino-del Valle⁴; María de L. Ramos-Alvarado⁵; Mía Badillo⁶; Sharee Umpierre, MD²; Madison O'Hara, BS⁷; Lauren Colbert, MD⁷; Josefina Romaguera, MD²; Jagannadha K. Sastry⁷; Stéphanie M. Dorta-Estremera^{1,2}. ¹University of Puerto Rico Medical Sciences Campus, Department of Microbiology; ²University of



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Puerto Rico Comprehensive Cancer Center Clinical and Translational Research Division; ³Keck School of Medicine of USC, Department of Population and Public Health Sciences; ⁴San Juan Bautista Medical School; ⁵Universidad Central del Caribe; ⁶University of Puerto Rico Rio Piedras Campus; ⁷University of Texas MD Anderson Cancer Center.

- 119 A Survival Analysis by Anatomical Subsites of Patients with Cutaneous Melanoma in Puerto Rico.** Taymaraliz Santos-Colón¹, Karen J. Ortiz Ortiz², Marta Torres Quiñones³, Cruz M. Nazario Delgado¹. ¹University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ²Puerto Rico Central Cancer Registry, University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico; ³Weill Cornell Medicine, New York, United States.
- 120 Determining the Metabolic Vulnerabilities of Chromophobe Renal Cell Carcinoma.** Jian Lun Xie¹, Elysia Washington², Abha Grover³, Pedro Pesquera³, Elizabeth Ellis³, Pavlos Msaouel⁴, Niki Zacharias Millward³. ¹U54 Partnership for Excellence in Cancer Research Program, University of Puerto Rico Río Piedras Campus; ²Partnership for Careers in Cancer Science and Medicine, University of Texas MD Anderson Cancer Center; ³Urology Department, University of Texas MD Anderson Cancer Center; ⁴Genitourinary Medical Oncology, University of Texas MD Anderson Cancer Center.
- 121 Preparación para Emergencias: Estudio Transversal en la Comunidad de La Perla, San Juan, Puerto Rico.** Marisol Peña Orellana, EdD; Ruth Ríos Motta, PhD; Juan Negrón Ayala, PhD; Natalia Antúnez Serrano; Alejandro Carro Mendoza; Gloria Cuevas Rodríguez; Victoria Finkel Aguilar; Jessica Jaramillo Criado; Gabriel A. Laracuenta Toro; Ámbar Marrero Sierra; Jeymeliz Martes Vargas; Kariely Martínez Gómez; Tatiana Martínez Merle; José Mercado Navarro; Fabiola Morales Muñiz; Raymond Robles Laguna; Juleika L. Torres O' Neill; Sofía Vega Mercado; Mariela Torres Cintrón, DrPH. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública.
- 122 Cardiac Strain Imaging for Early Detection of Subclinical Ventricular Dysfunction in Obese Veterans.** Emmanuel Colón Rodríguez, BS¹; Sonia Vicenty- Rivera, MD³; Ingrid Bonilla-Mercado, PhD^{1,2}. ¹VA Caribbean Healthcare System, Research and Development Department; ²University of Puerto Rico Medical School, Department of Pharmacology and Toxicology; ³VA Healthcare System Miami, Cardiology Department.
- 123 Relación de la Satisfacción Laboral con la Emigración de Tecnólogos Médicos de Puerto Rico a la Florida Central en Estados Unidos.** Andrea Enid Santiago Rivera¹, Keisha M. Ortiz Muñiz¹, Ruth E. Ríos Motta². ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Profesiones de la Salud, Programa de Maestría en Ciencias de Laboratorio Clínico, San Juan, Puerto Rico; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Salud Pública, Departamento de Administración de Servicios de Salud, San Juan, Puerto Rico.
- 124 Experiencias de Familiares al Acompañar al Paciente en las Unidades de Cuidados Intensivos.** Edgardo Omar Sosa-Rivera, Gabriel Romero-García, Cyd Valerio-González, Elisabet Pérez-Rodríguez, Milagros I. Figueroa-Ramos, Carmen Mabel Arroyo-Novoa. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería.



- 125 Translation, Adaptation, and Feasibility Test of Cognitive Stimulation Therapy (CST) in Puerto Rico: Pilot Study.** María E. Bidot San Antonio, EdD¹; Emma J. Vallés, MHSN, LDN¹; María J. Rodríguez Torrado, MPHE¹; Irma Rivera, EdD³; Alianie Santos, PsyD⁴; Elvis Santiago, MPH⁵; Rebeca Hernández⁶; Valerie Wojna, MD². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Geriatrics Research and Education Center; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Neurology Program; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Evaluation Office; ⁴Ponce Health Sciences University, Psychology Program; ⁵University of Puerto Rico, Medical Sciences Campus, School of Medicine, Surgery Department; ⁶Bayamón Central University, Health Professions and Related Programs, General Sciences.
- 126 Vertebral Artery Injury Following Cervical Disc Arthroplasty: A Narrative Review.** Gonzalo Del Río Montesinos MS^{1,3}; Lancelot Benn, MD⁴; Christopher P. Bellaire, MD^{2,4}; Addisu Mesfin MD^{2,4}. ¹Universidad Central del Caribe (UCC); ²MedStar Georgetown University School of Medicine; ³Nth Dimensions; ⁴MedStar Orthopedic Institute, MedStar Washington Hospital Center.
- 127 Retrograde Urethrogram Interpretation Among Urology Residents: Finding Ways to Improve Year by Year.** Francisco Baralt-Nazario¹, Manuel Pizarro-Mondesir², Ramphis Morales-López¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Urology, San Juan, Puerto Rico; ²Universidad Central del Caribe School of Medicine, Bayamón, Puerto Rico.
- 128 Utilization of Digital Pathology to Assess Fibrosis Around the Celiac Plexus in Median Arcuate Ligament Syndrome: Correlation with Clinical Outcomes.** Alondra M. Torres-González¹; Yaman Alsabbagh, MD²; Santh Lanka, MD²; Bryan J. Dangott, MD³; Heather Confiado, MD³; Sam Farres, MD²; Jordan P. Reynolds, MD³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan Puerto Rico; ²Mayo Clinic Hospital, Department of Surgery, Jacksonville, Florida, United States of America; ³Mayo Clinic Hospital, Department of Pathology, Jacksonville, Florida, United States of America.
- 129 Standard Measure of Mitral and Tricuspid Valves: An Anatomical Study in Puerto Rican Population.** Shay Blanco Olivares; Natalia Valentín Carro, MS, PhD. University of Puerto Rico, Medical Science Campus, Department of Anatomy and Neurobiology.
- 130 Psychosocial Interventions for Parents of Type 1 Diabetes Adolescents: Need, Willingness to Participate, Perceived Usefulness, and Topic Preferences.** Eduardo Cumba-Avilés, PhD¹; Marleana M. Rolón-Sanfeliz, BA¹; María E. Negrón-Philippi, HSDG¹; Laura S. Márquez-Calderas, HSDG¹; Tanya P. Serrano-Negrón, BA¹; María I. Jiménez-Chafey, PsyD². ¹University of Puerto Rico, Río Piedras Campus, Institute for Psychological Research, College of Social Sciences, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, Department of Counseling for Student Development, Deanship of Students, San Juan, Puerto Rico.
- 131 Trust and Perception on the Impact of Artificial Intelligence on Cancer Risk Factor Identification, Prevention, and Screening in Puerto Rico.** Diego A. Laboy Morales¹, Jimena de los Santos Reyes¹, Yasmarie D. Colón Sáez², Alfredo Cardona Lizardi¹, Andrea Goveo Lounsberry³, Wilfredo E. De Jesús-Monge^{1,4}. ¹San Juan Bautista School of Medicine, ²University of Puerto Rico, Cayey Campus; ³Boston University; ⁴Puerto Rico Consortium for Clinical Investigation.

- 132 Vaginal Microbiota Dynamics in Pregnant Hispanic Women: Associations with HPV Infection and Cervical Health.** Andrea N. Padilla-Bou¹, Andrea P. Cortés-Nazario¹, Ivanna Villegas-Román², Julianna I. Aponte-Torres², Daniela-Vargas-Robles¹, Josefina Romaguera-Agrait², Filipa Godoy-Vitorino^{1*}. ¹University of Puerto Rico, Medical Sciences Campus, Department of Microbiology and Medical Zoology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico.
- 133 Fearful-BONDS in Parenting: Impact of Adverse Exposures.** Polaris González-Barrios, PhD, MSc¹; Veronique Rosado-Abreu⁴; Jahleel Torres-Pérez, BA³; Isel Figueroa, BS⁴; Sara Díaz-Méndez, MD¹; Alejandra Torres Almánzar³; Elinette Albino, PhD, MSc²; Christian Bravo, PhD¹; Efraín Ríos, PsyD⁵; Karen Martínez, MD, MSc¹; Claudia Lugo, PhD⁶. ¹Department of Psychiatry, University of Puerto Rico, Medical Sciences Campus; ²School of Health Professions, University of Puerto Rico, Medical Sciences Campus; ³Department of Social Sciences, Psychology Department, Undergraduate, University of Puerto Rico, Río Piedras Campus; ⁴Department of Natural Sciences, Undergraduate, University of Puerto Rico, Río Piedras Campus; ⁵Department of Psychology, University of Puerto Rico, Mayagüez Campus / School of Behavioral and Brain Sciences, Ponce Health Sciences University; ⁶Department of Psychiatry, Columbia University.
- 134 Características que Componen la Vulnerabilidad de la Población de Veteranos en Puerto Rico en 2018-2022.** Tiara de P. de la Rosa Silva¹, Ana Luisa Dávila Román¹. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Programa Graduado de Demografía, San Juan, Puerto Rico.
- 135 Cytokine Storm Syndrome Triggered by a Severe Dengue Virus Type 3 Infection.** Fabiola Morales Tirado, MS¹; Camilla Feliciano González, BS²; Gilberto Puig Ramos, MD^{2,3}. ¹Universidad Central del Caribe, Bayamón, Puerto Rico; ²University of Puerto Rico-School of Medicine, San Juan, Puerto Rico; ³The San Jorge Hospital, Pediatric Intensive Care Unit, San Juan, Puerto Rico.
- 136 Impact of Laboratory Automation and its Effects on the Medical Laboratory Workforce.** Keisha M. Ortiz Muñiz¹, Andrea Enid Santiago Rivera¹, Ruth E. Ríos Motta². ¹University of Puerto Rico, Medical Sciences Campus, School of Health Professions, Master's Program in Clinical Laboratory Sciences, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Public Health, Department of Health Services Administration, San Juan, Puerto Rico.
- 137 Assessing the Challenges and Needs Experienced by Participants of a Support Group of Families with Children from 0 to 21 Years Old with Autism.** Carol Salas Pagán, María N. Reyes Medina, Yarel M. Delgado Rosa, Cynthia I. Pérez Reyes, Ilia M Torres Avillán. University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Institute on Developmental Disabilities, San Juan, Puerto Rico.
- 138 Prevalence of Oral Human Papillomavirus in a Population-Based Sample of Women in Puerto Rico.** María S. Segarra Juelle^{1,2}, Frances Vázquez³, Jeslie Ramos-Cartagena⁴, Josué Pérez⁴, Cynthia Pérez⁵, Ana P. Ortiz^{1,3,4}. ¹Cancer Prevention and Control Research Training Program; ²University of Puerto Rico School of Medicine; ³Cancer Control and Population Sciences Division; ⁴University of Puerto Rico Comprehensive Cancer Center; ⁵Department of Biostatistics and Epidemiology; ⁶Graduate School of Public Health, Medical Sciences Campus, University of Puerto Rico.



- 139 Translation and Validation of the Spanish Early-Onset Scoliosis Self-Report Questionnaire (EOSQ-SELF).** Joseph Salem-Hernández, BS¹; Cristian Cortés-Nieves, BS¹; Hiroko Matsumoto, MD²; Pablo Marrero, MD, FAAOS¹; Norman Ramírez-Lluch, MD, FAAOS-FAAP³. ¹School of Medicine, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ²Harvard Medical School, Pediatric Orthopaedic Surgery Department, Boston, Massachusetts; ³Mayagüez Medical Center, Pediatric Orthopaedic Surgery Department, Mayagüez, Puerto Rico.
- 140 Characterization of Pancreatic Beta Cell-derived Extracellular Vesicles under Cytokine-Stressed Conditions: Implications for Diagnosing Type 1 Diabetes Mellitus.** Simran Rajput^{1,2}, Lingfei Sun¹, Guoping Li¹, Marta García-Contreras¹, Saumya Das¹. ¹Cardiovascular Research Center, Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA; ²San Juan Bautista School of Medicine, Caguas, Puerto Rico.
- 141 Prevalence and Morphometric Variability of the *Psoas minor* Muscle in a Caribbean Cadaveric Population.** Gabriela Torres¹, Alejandro Dueño², Nivia L. Pérez-Acevedo³. ¹Department of Biology, Río Piedras Campus; ²Department of Biology, Mayagüez Campus; ³Department of Anatomy and Neurobiology, School of Medicine, MSC-UPR.
- 142 DNA Methylation as a Potential Regulatory Mechanism of Cell Invasion and Motility in Cell-Based Models of Docetaxel-Resistant Prostate Cancer.** Gabriela Castro¹; Rodniel Avilés²; Solimar Esteves²; Shakira Abad¹; Ralphdy Vergne³; Valerie Rodríguez²; Lenin Godoy⁴; Kosj Yamoah⁵; Jong Park⁵; Gilberto Ruiz-Deya²; Carmen Ortiz, PhD⁴. ¹Pontificia Universidad Católica de Puerto Rico, Ponce PR; ²Ponce Health Sciences University, School of Medicine, Ponce, PR; ³American University of Antigua School of Medicine, Osbourn, Antigua and Barbuda; ⁴Ponce Health Sciences University, Ponce Research Institute, Ponce, PR; ⁵H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL.
- 143 Intergenerational Effects of Maternal Childhood Neglect on Maternal and Postpartum Bonding.** Jahleel D. Torres-Pérez, BA^{1,2}; Polaris González-Barrios, PhD^{2,3}; Isel J. Figueroa-Marcano, BA^{2,3}; Veronique I. Rosado-Abreu^{2,4}; Sohye Kim, PhD⁶; Claudia Lugo-Candelas, PhD⁷; Carmen J. Buxó, DrPH, MPH, MSc⁸; Karen G. Martínez-González, MD, MSc³. ¹Psychology Department, University of Puerto Rico, Río Piedras Campus; ²Center for the Study and Treatment of Fear and Anxiety Disorders, University of Puerto Rico, Medical Sciences Campus; ³Department of Psychiatry, University of Puerto Rico, Medical Sciences Campus; ⁴Department of Natural Sciences, University of Puerto Rico, Río Piedras Campus; ⁵School of Medicine, University of Puerto Rico; ⁶Eunice Kennedy Shriver Center, Department of Psychiatry, Pediatrics, and Obstetrics and Gynecology, University of Massachusetts Chan Medical School; ⁷Department of Psychiatry, Columbia University; ⁸Dental and Craniofacial Genomics Core, School of Dental Medicine, University of Puerto Rico, Medical Sciences Campus.
- 144 Enhancing Cancer Diagnosis Accessibility: The Impact of Mobile Clinics.** Mariela Colón Peñalbert¹, Celínés Rodríguez Acevedo², Elinette Albino^{1,2}. ¹School of Health Professions, Clinical Laboratory Sciences Program, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR; ²School of Health Professions, Puerto Rico Genetics Laboratory, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR.



45th Annual Research and Education Forum

- 145 Exploring the Impact of Health Literacy on Clinical Trial Awareness among Hispanic/Latino and Black Cancer Survivors.** Claudia Rachid-Batlle¹, Hilmaris Centeno-Girona¹, Marievelisse Soto-Salgado¹, Stephanie Cameron-Maldonado¹, Claudia X. Boneu¹, Juan Diego González-Mayoral¹, Arnethea L. Sutton², Katherine Tossas², Robert Winn², Marcia Cruz-Correa^{1,3}. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico; ²Virginia Commonwealth University Massey Comprehensive Cancer Center, Virginia, United States; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Biochemistry and Surgery, San Juan, Puerto Rico.
- 146 Clinical Characteristics of Recurrent Cystic Trigeminal Schwannoma: A Case Report.** Alejandra Cardona¹, Claudia Muns¹, Lyan Cabello Ballester², Alejandro Acosta³. ¹Diagnostic Radiology, Department of Radiological Sciences, School of Medicine, University of Puerto Rico Medical Sciences Campus; ²San Juan Bautista School of Medicine; ³School of Medicine, University of Puerto Rico Medical Sciences Campus.
- 147 Extremophile-Derived Radioprotectors to Potentiate Cell Therapy.** Victoria I. García¹, Joshua Tolliver², Sheeba Jacob², Zachary J. Reitman². ¹San Juan Bautista School of Medicine, Caguas, PR; ²Department of Radiation Oncology, Duke School of Medicine, Durham, NC, USA.
- 148 Mejorando la Calidad de Vida de los Adultos Mayores en Las Marías: Un Enfoque Holístico.** Jousteven Méndez Pérez, Sandra Otero Morales, Gabriela A. Algarín Zayas, Marianyoly Ortiz, José F. Cordero. Fideicomiso de Salud Pública de Puerto Rico, un programa del Fideicomiso para Ciencias, Tecnología e Investigación de Puerto Rico.
- 149 From COVID-19 Rumors to Facts: Developing an Educational Tool with Rumors Collected by Community Health Ambassadors in Loíza.** Alexandra S. Ortiz, Gabriela A. Algarín, Rachel M. Millán, Marianyoly Ortiz. Puerto Rico Science, Technology & Research Trust, Puerto Rico Public Health Trust, Community Engagement Division, San Juan, Puerto Rico.
- 150 Ventricular Arterial Coupling as a Predictor of Mortality in Veterans Hospitalized with Acute Decompensated HF.** Sara Ocasio-Gari, BS²; Adrián Pérez-Aybar MD¹; Sonia Vicenty, MD³; Ingrid M. Bonilla PhD^{2,4}. ¹Veterans Affairs Caribbean Healthcare System; ²Cardiology Department, Veterans Affairs Caribbean Healthcare System: Research and Development Department; ³Veterans Affairs Healthcare System Miami; Cardiology Department; ⁴University of Puerto Rico, Medical School Pharmacology and Toxicology Department.
- 151 Granulomatous Lobular Mastitis: A Challenging Diagnosis in a Reproductive-Age Patient with Recurrent Breast Mass and Abscess Formation.** José Rolón-Pérez, Alemi Viera. University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 152 Regenerative Dynamics of the IGF System: Insights from *Holothuria glaberrima*.** Evelyn J. Avilés-Ríos, Matilde Grosso-García, José E. García-Arrarás. University of Puerto Rico, Río Piedras Campus, Biology Department, San Juan, Puerto Rico.



- 153 Impact of an Educational Video on Knowledge of Vaccination Against Influenza, Pertussis, and COVID-19 in Pregnant Women Living in Puerto Rico.** Daniel Pérez-Cordero¹, Josefina Romaguera², Aniris Román³. ¹UPR, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²UPR, Medical Sciences Campus, School of Medicine, Department of OB-Gyn, San Juan, Puerto Rico; ³UPR, Río Piedras Campus, Puerto Rico.
- 154 Fast-Tracking Kidney Transplant Referrals: A Quality Improvement Initiative.** Celenia Torres Resto¹, Catherine Johnson Ramos¹, Johanie Carrasquillo Burgos¹, Brenda Calo Flores¹, Myriam Centeno Cintrón¹, Nilka de Jesús González^{1,2}. ¹Transplant Center, Hospital Español Auxilio Mutuo, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics, San Juan, Puerto Rico.
- 155 A Müllerian Anomaly Affecting the Quality of Life.** Karla Lugo¹; María Isabel Hawayek, MD²; Helen Oquendo Del Toro². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico.
- 156 Effects of SARS-CoV-2 Spike Protein and Nicotine Exposure on $\alpha 7$ Nicotinic Acetylcholine Receptor Levels in the SH-SY5Y.** Sonia Corretjer-Farinacci¹, Adriana Rodríguez-Aponte¹, Rolando Irizarry-Álvarez¹, Bismark Madera^{1,2}, Negin Martin³, Jerrel L. Yakel⁴, Manuel Delgado-Vélez^{1,2,5}, José A. Lasalde-Dominicci^{1,2}. ¹Department of Biology, University of Puerto Rico, Río Piedras Campus; ²University of Puerto Rico, Molecular Sciences Research Center; ³National Institute of Environmental Health Sciences, National Institutes of Health; ⁴Neurobiology Laboratory, National Institute of Environmental Health Sciences, National Institutes of Health; ⁵Department of Pharmaceutical Sciences, Medical Sciences Campus.
- 157 Infertility Among Hispanic PCOS Patients in Puerto Rico: A Descriptive Assessment.** I. Seguinot-Tarafa¹, A. Rivera-Vélez², A. Rivera-Rosario², A. San Miguel-Pérez³, N. Bracero-Serrano¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ³Central Caribbean University, School of Medicine, Bayamón, Puerto Rico.



45th Annual Research and Education Forum

2ND POSTER SESSION

*Dr. Ramón Emeterio Betances Student Center
UPR - Medical Sciences Campus*

Thursday, April 10, 2025

11:30 am to 1:00 pm

- 158 Periosteal Pdgfr α -lineage Cells Contribute to Heterotopic Ossification in Fibrodysplasia Ossificans Progressiva.** Loreilys Mejías Rivera^{1,4}, Brian Herman¹, Diego Ocaranza Nuñez¹, Alexandra Goodwin¹, Fatoumata Diarra¹, Foteini Mourkioti^{1,3,5}, Eileen M. Shore^{1,2,4,5}. ¹University of Pennsylvania, Perelman School of Medicine, Departments of Orthopaedic Surgery; ²Genetics, and ³Cell and Developmental Biology; ⁴Center for Research in FOP and Related Disorders; ⁵Penn Institute for Regenerative Medicine, Philadelphia, PA.
- 159 Incidental Discovery of a Large Retro Cerebellar Arachnoid Cyst and Syringomyelia Following a Syncopal Episode.** Claudia Muns¹, Jean Paul Inesta Rivera¹, Marcos Martínez Morandeira², Andrés Pavarini¹, Luis Biescas³. ¹School of Medicine, University of Puerto Rico Medical Sciences Campus; ²Ponce Health Sciences University, School of Medicine; ³VA Caribbean Healthcare System.
- 160 Neuroinflammatory Impact of HIV-gp120 on the Hippocampus.** Sofía Sánchez-Franceschini¹, Morayma S. Yordán-González², Zanishka M. Báez-Prieto³, Irmaliz Girona-Rodríguez⁴, Kendall A. Krans-Díaz⁵, Raymond Sánchez-Robles⁶, Mikhail Inyushin⁷, Janaina M. Alves². ¹School of Medicine, Universidad Central del Caribe, Bayamón, PR, 00960, U.S.A.; ²Dept. of Microbiology & Immunology, Universidad Central del Caribe, Bayamón, PR, 00960, U.S.A.; ³General Biology Program, Universidad de Puerto Rico, Bayamón Campus, Bayamón, PR, 00960, U.S.A.; ⁴Neuroscience Program, Johns Hopkins University, 21218, U.S.A.; ⁵Biology Program, Loyola University Maryland, 21210, U.S.A.; ⁶School of Medicine, University of Puerto Rico, Medical Sciences Campus, PR, 00921, U.S.A.; ⁷Dept. of Physiology, Universidad Central del Caribe, Bayamón, PR, 00960, USA.
- 161 Qualitative Data Collection Through Semi-Structured Interviews in Puerto Rican Communities Reliant on Small Water Systems.** Coralys Ginés-Torres, BS¹; Karen Andújar-Aponte, ME¹; Nicole M. Marrero-Vázquez, BA¹; María Ramos-Rosado, BS¹; Zaymarie Chévere-Delgado, BS¹; Leslie Maas-Cortés, MHS¹; Omar Pérez-Figueroa, PhD¹; Graciela Ramírez, PhD²; Jared Bowden, PhD³; Jay Levine, PhD³. ¹Puerto Rico Public Health Trust, a program of the Puerto Rico Science, Technology and Research Trust; ²Center for Environmental Education, Conservation and Research (CECIA) of the Interamerican University of Puerto Rico; ³North Carolina State University.
- 162 Advancing Pain Management: Applying Multimodal Analgesia with Lidocaine and Dexmedetomidine According to Scientific Evidence.** Andrea E. García-Ortiz, Valerie Linera-Hernández, Taysha Montañez-Montañez, Cristian Román-Santiago, Noemy Díaz-Ramos, Carmen Mabel Arroyo-Novoa, Milagros I. Figueroa-Ramos. University of Puerto Rico, Medical Sciences Campus, School of Nursing.



- 163 Resurgiendo de la Crisis: El Impacto del Covid-19 en los Estudiantes Recién Graduados de Enfermería.** Priscilla Mercado, Daniella Olmo. University of Puerto Rico, Medical Sciences Campus, School of Nursing.
- 164 Scoliosis in a Patient with Partial Trisomy 13: Expanding the Phenotypic Spectrum of Patau Syndrome.** Andrea Fábregas, BS¹; Elyette Lugo, BS²; Amer Samdani, MD¹. ¹Shriners Children's Philadelphia, Department of Orthopedic Surgery, Philadelphia, PA, USA; ²John Hopkins University, Department of Orthopedic Surgery, Baltimore, MD, USA.
- 165 Rare Anatomical Variation of the Celiac Trunk: A Cadaveric Case Study.** Gabriella Torres Irizarry, MS; Natalia Valentín-Carro, MS, PhD. University of Puerto Rico- Medical Sciences Campus- Department of Anatomy and Neurobiology.
- 166 Profile of Pediatrics Patients Requiring Non-Invasive Procedural Sedation in an Imaging Center.** Marlacoral Ortiz, MD¹; Anabel Puig-Ramos, PhD²; Natalia S. Díaz-Correa³; Juliara E. Ortiz-Santana, MD, FAAP⁴; Joel Rivera³; Sebastián Medina-Enríquez³; Elyzabeth Vega-Arroyo³; Dylan G. Rivera-Talavera³; Amanda Suárez³; Isaura Martínez⁴; Fabiola Urbistondo²; Carlos Ocasio, MD, FAAP²; Ricardo García, MD, FCCM, FAAP². ¹San Juan City Hospital, Department of Pediatrics; ²University of Puerto Rico School of Medicine Department of Pediatrics-Critical Care Medicine Section; ³University of Puerto Rico, Río Piedras Campus; ⁴University of Puerto Rico School of Medicine Department of Pediatrics; ⁵University of Puerto Rico, Cayey Campus.
- 167 Mechanistic Insights into the Downregulation of CXCR4 Surface Expression by Oral Bacterial Cell Wall Molecules.** Kamish D. Marrero¹, Ying Dang², Qiuqia Shao², Xiangxu Jia², Bindong Liu². ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ²Meharry Medical College, Center for AIDS Health Disparities Research, Department of Microbiology, Immunology and Physiology, Nashville, Tennessee.
- 168 Examining Cellular and Viral DNA Replication Dynamics During Virus Infection.** Lynnette A. Martínez-Rivera, Namrata Kumar, Holly Chan, Matthew Weitzman. Division of Protective Immunity, Department of Pathology and Laboratory Medicine, Children's Hospital of Philadelphia, Philadelphia, PA, USA.
- 169 Persistence and Progression of HPV Infection Among Hispanic Women Living in Puerto Rico: A Longitudinal Analysis.** Andrea Cortés-Nazario¹, Angelie Carrión-Vélez¹, Andrea Padilla-Bou¹, Bianca Alonso-Cardona¹, Arianna Villegas-Román², Kvrismar González-Castillo², Josefina Romaguera², Filipa Godoy-Vitorino^{1*}. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Microbiology and Medical Zoology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico.
- 170 Polysaccharide Peptide as an Immunological Modulator to Halt HIV-1 Progression in CD4+ T-Lymphocytes via Cofilin-1 Downregulation.** Abigaíl M. Rivera-Berganzo²; Glamaris Rosario-Sanfiorenzo³; Giovanni O. Alicea-Pérez³; Ileanmarie Santana-Costas²; Victoria Bermúdez-Fosse²; Nashalie M. Hernández Paniagua²; Naiara Hernández²; Fabiola I. Colón-Santiago¹; Khristian R.

Belavan Rosado²; Betsy Santos²; Jeshua J. Colón²; Natalia Sánchez Otero; Amanda C. Rivera²; Andrea S. Rodríguez De La Rosa²; Elaine Ruiz⁴; Eduardo Álvarez-Rivera, PhD¹. ¹Department of Microbiology and Immunology; ²Department of Science and Technology, Universidad Interamericana de Puerto Rico, San Juan; ³Department of Biology, Universidad de Puerto Rico, Bayamón; ⁴Department of Medical Images Technology, Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico.

- 171 Oral Bacteria Associated with Nitrate Reduction in Saliva.** Jorge Bermúdez Landa^{1*}, Kai Guo², Jairelisse Morales Morales², José C. Clemente³, Kaumudi Joshipura⁴, Evangelia Morou-Bermúdez². ¹Natural Sciences Department, University of Puerto Rico, Río Piedras Campus; ²School of Dental Medicine, University of Puerto Rico Medical Sciences Campus; San Juan, PR, United States; ³Department of Genetics and Genomic Sciences, Icahn School of Medicine at Mount Sinai, New York, NY, United States; ⁴School of Public Health, Ahmedabad University, Ahmedabad, India.
- 172 Impact of Natural Disasters and Pandemics on Hypertension Mortality in Puerto Rico: Analysis from 2015 to 2023.** Hillary S. Telemin Vilorio; Isabel Castellanos; María José Sánchez Muñiz; Cecilia V. Olmo-López; Oscar A. Lugo Capera, MSc. School of Medicine, Universidad Central del Caribe, Bayamón, PR.
- 173 Hypertensive Disorders During Pregnancy and the Effects on the Fetus Weight at Birth.** Keischaly Collazo Aparicio¹; Omar A. Benítez¹; María Isabel Hawayek, MD²; Alberto De La Vega, MD². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Department of Obstetrics and Gynecology, San Juan, Puerto Rico.
- 174 Statistical Analysis of Mortality Due to Renal Disease and Associated Causes in Puerto Rico During Periods of Emergency (2015-2023).** Oscar Andrés Lugo, José Encarnación, Carlos Pérez, Paola Rivera. Universidad Central del Caribe, School of Medicine, Bayamón, PR.
- 175 Modified Rabies Virus Glycoprotein Peptide Increases Gold-liposome Internalization in Glioblastoma Cells.** Diego García Ortiz¹, Annelis Sánchez², Pablo E. Vivas-Mejía^{1,2}. ¹University of Puerto Rico Medical Sciences Campus, Department of Biochemistry, San Juan, Puerto Rico; ²University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico.
- 176 A Multi Decade Analysis of Substance Overdoses in Puerto Rico.** Yariel Gómez-Hernández, BS¹; Francisco Dávila-Toro, MD². ¹School of Medicine, University of Puerto Rico; ²Institute of Forensic Sciences, Caribbean Central University.
- 177 Access to Care: Examining Wait Times for Health Specialist Appointments Across Puerto Rico's Medical Specialties and Regions.** Isabel Castellanos-Castilloa; María José Sáncheza; Cecilia V. Olmo López; Hillary S. Telemin Vilorioa; Jerry Cruz-Rodriguez; Gabriel A. Jiménez; Bárbara Riestra Candelaria, PhD. School of Medicine, Universidad Central del Caribe, Bayamón, PR.



- 178 Salud y Comunidad: Un Camino hacia la Autosuficiencia para Sobrevivientes de Violencia de Género.** Luisa Pérez, María del Mar López Berríos, Gabriela Algarín Zayas, Marianyoly Ortiz, José Cordero. Fideicomiso de Salud Pública de Puerto Rico, un programa del Fideicomiso para Ciencias, Tecnología e Investigación de Puerto Rico.
- 179 Acute Vascular Distress Syndrome (AVDS) of Bronchial Mucosa in Post Coronavirus Disease 2019 (COVID-19) Infection.** Diane L. Mankin-Cruz, MD; William J. Ramos-González, MD; Frankie Alvarado, MD. Pavía Hospital, Internal Medicine Department, Pulmonary Disease Section, Arecibo, Puerto Rico.
- 180 Mental Health Impacts of Abortion Restriction and Denial: A Scoping Review.** Claudia S. Rivera Barbeito¹, Amanda Mele², Alyssa Grimshaw³, Ariadna Forray². ¹University of Puerto Rico, Medical Science Campus, School of Medicine; ²Yale University, School of Medicine, Department of Psychiatry; ³Harvey Cushing/John Hay Whitney Medical Library at Yale.
- 181 Chylolymphatic Mesenteric Cyst: A Rare Clinical Entity in the Differential of Cystic Abdominal Masses: A Case Report.** Coral Martes Villalobos, BS¹; Luar A. Rodríguez Galves, BS¹; Heriberto Casanova Rodríguez, MD^{1,2}. ¹Universidad Central del Caribe School of Medicine, Bayamón, Puerto Rico; ²Doctor's Center Hospital, Carolina, Puerto Rico.
- 182 Anterior Displacement of the Anus: A Case Report on Clinical Presentation and Management.** Rubi Ortiz, MD¹; Marianna Martini, MD¹; Norma Claudio, MD². ¹San Juan City Hospital, Department of Pediatrics, San Juan, Puerto Rico; ²San Juan City Hospital, Department of Neonatology, San Juan, Puerto Rico.
- 183 Pregnancy and Management of Ischemic Stroke: A Case Report.** Esteban R. Rivera, BS¹; Alexander I. Acevedo Jetter, BS¹; Alejandro E. Cedeño Morán, BS¹; Rodolfo E. Alcedo-Guardia, MD^{2,3}. ¹University of Puerto Rico, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, School of Medicine, Department of Neurosurgery, San Juan, Puerto Rico; ³Mennonite Health System, Department of Neuroscience, Caguas, Puerto Rico.
- 184 Inflammatory Bowel Disease in Hermansky-Pudlak Syndrome Patients: A Descriptive Study.** Jesús G. Rivera Román, María López Avilés, Natalia Hernández Cuevas, Gretchen Ríos Grant, Ricardo Marrero Torres, Esther A. Torres. University of Puerto Rico, School of Medicine, Department of Medicine - Gastroenterology, San Juan, Puerto Rico.
- 185 Strengthening Superficial Small Water Systems in Rural Puerto Rico: A Community Advisory Board as an Approach to Increase Climate Adaptation.** María D. Ramos-Rosado, BS¹; Karen Andújar-Aponte, ME¹; Nicole M. Marrero-Vázquez, BA¹; Coralys Ginés-Torres, BS¹; Zaymarie Chévere-Delgado, BS¹; Leslie Maas-Cortés, MHS¹; Omar Pérez-Figueroa, PhD¹; Graciela Ramírez, PhD²; Jared Bowden, PhD³; Jay Levine, PhD³. ¹Puerto Rico Public Health Trust, a program of the Puerto Rico Science, Technology and Research Trust; ²Center for Environmental Education, Conservation and Research (CECIA) of the Interamerican University of Puerto Rico; ³North Carolina State University.

- 186 HIV Awareness among a Cohort of First-Year Medical Students in Puerto Rico.** Sofía Rey-Garaycoa; Yarelis Martínez Rodríguez; Guillermo Martínez Hernández; Juan Salichs Gelabert; Linda Rose Pérez Laras, DrPH; Peter Barbosa, PhD. San Juan Bautista School of Medicine, Caguas, Puerto Rico.
- 187 Enhancing Volunteer and Patient Experiences at Padre Venard Community Clinics Through Feedback Survey.** Priamo Pichardo, Alondra Soto, Antonio Morales, Gabriel Camareno. Universidad Central del Caribe, Bayamón, Puerto Rico.
- 188 Assessing the Clinical Management of Acute Otitis Externa: A Retrospective Cross-Sectional Study.** Lawrence F. Oppenheimer Vélez, MD¹; Javier A. Vilá Ortiz, BS¹; Carlos E. Crespo Borges, BS²; Gabriela C. Pomales Díaz, BS²; Edgar del Toro Diez, MD¹; Jeamarie Pascual Marrero, MD, MPH¹. ¹University of Puerto Rico School of Medicine, Otolaryngology–Head & Neck Surgery Section, Surgery Department, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 189 Patients Treated with Intravenous Thrombolytics at University of Puerto Rico Hospital Emergency Department.** Víctor Ramos de Jesús, BS, MS-IV¹; Jael E. Camacho Matos, MD, PGY-2²; Juan González Sánchez, MD^{2*}. ¹UPR, Medical Sciences Campus, School of Medicine; ²Emergency Medicine Department, UPR – Medical Sciences Campus, School of Medicine. *Principal investigator.
- 190 Spongiotic Gingival Hyperplasia in an 8-year-old Child, Male with Multiples Dental Caries in Operating Room: a Case Report.** Heidi Sánchez-Montero, PGY-1¹; Aarón Ávila-López, PGY-2¹; Yolanda Heredia-Matos¹; Viviana Acevedo-Rodríguez¹; Ferdinand Lugo²; Danny Mora²; Camila Pérez-López¹. ¹General Practice Residency, School of Dental Medicine, University of Puerto Rico; ²UPR School of Dental Medicine, Surgical Sciences Department.
- 191 Differential Activation of Epithelial-Mesenchymal Transition Pathway in BRAF vs. NRAS Mutated Metastatic Melanoma.** Víctor J. Raimundi Santos, BS, MDc¹; Tyrel Porter, BS, MDc². ¹School of Medicine, Medical Sciences Campus, University of Puerto Rico; ²School of Medicine, Universidad Central del Caribe.
- 192 Adverse Childhood Experiences as Predictors of Perceived Social Support and Depression Levels in NICU Mothers.** Roberto Y. Rodríguez Lozada¹, Polaris González-Barrios², Keimaris Colón Díaz², Zayhara Reyes Bou³, Gabriela M. Vera Santiago⁴, Darielie Rivero Rolón¹, Paula Román Villamil¹, Yeleniz Díaz Vicioso¹, Yessica Areché Serrano¹, José Martínez González⁵, Lourdes García Fragoso³, Inés García García³. ¹University of Puerto Rico, Río Piedras Campus, Natural Science Faculty, Department of Biology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Psychiatry, San Juan Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics, San Juan Puerto Rico; ⁴University of Puerto Rico, Bayamón Campus, Natural Science Faculty, Department of Biology, Bayamón, Puerto Rico; ⁵Albizu University, Department of Clinical Psychology, San Juan, Puerto Rico.



- 193 Effects of Social and Family Support on Emotional Dysregulation Among Hispanic and Non-Hispanic Mothers Following the COVID-19 Pandemic.** Adyanis Centeno¹; Daniel Mulligan, PhD²; Kim McCarthy, LMSW²; Damion Grasso, PhD²; Margaret Briggs-Gowan, PhD². ¹University of Puerto Rico School of Medicine, Medical Center, San Juan, PR; ²Division of Child Psychiatry, Department of Psychiatry, UConn Health.
- 194 Mental Health Status and Service Utilization: A Cross-Sectional Study in La Perla, San Juan, Puerto Rico.** Jessica Jaramillo Criado¹; Mariela Torres Cintrón, DrPH¹; Ruth Ríos Motta, PhD¹; Juan Negrón Ayala, PhD²; Natalia Antúnez Serrano¹; Alejandro Carro Mendoza¹; Gloria Cuevas Rodríguez¹; Victoria Finkel Aguilar¹; Gabriel A. Laracuenta Toro¹; Ámbar Marrero Sierra¹; Jeymeliz Martes Vargas¹; Kariely Martínez Gómez¹; Tatiana Martínez Merle¹; José Mercado Navarro¹; Fabiola Morales Muñiz¹; Raymond Robles Laguna¹; Juleika L. Torres O' Neill¹; Sofía Vega Mercado¹; Marisol Peña Orellano, EdD¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Public Health, Department of Health Services Administration, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Public Health, Department of Social Sciences, San Juan, Puerto Rico.
- 195 Creutzfeldt-Jakob Disease After COVID-19 Infection in a Previously-Healthy 58-year-old Male in Puerto Rico – A Case Study.** Francisco J. López-Font, MHA¹; Carlos Vega-Mena, MD¹; Antonella Jiménez-Cabarcas, MD¹; Christian Valentín-Santiago, MD¹; José Ávila-Ornelas, MD²; Naggai González-Segarra, MD²; Ramón Scharbaai-Vázquez, PhD¹; Mario Polo-Asenjo, MD^{1,2}; Ernesto García-Santiago, MD^{1,2}. ¹Luis A. Ferré Highway Exit #21, Road 172 Caguas to Cidra, Urb. Turabo Gardens, Caguas, PR 00727; ²Hospital Menonita Caguas, Luis A. Ferré Highway Exit #21, Road 172 Caguas to Cidra, Urb. Turabo Gardens, Caguas, PR 00727.
- 196 Effects of NLRC5 Mutation on IFN Alpha and Gamma Stimulated MHC Class I Expression.** Madeline Candelas Torres¹; Noam Savion-Gaiger, MD²; Harriet Kluger, MD²; Kevan Herold, MD²; Ana Luisa Perdigoto, MD, PhD². ¹San Juan Bautista School of Medicine, Caguas, PR, USA; ²Yale University School of Medicine, New Haven, CT, USA.
- 197 Multidisciplinary Approach to Full Oral Rehabilitation in a Patient with Systemic Lupus Erythematosus, Sjögren's Syndrome, and Depression.** Karla Sánchez Ortega, DDS. General Practice Residency, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 198 Congenital Herpes Simplex II Manifestation in a Newborn Male: A Case Study.** Jessica I. Rizo Hernández, MD¹; Fiorella Raffucci Velázquez, MD¹; Amarilis Rivera Marrero, MD²; Israel Matías, MD²; Norma Claudio, MD²; Álvaro Santaella MD². ¹San Juan City Hospital, Department of Pediatrics, San Juan, Puerto Rico; ²San Juan City Hospital, Department of Neonatology, San Juan, Puerto Rico.
- 199 Perceived Loneliness and Mental Health Among Adults in Urbanización Delgado, Caguas: A Cross-Sectional Study.** Luis J. Rivera, MPH; Sergio A. Vidal Rosa; Karen Agosto Valentín, DrPH, JD, MPH; Sheylimar M. Andino Escudero, MPH; Derick O Bermúdez Cartagena, MPH; Ariana Carreras Espinosa, MPH; Joshua A. Doble Rivera, MPH; Luis G. Fuentes Burgos, MPH; María A. González, MPH; Oscar A. González García, MPH; Adriana N. Núñez Rosado, MPH; Génesis D. Rivera



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Martínez, MPH; Karoline M. Rosario Esquilín, MPH; Karina E. Santiago Adorno, MPH; Quiriat J. Torres Rosario, MPH; MPH Marisol Peña Orellana, EdD, MS. Master's Program in General Public Health, University of Puerto Rico, Medical Sciences Campus, Faculty of Biosocial Sciences and Graduate School of Public Health, Department of Health Services Administration, San Juan, Puerto Rico.

- 200 Posterior Fossa Constraints in a Case of Developmental Facial Palsy with Chiari I Malformation.** Adrian A. Naoun¹, Yandy García¹, Fabián Gómez, Philip Cantu¹, Ernesto García². ¹San Juan Bautista School of Medicine, Caguas, PR, USA; ²Hospital Menonita, Caguas, PR, USA.
- 201 El Rol del Programa de Introducción a Estudios en Medicina del Centro Hispano de Excelencia de la Escuela de Medicina de la Universidad de Puerto Rico.** César Ostolaza Santiago², Abner Flores Siaca², Keylianise Espinosa Sotomayor³, Ángeles Martínez Vélez¹, Ileana M. Ayala-Fontáñez¹, América Facundo Rosado¹. ¹Centro Hispano de Excelencia, Escuela de Medicina, Universidad de Puerto Rico, Recinto de Ciencias Médicas; ²Universidad de Puerto Rico Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Programa Graduado de Demografía, San Juan, Puerto Rico; ³Universidad de Puerto Rico, Recinto de Río Piedras, Departamento de Química.
- 202 Oral Microbial Community Differences Associated with HPV Infection and Increased Oropharyngeal Cancer Risk in Puerto Rican PWH.** Juliana M. Serrano-Rodríguez^{1,2}, Jurelis Torres-Reyes¹, Yakshi N. Ortiz-Maldonado¹, Carlos A. Solá-Morlá^{1,3}, Gabriel Borges-Vélez¹, Jeannette L. Salgado-Montilla¹, María M. Sánchez-Vázquez¹, Magaly Martínez-Ferrer⁴, Ana P. Ortiz-Martínez¹, Ramón F. González-García⁵, Josué Pérez-Santiago^{1,5}. ¹Division of Clinical and Translational Cancer Research, University of Puerto Rico Comprehensive Cancer Center, San Juan, PR; ²University of Puerto Rico, Río Piedras Campus, San Juan, PR; ³School of Medicine - Universidad Central del Caribe, Bayamón, PR; ⁴School of Pharmacy, University of Puerto Rico Medical Sciences Campus, San Juan, PR; ⁵School of Dental Medicine, University of Puerto Rico Medical Science Campus, San Juan, PR.
- 203 Asymptomatic Ulcerative Colitis Culminating in Toxic Megacolon: Case Report.** Camilla M. Feliciano González, BS¹; Emily A. Rosa Bouza, BS¹; Hilmaris C. Santiago Figueroa, BS²; Arnaldo E. Álvarez-Meléndez, BS²; Paola E. Flores-Arroyo, BS³; Anabel Puig Ramos, PhD⁴; Charles Castro, MD⁴; Stephanie González, MD⁴; Claudia Garza, MD⁴; Carlos Ocasio, MD⁴; Hilda Díaz, MD⁴; Manuel Iglesias, MD⁴; Paola Montalvo, MD⁴; Ricardo García De Jesús, MD⁴. ¹UPR-School of Medicine, San Juan, PR; ²San Juan Bautista School of Medicine, Caguas, PR; ³Ponce Health Sciences University, Ponce, PR; ⁴UPR-School of Medicine, Department of Pediatrics-Critical Care Section, San Juan, PR.
- 204 Comparison of the Performance of the Large Language Models, GPT-4o and Copilot on the American Society for Surgery of the Hand Self-Assessment Examination.** Benjamín Nieves-López¹, Mohammad Kahrizi², Keith Aziz². ¹University of Puerto Rico, Medical Sciences Campus; ²Mayo Clinic Jacksonville.
- 205 Intracranial Hypertension, Empty Sella, and CSF Leak Leading to Intracranial Hypotension: a Case Report.** Claudia Muns¹, Alejandro González¹, Alejandro Acosta¹, Alejandro Linera², Luis Biescas³. ¹School of Medicine, University of Puerto Rico, Medical Sciences Campus; ²University of Maryland, School of Medicine; ³VA Caribbean Healthcare System.



- 206 Conocimiento de los Maestros de Escuela Superior sobre los Síntomas de Ansiedad y Estrategias de Reducción en el Salón de Clases.** Victoria Núñez-Pérez BSN, MSN; Ana S. Tavera-Pimentel BSN, MSN; Carmen I. Díaz-Colón, EdD, MSN. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería, Programa de Maestría en Ciencias en Enfermería, San Juan, Puerto Rico.
- 207 Exploring Climate and Healthcare Vulnerabilities in Caribbean Island Communities: The Experience of Puerto Rico and the U.S. Virgin Islands.** Paola Buch¹, Polaris Torres¹, Nancy Cardona-Cordero¹, Marievelisse Soto-Salgado¹, Noreen Michael², Pablo Méndez-Lázaro³, Ana Patricia Ortiz¹. ¹University of Puerto Rico, Comprehensive Cancer Center, San Juan, Puerto Rico; ²University of the Virgin Islands, St. Thomas, USVI; ³University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 208 Advancing Equity in Genomic Research: Bridging Gaps with Minority and Vulnerable Populations.** Celinés Rodríguez-Acevedo¹, Paola Giusti-Rodríguez², Carmen J. Buxó³, Elinette Albino^{1,4}. ¹School of Health Professions, Puerto Rico Genetics Laboratory, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR; ²School of Medicine, Psychiatry Department, University of Florida; ³School of Dental Medicine, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR; ⁴School of Health Professions, Clinical Laboratory Sciences Program, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR.
- 209 The Impact of Knowledge Gaps on Contraception Use Among Hispanic Women in Puerto Rico.** Nattalia Rosario Vega, Natalia Cárdenas-Suárez, Kvrismar González-Castillo, Alexander Pacheco Camacho, A. Muñoz-Matta. Department of Obstetrics and Gynecology, University of Puerto Rico.
- 210 Did Adults with Diabetes and Adults Without Chronic Diseases in Puerto Rico Differ in Socio-Psychological Well-being During the COVID-19 Pandemic?** Luna Oliveira-Mercado, HSDG¹; Eduardo Cumba-Avilés, PhD¹; Leamsi M. Rivera-Sáez, HSDG¹; Stella N. Maymí Cintrón, HSDG¹; Amaris Nieves López, HSDG¹. ¹University of Puerto Rico, Río Piedras Campus, Institute for Psychological Research, College of Social Sciences, San Juan, Puerto Rico.
- 211 A Rare Case of Pulmonary Hypertension Secondary to Abernethy Malformation in a Pediatric Patient.** Sofía I. González-Espola, BS¹; Juliara E. Ortiz-Santana, MD, FAAP²; Ricardo García, MD, FCCM, FAAP². ¹Universidad Central del Caribe-School of Medicine, Bayamón, Puerto Rico; ²University of Puerto Rico-School of Medicine, Department of Pediatrics, San Juan, Puerto Rico.
- 212 Reproductive Experiences and Contraceptive Choices: a Study on Sterilization Regret and Family Planning in Puerto Rico.** Kvrismar González-Castillo¹, Daniela Medina-Camacho¹, Camila Cuevas-Burgos², Natalia Cárdenas-Suárez¹, Katherine Vernaza-Ochoa², Josefina Romaguera-Agrait¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, Natural Sciences Faculty, Department of Biology, San Juan, Puerto Rico.
- 213 Dental Students Knowledge about Sleep Disturbance Breathing in the Pediatric Population.** Gabriela Rodríguez-Sanzo, Zareth Jana, Lydia M. López del Valle, Damaris Molina-Negrón. University of Puerto Rico, School of Dental Medicine, ADEA Fellowship.

- 214 Reverse Fragility Index: Reoperation Rates in Spinal Fusion vs. Interventions for Lumbar Spinal Stenosis (LSS) – A Systematic Review and Meta-Analysis.** Rafael Baella Anzalota, MD; Gerardo Olivella, MD; José I. Acosta-Julbe, MD; Alondra Vázquez, BSc; Daniel Deliz, BSc; Hans W. Hess Arcelay, MD; Enrique Escobar, MD. University of Puerto Rico, Medical Sciences Campus.
- 215 Assessing Novel JAK Targeting Agents for the Treatment of CTCL.** Kerely Lorenzo-Méndez¹, Wei Yan², Julia M Lewis¹, Hong-yu Li², Michael Girardi¹. ¹Department of Dermatology, Yale School of Medicine, New Haven, CT, USA; ²Department of Pharmacology, UT Health San Antonio, Long School of Medicine, San Antonio, TX, USA.
- 216 Health Literacy Among Pediatric Caregivers: Assessing Levels and Sociodemographic Correlations.** Jan F. Bidot Cruzado¹; Hanna L Rigamonti, MD²; Francheska Salgado García, MD²; Israel Matías González, MD³; Norma Claudio Figueroa, MD³; Lourdes García Frago, MD³; Inés García, MD³. ¹Department of Biology, University of Puerto Rico-Río Piedras Campus; ²Department of Pediatrics, San Juan City Hospital; ³Neonatology Section, Department of Pediatrics, School of Medicine, University of Puerto Rico-Medical Sciences Campus.
- 217 A Comparative Assessment of Health Insurance Coverage in Puerto Rico and the United States.** Kai Guo¹, Quan Kevin Shan², He Eric Shan². ¹School of Dental Medicine, University of Puerto Rico; ²San Juan Saint John School.
- 218 Energy Dynamics During Migration and Cytolytic Action of CAR-T Cell Targeting Cancer Tissue Through Gel Systems.** Manuel J. La Torre-Poueymirou¹, Andre Kelly², Roddy S. O'Connor². ¹Universidad Central Del Caribe, School of Medicine, Bayamón, Puerto Rico; ²University of Pennsylvania, Perelman School of Medicine, Center for Cellular Immunotherapies, Philadelphia, Pennsylvania.
- 219 Nivel de Concordancia Entre los Tecnólogos Médicos Durante el Análisis Microscópico de Sedimento Urinario con Tinción Directa *Sternheimer Malbin*.** Michael Alejandro-Berdecía, Yadiris López-Rivera, Linda Pérez-Laras. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Profesiones de la Salud, Maestría en Ciencias de Laboratorio Clínico.
- 220 Development of a Non-Invasive, Self-Managed Physical Therapy System to Improve Wrist Motor Functions Using sEMG Data Signals.** Sarah Naji-Naji¹; Alex J. Díaz-Sepúlveda¹; Ariana Ortega-Mendoza²; Adriana Pagán-Hernández³; Camelia Zamora-Vázquez⁴; Jorge Ruiz-Torres⁵; Ricardo Nieves-Santiago, BS⁵; Walter Frontera, PhD⁵; Abraham Schwartz, PhD⁵; Emma Fernández-Repollet, PhD⁶. ¹University of Puerto Rico, Río Piedras Campus; ²Adiane School; ³University of Rochester; ⁴Georgia Institute of Technology; ⁵Commonwealth-Parkville School; ⁶University of Puerto Rico, Medical Sciences Campus.
- 221 Social Determinants of Health Associated with Clinical Trials Participation among Hispanic/Latino Cancer Survivors Residing in Puerto Rico.** Liamarys Ortiz-Torres, BS¹; Stephanie Cameron-Maldonado, MS²; Lorena González-Sepúlveda, MS^{2,3}; Karina Rivera-Mejías, MPH³; Noedly Ayala-Sánchez¹; Yadielis Arce-Rivera¹; Alejandra Díaz-Rohena, BS⁵; Natalia Domínguez-Betancourt⁴; María Vázquez-Torres, BS²; Marivelisse Soto-Salgado, DrPH, MS². ¹University of Puerto Rico, Cayey Campus, Cayey, PR; ²University of Puerto Rico Comprehensive Cancer Center,



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- 222 Critical Importance of Early Symptom Recognition and Proactive Management in Preventing Fatal Outcomes: A Case Report on Autoimmune Polyglandular Syndrome.** Paola E. Flores-Arroyo, BS¹; Arnaldo E. Álvarez-Meléndez, BS²; Emily A. Rosa Bouza, BS⁴; Camilla M. Feliciano González, BS⁴; Hilmaris C. Santiago Figueroa, BS²; Andrés B. Sosa-González, MSc¹; Anabel Puig Ramos, PhD⁵; Gilberto Puig-Ramos, MD³. ¹Ponce Health Sciences University, Ponce, PR; ²San Juan Bautista School of Medicine, Caguas, PR; ³San Jorge Children and Women's Hospital, San Juan, PR; ⁴University of Puerto Rico, Medical Sciences Campus, San Juan, PR; ⁵UPR-School of Medicine Department of Pediatrics- Critical Care Section, San Juan, PR.
- 223 Efficacy of a Novel Myosin II Inhibitor of Muscle Contraction in Juvenile Zebrafish Hearts.** Victoria A. Blaiotta Vázquez, MPH¹; Christopher Kauffman²; Natalia Torres, PhD²; Martin Tristani-Firouzi, MD². ¹University of Puerto Rico, School of Medicine; ²Nora Eccles Harrison CVRTI, University of Utah.
- 224 Persistent ARVD/C-like Electrophysiology Following Successful Excision of a Right Atrial Myxoma.** Adrian A. Naoun¹, Génesis Virella¹, Carol Sánchez Santana¹, Milianette Cruz¹, Luis Jiménez Reyes. ¹San Juan Bautista University, Department of Medicine, Caguas, PR, USA; ²Caribbean Heart Institute, Caguas, PR, USA.
- 225 ¡Ponte al Día! Proyecto Intergeneracional: Cerrando Brechas Digitales para Combatir la Soledad en Adultos Mayores de Puerto Rico.** Gabriella Tarrats-Irizarry, Rachel Millán-Rodríguez, Gabriela Algarín-Zayas, Marianyoly Ortiz-Ortiz. Puerto Rico Public Health Trust, Puerto Rico Science, Technology and Research Trust.
- 226 A Close Call: Airway Compromise due to Fractured Tracheostomy Tube Presenting as Tracheal Foreign Body.** Clariliz Munet Colón, MD¹; Javier A. Vilá Ortiz, BS¹; Pamela Abreu Lozada, BS²; Eric Pérez, BS²; Shyanne A. Lajud Guerrero, MD¹. ¹University of Puerto Rico School of Medicine, Otolaryngology–Head & Neck Surgery Section, Surgery Department, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 227 Uso de Servicios de Salud entre la Población de Hombres y Mujeres Trans y Personas de Género No Binario en Puerto Rico.** Manuel Franco Colón, DrPH¹; Carlos E. Rodríguez Díaz, PhD, MPH, MCHES²; Caleb Esteban, PhD³; Mariela Torres Cintrón, DrPH, MS¹. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública; ²Boston University School of Public Health; ³Ponce Health Sciences University.
- 228 Retrospective Evaluation of Molecular Diagnostic Approaches for BCR-ABL1-negative Myeloproliferative Neoplasms in Puerto Rico.** Loraine Rivera Ostolaza¹, Celínés Rodríguez Acevedo², Elinette Albino^{1,2}. ¹School of Health Professions, Clinical Laboratory Sciences Program, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR; ²School of Health Professions, Puerto Rico Genetics Laboratory, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR.

- 229 Development of an Automated Operant Conditioning Chamber for Assessing Hedonia and Motivation in Rats.** Saumarí Negrón-Santos^{1,*}, Charlie J. Montes Rivera^{1,*}, Keven Laboy-Juárez^{2,#}.
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²University of Puerto Rico, Molecular Sciences Research Center, San Juan, Puerto Rico.
- 230 Comparative Analysis of Lipidomic Profiles Focused on Diabetes and Age.** Emilie I. Dávila Perea^{1,2}, MinYoung Park¹, José O. Alemán¹. ¹Holman Division of Endocrinology and Diabetes, Department of Medicine, New York University Langone Health, New York, USA; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 231 Changes in T Cell and B Cell Subsets in Hispanic Patients with Cervical Dysplasia and Cervical Cancer During Chemoradiation Treatment.** Emmanuel Colón Rodríguez, BS¹; Josefina Romaguera, MD^{1,2}; Kamila A. Andino del Valle³; Sharee Umpierre, MD^{1,2}; Madison O'Hara, BS⁴; Lauren Colbert, MD⁴; Jagannadha K. Sastry, PhD⁴; Stephanie M. Dorta-Estremera, PhD^{1,5}.
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- 232 Radiographic Predictors of Chronic Subdural Hematoma Recurrence: Insights from a Population-Based Study.** Carlos E. Calderón Valero, BS, MS^{1,2}; Giancarlo Mignucci-Jiménez, MD^{1,3}; Esteban Rivera, BS²; Alejandro J. Matos-Cruz, MD⁴; Kivanc Yangi, MD¹; Aixa De Jesús, MPH⁵; Caleb Feliciano, MD⁵; Mark C. Preul, MD¹. ¹The Loyal and Edith Davis Neurosurgical Research Laboratory, Department of Neurosurgery Barrow Neurological Institute, St. Joseph's Hospital and Medical Center, Phoenix, Arizona; ²University of Puerto Rico, Sciences Campus, School of Medicine, Department of Medicine, San Juan, Puerto Rico; ³The University of Oklahoma, Department of Neurosurgery, Oklahoma City, Oklahoma; ⁴Department of Neurosurgery Allegheny General Hospital Pittsburgh, Pennsylvania; ⁵University of Puerto Rico, Sciences Campus, School of Medicine, Section of Neurosurgery, San Juan, Puerto Rico.
- 233 Genetic Literacy and Experiences with Genetics, Diagnostics, and Support Services in Puerto Ricans Diagnosed with Huntington's Disease.** Laly Sánchez-Delgado¹, Elinette Albino^{1,2}. ¹School of Health Professions, Clinical Laboratory Sciences Program, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR; ²School of Health Professions, Puerto Rico Genetics Laboratory, Medical Sciences Campus, University of Puerto Rico, Río Piedras, PR.
- 234 Risk Factors for Cerebral Aneurysms in Sickle Cell Disease.** Alejandro R. González-Barreto¹, Manus Donahue², Mark Rodeghier³, Samantha Davis⁴, Michael R. DeBaun^{4,5}, Adetola A. Kassim^{5,6}, Lori C. Jordan⁴. ¹University of Puerto Rico, Medical Science Campus, School of Medicine, San Juan, Puerto Rico; ²Vanderbilt University Medical Center, Department of Neurology, Nashville, Tennessee; ³Rodeghier Consulting, Chicago, Illinois; ⁴Vanderbilt University Medical Center, Department of Pediatrics, Nashville, Tennessee; ⁵Vanderbilt-Meharry Center of Excellence in Sickle Cell Disease, Nashville, Tennessee; ⁶Vanderbilt University Medical Center, Department of Medicine, Nashville, Tennessee.



3RD. POSTER SESSION

*Dr. Ramón Emeterio Betances Student Center
UPR - Medical Sciences Campus*

Friday, April 11, 2025

11:30 am to 1:00 pm

- 235 A Longitudinal Case of Hurthle Cell Carcinoma Followed by Papillary Thyroid Carcinoma.** Adrian A. Naoun¹, Milianette Cruz¹, Norianne Martínez Viota¹, Génesis Virella Tirado¹, Alfredo González-Buxó². ¹San Juan Bautista School of Medicine, Caguas, PR, USA; ²Oficina Médica Buxó, Aguas Buenas, PR, USA.
- 236 Maternal Comorbidities and Placental Findings in Small for Gestational Age Neonates Born to a Population Living in Puerto Rico.** Omar A. Benítez, BS¹; María Isabel Hawayek, MD²; Alberto De La Vega, MD²; Lourdes García Fragoso, MD³; Inés García, MD³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics, San Juan, Puerto Rico.
- 237 Veterans Affairs Lipid Optimization Reimagined Quality Improvement Program: A Multidisciplinary Approach for Veterans with ASCVD at the VACHS.** Loriany Alcocer-Rodríguez, BS¹; Juan I. Vázquez-Fuster, MD¹; Ingrid M. Bonilla-Mercado, PhD^{2,3}; Luis F. Rodríguez-Ospina, MD, FACC¹. ¹VA Caribbean Healthcare System, Cardiology Department, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Pharmacology and Toxicology Department, San Juan, Puerto Rico; ³VA Caribbean Healthcare System, Research and Development Department, San Juan, Puerto Rico.
- 238 Indicadores del Nivel Socioeconómico en el Acceso a Servicios de Salud entre los y las Residentes de la Urbanización Delgado en Caguas, Puerto Rico.** Ariana Carreras Espinosa, MPH; Sheylimar M. Andino Escudero, MPH; Derick O. Bermúdez Cartagena, MPH; Joshua A. Doble Rivera, MPH; Luis G. Fuentes Burgos, MPH; María A. González, MPH; Oscar A. González García, MPH; Adriana N. Núñez Rosado, MPH; Génesis D. Rivera Martínez, MPH; Luis J. Rivera, MPH; Karoline M. Rosario Esquilín, MPH; Karina E. Santiago Adorno, MPH; Quiriat J. Torres Rosario, MPH; Sergio A. Vidal Rosa, MPH; Karen Agosto Valentín, DrPH, JD, MPH; Marisol Peña Orellana, Ed.D, MS. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Facultad de Ciencias Biosociales y Escuela Graduada de Salud Pública, Departamento de Administración de Servicios de Salud, San Juan, Puerto Rico.
- 239 Nucleus Accumbens Deep Brain Stimulation During Extinction and Reinstatement of Morphine Place Preference.** Fabiola I. Ricardo-López¹, Isabel López-Molini¹, Ricardo Schriels-Soto¹, Joy Velázquez-Colón², Imanol Berríos-Rivera³, Astrid Valle-Toste³, Helena Arraiza-Truust², Jennifer L. Barreto-Estrada¹. ¹Department of Anatomy and Neurobiology, University of Puerto Rico-Medical Sciences Campus, 00936; ²Department of Biology, University of Puerto Rico-Río Piedras Campus, Río Piedras, 00925-253; ³Department of Biology, University of Puerto Rico-Bayamón Campus, 00959-1919.

- 240** **Análisis de la Distribución Geográfica de la Prestación de Servicios Especializados de Salud en los Hospitales de Puerto Rico.** Verónica Febus, MS, DrPH¹; Christian González Serrano, MPH, DrPH²; Juan Pérez Emmanuelli, MD, DrPH². ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Salud Pública, Departamento de Salud Ambiental, Programa Doctorado en Salud Pública con especialidad en Salud Ambiental, San Juan, Puerto Rico; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Salud Pública, Departamento de Administración de Servicios de Salud, Programa Doctorado en Salud Pública con especialidad en Análisis de Sistemas de Salud y Gerencia, San Juan, Puerto Rico.
- 241** **Ventral Pallidum GABAergic Neurons Are Engaged in Extinction of Approach/Avoidance Conflict.** Vanelisse Rivera-Marzán¹, Pamela Pérez-Vázquez², Alanis Delgado-Suárez³, Jose Pérez-Torres³, Angelys Rivera-Hernández¹, Roberto Vázquez-Alicea¹, Kelvin Rodríguez-Rivera³, Cristina María-Ríos³, Christian Bravo-Rivera³. ¹University of Puerto Rico, Río Piedras Campus, San Juan, PR; ²University of Puerto Rico, Mayagüez Campus, Mayagüez, PR; ³University of Puerto Rico, School of Medicine, San Juan, PR.
- 242** **Disruption of Mitochondrial Function by Ergosterol Peroxide in Triple-Negative Breast Cancer Cells.** Aliyah L. Bocachica-Adorno^{1,2}; Luz V. Arroyo-Cruz, PhD²; Taotao Ling, PhD³; Fátima Rivas, PhD³; Carlos Barreto⁴; Maribella Domenech-García, PhD⁴; Michelle Martínez-Montemayor, PhD². ¹University of Puerto Rico, Bayamón Campus, Department of Biology, Bayamón, Puerto Rico; ²Universidad Central del Caribe School of Medicine, Department of Biochemistry, Bayamón, Puerto Rico; ³Louisiana State University, Department of Chemistry, Baton Rouge, LA; ⁴University of Puerto Rico, Mayagüez Campus, Department of Chemical Engineering, Mayagüez, Puerto Rico.
- 243** **Unveiling the Unexpected: A Rare High-Grade B-Cell Lymphoma of the Small Bowel with a Unique Presentation.** Victoria Pinto-Sánchez, BS¹; Gerardo Caussade-Silvestrini, BS¹; Noelia García-Pérez, MD²; Melanie Santos-Marrero, MD²; Radamés Revilla-Orellano, MD²; Cristina Fernández-Hernández, BS¹; Rafael Rivera-Sotomayor, BS¹; Baryan Pagán-Rodríguez, BS¹; Arelis Febles-Negrón, MD². ¹School of Medicine, University of Puerto Rico, Medical Sciences Campus, San Juan; ²Department of Internal Medicine, University of Puerto Rico, Medical Sciences Campus, San Juan.
- 244** **An Academic Perspective of Challenges in Doing Population-Based Research in Puerto Rico During the COVID-19 Pandemic: January 7, 2020, Earthquake.** Fernando J. Mercado-Ortiz¹, Israel A. Almodóvar-Rivera², Verónica M. García-Ramírez¹, Keila E. Narváez-Sánchez¹, Cruz M. Nazario-Delgado¹, Rosa V. Rosario-Rosado¹. ¹University of Puerto Rico, Medical Science Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²University of Puerto Rico, Mayagüez Campus, College of Arts and Sciences, Department of Mathematical Sciences, Mayagüez, Puerto Rico.
- 245** **Alcance de las Capacitaciones sobre el Estigma Asociado al VIH en Profesionales de la Salud en Puerto Rico durante los años 2020 al 2024.** Solaritza Rivera-León, MPH, MPHE; Keishla M. Torres-Montalvo, MPH, CGG; Maricarmen Rodríguez-González, BA. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Decanato de Asuntos Académicos, Northeast Caribbean AIDS Education and Training Center.



- 246 Hábitos, Preferencias y Accesibilidad de Alimentos entre los Estudiantes de la Escuela Graduada de Salud Pública: Explorando la Inseguridad Alimentaria en el Recinto de Ciencias Médicas.** Adriana S. Mirandés-Ramírez. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Departamento de Ciencias Sociales, San Juan, Puerto Rico.
- 247 A Rare Manifestation of SLE: The First Documented Case of Lupus Cystitis in Puerto Rico.** Luis Xavier Mayol-Vélez, Saribel Torres, Fernando Zayas. Family Medicine, University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 248 Allatotropin Expression in the CNS of *Biomphalaria glabrata*, an Intermediate Host for Human Schistosomiasis.** Diego Nazario-Martínez¹, Joseph Torres-Cruz¹, Alana Rivera², Dina Bracho², Laura Vicente-Rodríguez¹, Mark W. Miller². ¹University of Puerto Rico, Cayey Campus, Department of Biology, Cayey, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Institute of Neurobiology, Department of Anatomy and Neurobiology, San Juan, Puerto Rico.
- 249 Caracterización Bibliométrica de la Investigación sobre Salud Mental en Puerto Rico durante el Período 2000-2022.** Mariely García Vélez, Universidad de Puerto Rico en Ponce.
- 250 Carcinoma Anaplásico de Tiroides: Estudio de caso en mujer de 87 años.** Yanielis Moreno-Díaz¹; Yadiris López-Rivera, DrPH, CT (ASCP)¹; Yomayra Aquino CT (ASCP)^{1,2}; Javier Rodríguez-Becerra, MD^{1,2}. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Profesiones de la Salud - Programa de Citotecnología; ²Atlantic Pathology Manatí, Puerto Rico.
- 251 Movimientos Geográficos de la Población Dentro de Puerto Rico: Diferencias Entre los Que Migraron Internamente y Aquellos Que No Cambiaron de Municipio para el Periodo de 2018-2022.** Abner U. Flores-Siaca, Luz E. León-López. Programa de Demografía, Escuela Graduada de Salud Pública, Recinto de Ciencias Médicas-UPR.
- 252 Short-chain Fatty Acids: A Pathway to Reducing Oncogenic Phenotypes in Breast Cancer Subtypes.** Amanda Prats-Marrero^{1,2}, Riseilly Ramos-Nieves^{1,3}, Samira B.F. Abdullah-Vargas^{1,2}, Ángel J. Amaral-Maisonet^{1,2}, Liah M. Román-Calderón¹, Ariana S. García-López^{1,2}, Jeannette L. Salgado-Montilla¹, Gabriel Borges-Vélez¹, Esther Peterson¹, Josué Pérez-Santiago^{1,3}. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, PR; ²University of Puerto Rico, Río Piedras Campus, San Juan, PR; ³University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 253 ADEA Academic Dental Careers Fellowship Program: Education about Human Development and Behavior Management at UPR-SDM.** Paola N. Álvarez García; Carla Rodríguez Bonilla, DMD. University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine, San Juan, Puerto Rico.
- 254 Correlational Study of the Sociodemographic Profile and Characteristics of the Physical Therapy Profession in Puerto Rico.** Marienid Tirado-Hernández, José F. Rivera-Rodríguez, Gabriel M. Avilés-Matías, Fabiola M. Fontán-Fontán, Karisol Chévere-Rivera. University of Puerto Rico, Medical Sciences Campus, School of Health Professions, Doctor in Physical Therapy Program, San Juan, Puerto Rico.

- 255 A Cohort Analysis Using NIH All of Us: Cancer Diagnostic Age and Incidence in ADHD versus non-ADHD Population.** Melissa G. Soto-Santiago¹, Mayra S. Haedo-Cruz¹, Grace Vélez Crespo¹, Gabriel Borges-Vélez¹, Josué Pérez-Santiago^{1,2}. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, PR; ²University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 256 Transcriptome Analysis for Merkel Cell Carcinoma Patients Testing Positive (+) and Negative (-) for Polyoma Virus.** MíaSara Pérez^{1,2}; Fnu Srividya, PhD¹; Daniel Wang¹; Nicole Muñoz^{1,2}; Leomar Ballester, MD, PhD¹; Phyu P. Aung, MD, PhD¹; Manuel Delgado Vélez, PhD²; José A. Lazalde Dominicci, PhD². ¹Department of Pathology and Lab Medicine, MD Anderson Cancer Center, University of Texas, Houston, TX, 77030, USA; ²University of Puerto Rico, School of Medicine, San Juan, PR 0025-2537, USA.
- 257 Nacimientos por Cesáreas: Características Sociodemográficas y de Salud de la Madre y del Neonato en Puerto Rico entre 2015-2023.** Nicole J. Rivera, Ana L. Dávila, Luz E. León. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Programa Graduado de Demografía, San Juan, Puerto Rico.
- 258 The Plant-Derived Compound Simalikalactone D is a Potent Anticancer Agent in Triple Negative Breast Cancer Cells.** Joshua Nieves¹, Annelis O. Sánchez¹, Claudia Ospina², Pablo E. Vivas-Mejía¹. ¹University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico, ²Inter American University of Puerto Rico, Bayamón Campus, Bayamón, Puerto Rico.
- 259 Complications of a Delayed Diagnosis of Total Anomalous Pulmonary Venous Return in an Infant.** Paola M. Alvelo-Fernández, MPH¹; Gabriel S. Medina-Ortiz, BS²; Juliara E. Ortiz-Santana, MD, FAAP²; Ricardo García, MD, FCCM, FAAP². ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²University of Puerto Rico, School of Medicine, San Juan, Puerto Rico.
- 260 Functional Outcomes and Imaging-Related Factors in Distal Radius Fractures Among Older Adults: A Comprehensive Review.** José J. Aponte-Reyes, MD; José I. Acosta-Julbe, MD; **Joseph Salem-Hernández, BS**; Emmanuel J. Belardo Del Río, MD; Fernando J. Arocho-Oquendo, BS; Christian A. Foy Parrilla, MD, FAAOS. School of Medicine, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 261 Overmedication and Intoxication: Management of Calcium Channel Blocker and Beta-blocker Overdose in an Overmedicated Psychiatric Patient.** Alanis Quijano-Torres, BS¹; Camilla Feliciano-González, BS¹; Emily Rosa-Bouza, BS¹; Natasha L. Pérez-Nieto, BS¹; Giancarlos Isidor-Pagán²; Diego-Fernández Vázquez²; Nicole Martínez-Martínez²; Rhina Jiménez, MS¹; Anabel Puig-Ramos, PhD¹; Gilberto Puig, MD, FAAP³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan; ²University of Puerto Rico, Río Piedras Campus; ³San Jorge Children and Women's Hospital.
- 262 Disparities in Surgical Cancer Care Among Latino and Puerto Rican Populations in the USA: Analyzing Access, Treatment, and Outcomes.** Sebastián A. Hernández Candelario, BS¹; Iris I. Sánchez Lebrón, BS¹; Diego E. Collazo-Irizarry, BS¹; Marcel Grau Rodríguez, BS¹. ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico, United States of America.



- 263 Spontaneous Regression of Atypical Myxoid and Spindle Cell Neoplasm: a Case Report.** Alejandro Arbona-Lampaya¹, Kumarasen Cooper², Jenny T. Bencardino³. ¹School of Medicine, University of Puerto Rico - Medical Sciences Campus, San Juan, Puerto Rico; ²Department of Pathology & Laboratory Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania; ³Department of Radiology, Montefiore Medical Center - Albert Einstein College of Medicine, Bronx, New York.
- 264 Alfabetización Física: Potencial de un Repositorio Digital para Empleados Universitarios.** Emmanuel Hernández-Torres, Marcilyn Colón-Colón, Rosalie Ayala-Colón. Escuela Graduada de Salud Pública, Recinto de Ciencias Médicas, Universidad de Puerto Rico.
- 265 Fecal Indicator Bacteria in the Waters at the Isla Verde Marine Reserve and Torrecilla Lagoon.** Laura I. Santiago-Pérez¹, Karla M. Nadal-Nevárez², Daniela M. Rodríguez-Rodríguez², Angelie Rivera Rodríguez². ¹University of Puerto Rico Bayamon Campus, Department of Chemistry, Bayamón, Puerto Rico; ²University of Puerto Rico, Bayamón Campus, Department of Biology, Bayamón, Puerto Rico.
- 266 Severe Ulcerative Colitis Exacerbation in a Pediatric Patient: a Case Report.** Paola E. Flores Arroyo, BS¹; Arnaldo E. Álvarez Meléndez, BS²; Anabel Puig Ramos, PhD³; Gilberto Puig Ramos, MD⁴. ¹Ponce Health Sciences University; ²San Juan Bautista School of Medicine; ³UPR Medical Science Campus, School of Medicine, Pediatrics Critical Care; ⁴San Jorge Hospital.
- 267 A Modified Posterior Approach to the Nerve Transfer of the Spinal Accessory Nerve to the Suprascapular Nerve.** Lenny L. Rivera¹, Gerardo Caussade-Silvestrini², José Acosta-Julbe¹, Rubén Tresgallo¹, Alexandra Claudio¹, Christian Foy-Parrilla³. ¹University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Division of Orthopaedic Surgery, San Juan, Puerto Rico.
- 268 Successful Treatment of Severe Morphea with Upadacitinib in a Patient with Rheumatoid Arthritis.** Valerie Encarnación-Cortés¹, Cristina Brau-Javier² (Co-first author). ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Dermatology, San Juan, Puerto Rico.
- 269 Cannabis Medicinal: Su Efecto en la Sintomatología de la Ansiedad.** Arianis Dávila. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería.
- 270 La Población que se va de Puerto Rico: ¿Cuáles son sus Características Sociodemográficas y Económicas?** Emanuel de la Cruz Travieso; Luz E. León López, PhD. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Programa Graduado de Ciencias en Demografía.

- 271 Risk Factors for Intraventricular Hemorrhage in Preterm Infants Admitted to the San Juan City Hospital: Preliminary Findings.** Katia Santiago-Ledee, MD¹; Israel Matías, MD²; Norma Claudio, MD²; Debby Meléndez Pérez³; Alejandra Álvarez³; Lourdes García-Fragoso, MD²; Inés García-García, MD². ¹San Juan City Hospital, Department of Pediatrics, San Juan, Puerto Rico; ²UPR, Medical Science Campus, School of Medicine, Department of Pediatrics, Neonatology Section, San Juan, Puerto Rico; ³UPR, Río Piedras Campus, Faculty of Natural Sciences, San Juan, Puerto Rico.
- 272 Clinical Outcomes and Multimodal Management of Cerebral Arteriovenous Malformations: a Single Center Experience.** Esteban R. Rivera, BS¹; Carlos E. Calderón Valero, BS, MS¹; Juan C. Vicenty Padilla, MD^{2,3}; Juan M. Ramos-Acevedo, MD^{2,3}; Rodolfo E. Alcedo, MD^{2,3}. ¹University of Puerto Rico, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, School of Medicine, Department of Neurosurgery, San Juan, Puerto Rico; ³Mennonite Health System, Department of Neuroscience, Caguas, Puerto Rico.
- 273 The Role of Community Mobilization in Integrated Vector Management in Bayamón, PR.** Paola K. Figueroa Colón¹, Emily N. Rivera Viera¹, Gabriela A. Cosme Silva¹, Allison Laboy Parrilla¹, Rafael Saavedra², Jania García², Katherine Torres². ¹University of Puerto Rico at Bayamón; ²Puerto Rico Science, Technology and Research Trust.
- 274 Determining the Association of Antiretroviral Treatment, Sociodemographic Factors, Social Determinants of Health, and Depression in Patients with HIV.** Anthony Maldonado, Madline Cintrón, Nilka Lorenzo, Kyle Melin, Jonathan Hernández, Sayel Rivera, Bianca Torres. University of Puerto Rico, Medical Sciences Campus, School of Pharmacy.
- 275 ERK and AKT Expression in the BDNF Signaling Pathway in the Extinction of Morphine Place Preference.** Joy Velázquez-Colón¹, Wilma V. Richiez-Mateo², Fabiana Z. Rosado-Rodríguez³, Ricardo Schriels-Soto⁴, Imanol Berríos-Rivera⁵, Astrid Valle-Toste⁵, Jennifer L. Barreto-Estrada⁴. ¹Department of Biology, University of Puerto Rico, Río Piedras Campus, Río Piedras, 00925-253; ²Department of Synaptic Integration and Neuromodulation NIH, 20892; ³Department of Psychology, University of Puerto Rico, Río Piedras Campus, Río Piedras, 00925-253; ⁴Department of Anatomy and Neurobiology, University of Puerto Rico-Medical Sciences Campus, 00936; ⁵Department of Biology, University of Puerto Rico, Bayamón Campus, 00959-1919.
- 276 An Old Foe Causing Neonatal Kidney Failure in 2023: A Case Report.** Maraida L. Serrant-Hernández, MD, MHA, MPH¹; Alexandra I. Rodríguez-Díaz, MD²; Melvin Bonilla-Félix, MD, FAAP³. ¹San Juan City Hospital, Department of Pediatrics, San Juan, Puerto Rico; ²University of Puerto Rico Pediatric Hospital, Department of Pediatrics, San Juan, Puerto Rico; ³University of Puerto Rico Pediatric Hospital, Department of Pediatric Nephrology, San Juan, Puerto Rico.
- 277 Patients' Journey to Substance Use Recovery.** Sandra I. Ralat¹, Marcos I. Roche¹, Joshua N. Bernabe², Claudia S. Morales³, Thairys Flores¹, Ricardo Rojas¹, Ismael Pérez¹, Victoria Agostini⁴, Francisco Arbelo⁴, Andrea N. Torres⁴, Yimayra Rivera⁴, Sara Díaz¹, Karen Martínez¹, Darlene Santiago¹. ¹University of Puerto Rico, Medical Sciences Campus; ²Universidad Central del Caribe; ³San Juan Bautista Medical School, Caguas, Puerto Rico; ⁴University of Puerto Rico, Río Piedras Campus.



- 278 A Rare Case of an Adamantinous Craniopharyngioma Seeding After Resection: a Pediatric Case Report.** Claudia Muns¹, Alejandro Arbona-Lampaya¹, Luis Biescas², Ángel Rosado González³, Maximiliano Carrera⁴. ¹School of Medicine, University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ²VA Caribbean Healthcare System; ³UT Southwestern Medical Center; ⁴University of Medicine and Health Sciences, Saint Kitts and Nevis.
- 279 Cranial Mass with Dural Invasion as a Rare Manifestation of Follicular Thyroid Cancer.** Esteban R. Rivera-Rivera, BS¹; Alejandro E. Cedeño-Morán, BS¹; Alexander I. Acevedo Jetter, BS¹; Rodolfo E. Alcedo-Guardia, MD^{2,3}. ¹University of Puerto Rico, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, School of Medicine, Department of Neurosurgery, San Juan, Puerto Rico; ³Mennonite Health System, Department of Neuroscience, Caguas, Puerto Rico.
- 280 Wassel-Flatt Type IV and VII Pre-Axial Hand Polydactyly in Adults: a Case Series and Review of Literature.** Lenny Rivera-Rosario¹, Carlos Campa-Maldonado¹, José I. Acosta-Julbe¹, Derick Rodríguez-Reyes², José A. Rosario-González³, Christian Foy¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Orthopedic Surgery, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of General Surgery, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 281 Transplant-Associated Thrombotic Microangiopathy in a Pediatric Patient: Insights and Challenges.** Sofía I. González-Espola, BS¹; Juliara E. Ortiz-Santana, MD, FAAP²; Marla Coral Ortiz, MD²; Ricardo García, MD, FCCM, FAAP². ¹Universidad Central del Caribe-School of Medicine, Bayamón, Puerto Rico; ²University of Puerto Rico-School of Medicine, Department of Pediatrics, San Juan, Puerto Rico.
- 282 TCMDC-124132: A Novel Antimalarial Candidate Targeting Multiple *Plasmodium* Life Stages.** Kathy Trujillo-Nevárez¹, Emilee E. Colón-Lorenzo¹, Alison Roth², Roberto G. Díaz¹, José G. Ortiz³, David A. Fidock^{4,5}, Joel Vega-Rodríguez^{1,6}, Jürgen Bosh^{7,8,9}; Adelfa E. Serrano-Brizuela^{1*}. ¹University de Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Microbiology and Medical Zoology, San Juan, Puerto Rico; ²Walter Reed Army Institute of Research, In Vitro Studies Experimental Therapeutics Branch, Bethesda, Maryland, United States; ³University de Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pharmacology and Toxicology, School of Medicine, San Juan, Puerto Rico; ⁴Department of Microbiology and Immunology, Columbia University Medical Center, New York, United States; ⁵Division of Infectious Diseases, Department of Medicine, Columbia University Medical Center, New York, United States; ⁶National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Malaria and Vector Research Rockville, Maryland, United States; ⁷Department of Biochemistry and Molecular Biology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States; ⁸Division of Pediatric Pulmonology and Allergy/Immunology, Case Western Reserve University, Cleveland, Ohio, United States; ⁹InterRayBio, LLC, Baltimore, Maryland, United States.
- 283 Impact of Ogilvie Syndrome Outcomes in Absence of Standard Protocols: Single-Center Experience in Puerto Rico.** Gustavo Alayón¹, Manuel Frau¹, Marcia Alayón², Gabriela Santiago³. ¹Ponce Health Sciences University; ²Private Practice; ³University of Medical Health Sciences.

- 284 Overcoming Barriers: Challenges and Opportunities Researching the Population of Transfemmes and Transwomen in Puerto Rico.** Kaitleen Rodríguez Corretjer¹, Christian Torres Franqui¹, Rafael García Berdecía², Miguel Vázquez Rivera^{3,4}, Rosa V. Rosario Rosado¹. ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology; ²University of Puerto Rico, Medical Sciences Campus, School of Pharmacy; ³Trueself Foundation; ⁴Clínica Psicoalternativas.
- 285 Health Clinics Outcomes-Disparities in Diabetes Prevalence by Socioeconomic Status in Puerto Rico.** Mayra A. Robles-Molina¹, Mariela Torres-Cintrón², Linda R. Pérez-Laras³. ¹University of Puerto Rico, Medical Sciences Campus, School of Health Professions, Clinical Laboratory Sciences Program, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Public Health, Department of Health Services Administration, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Health Professions, Clinical Laboratory Sciences Program, San Juan, Puerto Rico.
- 286 Effect of an Educational Workshop of Nurses' Knowledge of Pain: A Quantitative Quasi Experimental Study.** Viviana Torres-Reyes^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus San Juan, Puerto Rico; ²University of Phoenix, Arizona, United States of America.
- 287 Regulation of Lipid Droplet Formation in ApoE4 Astrocytes by PPAR-γ Activation.** Natalia Álvarez-Roger¹, Jayvon Nougaisse², Xin-Yun Lu². ¹Universidad Central del Caribe School of Medicine, Bayamón, Puerto Rico; ²Augusta University, Department of Neuroscience, Georgia, United State of America.
- 288 Potter's Sequence and Autosomal Recessive Polycystic Kidney Disease, Enduring Beyond the Neonatal Period.** Andrea G. Ríos-Ballagas, BS¹; Adriana I. Pérez Vega, BS²; Sofía I. González Espola, BS³; Paola M. Alvelo-Fernández, MPH²; Juliara E. Ortiz-Santana, MD, FAAP⁴; Ricardo García, MD, FCCM, FAAP⁴. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²San Juan Bautista School of Medicine, Caguas, Puerto Rico; ³Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ⁴University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics, San Juan, Puerto Rico.



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Your expertise, dedication, and comprehensive insights have been instrumental in maintaining this forum's highest academic and scientific excellence standards. The diversity of your academic backgrounds and the depth of your knowledge have contributed significantly to a rich, multidisciplinary discourse essential for fostering innovation and advancing research in our communities and beyond.

This collaboration underscores the unity and strength of our academic and scientific communities and highlights your crucial role in shaping the future of research and education. Your contributions have made a significant impact, ensuring the success of this prestigious event.

We are profoundly thankful for your commitment and look forward to the continued advancements your efforts will inspire.

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