

University of Puerto Rico, Medical Sciences Campus

46th Annual Research and Education Forum

March 25-27, 2026

RCM



Innovating Together
for Healthier Futures





Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

WELCOME MESSAGE

Chancellor of the Medical Sciences Campus



It is with great pleasure and profound pride that I extend a warm welcome to the 46th Annual Research and Education Forum of the University of Puerto Rico Medical Sciences Campus. This event reaffirms our institutional commitment to scientific discovery, innovation, and academic excellence in the health sciences. Year after year, the Forum serves as a vital platform for the exchange of knowledge, the dissemination of research findings, and the strengthening of interdisciplinary collaborations, all with the shared goal of advancing health and improving the well-being of our communities.

This year's Forum holds special significance as it is dedicated to Glorisa J. Canino, PhD, a distinguished researcher, Professor at the School of Medicine, and Director of the Behavioral Sciences Research Institute. For more than three decades, Dr. Canino has led and collaborated on numerous projects funded by the National Institutes of Health (NIH), making outstanding contributions to adult and child psychiatric epidemiology, the psychometric adaptation of instruments to Latino culture, pediatric asthma, the genetics and epigenetics of asthma, and health disparities. Her prolific scholarly record—exceeding 250 scientific publications—together with her sustained commitment to mentoring faculty, doctoral, and postdoctoral students, and her community leadership on behalf of Puerto Rican children, have established her as a leading figure in health research in Puerto Rico and beyond. We are deeply honored to recognize her remarkable career, impact, and legacy.

This year, the Forum also joins in celebrating the 15th anniversary of the Doctoral Program in Social Determinants of Health of the Graduate School of Public Health, a highly significant academic initiative that has strengthened the preparation of researchers committed to equity, social justice, and the analysis of structural factors affecting population health. This milestone underscores the importance of integrating scientific inquiry with a broad and transformative social perspective.

I would like to express my sincere appreciation to the Organizing Committee, particularly Dr. Yasmin Pedrogo Rodríguez, Chair of the Scientific Committee, and Dr. Efraín Flores Rivera, Forum Coordinator, for their leadership, dedication, and tireless efforts in making this important academic gathering possible.

I encourage all participants to take full advantage of the presentations, discussions, and opportunities for dialogue offered throughout the Forum. May these days of scholarly exchange inspire new ideas, collaborations, and projects that continue to advance scientific knowledge and improve health care in Puerto Rico and beyond.

Welcome to the 46th Annual Research and Education Forum of the Medical Sciences Campus!



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



Innovating Together *for Healthier Futures*

University of Puerto Rico, Medical Sciences Campus

WELCOME MESSAGE

Dean of Academic Affairs and Chair of the Organizing Committee

It is with great enthusiasm that I welcome you to the 46th Annual Research and Education Forum of the University of Puerto Rico Medical Sciences Campus. This year, under the theme “Innovating Together for Healthier Futures,” we reaffirm our collective commitment to scientific discovery, academic excellence, and collaborative innovation across the health sciences.

This Forum brings together a diverse and highly talented community of researchers, faculty, students, and professionals from multiple disciplines and institutions. Over the course of three days, we are proud to present 448 oral and poster presentations—the highest participation in the history of the Forum—highlighting the remarkable breadth and depth of research conducted across our campus and beyond.



Participants represent all six schools of the Medical Sciences Campus, as well as other campuses within the University of Puerto Rico System, private universities, hospitals, and research centers. Together, these contributions showcase innovative work spanning biomedical sciences, clinical practice, public health, pharmacy, dentistry, nursing, and allied health professions. They reflect the dedication, creativity, and perseverance of our academic community in addressing Puerto Rico’s pressing health challenges and advancing knowledge for the benefit of our society.

We are also privileged to welcome distinguished speakers who will share their expertise during plenary sessions focused on cutting-edge topics. Their insights enrich the Forum by fostering dialogue, strengthening interdisciplinary collaboration, and inspiring future research initiatives.

As we engage in presentations, discussions, and networking opportunities, I invite you to embrace the spirit of collaboration and innovation that defines this year’s Forum. May these days of scholarly exchange spark new ideas, partnerships, and discoveries that contribute to building healthier futures for Puerto Rico and beyond.

Welcome to the 46th Annual Research and Education Forum!

Yasmín Pedrogo Rodríguez, MD, FAAP, MSc MEdL
Dean of Academic Affairs
Chair, Organizing Committee
Medical Sciences Campus, University of Puerto Rico

ORGANIZING COMMITTEE

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

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

Amariliz Burgos Santiago, MBA
Library Administrator

Carlos A. Ortiz Reyes, MBA, EdD
Director of RCM Online Division

Danilly Ramos Llera, MBA, MIS, EdD
Librarian I

José R. Ubieta Santiago, MIS, PhD
Librarian I

Kaitlyn Nieves Serra, PhDc
Student Representative

SCIENTIFIC COMMITTEE**School of Medicine**

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

Karen Martínez González, MD, MSc – Professor & Chair
Department of Psychiatry

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

Nivia L. Pérez Acevedo, MS, PhD - Associate Dean, Biomedical Sciences
Director, Graduate Program



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

Graduate School of Public Health

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

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 of Research

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)

School of Pharmacy

Manuel Delgado Vélez, PhD - Assistant Professor
Department of Pharmaceutical Sciences

School of Health Professions

Nicolás Linares Orama, PhD - Professor
Speech-Language Pathology Program

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

Deanship of Student Affairs

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

FORUM SCIENTIFIC PROGRAM

First Day - Wednesday, March 25, 2026

REGISTRATION

7:00 to 8:00 am

Location: Foyer

Don Jaime Benítez Rexach Amphitheater

Continental breakfast at the registration site

INAUGURAL SESSION AND DEDICATION

8:00 to 9:00 am

Location: Don Jaime Benítez Rexach Amphitheater

Moderator:

Nerian Ortiz Matos, MD, FAAP
Director, Department of Pediatrics
School of Medicine, UPR – Medical Sciences Campus

Welcoming Remarks

Víctor M. Ramos Otero, MD, MBA
Secretary of Health
Puerto Rico Department of Health

Zayira Jordán Conde, PhD
President, University of Puerto Rico

Myrna L. Quiñones Feliciano, MD, Esq., FAAP
Chancellor, Medical Sciences Campus

Yasmín Pedrogo Rodríguez, MD, FAAP, MSc MEdL
Dean of Academic Affairs
Chair of the Forum Organizing Committee

DEDICATION OF THE 46TH ANNUAL RESEARCH AND EDUCATION FORUM

To Dr. Glorisa J. Canino Jordán,
in recognition of her extraordinary legacy in education,
research, mentorship, and community leadership
at the Medical Sciences Campus and beyond.





Innovating Together *for Healthier Futures*

University of Puerto Rico, Medical Sciences Campus

PLENARY SESSION – SCHOOL OF NURSING

9:00 to 10:00 am

Location: Don Jaime Benítez Rexach Amphitheater

Leveraging Artificial Intelligence to Advance Evidence-Based Practice: Strengthening Critical Thinking, Clinical Judgment, and Decision-Making While Preserving Rigor, Ethics, and Human Connection

Keynote Speaker:

Lynn Gallagher-Ford, PhD, RN, EBP-C, DPFNAP, FAAN

Independent Consultant

Evidence-based practice (EBP) and Leadership Development

Moderator:

Noemy Díaz Ramos, EdD

Interim Associate Dean of Research and Evidence-Based Practice
School of Nursing, UPR - Medical Sciences Campus

BREAK

10:00 to 10:30 am

PLENARY SESSION – GRADUATE SCHOOL OF PUBLIC HEALTH

10:30 to 11:30 am

Location: Don Jaime Benítez Rexach Amphitheater

*Celebrating the 15th Anniversary of the Doctoral Program
in Social Determinants of Health at the Graduate School of Public Health*

Social Determinants of Health: From Theory to Action to Address the Mechanisms Producing Health Inequities

Keynote Speaker:

Hugo Vásquez Vera, MD, MPH, PhD

Regional Advisor on Social Determinants of Health

Pan American Health Organization / World 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 3:30 pm***Location: A 469 (Room 3)**Graduate School of Public Health**4th Floor, Dr. Guillermo Arbona Building*

Moderator:

Ana M. Parrilla Rodríguez, MD, MPH, FABM, IBCLC, FACCE, LCCE
 Professor and Director of the Department of Human Development
 Graduate School of Public Health, UPR - Medical Sciences Campus

- 001 The Right to Adequate Housing in Puerto Rico: Property Law, Tenure Security, and Public Policy Gaps.** Annie I. Rivera Cruz, JSD, LLM, JD. Interamerican University of Puerto Rico, School of Law, San Juan, PR.
- 002 Experiencias de las Paternidades en el Periodo Perinatal: Salud Mental e Implicaciones para la Política Social en Puerto Rico.** José Y. Montañez Agosto, MSW, CMHE, PhD. Universidad de Puerto Rico, Recinto de Río Piedras, Escuela Graduada de Trabajo Social Beatriz Lassalle, San Juan, Puerto Rico.
- 003 Acceso, Calidad, Financiamiento y Recursos Humanos según el Tipo de Sistema de Salud de una Muestra de Países, 1990-2023.** Félix L. Ortiz Báez, Heriberto Marín Centeno, Mariela Torres Cintrón, José M. Pérez Díaz. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Administración de Servicios de Salud, San Juan, Puerto Rico.
- 004 La Salud como Derecho Humano: Análisis Crítico del Marco Legal para la Atención al Consumo Problemático de Sustancias en el Contexto Colonial Puertorriqueño.** Jennifer Montalvo Universidad de Puerto Rico, Recinto de Río Piedras.
- 005 Salud Pública en Crisis: Análisis de las Políticas de Cierre Escolar y Mitigación durante el COVID-19.** Evelyn I. Matos Quintana^{1,2}, Miguel E. Marrero Medina^{3,4} ¹Universidad de Puerto Rico, Recinto de Río Piedras, Liderazgo en Organizaciones Educativas, Facultad de Educación, San Juan, Puerto Rico; ²Departamento de la Familia, San Juan, Puerto Rico; ³Escuela de Medicina San Juan Bautista, Programa Maestría en Salud Pública, Caguas, Puerto Rico; ⁴Universidad de Puerto Rico, Recinto de Carolina, Departamento de Ciencias Sociales y Justicia Criminal, Carolina, Puerto Rico.
- 006 La Ley Núm. 54-1989 y El Mito De La Neutralidad: Análisis Interseccional Del Diseño Legal Frente a La Violencia De Género Hacia Adultas Mayores.** Analys Torres Vázquez. Universidad de Puerto Rico, Recinto de Río Piedras, Escuela Graduada de Trabajo Social Beatriz Lassalle, San Juan, Puerto Rico.
- 007 Pharmaceutical Supply Chains for Diabetes Medicines in Puerto Rico: Policy for Vulnerabilities, Affordability, and SDG 3.** Alba J. Brugueras-Fabre, PhD. Universidad del Sagrado Corazón, San Juan, Puerto Rico; Universidad de Puerto Rico, Río Piedras Campus, San Juan, Puerto Rico.
- 008 Acciones y Retos Legislativos en Políticas Públicas para la Salud y la Prevención de la Violencia hacia las Mujeres en Puerto Rico.** Bárbara Barros-Cartagena, Deuri Rodríguez, Angelis Samalot, Andrea Pereira, Alondra Sánchez, Angélica Rodríguez, Laura Añeses. School of Behavioral and Brain Sciences, Ponce Health Sciences University.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

2nd ORAL CONCURRENT SESSION

1:20 to 3:30 pm

Location: A 471 (Room 4)

Graduate School of Public Health

4th Floor, Dr. Guillermo Arbona Building

Moderator:

Rafael Rodríguez Mercado, MD, FACS
Professor of Neurosurgery
School of Medicine, UPR - Medical Sciences Campus
Endovascular Neurosurgery and Stroke Center Director
Puerto Rico Medical Center (ASEM)

- 009 Pure Intracranial Schwannoma of Cranial Nerve X: Case Presentation and Literature Review.** Diego López-Soto, BA¹; Jeffrey Breton, MD²; Samir Sur, MD². ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ²MedStar Georgetown University Hospital, Department of Neurosurgery, Washington, D.C., United States.
- 010 The Relationship Between Hand Dominance and ACL Tears in Competitive Volleyball Athletes.** Félix Rivera Troia¹, Arlene Pérez Zierenberg², Gerardo Pérez Román³, Carlos Pérez López¹. ¹Ponce Health Sciences University, School of Medicine, Department of Surgery, Section of Orthopaedic Surgery, Ponce, PR; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR; ³Hospital Auxilio Mutuo, San Juan, PR.
- 011 A Rare Case of Community-Acquired Acinetobacter Urethritis in an Immunocompetent Adult Woman.** Alejandro Arbona-Lampaya, BS^{1*}; Ricardo G. Blanco-Ortiz, BS^{1*}; Jan P. Villanueva-Medina, BS¹; Roberto Angeli-Morales, BS¹; Radamés Román-Grau, MD^{1,2}. ¹School of Medicine, University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ²Perea Hospital, Mayagüez, Puerto Rico. *These two authors contributed equally to this work.
- 012 Traumatic Gluteal Compartment Pathology and Hematomas: A Three-Case Series Highlighting Diagnostic and Surgical Challenges.** Carlos Díaz-Rivera¹, Juan Bonilla-Robles¹, Ian Cummings-Ruiz², Juan Berríos-Cordero³, José Rosario-González³, Nydia De Soto-Cordero¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine; ²St. Luke's Episcopal Medical Center, Department of Surgery, Ponce, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 013 Tumor-Selective Delivery of Exatecan and SLFN11 Predictive Value in Pediatric Rhabdomyosarcoma.** Paula Rivera Carrasquillo¹, Shahyan Rehman², Juan Vásquez³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Yale School of Medicine, Department of Surgery, Division of Pediatric Surgery, New Haven, Connecticut; ³Yale School of Medicine, Department of Pediatrics, New Haven, Connecticut.
- 014 MRI Non-Enhancing Intracranial Meningiomas: Literature Review and Case Series.** Adriana Vázquez-Medina, MD; Orlando De Jesús, MD. Department of Surgery, Section of Neurosurgery, University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 015 Below-Knee Amputation Following Osteomyelitis from Multidrug Resistant *Stenotrophomonas maltophilia* in a Diabetic Foot Ulcer: A Case Report and Literature Review.** Alejandro Arbona-Lampaya, BS^{1*}; Ricardo A. Pérez-Ojeda, BS^{1*}; Melanie Santos-Marrero, MD²; Adrián Pérez-Aybar, MD³. ¹School of Medicine, University of Puerto Rico - Medical Sciences Campus, San Juan, Puerto Rico; ²Department of Internal Medicine, University of Puerto Rico - School of Medicine, San Juan, Puerto Rico; ³Department of Internal Medicine, VA Caribbean Healthcare System, San Juan, Puerto Rico. *These two authors contributed equally to this work.
- 016 3D Printing Fluidic Devices That Serve as Non-Invasive Diabetes and Kidney Disease Diagnostic Tools and Vascular Research Platforms.** Andrés Moya Rodríguez, Sabrina Pagán Acosta, Daniela Delgado Montalvo, Everly Mercado Dalmau, Camila Terrero Jiménez, Natalia Vera Rivera, Sebastián Rivera Jové, Giancarlo Sánchez Castro, Rodrigo Báez Quintana, and Ricardo Ferrer Torres. UPR, Mayagüez Campus, Mayagüez, PR.

3rd ORAL CONCURRENT SESSION**1:20 to 3:30 pm***Location: A 491 (Room 9)**Graduate School of Public Health**4th Floor, Dr. Guillermo Arbona Building*

Moderator:

Brunilda Príncipe Pabellón, DrPH, MS, MaEd

Assistant Professor and Specialist in Curriculum and Evaluation

Deanship for Academic Affairs, UPR - Medical Sciences Campus

- 017 Fetal Alcohol Syndrome: A Survey of Physicians' and Medical Students' Knowledge and Experience.** Carol Salas Pagán, María N. Reyes Medina, Carolyn Pabón Rivera, Katia Berríos Adorno, and Iliá M. Torres Avillán. University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Institute on Developmental Disabilities, San Juan, Puerto Rico.
- 018 Experiencias Asociadas a la Violencia Obstétrica en Mujeres Residentes en Puerto Rico.** Conchita Santiago, Noemy Díaz. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería.
- 019 ¿Qué Será de las Mujeres Cuando Llegue el Temporal? Análisis de la Política Social sobre Violencia Doméstica en Puerto Rico Durante Desastres Socionaturales.** Ileana M. Ayala Fontánez. Universidad de Puerto Rico, Recinto de Río Piedras, Escuela Graduada de Trabajo Social Beatriz Lassalle, Facultad de Ciencias Sociales, San Juan, Puerto Rico.
- 020 Understanding Cervical Cancer Care: Perspectives of Women Living with and without HIV in Puerto Rico.** Marievelisse Soto-Salgado, DrPH, MS¹; Melisa Ramos-Sepúlveda, MPHE, CHES^{1,2}; Karina Torres-Mojica, MPH¹; Alexander De Jesús-Blest, BS¹; Rocío del M. Avilés-Mercado, BS^{1,3}; Verónica M. García-Ramírez, MS¹; Edna Acosta-Pérez, PhD⁴; Tatiana Pérez-Rodríguez, MPH⁴; Mariela Bournigal-Feliciano, MPH^{1,6}; Vivian Colón-López, PhD¹; Sheree Umpierre, MD⁵; Lorena González-Sepúlveda, MS¹; Ana P. Ortiz, PhD, MPH^{1,3}. ¹University of Puerto Rico (UPR) Comprehensive Cancer Center, Division of Cancer Control and Population Sciences, San Juan, Puerto Rico; ²UPR Medical Sciences Campus (UPR-MSC), School of Medicine, Department of Biochemistry, San Juan, Puerto Rico; ³UPR-MSC, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ⁴UPR-MSC, Alliance for Clinical and Translational Research Consortium, San Juan, Puerto Rico; ⁵UPR-MSC, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico; ⁶Johns Hopkins Bloomberg School of Public Health.
- 021 Derechos, Riesgos y Salud: Efectos de Políticas Sociales en el Bienestar de Personas LGBTQ+ en Puerto Rico.** Luis Arroyo-Andújar¹, Edda Rodríguez-Santiago¹, Souhail Malavé-Rivera¹, Carlos Rodríguez-Díaz². ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health; ²Boston University.
- 022 Política Social, Género y Salud Pública: Barreras Administrativas para la Igualdad Salarial en Puerto Rico.** Angélica N. García-Romero, MSW¹. ¹Universidad de Puerto Rico, Recinto de Río Piedras, Escuela Graduada de Trabajo Social Beatriz Lassalle, San Juan, Puerto Rico
- 023 De los Datos a la Acción: El Rol de la Hoja de Evaluación de Riesgo en la Salud y Seguridad de las Mujeres ante la Violencia de Género.** Idania R. Rodríguez, PhD; Norberto A. Toledo, MPH. Instituto de Estadísticas de Puerto Rico, San Juan, Puerto Rico.
- 024 La Guerra Contra Las Drogas: Iniciativas Adoptadas por el Estado y Sus Implicaciones Para Una Política Pública Alternativa Desde Los Derechos Humanos.** Joseline Pérez-García. Universidad de Puerto Rico, Recinto de Río Piedras, Escuela Graduada de Trabajo Social, Departamento de Ciencias Sociales, San Juan, Puerto Rico.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

4th ORAL CONCURRENT SESSION

1:20 to 3:30 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 III

Student Counseling and Psychological Services Center (CECSI)

Deanship of Student Affairs, UPR - Medical Sciences Campus

- 025 Mental Health Problems in Adults from Puerto Rico Living with Arthritis During the COVID-19 Pandemic.** José O. Negrón-Cruz, HSDG; Eduardo Cumba-Avilés, PhD; Marleana M. Rolón-Sanfeliz, BA; Gabriela Cacho-Pérez, HSDG. University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, PR.
- 026 Stress Dimensions and Dysfunctional Eating Behaviors in Puerto Rico.** Andrea López-Cepero¹, José F. Rodríguez-Orengo², Josiemer Mattei³. ¹Nutrition Program, Department of Human Development, Graduate School of Public Health, University of Puerto Rico – Medical Sciences Campus, San Juan, PR; ²Department of Physiology, School of Medicine, University of Puerto Rico – Medical Sciences Campus, San Juan, PR; ³Department of Nutrition, Harvard TH Chan School of Public Health, Boston, MA.
- 027 Art Therapy in the University Context: Exploring a Group Intervention to Reduce Anxiety.** Nancy Viana Vázquez, Rosa J. Rodríguez Benítez, Sofía Calderón Pizarro. University of Puerto Rico, Río Piedras Campus, Faculty of Social Sciences, Department of Social Work and Department of General Social Sciences, San Juan, Puerto Rico.
- 028 Student Voices on Basic Needs: A Study at the University of Puerto Rico, Río Piedras Campus.** Cristal E. Márquez-Moyeno^{1,2,3}; Romer O. Vilorio-Caraballo^{1,2,3}; David Pérez-Jiménez^{1,2,3}. ¹University of Puerto Rico Río Piedras Campus, Faculty of Social Sciences, Department of Psychology; ²University of Puerto Rico, Río Piedras Campus, Instituto de Investigación Psicológica, Faculty of Social Sciences; ³University of Puerto Rico Río Piedras Campus, Faculty of Social Sciences, Centro de Investigaciones Sociales.
- 029 Empowering Public Health Professionals: The Key Role of Health Literacy from the Public Health Preparedness Academy.** Kathleen N. Morales Sánchez, MPH; Marisabel Román Afanador, MPHE, CHES®; Wilmarian Rodríguez Lebrón, MS; Rose M. Díaz García MS, CGG; Graciela Marrero Gerena, BHE; Jorge I. Figueroa Valencia MPHE, CHES®; Miriam Ramos Colón, MS, CGG. Auxiliary Secretary of Comprehensive Health Services, Puerto Rico Department of Health.
- 030 Programa HOLA: Diseño de un Modelo Educativo Comunitario para Cuidadores Informales de Adultos Mayores.** Félix Román, Joseph Concepción, Arianis Dávila, Deborah Canales, Kathleen Manso, Liz Borrero, Tamara Felicie, Irma Vázquez, Kiara Escudero, Luz V. Camacho, Leyra Figueroa, Juan Soto, Maribelis Rivera, Marta Ramos, Nancy Dávila, María Castro, & Jennifer Rivera. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería, Programa Graduado, San Juan, Puerto Rico.
- 031 Assessing Institutional Culture and Climate through a Needs Assessment at the University of Puerto Rico, School of Dental Medicine.** Leslie M. González Morales, Elba C. Díaz Toro. University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine, Office of the Dean, Cultural Integration Program and Academic Climate (CIPAC), San Juan, Puerto Rico.
- 032 NutriFit: Innovación Educativa Integral para el Manejo de la Diabetes.** Brenda Padilla-Pérez, MPHE¹; Adia Aponte-Marrero, MPHE, CHES®¹; Michelle Carrillo-Russe, LND, EDPR, CMCP, CMG¹; Yiselly M. Vázquez-Guzmán, EdD, MPHE, MA, MCHES®^{1,2}. ¹Asociación Puertorriqueña de Diabetes; ²Escuela Graduada de Salud Pública, Recinto de Ciencias Médicas, Universidad de Puerto Rico.

5th ORAL CONCURRENT SESSION**1:20 to 3:30 pm***Location: B 463 C (Room 15)**Graduate School of Public Health**4th Floor, Dr. Guillermo Arbona Building*

Moderator:

Edgar Pérez Matías, DrPH, ASP

Assistant Professor

Department of Environmental Health

Graduate School of Public Health, UPR - Medical Sciences Campus

- 033** **Voces de la Coalición: Entendiendo la Continuidad del Cuidado de Cáncer en Escenarios de Climas Extremos en Puerto Rico.** Bridgette N. Troche Santana^{1,2}; Deliris Agosto-Centeno^{1,2}; Melanie Díaz-Bonet^{1,2}; Solimar García-Molina^{1,2}; Pablo Méndez-Lázaro^{1,2}. ¹CARIB-CARES- Centro de Investigación en Cáncer del Caribe sobre los Riesgos Ambientales y Naturales; ²UPR-RCM- Universidad de Puerto Rico, Recinto de Ciencias Médicas.
- 034** **Estudio de Percepción de Riesgo al Calor Extremo entre Personas Adultas Mayores en Puerto Rico: Impactos y Adaptaciones.** Mónica V. Sánchez-Sepúlveda¹, Frances M. Aponte Caraballo¹, Laura T. Cabrera Rivera¹, Manuel Heredia Morales¹, Valeria M. Casellas-Pérez¹, Jimena Pérez¹, Pablo A. Méndez Lázaro^{1,2}. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Departamento de Salud Ambiental, San Juan, Puerto Rico; ²UPR-Centro Comprensivo de Cáncer, San Juan, Puerto Rico.
- 035** **Seasonal Suicide Trends and Regional Temperature Patterns in Puerto Rico: A Descriptive Study of 2000-2024 Data.** Erika I. Escabí-Wojna^{1,2}, Viviani López Rivera³, María Coss Guzmán³, Laura T. Cabrera Rivera¹, Manuel Heredia Morales¹, Pablo A. Méndez Lázaro^{1,2}. ¹University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ²University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico; ³Commission on Suicide Prevention, Puerto Rico Department of Health, San Juan, Puerto Rico.
- 036** **CARIB-CARES Coalition of Partners Evolution in US Virgin Islands and Puerto Rico: A Social Network Analysis.** Melanie Díaz-Bonet^{1,2}, Bridgette Troche-Santana^{1,2}, Deliris Agosto-Centeno^{1,2}, Solimar García-Molina^{1,2}, Tischa Muñoz-Erickson⁶, Sarah Clark^{1,5}, Zack Guido^{1,5}, Nancy Cardona-Cordero¹, LaVerne Ragster^{1,4}, Noreen Michael^{1,4}, Pablo Méndez-Lázaro^{1,2,3}. ¹The Caribbean Cancer Research Center on Environmental and Natural Hazards (CARIB-CARES); ²University of Puerto Rico Medical Sciences Campus (UPRMSC), Graduate School of Public Health, Environmental Health Department; ³UPR Comprehensive Cancer Center (UPRCCC); ⁴University of the Virgin Islands (UVI); ⁵Arizona Institute for Resilience, University of Arizona (UA); ⁶International Institute of Tropical Forestry-US Forest Service (IIFT-USFS).
- 037** **Spatial Analysis of Vulnerability and Climate Risks in Cancer Incidence Across Puerto Rico Using Integrated Geographic and Cancer Registry Data.** Solimar García-Molina, DrPH¹; Melanie Díaz-Bonet, DrPHc¹; Deliris Agosto-Centeno, MS¹; Bridgette Troche-Santana, MPHE¹; Ana P. Ortiz, PhD²; Lenulisy Rosado-Estrada, DrPHc²; Marivelisse Soto, DrPH²; Nancy R. Cardona-Cordero, DrPH²; Pablo Méndez-Lázaro, PhD¹. ¹UPR-MS - University of Puerto Rico Medical Sciences Campus-Graduate School of Public Health, Environmental Health Department - CARIB-CARES - The Caribbean Research Center on Environmental and Natural Hazards; ²UPR Comprehensive Cancer Center.
- 038** **Extreme Heat in Schools: Monitoring with Sensors and School Collaboration.** Priscilla N. Molina-Cora¹, Kevin R. Fernández-Rodríguez¹, Jimena Pérez¹, Laura Cabrera-Rivera¹, Pablo Méndez-Lázaro^{1,2}. ¹Department of Environmental Health-Graduate School of Public Health, Medical Sciences Campus, University of Puerto Rico, San Juan, PR; ²Cancer Biology Division and Environmental Translational Cancer Program - Comprehensive Cancer Center, San Juan, PR.
- 039** **Protegiendo a la Población de Puerto Rico a Través del Sistema de Alerta Temprana de Calor: Análisis Espaciotemporal de los Avisos en los Años 2023 y 2024.** Valeria M. Casellas-Pérez¹, Kevin R. Fernández Rodríguez¹, Adianez C. Gómez González¹, Frances M. Aponte Caraballo¹, Manuel Heredia Morales¹, Pablo A. Méndez Lázaro^{1,2}. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Departamento de Salud Ambiental, San Juan, Puerto Rico; ²UPR-Centro Comprensivo de Cáncer.



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

Wednesday, March 25, 2026

LECTURE AND DEMONSTRATION

4:30 to 5:30 pm

Location: 1st Floor

Conrado F. Asenjo Library

UPR - Medical Sciences Campus

***Web of Science Research Assistant:
Transforming Scientific Research Through Trusted Artificial Intelligence***

Guest Speaker:

Fernando Franco H.
Strategic Customer Success Consultant
Clarivate



Second Day – Thursday, March 26, 2026

REGISTRATION

7:00 to 8:00 am

Location: Foyer

Don Jaime Benítez Rexach Amphitheater

Continental breakfast at the registration site

PLENARY SESSION – SCHOOL OF DENTAL MEDICINE

8:00 to 10:00 am

Location: Don Jaime Benítez Rexach Amphitheater

The Rise of Innovative ‘Bioactive’ Materials: Are They Redefining Restorative Dentistry?

Keynote Speaker:

Salvatore Sauro, PhD

PI and Full Professor

Dental Biomaterials and Minimally Invasive Dentistry

Department of Dentistry, Faculty of Health Sciences

CEU - Cardenal Herrera University

Valencia, Spain

Natural-Derived Antioxidants: A New Frontier in Pulp and Dentin Collagen Preservation

Guest Speaker:

Michela Capoferri, PhD

Nutrition Specialist and Researcher

School of Health Sciences,

Universidad Cardenal Herrera-CEU,

CEU Universities, Alfara del Patriarca, Spain

Moderator:

Augusto Elías Boneta, DMD, MSD

Assistant Dean of Research

School of Dental Medicine, UPR - Medical Sciences Campus

BREAK

10:00 to 10:30 am



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

PLENARY SESSION – SCHOOL OF PHARMACY

10:30 to 11:30 am

Location: Don Jaime Benítez Rexach Amphitheater

**The Impact of Competency-Based Education
in Health Professions Academic Programs**

Keynote Speaker:

Ángel Villarini Jusino, PhD

Professor (retired)

University of Puerto Rico, Río Piedras Campus

Moderator:

Wanda T. Maldonado Dávila, PharmD

Dean of the School of Pharmacy

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.

6th ORAL CONCURRENT SESSION**1:20 to 3:30 pm**

Location: A 469 (Room 3)

Graduate School of Public Health

4th Floor, Dr. Guillermo Arbona Building

Moderator:

Yisel Cantres Rosario, PhD

Assistant Professor

Department of Microbiology

School of Medicine, UPR - Medical Sciences Campus

- 040 Cutaneous *Ancylostoma Braziliense* Infection Masquerading as Inflammatory Dermatoses.** María Sofía Segarra Juelle¹, María Fernanda López Avilés¹, Diego Enrique Otero Santiago¹, José González Chávez². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Santurce Medical Mall, San Juan, Puerto Rico.
- 041 Patterns and Public Health Implications of Musculoskeletal Injuries from Motorcycle Trauma at the Puerto Rico Trauma Center.** Héctor Sanchez-Fernández, MD¹; Norberto J. Torres-Lugo, MD¹; Juan A. Silva-Aponte, MD¹; José A. Rosario-González, BS²; Luis Lojo-Sojo, MD¹. 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, San Juan, Puerto Rico.
- 042 Psychoneuroimmunological Profiles in Breast Cancer: A Descriptive Case Series.** Sanel Figueroa-Vargas, MS¹; Zindie Rodríguez-Castro, MD¹; Cinthia Cortés- Castro, MS, LCSW¹; Cristina Peña-Vargas, PhD^{1,4}; Guillermo Armaiz-Pena, PhD^{1,2,3}; Eida M. Castro-Figueroa, PsyD, MSc^{1,2,4}. ¹Ponce Research Institute, Ponce, PR, USA; ²Ponce Health Sciences University, School of Medicine, Ponce, PR, USA; ³Ponce Health Sciences University, School of Dental Medicine, Ponce, PR, USA; ⁴Ponce Health Sciences University, School of Behavioral and Brain Sciences, Ponce, PR, USA; ⁵Ponce Health Sciences University, Public Health Program, Ponce, PR, USA.
- 043 Tumor Grade and Survival Outcomes in Penile Squamous Cell Carcinoma: A Puerto Rican Cohort Study.** Ariel Barbosa-Ruiz¹, María M. Sánchez-Vázquez², Andrés E. Hernández-González³, Carlos A. Rivera-López¹, Naydi Pérez Ríos², Tatiana Pérez Rodríguez⁵, María J. Marcos-Martínez⁴, Eduardo Canto¹, Antonio Puras-Báez¹, Magaly Martínez-Ferrer^{2,3}. ¹University of Puerto Rico School of Medicine, Department of Surgery, Urology Division; ²University of Puerto Rico Comprehensive Cancer Center, Division of Clinical and Translational Cancer Research; ³University of Puerto Rico School of Pharmacy, Department of Pharmaceutical Sciences; ⁴University of Puerto Rico School of Medicine, Department of Pathology and Laboratory Medicine; ⁵Biostatistics, Epidemiology, and Research Design (BERD) Core, The Alliance for Clinical and Translational Research.
- 044 Quantitative Proteomics of Astrocyte-Derived Exosomes Identify Potential Novel Biomarkers of HIV-Associated Neurocognitive Impairment.** Kamilis S. Hernández Alejandro¹; Yadira M. Cantres Rosario²; Ana E. Rodríguez De Jesús², Eduardo L. Tosado Rodríguez³, Elaine Rodríguez⁴, Abiel Roche Lima³, Loyda M. Meléndez¹, Lester J. Rosario Rodríguez⁴, Yisel M. Cantres Rosario¹, Valerie Wojna⁴. ¹Department of Microbiology, University of Puerto Rico-Medical Sciences Campus; ²Translational Proteomics Center, Research Capacity Core, Center for Collaborative Research in Health Disparities (CCRHD), Academic Affairs Deanship; ³Integrated Informatics Services, Research Capacity Core, Center for Collaborative Research in Health Disparities (CCRHD), Academic Affairs Deanship; ⁴Department of Internal Medicine, University of Puerto Rico-Medical Sciences Campus.
- 045 Evaluating Differential Gene Expression Overlap as a Predictor of CAR T Cell Treatment Response.** Alibeth E. Luna^{1,2}, Deiver Suárez^{1,2}, Gustavo E. Bertrán^{2,3}, Mauricio Cabrera^{1,3}, Clara E. Isaza^{1,2,3}. ¹Graduate Program in Bioengineering, University of Puerto Rico-Mayagüez; ²Graduate Program in Biology, University of Puerto Rico-Mayagüez; ³The Applied Optimization Group, University of Puerto Rico-Mayagüez.
- 046 Predictors of Emergency Department ROSC in Out-of-Hospital Cardiac Arrest: Role of Initial Rhythm and Airway Management.** Juan P. Rosa Cortés, MS; Mary J. Torres Guzmán, MS; Alejandra P. Méndez Pérez, MS; Alexis J. Rodríguez Octaviani, MS; Haydee M. Rincón Peona, EM, PGY; Enid J. García Rivera, MD; Juan A. González Sánchez, MD. UPR School of Medicine; University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center, San Juan, Puerto Rico.
- 047 Frequency and Causes of Visits to the Emergency Departments by People with Dementia in Puerto Rico.** José Carrión Baralt, PhD, MPH¹; Carmen Maldonado Andino, MPH(c)¹; Alexis Rodríguez Ramos, PhD, MPH(c)¹; Giselle Vázquez De Jesús, MPH(c)¹; Pedro J. Castro Peláez, PhD, MSc². ¹Gerontology Program, Graduate School of Public Health, UPR MSC; ²The Alliance for Clinical & Translational Research, UPR MSC.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

7th ORAL CONCURRENT SESSION

1:20 to 3:30 pm

Location: A 471 (Room 4)

Graduate School of Public Health

4th Floor, Dr. Guillermo Arbona Building

Moderator:

Vincent Sifres Fernández, PhD

Member and Co-coordinator

Institute for the History of Health Sciences (IHICIS)

Deanship for Academic Affairs, UPR - Medical Sciences Campus

- 048 40 Años del Movimiento Global de Promoción de la Salud (1986–2026): Valoración del Marco Conceptual, las Políticas y los Desafíos.** Hiram V. Arroyo Acevedo. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Departamento de Ciencias Sociales, San Juan, Puerto Rico.
- 049 Los Ochenta Años de la Promoción de la Salud Escolar en Puerto Rico (1945–2025) y su Contribución Histórico-Institucional a la Salud Pública.** Rosalie Ayala Colón, Hiram V. Arroyo Acevedo, María T. Borges Cancel, Marcilyn Colón Colón. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Esc. Graduada de Salud Pública, Departamento de Ciencias Sociales, Programa Graduado de Educación en Salud Pública, San Juan, PR.
- 050 Re-Pensando las Humanidades Médicas en Puerto Rico: Hacia un Saber Situado y una Alfabetización Crítica en Salud.** Iliaris Avilés Ortiz, Mariam Colón Pizarro. Universidad de Puerto Rico, Recinto Universitario de Mayagüez, Facultad de Artes y Ciencias, Departamento de Humanidades, Mayagüez, Puerto Rico.
- 051 Rethinking Public Health Curriculums for Freedom and Health: A Decolonial Discussion from an Afro-Caribbean Archipelago.** Chrys Marie Cuencas Álamo. University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Health Services Administration, San Juan, Puerto Rico.
- 052 Ecofeminismo y Justicia Climática: Luchas Entrelazadas.** Alejandra M. Figueroa Huertas^{1,2}. ¹Universidad de Puerto Rico, Recinto de Río Piedras, Facultad de Educación, Departamento de Estudios Graduados, San Juan, Puerto Rico; ²Escuela Especializada en Idiomas Padre Rufo, Región Educativa de San Juan, Departamento de Educación de Puerto Rico, San Juan, Puerto Rico.
- 053 El trabajo no Remunerado de Cuidados: Consideraciones para las Políticas Sociales en Puerto Rico desde la Determinación Social y los Feminismos.** Jennifer Oliveras Del Río, DrPH, MSW. Universidad de Puerto Rico, Recinto de Río Piedras, Facultad de Ciencias Sociales, Escuela Graduada de Trabajo Social; Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública.
- 054 Health and Well-Being of Sexual and Gender Minorities in Puerto Rico.** María E. Ayala Tirado¹, Luis A. Arroyo-Andújar, MPH, MA²; Iliá M. Otero-Cruz, MPH²; Souhail M. Malavé-Rivera, PhD, MSc²; Edda I. Santiago-Rodríguez, DrPH, MPH, MA²; Carlos E. Rodríguez-Díaz, PhD, MPHE, MCHES^{2,3}. ¹George Washington University Milken Institute School of Public Health; ²University of Puerto Rico Medical Sciences Campus, School of Public Health; ³Boston University School of Public Health.
- 055 Información, Consentimiento y Salud Sexual en Mujeres Histerectomizadas en Puerto Rico: Implicaciones Éticas y Clínicas.** Michele I. Beauchamp Montalvo, PhD. Universidad de Puerto Rico en Ponce, Departamento de Humanidades, Ponce, Puerto Rico.

8th ORAL CONCURRENT SESSION**1:20 to 3:30 pm***Location: A 491 (Room 9)**Graduate School of Public Health**4th Floor, Dr. Guillermo Arbona Building*

Moderator:

Bruno Marie Bordes, PhD

Professor, Institute of Neurobiology

Adjunct Professor, Department of Anatomy & Neurobiology

School of Medicine, UPR - Medical Sciences Campus

- 056 Physical Activity Impact on Cognition in PWH Varies with Sex.** Fernando Padrón¹, Miriam Matos¹, Elaine Rodríguez¹, Lester J. Rosario-Rodríguez¹, Yisel M. Cantres-Rosario¹, Valerie Wojna¹, Nicole M. González², Bexaida Díaz², Farah Ramírez-Marrero². ¹University of Puerto Rico Medical Sciences Campus, School of Medicine, Department of Internal Medicine, San Juan, Puerto Rico; ²University of Puerto Rico Río Piedras Campus, Department of Graduate Studies in Education, Puerto Rico.
- 057 Tamoxifen Modulates the Gut Microbiome by Promoting Bifidobacterium after Spinal Cord Injury.** Luis H. Pagán-Rivera¹, Filipa Godoy-Vitorino², Samuel Ocasio-Rivera¹, María E. Santiago-Gascot¹, José M. Santiago³, Iris Salgado⁴, Aranza Torrado-Tapias⁵, Carolina García-Guay⁶, Jorge D. Miranda¹. ¹University of Puerto Rico Medical Sciences Campus, Department of Physiology, San Juan, PR. 00936; ²University of Puerto Rico Medical Sciences Campus, Department of Microbiology and Medical Zoology, San Juan, PR; ³University of Puerto Rico Carolina Campus, Carolina, PR; ⁴Universidad Central del Caribe, School of Medicine, Bayamón, PR; ⁵National Institutes of Health, National Human Genome Research Institute, Bethesda, MD; ⁶University of Puerto Rico, Río Piedras Campus, Department of Psychology, San Juan, PR.
- 058 Transferrin-Decorated Protein Nanosized-DDS for Codelivery of Synthetic Phospholipids in NSCLC.** Keisy Rodríguez-Villafañe¹, Daraishka Pérez², Yancy Ferrer³, Yamixa Delgado^{2*}. ¹Pharmaceutical Sciences Program, University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, San Juan PR; ²Biochemistry & Pharmacology Department, San Juan Bautista School of Medicine, Caguas, PR; ³Anatomy and Neurobiology Department, University of Puerto Rico, Medical Sciences Campus, San Juan, PR *Corresponding author.
- 059 Optimization Protocol for Obtaining Organic Extracts from Tropical Marine Macroalgae with Potential Anxiolytic Effects.** *Tatiana N. Ríos Colón¹, Amanda S. Vázquez Rodríguez², Rocío Guadamuro¹, Ricardo Chiesa³. ¹Department of Chemistry, University of Puerto Rico-Cayey; ²General Sciences Program, University of Puerto Rico-Cayey; ³Department of Biology, University of Puerto Rico-Cayey.
- 060 Surface Functionalized ZnSe Quantum Dots Enable Selective and Broad-Spectrum Detection of Heavy Metals in Water.** Marimel Rolón Rivera, Sonia J. Bailón Ruiz. University of Puerto Rico at Ponce, Laboratory of Investigation in Nanotechnology and Characterization (LINC), Department of Chemistry & Physics Ponce, PR.
- 061 Protein and Glucose Image-Based Sensor to Increase Science Accessibility and Health Monitoring.** Sabrina Pagán Acosta, Andrés Moya, Daniela Delgado. University of Puerto Rico, Mayagüez Campus, Faculty of Arts and Sciences, Department of Chemistry, Mayagüez, Puerto Rico.
- 062 Regulation of Sex-specific Stress Vulnerability: Elucidating the Role of Estrogen and Chromatin.** Kiara L. Rodríguez Acevedo¹, Rachael E. Hokenson^{2,3}, Megan Álvarez^{1,4}, Tallie Z. Baram^{2,3,5}, Elizabeth Heller². ¹Department of Systems Pharmacology and Translational Therapeutics, University of Pennsylvania, Philadelphia, PA, United States; ²Department of Anatomy/ Neurobiology, University of California-Irvine, Irvine, CA, United States; ³Department of Pediatrics, University of California-Irvine, Irvine, CA, United States; ⁴College of Arts and Sciences, University of Pennsylvania, Philadelphia, PA, United States; ⁵Department of Neurology, University of California-Irvine, Irvine, CA, United States.
- 063 Crosstalk Between Brain and Heart: Astrocyte Derived Extracellular Vesicles Effects on AC16 Cardiomyocytes.** Diego Troche Monserrate¹, Fernando Padrón¹, Kamilis Hernández¹, Aleandra Ortiz², Elaine Rodríguez¹, Lester Rosario¹, Valerie Wojna³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Internal Medicine, San Juan, Puerto Rico; ²University of Puerto Rico Medical Sciences Campus, School of Medicine, Department of Anatomy and Neurobiology, San Juan, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Neurology, San Juan, PR.



Innovating Together *for Healthier Futures*

University of Puerto Rico, Medical Sciences Campus

9th ORAL CONCURRENT SESSION

1:20 to 3:30 pm

Location: B 463 A (Room 13)

Graduate School of Public Health

4th Floor, Dr. Guillermo Arbona Building

Moderator:

Charles W. Seguí Caballero, MLS

Librarian II

Conrado F. Asenjo Library

Deanship for Academic Affairs, UPR - Medical Sciences Campus

- 064** **Viralizando la Salud Pública: Educando para Comunicar en Tiempos de Infodemia.** Yiselly M. Vázquez-Guzmán, EdD, MPHE, MA, MCHES. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública.
- 065** **Experiencias de la Transformación Digital en el Programa de Maestría en Educación en Salud Pública en la Escuela Graduada de Salud Pública.** Ivelisse M. García-Meléndez, María T. Borges-Cancel, & Marcilyn Colón Colón. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Departamento de Ciencias Sociales, San Juan, PR.
- 066** **Building AI Literacy for Biomedical Research: Training and Open Resources from Center for Research Education, Scientific Communication-Counseling Opportunities (CRESCO), Title V - UPR Medical Sciences Campus.** José R. Ubieta Santiago¹, Melissa Mercado Caraballo², José J. Morales Benítez³. ¹University of Puerto Rico, Medical Sciences Campus, Conrado F. Asenjo Library, Deanship for Academic Affairs, San Juan; ²University of Puerto Rico, Río Piedras Campus, Faculty of Information and Communication, Graduate Program in Information Science, San Juan, Puerto Rico; ³University of Puerto Rico, Mayagüez Campus, General Library, Graduate Research and Innovation Center (GRIC), Mayagüez, Puerto Rico.
- 067** **Strengthening Research Capacity in Infection-Related Cancers: Initial Results from the REPMIC Program.** Ana P. Ortiz^{1,2}, Tanyaly Rivera-Santiago¹, Marievelisse Soto-Salgado¹. ¹University of Puerto Rico, Comprehensive Cancer Center, Division of Cancer Control and Population Sciences, San Juan, PR; ²University of Puerto Rico Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology.
- 068** **Advancing Careers in Cancer Research through Mentorship: The Cancer Prevention and Control (CAPAC) Research Training Program.** Ana Patricia Ortiz, PhD, MPH^{1,2}; Mariela Bournigal-Feliciano, MPH¹; 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, PR.
- 069** **Learning Together to Care Better: A Case-Based Interprofessional Education Experience in HIV Care.** Belinda Beauchamp, MD, FAAP¹; Edna Almódovar, PharmD²; Ginette Izquierdo, DMD³; Jannette Velázquez, DMD³; Gloria Suau, MD⁴; Lilliana Hernández, RN, PhD⁵; Solaritza Rivera-León, MPHE, MPH⁶; Keishla Torres, MPH, GCG⁶. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics, San Juan, PR; ²University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, San Juan, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine, San Juan, PR; ⁴University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Psychiatry, San Juan, PR; ⁵University of Puerto Rico, Medical Sciences Campus, School of Nursing, San Juan, PR; ⁶University of Puerto Rico, Medical Sciences Campus, Northeast Caribbean AIDS Education and Training Center, San Juan, PR.
- 070** **clinicaLea in Social Media: A Project to Advance Clinical Research Education for Hispanics in Puerto Rico and Abroad.** Wilfredo E. De Jesús-Monge, MD, MSc. Bioclinical Studies Consultants LLC, Guaynabo, PR.
- 071** **Preventive Health Education for Children and Adolescents in Vulnerable Communities: A School and Community-Based Outreach Initiative in Puerto Rico.** Kamila López Díaz¹, and Manuel Reyes Guzmán². ¹University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences, Department of Chemistry, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, Faculty of General Studies, Department of Physical Sciences, San Juan, Puerto Rico.

10th ORAL CONCURRENT SESSION**1:20 to 3:30 pm***Location: B 463 C (Room 15)**Graduate School of Public Health**4th Floor, Dr. Guillermo Arbona Building*

Moderator:

Cynthia M. Pérez Cardona, PhD
ProfessorDepartment of Biostatistics and Epidemiology
Graduate School of Public Health, UPR - Medical Sciences Campus

- 072 De la Vigilancia a la Acción: Hallazgos del NHBS-PWID para Responder al VIH y Hepatitis entre Usuarios Drogas Inyectables en Puerto Rico.** Yadira Rolón Colón, MS¹; Edna Acosta Pérez, PhD, MSc²; Jesús Vargas Franco, MPH¹; Juan Reyes, EdD²; Jan Peña Rivera, MPH²; María Pabón Martínez, BA¹; José J. Mulinelli, BBA³. ¹Puerto Rico Department of Health; ²Graduate School of Public Health, University of Puerto Rico Medical Sciences Campus; ³Coaf, Inc.
- 073 Epidemiological Profile, Trends, and Survival Disparities in Pediatric Cancer in Puerto Rico: A Population-Based Study.** Carolyn M. Ruiz Pérez, MS¹; Rocío K. Rivera Valentín, MD/PhD²; Lilliana Castro Jiménez, MPH²; Brenda C. Torres Velásquez, MS, PhD². ¹University of Puerto Rico Comprehensive Cancer Center, Division of Clinical and Translational Cancer Research, San Juan, Puerto Rico; ²University of Puerto Rico Comprehensive Cancer Center, Division of Shared Resources & Scientific Operations, Biostatistics & Bioinformatics Core-BBC, San Juan, Puerto Rico.
- 074 Vaccination Unavailability or Delayed Vaccination: Two Plausible Scenarios for a Pandemic. A Case Study of Puerto Rico's Covid-19 Outbreak.** Ernesto P. Esteban, PhD. University of Puerto Rico-Humacao, Department of Physics and Electronics, Humacao, Puerto Rico.
- 075 Long-Term Trends in HPV Vaccine Initiation and Completion in Puerto Rico: Evidence of Structural Timing Gaps Between Clinical Guidance and Mandate Requirements.** Jennifer M. Torres Del Valle, Claudia Amaya-Ardila, Souhail Malavé Rivera. University of Puerto Rico-Medical Sciences Campus.
- 076 Gaps in Communication: PrEP-Eligible Men Who Have Sex with Men's Hesitancy to Initiate Conversations About Sexual Health with Healthcare Providers.** Souhail M. Malavé-Rivera, Mario A. Rodríguez-Cancel, Luis A. Arroyo-Andújar, Milton Rodríguez-Padilla, Iliá M. Otero-Cruz, Ricardo L. Vargas-Mollina, Edda I. Santiago-Rodríguez, & Carlos E. Rodríguez-Díaz.
- 077 Epidemiology and Incidence of Craniosynostosis in Puerto Rico: A Population-based Study.** David A. Febre-Alemañy ^{1,2}, Victoria I. García Rodríguez^{1,2}, Liara S. Ortiz Ocasio¹, Adanis Bravo-Cordero^{1,2}, Iván J. Sosa-González, MD⁴; Samuel Estronza-Ojeda, MD³; Jonatán Hernández-Rosa, MD¹. †Both authors contributed equally to this work. ¹University of Puerto Rico – School of Medicine, Department of Surgery; ²San Juan Bautista School of Medicine, Caguas, Puerto Rico; ³Neurosurgery Section, Department of Surgery, University of Puerto Rico Medical Sciences Campus, San Juan, PR; ⁴Hospital Menonita Caguas, Puerto Rico, US.
- 078 Análisis de la Asociación entre el Número de Casos Positivos a Dengue y las Variables Climáticas y Socioecológicas en el Municipio de San Juan Durante el Periodo de 2021 a 2024.** Jorge Rivera Velásquez, MPH¹; Imar Mansilla Rivera, PhD¹; Gilberto Ramos Valencia, DrPH, MS²; Julieanne Miranda Bermúdez, DrPH, MS³. ¹Departamento de Salud Ambiental, Escuela Graduada de Salud Pública; ²Departamento de Epidemiología y Bioestadística, Escuela Graduada de Salud Pública; ³Unidad de Control de Vectores de Puerto Rico, Fideicomiso para Ciencia, Tecnología e Investigación de Puerto Rico.
- 079 Tasas de Uso y Variables Asociadas a Distintas Modalidades de Servicios de Salud Mental en Adultos de Puerto Rico Durante la Pandemia del COVID-19.** Eduardo Cumba Avilés, PhD; Marleana M. Rolón Sanfeliz, BA; Sergio A. Ramírez Alonso, HSDG. Universidad de Puerto Rico, Recinto de Río Piedras, Facultad de Ciencias Sociales, Instituto de Investigación Psicológica, San Juan, Puerto Rico.



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

Thursday, March 26, 2026

BOOK PRESENTATION

5:30 to 7:30 pm

Location: 1st Floor

Conrado F. Asenjo Library

UPR - Medical Sciences Campus

Trópicos Insanos: Político Antillano de las Crónicas de Indias y Puerto Rico



by Raúl Mayo Santana, PhD
Professor Emeritus
School of Medicine, UPR - Medical Sciences Campus



Presented by:

José Carlos Arroyo Muñoz, PhD
Professor
Faculty of Theology and History
Inter American University of Puerto Rico, Metro Campus

Third Day – Friday, March 27, 2026

REGISTRATION

8:00 to 9:00 am

Location: Foyer

Don Jaime Benítez Rexach Amphitheater

Continental breakfast at the registration site

PLENARY SESSION – 64th BAILEY K. ASHFORD MEMORIAL LECTURE

9:00 to 11:30 am

Fungal Diseases in Warming World

Keynote Speaker:

Arturo Casadevall, MD, PhD

Bloomberg Distinguished Professor

Chair of Molecular Microbiology and Immunology

Johns Hopkins School of Public Health

Moderator:

Nivia L. Pérez Acevedo, MS, PhD

Associate Dean of Biomedical Sciences

Director of Graduate Program, School of Medicine

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.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

11th ORAL CONCURRENT SESSION

1:20 to 3:30 pm

Location: A 469 (Room 3)

Graduate School of Public Health

4th Floor, Dr. Guillermo Arbona Building

Moderator:

Danilly Ramos Llera, MLS, MBA, EdD

Librarian I

Conrado F. Asenjo Library

Deanship for Academic Affairs, UPR - Medical Sciences Campus

- 080 El Impacto del Empoderamiento y la Participación de las Partes Interesadas en la Investigación Comunitaria para la Salud Pública.** Karen Agosto, Ruth Ríos, Marisol Peña, Cibela Cajigas, Juan C. Cardona, Sheila M. De León, Frances G. González, Sylvia D. Lillquist, Abiezer Luzunaris, Ariangeliz Malavé, Alanis M. Mercado, Paola N. Pardo, William A. Ríos, Gabriela M. Ruiz, Francelis Sánchez, Elizabeth Vale. 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.
- 081 Building Bridges Between Science and Society: Strengthening Community Partnerships and Translational Research Capacity in Puerto Rico.** Edna Acosta Pérez, PhD, MSc^{1,2}; Enid García-Rivera, MD, MPH^{2,3}; Carlamarie Nobao Ramos, MS, PhD²; Mayra L. Roubert Rivera, DrPH, MS^{2,4}; Yashira M. Sánchez Colón, PhD, MS^{2,4}; Lyliana Crespo-Nazario, DHSc, MAES^{2,5}; Yari Valle, DrPH, MPH, GCG²; Olga Morales Vega, BS^{2,5}; Bárbara Carlo Reyes, ABA². ¹Graduate School of Public Health, Medical Sciences Campus, UPR; ²Community Engagement Outreach Core, The Alliance for Clinical and Translational Research, San Juan, Puerto Rico; ³University of Puerto Rico School of Medicine, Medical Sciences Campus, UPR; ⁴Public Health Program, Ponce Health Sciences University; ⁵Internal Medicine, Universidad Central del Caribe.
- 082 Percepción de los Fisioterapeutas sobre los Servicios de Telesalud.** Edmarie Soto-Figueroa¹, Astrid C. Contreras-Moctezuma², Nebdiel O. Oquendo-Colón³, Esteban J. Rodríguez-Seary⁴, Karisol Chévere-Rivera⁵, Rafael A. López-Andino⁶. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Profesiones de la Salud, Programa Doctor en Terapia Física, San Juan, Puerto Rico.
- 083 Uso de Tabaco en Cuidadores en Puerto Rico 2021-2022: Impacto en la Salud y su Calidad de Vida.** Alex Cabrera-Serrano, Marcos E. Felici-Giovanini, Graciela Marrero-Gerena, Marianne Cartagena-Colón. Departamento de Salud de Puerto Rico.
- 084 Iniciativa Juega, Diviértete y Aprende: El Juego como Derecho y Espacio de Promoción de la Salud.** Rosa Figueroa-Sánchez¹, Zaiska Pacheco-Cruz². ¹Trabajadora Social en Práctica Independiente; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, San Juan, Puerto Rico.
- 085 Environmental Health in Child Care: Local Lessons of a National Program.** Hester Paul¹, Jessica Price¹, Elisabeth Repp¹, Blean Girma², Dianivette Rolón-Cruz¹. ¹Children's Environmental Health Network, ²University of Maryland.
- 086 Exploración del Patrón de Cuidado de Incontinencia Urinaria por Médicos Primarios: Una mirada desde la Terapia Física.** Amanda V. Rivera Bobet, María F. Ferrer Aponte, Lorena C. Vázquez Anadón, Rebecca C. Galarza de Jesús, Karisol Chévere Rivera, Jeniffer Peña Romero. Universidad de Puerto Rico, Recinto de Ciencias Médicas.
- 087 Community Participation in Correctional Reform: A Public Health Approach from Puerto Rico.** Ángel R. Ocasio Gracia^{1,2,4}, Victoria Finkel Aguilar⁴, Mariana T. Torres Mulero^{3,4}, Ian González Montañez^{1,4}, Gabriel Santiago Bibiloni⁴. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, School of Law, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, San Juan, Puerto Rico; ⁴Coalition for the Transformation of the Correctional System of Puerto Rico, San Juan, Puerto Rico.

12th ORAL CONCURRENT SESSION**1:20 to 3:30 pm***Location: A 471 (Room 4)**Graduate School of Public Health**4th Floor, Dr. Guillermo Arbona Building*

Moderator:

Manuel Delgado Vélez, PhD

Assistant Professor of Pharmaceutical Sciences

Department of Pharmaceutical Sciences at the School of Pharmacy

UPR - Medical Sciences Campus

Molecular Sciences Research Center

- 088 The Transcription Factor Basonuclin-1, a Key Player in the Progression of Triple-Negative Inflammatory Breast Cancer.** Rose Neijchma Verly, MD; Nathalie Torres Serrano, BS; Mayra S. Haedo Cruz, BS; Carlos S. Morales Rivera, MS; Diego A. Rosado Tristani, PhD; Esther A. Peterson Peguero, PhD. Department of Biology, University of Puerto Rico, Río Piedras – San Juan, PR; University of Puerto Rico Comprehensive Cancer Center, Division of Cancer Biology, San Juan, PR (UPRCCC).
- 089 Poly-UG RNA Quadruplexes as Structural Scaffolds Linking Stress Granule Dynamics to TDP-43 Pathology in ALS.*** Ángel Acevedo, Lakshya Bajaj. University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pharmacology & Toxicology, San Juan, Puerto Rico.
- 090 The Effect of Tamoxifen on Metabolic Patterns, Contractile Properties and Biomarkers of Skeletal Muscle After Spinal Cord Injury.** Viviana González¹, Samuel Ocasio¹, Nataliya Chorna¹, María E. Santiago Gascot¹, Aranza Torrado², José M. Santiago³, Luis Pagán¹, Iris Salgado⁴, Walter Frontera¹, Jorge D. Miranda¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Physiology, San Juan, Puerto Rico; ²National Institutes of Health, National Human Genome Research Institute, Bethesda, MD, USA; ³UPR-Carolina Campus, Carolina PR; ⁴Universidad Central del Caribe School of Medicine, Pharmacology Department, Bayamón PR.
- 091 Metabolomic Signatures of Running-Induced Hormesis in the Hippocampus.** Alejandra Vázquez¹, Karina Marín², Briana P. Bello², Danniel Rivera³, Sebastián Rodríguez⁴, Johannee Rivera Nazario³, Diego Martínez Rodgers², Luis Limardo Sánchez², Arianna Guzmán Torres², Brendimar Sierra², 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; 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.
- 092 Non-Closure Partial Nephrectomy Technique in Complex Hilar Tumors: Institutional Experience.** Elizabeth Velázquez Fernández¹, Héctor López-Huertas², Ronald Cadillo-Chávez². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Center for Advanced Urology & Robotic Surgery, Bayamón Medical Center, Bayamón, Puerto Rico.
- 093 Novel BioOptimatics Used to Identify Gene Expression Changes between Autism Spectrum Disorder and Schizophrenia.** Coral Castro Rivera^{1,2}, Deiver Suárez-Gómez², Isis Narváez-Bandera², Alibeth E. Luna-Alvear², Alaina Camasta², Sebastián Méndez^{1,2}, Mauricio Cabrera-Ríos², Clara E. Isaza². ¹University of Puerto Rico, School of Medicine; ²The Applied Optimization Group, University of Puerto Rico, Mayagüez Campus.
- 094 Optimización Computacional de la Terapia Antirretroviral con Algoritmos Genéticos en un Modelo Poblacional de VIH.** Nelson Moreira, Pedro Vázquez. Universidad de Puerto Rico, Recinto de Mayagüez, Departamento de Ciencias Matemáticas, Mayagüez, Puerto Rico.
- 095 Perineural Invasion as Prognostic Factor in the Development of Secondary Primary Tumors and Recurrences in Oral Cavity Squamous Cell Carcinoma.** Fabiola A. Acosta¹, Kevin Arce². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Section of Head & Neck Oncologic and Reconstructive Surgery, Division of Oral and Maxillofacial Surgery, Department of Surgery, Mayo Clinic and Mayo Clinic College of Medicine and Science, Rochester, MN.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

13th ORAL CONCURRENT SESSION

1:20 to 3:30 pm

Location: A 491 (Room 9)

Graduate School of Public Health

4th Floor, Dr. Guillermo Arbona Building

Moderator:

Inés García García, MD, FAAP

Professor of Pediatrics and Neonatologist

School of Medicine, UPR - Medical Sciences Campus

- 096 Impact of Surgical Timing and Treatment Modality on Orbital Floor Fractures Outcomes in a Hispanic Pediatric Population.** Giancarlo Irizarry-Espinosa¹, David Febre-Alemañy², Dora Moreno-Pérez³, Liara Ortiz Ocasio², Víctor Colón Sánchez¹, Juan Berríos¹, Victoria I. García-Rodríguez³, Ángel Rivera-Barrios, MD¹. ¹University of Puerto Rico Medical Sciences Campus; ²University of Puerto Rico School of Medicine, Department of Surgery; ³San Juan Bautista School of Medicine.
- 097 Bridging the Gap in Heart Failure Management: Comparing Entresto to ACEi/ARBs in Rehospitalization Outcomes.** Sebastián I. Morales-Cancio¹, Dr. Yomara Huertas-Gómez², Dr. Laura Rivera-Serrano², Dr. Paola Vega-González², Marialexandra Addarich-Figueroa³, Roberto Ferrer-Macías⁴, Dr. Eduardo Colón-Meléndez². ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ²San Lucas Episcopal Hospital, Internal Medicine Residency, Ponce, Puerto Rico; ³The Bayamón Central University, Bayamón, Puerto Rico; ⁴Ponce Health Science University, School of Medicine, Ponce, Puerto Rico.
- 098 Safety of Hand Surgery in the Procedure Room without Post-Anesthesia Care Unit (PACU) Stay.** Benjamín Nieves-López¹; Keith T. Aziz, MD²; Peter M. Murray, MD². ¹University of Puerto Rico Medical Sciences Campus; ²Department of Orthopedic Surgery, Mayo Clinic in Florida.
- 099 Therapeutic Outcomes of Focused Ultrasound–Mediated Temozolomide Delivery in Glioblastoma: A Systematic Review.** Joyce Campos, BS¹; Max Schreiber, MS¹; Nikki Barrington, PhD, MPH²; Randy S. D’Amico MD^{3,4}. ¹Department of Neurosurgery, San Juan Bautista School of Medicine, Caguas, PR, USA; ²Department of Neurosurgery, Chicago Medical School at Rosalind Franklin University, IL, USA; ³Northwell, New Hyde Park, NY, USA; ⁴Department of Neurosurgery, Lenox Hill Hospital, New York, NY, USA.
- 100 Brechas en los Servicios y Necesidades Insatisfechas: Voces de Grupos Comunitarios y Entornos Afectivos de Personas con Uso Caótico de Sustancias en Puerto Rico.** Álan Aldarondo-Torres, Génesis Crespo-Cruz, Joyce M. Matos-Acosta. Escuela Graduada de Trabajo Social, Facultad de Ciencias Sociales, Universidad de Puerto Rico, Recinto de Río Piedras.
- 101 Relationship of PHQ-9 Item 9 with Depressive and Anxiety Symptoms in a University-Based Psychological Services Clinic.** Fabián J. Pérez-Luzunaris, Stephanie Ortiz-Domenech, Miranda Z. Villanueva-Pérez, Gia Santiago-Cruz, Lyanet Rivera-Antonetti, Yaniris Colón-Rivera, Alondra S. Hernández-Crespo, Valeria Valentín-Morales. University of Puerto Rico, Río Piedras Campus, Department of Psychology, University Center for Psychological Services and Studies (CUSEP), San Juan, Puerto Rico.
- 102 High-Risk Behaviors in Hispanic Adolescents with Type 1 Diabetes and a History of Suicide Gestures or Attempts.** Sebastián A. Quintana-Rodríguez, BA; Carolina N. García-Guay, HSDG; Eduardo Cumba-Avilés, PhD. University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, Puerto Rico.
- 103 Hispanic Adolescents with Type 1 Diabetes and a History of Suicide Gestures or Attempts: Cognitive, Behavioral, Emotional, and Global Functioning.** Paola M. Rivera-Arroyo, BA; Alexzandra Mojica-Román, BA; Eduardo Cumba-Avilés, PhD. University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, Puerto Rico.

14th ORAL CONCURRENT SESSION**1:20 to 3:45 pm***Location: B 463 A (Room 13)**Graduate School of Public Health**4th Floor, Dr. Guillermo Arbona Building*

Moderator:

Karen G. Martínez González, MD, MSc
Professor & Chair, Department of Psychiatry
UPR - Medical Sciences Campus

- 104 Using Argumentative Mapping to Explore Multilevel Factors Associated to Colorectal Cancer Stage Disparities in Puerto Rico.** Hilmaris Centeno-Girona. University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, San Juan, Puerto Rico.
- 105 Association Between Breast Cancer and Nipple Suction as a Sexual Practice in Northern Mexican Women.** Paola N. Rodríguez-Montoyo BS¹; Rodrigo Ugalde-Resano, PhD, MD²; Ángel Mérida-Ortega, PhD^{2*}; Sailing J. Tang, MPH³; Ada Márquez-Acevedo MS⁴; Lizbeth López-Carrillo, PhD²; Luz Claudio, PhD³. ¹University of Puerto Rico, Medical Sciences Campus, School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²National Institute of Public Health, Center for Population Health Research, Cuernavaca, Morelos, Mexico; ³Icahn School of Medicine at Mount Sinai, Division of International Health, Department of Environmental Medicine and Public Health, New York, NY, USA; ⁴University of Idaho, College of Agricultural Life Sciences, Department of Veterinary and Food Animal Sciences, Moscow, Idaho, USA. *Mentor.
- 106 Social Support Needs of Hispanic Adults from Puerto Rico During the Pandemic: A Comparison by Perceived Level of Mental Well-Being.** Yamilette M. Conde-Serrano, BA; Eduardo Cumba-Avilés, PhD. University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, PR.
- 107 Comparative Analysis of Immune Profiles through Optimization Methods in Alzheimer's Disease.** Gustavo E. Bertrán^{1,2}, Alibeth E. Luna-Alvear^{2,3}, Clara E. Isaza^{1,2,3}, Mauricio Cabrera^{2,3}. ¹Graduate Program in Biology, University of Puerto Rico-Mayagüez; ²The Applied Optimization Group, University of Puerto Rico-Mayagüez; ³Graduate Program in Bioengineering, University of Puerto Rico-Mayagüez.
- 108 Psychopathological Symptoms Among Hispanic Adults from Puerto Rico With Different Levels of Physical Morbidity During the COVID-19 Pandemic.** Valeria S. Claudio-Rivera, BS; Eduardo Cumba-Avilés, PhD. UPR, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, P R.
- 109 The Impact of Immune Surveillance on Tumor Growth in Aged, Genetically Matched Oral Cancer Models.** Ricardo M. Cruz Sánchez BS¹; Roberto Rangel PhD²; Jeffrey Myers, MD/PhD². ¹University of Puerto Rico, Medical Sciences Campus, Department of Medicine, San Juan, Puerto Rico; ²The University of Texas MD Anderson Cancer Center, Department of Head and Neck Surgery, Houston, Texas, United States of America.
- 110 Impact of Social Determinants of Health on PROMs After TKA in Hispanic Patients: A Prospective Study.** Héctor E. Sánchez Fernández, MD¹; Juan Silva, MD¹; José Rosario González, BS²; Víctor J. Colón Sánchez, BS²; Giam L. Bosques Roig, BS²; Diego F. Santiago Jiménez, BS²; Antonio Otero López, MD¹. 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, San Juan, Puerto Rico.
- 111 Psychiatric Symptoms Among Hispanic Adults from Puerto Rico Living with Asthma During the COVID-19 Pandemic.** Gabriella Cacho-Pérez, HSDG¹; Eduardo Cumba-Avilés, PhD¹; Carla E. Figueroa-Ortiz, HSDG¹; Camila A. Hueca-Santiago, HSDG¹; José O. Negrón-Cruz, HSDG¹; Marleana M. Rolón-Sanfeliz, BA¹; Sergio A. Ramírez-Alonso, HSDG¹; Miguel A. Cárdenas-Pinto, HSDG^{1,2}. ¹University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, College of Natural Sciences, Department of Biology, San Juan, Puerto Rico.
- 112 Adults with or Without Hypertension Living in Puerto Rico: Psychiatric Symptoms During the COVID-19 Pandemic.** Miguel A. Cárdenas-Pinto, HSDG^{1,2}; Eduardo Cumba-Avilés, PhD¹; José O. Negrón-Cruz, HSDG¹; Gabriella Cacho-Pérez, HSDG¹; Carla E. Figueroa-Ortiz, HSDG¹; Camila A. Hueca-Santiago, HSDG¹; Marleana M. Rolón-Sanfeliz, BA¹; Sergio A. Ramírez-Alonso, HSDG¹; Tanya P. Serrano-Negrón, BA¹; & María E. Negrón Philippi, HSDG¹. ¹University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, College of Natural Sciences, Department of Biology, San Juan, Puerto Rico.



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

PLENARY SESSION – SCHOOL OF NURSING

Don Jaime Benítez Rexach Amphitheater

Wednesday, March 25, 2026

9:00 to 10:00 am

**Leveraging Artificial Intelligence to Advance Evidence-Based Practice:
Strengthening Critical Thinking, Clinical Judgment, and Decision-Making While Preserving
Rigor, Ethics, and Human Connection**



Lynn Gallagher-Ford, PhD, RN, EBP-C, DPFNAP, FAAN
Independent Consultant
Evidence-based practice (EBP) and Leadership Development

Dr. Lynn Gallagher-Ford is an independent consultant specializing in evidence-based practice (EBP) and leadership development. She served for 13 years as Chief Operating Officer of the Helene Fuld Institute for Evidence-Based Practice at The Ohio State University, establishing it as an internationally recognized leader in advancing EBP. She brings more than 40 years of clinical and administrative nursing experience, ranging from bedside care to executive leadership. She is co-author of *Implementing the EBP Competencies in Healthcare* and has contributed numerous book chapters and landmark studies on EBP in nursing. She led Delphi studies that defined EBP competencies for healthcare professionals and recently participated in scoping reviews demonstrating that EBP is the only healthcare investment consistently associated with improved patient outcomes. A former associate editor of *Worldviews on Evidence-Based Nursing*, she is a Fellow of the American Academy of Nursing. Her career reflects a sustained commitment to integrating evidence-based decision-making in healthcare organizations worldwide.

Conference summary:

This conference will explore how artificial intelligence (AI) can be strategically integrated to strengthen evidence-based practice (EBP) in clinical, educational, and research settings. Concrete applications of AI will be presented that enhance critical thinking, clinical judgment, and decision-making, enabling more efficient and rigorous processes in formulating clinical questions, searching and synthesizing literature, conducting critical appraisal, and implementing evidence-based interventions. The session will also emphasize the importance of preserving the scientific rigor, ethical integrity, and human connection that underpin the nursing profession and the health sciences. Participants will be invited to reflect on the opportunities and challenges of AI as a transformative tool that, when used responsibly, can expand professionals' capacity to generate knowledge, improve the quality of care, and advance science.

PLENARY SESSION – GRADUATE SCHOOL OF PUBLIC HEALTH*Don Jaime Benítez Rexach Amphitheater***Wednesday, March 25, 2026****10:30 to 11:30 am***Celebrating the 15th Anniversary of the Doctoral Program in Social Determinants of Health
at the Graduate School of Public Health***Social Determinants of Health: From Theory to Action to Address the
Mechanisms Producing Health Inequities****Hugo Vásquez Vera, MD, MPH, PhD**Regional Advisor on Social Determinants of Health
Pan American Health Organization / World Health Organization

Dr. Hugo Vásquez Vera is a physician trained at the University of Chile. He holds master's degrees in Community Health and Public Health, earned in Chile and Spain, and a PhD in Public Health with a specialization in Social Epidemiology from Pompeu Fabra University in Barcelona. His work focuses on the social determinants of health and their translation into public policy, particularly the relationship between housing and health, addressing issues such as housing insecurity and gentrification. He currently serves as Regional Advisor on Social Determinants of Health at the Pan American Health Organization / World Health Organization (PAHO/WHO) and collaborates with the Housing, Urban Environment, and Health Inequalities Research Group in Barcelona.

Conference summary:

This lecture explores how social determinants of health shape population outcomes and drive persistent inequities, moving from theory to practical action. Drawing on regional and global experience, Hugo Vásquez examines structural mechanisms such as housing insecurity, urban segregation, and socioeconomic disadvantage that systematically produce unequal health opportunities. The presentation highlights evidence-based strategies for translating research into public policy and health system reform, with particular emphasis on housing as a critical determinant of physical and mental well-being. It also discusses intersectoral approaches and primary care transformation as key pathways to advancing equity. By integrating epidemiological evidence with policy perspectives, this conference underscores the need for coordinated, multisectoral action to address upstream determinants and strengthen institutional capacity to reduce health disparities across diverse settings.



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

PLENARY SESSION – SCHOOL OF DENTAL MEDICINE

Don Jaime Benítez Rexach Amphitheater

Thursday, March 26, 2026

8:00 to 10:00 am

**The Rise of Innovative ‘Bioactive’ Materials:
Are They Redefining Restorative Dentistry?**



Salvatore Sauro, PhD

PI and Full Professor
Dental Biomaterials and Minimally Invasive Dentistry
Department of Dentistry
Faculty of Health Sciences
CEU – Cardenal Herrera University
Valencia, Spain

Dr. Salvatore Sauro is a full professor of dental biomaterials at Universidad CEU–Cardenal Herrera (Valencia, Spain) and Principal Investigator of the BIODENT-REG research group. He earned his PhD at King’s College London and has over 20 years of experience in dental biomaterials and minimally invasive dentistry. With more than 210 peer-reviewed publications (H-index 48), his research focuses on

bioactive and biomimetic materials for regenerating enamel, dentine, pulp, and bone tissues. Among his key contributions is a patented biomaterial that releases fluoride, calcium, and phosphates to promote remineralization and prevent dental decay. He also develops innovative chitosan- and gel-based systems for pulp and bone regeneration. Dr. Sauro’s work advances clinically applicable, biocompatible therapies aimed at improving dental health and repairing damaged tissues.

Conference summary:

Restorative dentistry is undergoing a paradigm shift with the emergence of bioactive materials that interact with dental tissues rather than serving as passive fillers. These advanced systems promote remineralization, stimulate biological responses, and enhance adhesion at the tooth–restoration interface, improving long-term clinical outcomes. This lecture examines the principles of bioactivity and how these materials support tissue regeneration and structural integrity at chemical and biological levels. Emphasis is placed on their potential to replace dental amalgam and conventional composites, in line with global trends toward minimally invasive and sustainable dentistry. The presentation also reviews applications in direct and indirect restorations, highlighting biomimetic approaches, ion-releasing technologies, and multifunctional composites that integrate mechanical strength with therapeutic effects. Through analysis of current evidence and clinical performance, the lecture explores whether bioactive materials are redefining standards and expectations in restorative dentistry.

Natural-Derived Antioxidants: A New Frontier in Pulp and Dentin Collagen Preservation

Michela Capoferri, PhD

Nutrition Specialist and Researcher
School of Health Sciences,
CEU – Cardenal Herrera University,
CEU Universities, Alfara del Patriarca, Spain



Dr. Michela Capoferri is a nutrition specialist and researcher at Universidad Cardenal Herrera CEU in Spain. She holds degrees in Human Nutrition and Dietetics, Food and Nutrition Safety, and Pharmacy. Her research focuses on lifestyle behaviors, body composition, rare diseases, and clinical trial design, combining methodological rigor with a translational approach to improve health outcomes. She has published in peer-reviewed journals including *British Dental Journal*, *Nutrients*, and *JADA*, and has presented at national and international conferences. An ISAK Level 1 Anthropometrist with training in public and community health, Michela brings strong analytical skills and a multidisciplinary, evidence-based perspective to advancing population health and sustainable lifestyles.

Conference summary:

Oxidative stress and collagenolytic enzymes cause collagen breakdown, reducing bond durability and worsening pulp inflammation. Recently, interest has grown in natural antioxidants as biomimetic strategies to extend the longevity of pulp and dental tissues and improve the durability of restorations. This lecture explores the role of natural antioxidants in protecting collagen in pulp and dentin. These compounds have strong free radical scavenging ability and can modulate oxidative pathways involved in collagen degradation and matrix metalloproteinase activation. Polyphenols and phytochemicals have antibacterial properties that may reduce cariogenic biofilms and secondary caries. New findings on the phytochemical composition and antioxidant potential of polyphenol-rich botanical extracts from Caribbean ethnomedicine will be presented. Based on recent research and metabolomic studies, certain botanical antioxidants exhibit high redox activity, high polyphenol content, and beneficial biochemical profiles for dental use. Their presence in dental materials could enhance collagen stability, reduce oxidative damage, preserve pulp vitality, and limit bacterial growth at restoration sites.



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

PLENARY SESSION – SCHOOL OF PHARMACY

Don Jaime Benítez Rexach Amphitheater

Thursday, March 26, 2026

10:30 to 11:30 am

**The Impact of Competency-Based Education
in Health Professions Academic Programs**



Ángel Villarini Jusino, PhD

Professor (retired)

University of Puerto Rico, Río Piedras Campus

Ángel Villarini Jusino holds a PhD in hermeneutic philosophy, cognitive psychology, and pedagogy from Boston College and is Professor Emeritus at the University of Puerto Rico, Río Piedras. He founded and directed the Proyecto para el Desarrollo de Destrezas de Pensamiento (1987–2010), promoting curricular innovation across the UPR system. He currently serves as President of the Organización para el Fomento del Desarrollo del Pensamiento Internacional, active in six countries. Dr. Villarini has received honorary professorships from universities in the Dominican Republic and Colombia and has held leadership roles in international educational organizations. His distinguished career centers on competency-based education, critical thinking, ethics, and citizenship. Widely recognized across Latin America and the Caribbean, he is the author of numerous scholarly articles, manuals, and textbooks.

Conference summary:

The speaker will provide context on the role of competency-based education in the Doctor of Pharmacy Program at the School of Pharmacy and in health professions more broadly. The philosophy and foundational principles of competency-based education will be explained, along with the shift in culture and educational philosophy required to implement competency-based programs.

**PLENARY SESSION – 64th BAILEY K. ASHFORD
MEMORIAL LECTURE**

Don Jaime Benítez Rexach Amphitheater

Friday, March 27, 2026

9:00 to 11:30 am

Fungal Diseases in Warming World

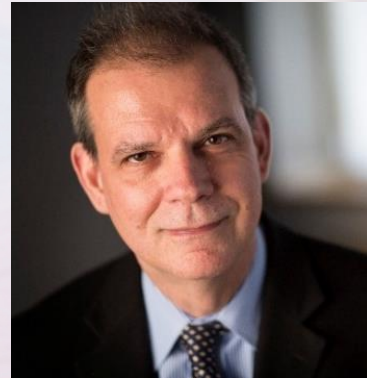
Keynote Speaker:

Arturo Casadevall, MD, PhD
Bloomberg Distinguished Professor
Chair of Molecular Microbiology and Immunology
Johns Hopkins School of Public Health

Moderator:

Nivia L. Pérez Acevedo, MS, PhD
Associate Dean of Biomedical Sciences
Director of Graduate Program, School of Medicine
UPR - Medical Sciences Campus

Dr. Arturo Casadevall is a Bloomberg Distinguished Professor and Chair of Molecular Microbiology and Immunology at the Johns Hopkins School of Public Health. He earned his M.D. and Ph.D. from NYU and completed his residency in internal medicine at Bellevue Hospital. An author of over 1,000 scientific publications, his research focuses on fungal pathogenesis and mechanisms of antibody action. He played a leading role in the deployment of convalescent plasma during the COVID-19 pandemic and has contributed significantly to research on scientific integrity, demonstrating that misconduct accounts for most retracted publications. Dr. Casadevall is Editor-in-Chief of *mBio* and Deputy Editor of the *Journal of Clinical Investigation*, and he serves on multiple editorial boards. He has held leadership roles on numerous NIH and National Academies committees and previously served as President of the Medical Mycology Society of the Americas. His many honors include election to the National Academy of Sciences and the National Academy of Medicine.



Conference summary:

The world is undergoing rapid anthropogenic climate change driven by industrial greenhouse gas emissions, leading to global warming that may influence the emergence and spread of infectious diseases. Climate change can alter the distribution of pathogens and their vectors, affect host resistance, and promote microbial adaptation to higher temperatures. Mammalian endothermy provides a natural thermal barrier that protects humans from many environmental microbes unable to survive at elevated body temperatures. However, rising global temperatures may enable some microbes to adapt and grow at human body temperature, increasing the risk of new infectious diseases. Evidence of this process is emerging, particularly among fungi. Species isolated from urban “heat islands” are more thermotolerant than those from rural environments. The global emergence of *Candida auris* between 2011 and 2013, occurring independently across continents with distinct genetic lineages, may reflect climate-driven thermal adaptation. Preparing for future threats will require mapping environmental microbes and advancing research on heat-adaptation mechanisms that could be targeted for intervention.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

1ST POSTER SESSION

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

Wednesday, March 25, 2026

11:30 am to 1:00 pm

- 113 Neurodevelopmental and Psychotic Disorder Comorbidity in Puerto Rican Patients within the PORTI Program: Clinical Impact and Ethnic Considerations.** Jazmín Sotomayor Ortiz, BS; Karen G. Martínez González, MD, MSc; Lelis Nazario Rodríguez, MD, FAPA. UPR School of Medicine, Department of Psychiatry, San Juan, PR, UPR School of Medicine, San Juan, PR.
- 114 Exploring Epigenetic Mechanisms of Alcohol Tolerance: the Role of Tip60 via CRISPR Editing.** María I. Morales-Quezada, Christian D. Del Valle-Colón, Jessica Rodríguez-Ríos, Airined Montes-Mercado, Edwin G. Peña-Martínez, José A. Rodríguez-Martínez, Alfredo Ghezzi. University of Puerto Rico Río Piedras Campus, College of Natural Sciences, Department of Biology.
- 115 Isolation and Characterization of Fungi Associated with Fiddler Crabs in Mangroves.** Gabriela J. Christian-Colón, Matías J. Cafaro. University of Puerto Rico at Mayagüez.
- 116 Clinical and Surgical Relevance of Axillary Nerve Variability in its Localization and Innervation of the Triceps Brachii Muscle: A Cadaveric Study.** Humberto Roura-Rovira, Ian Toro-Grafals, Ángel Cintrón Stuart, Joann Guzmán-Vázquez, Ángel Pérez, Jorge Carrillo. San Juan Bautista School of Medicine.
- 117 Epithelioid Angiosarcoma Mimicking Peritoneal Mesothelioma.** Aura Méndez, BS¹; Mileny Cedeño-Landi BS¹; Kayleigh Nealon, BS, BA¹; Carla Martínez Suárez, BS¹; Gabriela Ehringer Muñoz, BS¹; Julián Reoyo, MD²; Samir Alejandro Nacer, MD^{3,4}; Humberto Trejo Bittar, MD^{3,4}. ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²HCA Bayonet Point Hospital, Hudson, Florida; ³University of South Florida, Morsani College of Medicine, Tampa, Florida; ⁴Moffitt Cancer Center, Tampa, Florida.
- 118 Metástasis Pulmonar con Diferenciación Glandular en Nódulo Cervical: Caso Atípico de un Hombre de 73 Años Asintomático.** Gabriela Catinchi Rodríguez¹, Yadiris López-Rivera¹, Jennifer Correa^{1,2}, Javier Rodríguez^{1,2}. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Profesiones de la Salud, Programa de Citotecnología, San Juan, Puerto Rico; ²Atlantic Pathology.
- 119 Isolated Sacral Metastasis: An Unusual Presentation of Breast Carcinoma.** Samir Alejandro Nacer, MD^{3,4}; Mileny Cedeño-Landi BS¹; Aura Méndez, BS¹; Kayleigh Nealon, BS, BA¹; Carla Martínez Suárez, BS¹; Gabriela Ehringer Muñoz, BS¹; Julián Reoyo, MD²; Myles McCrary, MD, PhD^{3,4}; Roy Khalifa, MS⁵; Anthony Magliocco, MD⁵; James K. Liu, MD⁴; Yu Sun, MD, PhD^{3,4}. ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²HCA Bayonet Point Hospital, Hudson, Florida; ³University of South Florida, Morsani College of Medicine, Tampa, Florida; ⁴Moffitt Cancer Center, Tampa, Florida; ⁵Protean, BioDiagnostics Inc, Orlando FL.
- 120 Acute Ischemic Stroke Following Bioprosthetic Aortic and Mitral Valve Replacement for Infective Endocarditis.** Bryan Ruiz Mercado¹, Gonzalo González-Stawinski², Sergio Chévere³. ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ²Bayamón Medical Center, Department of Cardiothoracic Surgery, Bayamón, PR; ³Bayamón Medical Center, Department of Family Medicine, Bayamón, PR.
- 121 Clinical and Surgical Relevance of Radial Nerve Variability in its Localization and Innervation of the Brachialis Muscle: A Cadaveric Study.** Ian Toro Grafals, Humberto Roura-Rovira, Ángel Cintrón Stuart, Ángel Pérez, Joann Guzmán-Vázquez, Jorge Carrillo. San Juan Bautista School of Medicine, Caguas, Puerto Rico.
- 122 Asymmetrical Rare Bilateral Variations of the Fibularis Tertius: A Rare Cadaveric Case Report Including a Previously Undescribed Variant.** Joann Guzmán-Vázquez, Ángel Pérez, Ian Toro-Grafals, Humberto Roura-Rovira, Jorge Carrillo. San Juan Bautista School of Medicine.
- 123 Clinical and Surgical Considerations of Anatomical Variants of the Fibularis Brevis Tendon.** Ángel Pérez, Eliomar Rosa, Joann Guzmán-Vázquez, Humberto Roura-Rovira, Ian Toro-Grafals, Jorge Carrillo. San Juan Bautista School of Medicine.
- 124 Alström Syndrome with Novel ALMS1 Mutations: First Case Report in a Puerto Rican Patient.** Camila A. Pagán-Melvin¹; Gabriel A. Jiménez-Berrios, MD¹; Natalio J. Izquierdo, MD². ¹Universidad Central del Caribe School of Medicine, Bayamón, PR; ²Department of Surgery, Medical Sciences Campus, University of Puerto Rico.

- 125 **Cerebral *Cryptococcus neoformans* Abscess as a Forehead Protuberance in Idiopathic CD4+ T Cell Lymphopenia: A Case Report.** Ian Báez-Martínez¹, Gary A. Toranzos¹, Frankie Báez-Matos², Zelma Fuxench³. 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, PR; ³Auxilio Mutuo San Pablo Hospital, Department of Internal Medicine, Infectious Diseases Section, Bayamón, PR.
- 126 **DICER-1 Primary Intracranial Sarcoma in 3rd Decade of Life.** Melvin Arroyo Flores¹, Julián Reoyo², Mona Attarpour³. ¹San Juan Bautista School of Medicine; ²HCA Florida Bayonet Point Hospital; ³Avalon University School of Medicine.
- 127 **Neuro-Ocular Ischemia in Extreme Prematurity: Rubeosis Iridis as a Sentinel of Hypoxic–Ischemic Injury.** Claudia Rodríguez López¹; Raúl Pérez Torres, MD²; Inés García García MD³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Department of Ophthalmology; ³Neonatology Section, Department of Pediatrics, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 128 **Multimodal Radiosurgical and Surgical Control of Disseminated CNS SFT/HPC: A Case Report and Review of the Literature.** Ricardo G. Blanco-Ortiz, BS¹; Alondra P. Toro-Luciano, BS²; Caleb Feliciano, MD¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Neurosurgery, San Juan, Puerto Rico; ²San Juan Bautista School of Medicine, Caguas, Puerto Rico.
- 129 **Parry-Romberg Syndrome: Serial Fat Grafting and Custom Porous Polyethylene Implant Reconstruction of the Left Hemimandible and Zygoma.** Andrea R. Cortés Ortiz¹, Luz Figueroa², Jin Figueroa², Dr. Natalio Debs Elías³. ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²Universidad Politécnica de Puerto Rico, San Juan, Puerto Rico; ³Departamento de Salud de Puerto Rico.
- 130 **Comparative Clinical Presentation of TBCK Syndrome in Puerto Rican Siblings: A Case-Based Analysis of Disease Progression and Multisystem Involvement.** Leyshka Yin Díaz, Adanis Bravo Cordero, Yesenia Vélez Pizarro, Karen Cruz, MD. San Juan Bautista School of Medicine, Caguas, PR, 00725.
- 131 **Hoagland’s Sign as an Early Indicator of Infectious Mononucleosis: A Diagnostic Insight.** Rous M. González Soto¹, Valerie Cardona Berdecía¹, Emanuel Hernández², Ana García², Keishla Figueroa². 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 Pediatrics, San Juan, Puerto Rico.
- 132 **Unrecognized Large Anterior Myocardial Infarction Presenting as Severe Ischemic Cardiomyopathy with Complete Left Main Occlusion.** Eduardo S. Pérez, BS¹; Miguel Campos, MD². ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ²Pavia Santurce Hospital.
- 133 **Beyond Short Stature: Coordinated Pediatric Orthopedic and Endocrine Management of SHOX-Related Skeletal Disproportion in Two Siblings with Madelung Deformity.** María A. Cruz Velázquez, MS^{1,2}; Carmen L. Soto Rivera, MD². ¹Universidad Central del Caribe, SOM; ²Boston Children’s Hospital, Division of Endocrinology.
- 134 **A Diagnostic Journey to GRIN-1: When Genetic Testing Unlocks a Multisystem Pediatric Case.** Yesenia Vélez Pizarro, Adonis Bravo Cordero, Leyshka Yin Díaz, Karen Cruz, MD. San Juan Bautista School of Medicine, Caguas, PR, 00725.
- 135 **Ischemic Scalp Necrosis as a Clinical Sign of Severe Giant Cell Arteritis: A Case Report.** Andrea Cerezo-Martínez; Edwin Plaza-Lamoli, MD; José M. Bretón, MD; Luis M. Vilá, MD. Division of Rheumatology, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 136 **Large Bowel Obstruction from Foreign Body Ingestion in a Morbidly Obese Autistic Adult.** Roberto Angeli-Morales¹, Rocío T. Vázquez Beltrán¹, Alejandro A. Acosta Ferrer¹, Víctor Colón Sánchez¹, Antonio Arrieta², Albert Suárez Domínguez². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Surgery.
- 137 **Extensive Mucocutaneous Eruption with Overlapping Features of Erythema Multiforme and SJS: A Multidisciplinary Perspective.** Andrea P. Oliveras Arimont¹; Víctor Colón Sánchez¹; Luis Vélez, MD²; María Sánchez Muñiz³; Vanessa Sepúlveda Rivera, MD⁴. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Internal Medicine - Pediatrics Residency Program, UPR SOM; ³Universidad Central del Caribe, ⁴Department of Internal Medicine, School of Medicine, University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; Geriatric Section, Department of Internal Medicine, School of Medicine, University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 138 Atypical Optic Nerve Appearance in Central Retinal Vein Occlusion.** Carolina Andrea Jiménez Soto, BS¹; Luma Al-Attar, MD²; Ninel Gregori, MD³; Byron Lam, MD³; Mariam Vila, MD³. ¹University of Puerto Rico School of Medicine, San Juan, Puerto Rico; ²Retina Center of Puerto Rico, Manatí, Puerto Rico; ³Bascom Palmer Eye Institute, University of Miami, Miami, Florida, US.
- 139 Silent Obstruction: Mirizzi Syndrome Presenting as Painless Jaundice in a 60-Year-Old Woman.** Claudia S. Baralt Torres, MS^{1,3}; Camila Reyes-Soto, MS^{1,3}; Jorge L. Cortés-Ruiz, MD^{1,2,3}. ¹Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ²Auxilio Mutuo San Pablo, Bayamón, Puerto Rico; ³Centro Gastroenterología Avanzada del Norte, Bayamón, Puerto Rico.
- 140 Apical Variant Hypertrophic Cardiomyopathy Yamaguchi Variant Masquerading as Supraventricular Tachycardia and Provoking Syncope in an Elderly Patient.** Eduardo S. Pérez, BS; Antonio D. Morales, BS; Sarahí Rodríguez, MD. Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico.
- 141 Primary Gingival Mucosal Melanoma: A Case Report and Literature Review Comparing Mucosal and Cutaneous Melanoma.** Juan Berríos-Cordero¹, Paula Ruiz-Gil², Arnaldo Figueroa-Tejada², Lisa Torres-Colón³, Pablo Mojica-Manosa². 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 General Surgery, San Juan, Puerto Rico; ³Universidad Iberoamericana, Escuela de Medicina, Santo Domingo, Dominican Republic.
- 142 Atypical Origin of the Pectoral Nerves: A Case Report and Review of Clinical Implications for Orthopedic, Reconstructive, and Trauma Surgery.** José A. Rosario González, BS¹; Natalia Valentín Carro, PhD^{2*}; Gabriella Torres Irizarry, MS²; Shay Blanco Olivares, BS². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, PO BOX 365067, San Juan, PR 00936-5067, Puerto Rico; ²Department of Anatomy and Neurobiology, University of Puerto Rico, Medical Sciences Campus, School of Medicine, PO BOX 365067, San Juan, PR 00936-5067, Puerto Rico.
- 143 Polyclonal Hypergammaglobulinemia in Hurley Stage III Hidradenitis Suppurativa.** Cristina P. Gerena-Maldonado, MD¹; Mariana Sadurní-García, MD¹; Coral Martes-Villalobos, BS^{2,3}; Gerardo Caussade-Silvestrini, BS⁴; Maralexa Martínez-Valcárcel, BS⁵; Alma Cruz, MD, FAAD¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Dermatology, San Juan, PR; ²Universidad Central del Caribe School of Medicine, Bayamón, Puerto Rico; ³Boston University Chobanian & Avedisian School of Medicine, Boston, Massachusetts, United States; ⁴University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR; ⁵Ponce Health Sciences University School of Medicine, Ponce, PR.
- 144 Recurrent Papillary Tumor of the Pineal Region in a Young Adult: Clinical Course, Therapeutic Challenges, and Management Considerations.** Alexander Colón, Rocío Rivera Valentín. University of Puerto Rico Comprehensive Cancer Center.
- 145 Free Gracilis Transfer with Vein Conduit Nerve Coaptation for Neonatal Upper Extremity Compartment Syndrome: A Case Report.** Luz G. Figueroa Rodríguez¹, Andrea R. Cortés Ortiz², Jin L. Figueroa Rodríguez¹, Natalio Debs Elías³. ¹Universidad Politécnica de Puerto Rico, San Juan, Puerto Rico; ²San Juan Baustista School of Medicine, Caguas, Puerto Rico; ³Departamento de Salud de Puerto Rico.
- 146 Multidisciplinary Management of PR3-ANCA Positive GPA with Complex Mid-Facial Reconstruction: A Case Report.** Jin L. Figueroa-Rodríguez¹, Andrea R. Cortés-Ortiz², Luz G. Figueroa-Rodríguez¹, Natalio Debs-Elías³. ¹Polytechnic University of Puerto Rico, San Juan, Puerto Rico; ²San Juan Bautista School of Medicine, Caguas, Puerto Rico; ³Departamento de Salud de Puerto Rico.
- 147 Large Retroperitoneal Lipoma in a 19-Year-Old Female: A Pediatric Case Report.** MiaSara Pérez Salvá¹, Rocío Rivera Valentín MD/PHD^{1,2}. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, Puerto Rico; ²University of Puerto Rico Comprehensive Cancer Center Hospital, San Juan, Puerto Rico.
- 148 Acute Interstitial Nephritis After Semaglutide Initiation: A Rare but Potentially Reversible Complication of GLP-1 RA Therapy.** Alaila Maldonado Gauthier¹, Ricardo Calderón Ortiz². ¹University of Puerto Rico, Río Piedras Campus, Department of Biology, San Juan, Puerto Rico; ²Mennonite Hospital System, Department of Medicine, Division of Nephrology, Caguas, Puerto Rico.
- 149 Diseño de Actividades Creativas para Pacientes con Cáncer y sus Cuidadores.** Claudia S. Quiñones Flores. Universidad de Puerto Rico, Recinto de Río Piedras.
- 150 A Community-Centered Approach to TBCK-Related Neurodevelopmental Disorder Research in Puerto Rico.** Yowan Morales¹, Irene Lafarga-Previdi², Ana C. Vásques-Guzzi², Carmen M. Vélez-Vega², Linda Pérez-Laras¹, Xilma Ortiz³, Frances Vélez-Bartolomei⁴, Elinette Albino^{1,5}. 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, Center for Collaborative Research in Health Disparities, Community Engagement Core, San Juan, Puerto Rico; ³Children's Hospital of Philadelphia, Division of Neurology, Philadelphia, PA; ⁴University of Puerto Rico, Medical Sciences Campus, Dr. Antonio Ortiz University Pediatric Hospital, San Juan, Puerto Rico; ⁵Puerto Rico Genetics Laboratory, School of Health Professions, University of Puerto Rico, San Juan, Puerto Rico.

- 151 Integrating Practical Molecular Biology and Bioinformatics Through Collaborative Learning for the Creation of Educational Material for Primer Design.** Ernesto Espada-Nazario, Emmaly Rivera-Duprey, Ián E. Massini-Cotto, Yviana M. Jiménez-Rivera, Manuel A. Jiménez-Rivera. University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences, Department of Biology, San Juan, Puerto Rico.
- 152 PAUSA por tu Salud: Videotutoriales de Movimiento y Estiramiento para Promover el Bienestar.** Maricelis Arce-Echevarría¹, Marcilyn Colón-Colón¹, Yiselly Vázquez-Guzmán¹, Coral Díaz-Bermúdez¹, Yanibell Méndez-Torres¹, Emmanuel Hernández-Torres², Rosalie Ayala-Colón¹, Natalia Almedina-Centeno³. ¹Escuela Graduada de Salud Pública, Recinto de Ciencias Médicas, Universidad de Puerto Rico; ²Move 4 Wellness PR; ³NataliaAlmedinaPR.
- 153 Comparison of the 2017 Pooled Cohort Equations and 2025 PREVENT Models for Primary Prevention in U.S. Adults with Untreated Stage 1 Hypertension: NHANES 2011 to March 2020.** Raúl A. Ruiz Meléndez¹; Daniel K. Addo, MS²; Adam P. Bress, PharmD, MS². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Utah, School of Medicine, Department of Population Health Sciences, Utah, Salt Lake City.
- 154 Academic-Community Partnerships for Empowerment: Collaboration Between Profamilias and Public Health Students in Puerto Rico.** Coralys I. Cuevas Hornedo, MPH¹; Aragné Salazar Mendoza, MPH¹; Marisol Peña-Orellana, EdD, MS¹; Michael Dominguez². ¹Master'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; ²Profamilias, San Juan, Puerto Rico.
- 155 Improving Delivery of Serious News Through VitalTalk Training in Neonatal-Perinatal Fellows.** Claudia C. Rosas China, MS-2¹; Jen Hwang, MD, MEd²; Tara Bamat, MD²; Marissa Kilberg, MD, MEd²; Kesi Yang, MD². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine; ²Children's Hospital of Philadelphia (CHOP).
- 156 Cuidando Corazones: A Community-Based Home Outreach Model for Isolated Caregivers in Puerto Rico.** Yarelis Colorado-Ruiz MPH^{1,2,3}; Emilia Camacho Cardona²; Vilma L. Rivera Fontáñez³. ¹UPR Medical Campus, ²Casa Salud, Inc., ³Asociación de Madres Puertorriqueñas, American Mother, Inc.®
- 157 ADEA Academic Dental Careers Fellowship Program (ADCFP): Education on Theories of Growth Control at UPR-SDM.** Stacey Santiago Rodríguez. University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine.
- 158 Barriers to Palliative Care in Patients with Amyotrophic Lateral Sclerosis: A Narrative Review and Educational Initiative.** Angélica Figueroa-Guzmán¹, Liliana Viera-Ortiz², Frances Aponte-Caraballo³, Valerie Wojna³, Brenda Deliz-Roldán³. ¹School of Medicine, University of Puerto Rico, Medical Sciences Campus; ²Palliative Care and Emergency Medicine, School of Medicine, University of Puerto Rico, Medical Sciences Campus; ³Caribbean Hispanic Amyotrophic Lateral Sclerosis Center for Clinical Trials (CHALS-CCT), School of Medicine, Neurology Section, University of Puerto Rico, Medical Sciences Campus.
- 159 Arbona Health Hub: Advancing Accessible Science Research and Communication.** Marcel de Jesús Vega¹, Alejandro Arbona-Lampaya², Avery Arsenault³, Héctor Cancel Asencio⁴, Christian Correa⁵, Sofia Malavé⁶. ¹University of Puerto Rico, Medical Sciences Campus; ²School of Medicine, University of Puerto Rico Medical Sciences Campus; ³Texas College of Osteopathic Medicine; ⁴Ponce Health Sciences University, Department of Public Health; ⁵San Juan Batista School of Medicine; ⁶University of Puerto Rico, Mayagüez Campus, Department of Biology, Mayagüez, Puerto Rico.
- 160 Ampliando el Camino Hacia la Escuela de Medicina: Impacto de Charlas Educativas en Estudiantes Subgraduados de Puerto Rico.** Emilie I. Dávila Perea¹, Dariana S. Zayas Ortiz¹, Alondra M. Torres González¹, Sahudi N. Soto Rodríguez¹, Emmanuel de la Cruz Travieso², Ileana M. Ayala Fontáñez¹. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Medicina; ²Escuela Graduada de Salud Pública, San Juan, PR.
- 161 Educación Prenatal en Lactancia Materna como Estrategia para Mejorar la Exclusividad en Hospital Universitario en Puerto Rico.** Eldy Valines-Sánchez; Nerian Ortiz, MD. ¹Universidad de Puerto Rico, Recinto de Río Piedras; ²Departamento de Pediatría, Escuela de Medicina, Recinto de Ciencias Médicas.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 162 **Prospective Study Evaluating Management of Hypertension Induced by Anti-VEGF Therapy in Patients with Active Cancer: VEGFHTN Trial.** Raymond Sánchez¹, Isabelle Pesikoff², Nicolas L. Palaskas², Patricio Gargollo³. ¹University of Puerto Rico, School of Medicine, San Juan, Puerto Rico; ²MD Anderson Cancer Center, Houston, Texas; ³Mayo Clinic, Rochester, Minnesota.
- 163 **Cognitive Aids in High-Fidelity Simulation for Nurse Anesthesia Curricula: An Evidence-Based Practice Experience.** Eliam L. Aguilar Rollero, Tai Ma Campos, David F. Segovia, Landon R. Narkevic, Olwens A. Medina González, Albert J. Albors Ramos, Milagros Figueroa Ramos. University of Puerto Rico, Medical Sciences Campus, School of Nursing, Department of Graduate Studies, Nurse Anesthesia Program, San Juan, Puerto Rico.
- 164 **Studying the Prevalence of APOE Haplotypes in Caribbean Hispanics Residing in Puerto Rico.** Taira Franco-Martínez¹, Frances M. Marín-Maldonado², Lillian Contreras-Parson¹, Vanessa Sepúlveda-Rivera³, José Colón-Sáez², Jorge Duconge-Soler². ¹University of Puerto Rico, Río Piedras Campus, College of Natural Sciences, Department of Interdisciplinary Studies, San Juan Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmaceutical Sciences, San Juan, Puerto Rico; ³University of Puerto Rico, School of Medicine, Department of Internal Medicine, San Juan, Puerto Rico.
- 165 **Evaluación de la Ley Núm. 102-2025 de Puerto Rico sobre el Reconocimiento Universal de Licencias Ocupacionales y Profesionales: Un Análisis Comparativo con Otras Jurisdicciones, su Impacto y Mejores Prácticas sobre el Licenciamiento en la Profesión Médica.** Yannira A. Campos Mercado, Patricia Otón Olivieri. Escuela Graduada de Salud Pública, Universidad de Puerto Rico, Recinto de Ciencias Médicas.
- 166 **Entre la Evidencia y la Crisis Invisibilizada: Desafíos Globales y Lecciones de Política para Atender la Desconexión Social en Puerto Rico.** Gualberto E. Santana¹, Natalia Ramos¹, Angélica M. Crespo¹, Gabriela J. Cruz², Glorymar Soto², Karlia E. Nieves², Karen Agosto². ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Facultad de Ciencias Biosociales y Escuela Graduada de Salud Pública, Departamento de Bioestadística y Epidemiología, San Juan, Puerto Rico; ²Universidad 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.
- 167 **Bridging the Gap: Rewriting Health Policy in Puerto Rico for Advancement.** Verónica R. Dávila-Parrilla¹, Paola D. Rosario-Torres², Edna Acosta-Pérez^{3,4}, Lyliana Crespo-Nazario^{1,4}. ¹Universidad Central del Caribe, Bayamón, Puerto Rico; ²Escuela de Medicina San Juan Bautista, Caguas, Puerto Rico; ³Escuela Graduada de Salud Pública, Universidad de Puerto Rico, Recinto de Ciencias Médicas, San Juan, Puerto Rico; ⁴Community Engagement Outreach Core, The Alliance for Clinical and Translational Research, San Juan, Puerto Rico.
- 168 **Muertes con Presencia de Fentanilo en Puerto Rico, 2018–2024: Silos en Política Pública.** Angeline Reyes Butler^{1*}, Amanda Maldonado Pérez^{2*}, Juan Carlos Jorge³. ¹Universidad de Puerto Rico, Recinto de Bayamón, Facultad de Ciencias Naturales, Departamento de Biología Enfoque Humano, Bayamón, Puerto Rico; ²Universidad de Puerto Rico, Recinto de Río Piedras, Facultad de Ciencias Naturales, Departamento de Estudios Interdisciplinarios, San Juan, Puerto Rico; ³Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Medicina, Departamento de Anatomía y Neurobiología, San Juan, Puerto Rico.
- 169 **Puerto Rico Newborn Screening Initiative to Improve Phenylketonuria Management: A Quality Improvement Project.** Javielise Donato Rodríguez¹, Nayliz M. Ortiz Ortiz¹, Ledith Resto², Sulay Rivera², Raymond Tremblay¹. ¹University of Puerto Rico, Humacao Campus, Department of Biology, Humacao, PR; ²University of PR, Medical Sciences Campus, Department of Pediatrics, PR NBS Program, San Juan, PR.
- 170 **Uso de Estrategias No Farmacológicas para Reducir el Dolor en Niños durante Venopunción.** Gabriel De Jesús; Diego Suárez; Nerian Ortiz, MD. Universidad de Puerto Rico, Recinto de Río Piedras, Departamento de Pediatría Escuela de Medicina RCM, San Juan, PR.
- 171 **Influences on Doxycycline Post-Exposure Prophylaxis Awareness, Acceptance, and Accessibility among MSM/TGW in Puerto Rico: A Rapid Qualitative Study.** Ginaliz Acevedo Ojeda, Patricia L. Acosta Arroyo, Jocelyn M. Jiménez Cruz, Sayel Rivera García. University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmacy Practice, San Juan, Puerto Rico.
- 172 **Designing an mHealth Intervention for ADRD Caregivers in Puerto Rico: Wireframing and Early-Stage Development.** Samuel A. Bonet-Olivencia, Andrea S. Vélez-Nieves, Yaniel E. Cruz-Santa, Gianinna P. Maldonado-Valedón, Xamarys Ignacio-Méndez, Iván A. Carrión Ortiz, Eduardo A. Ortiz Torres. University of Puerto Rico, Mayagüez Campus, Mayagüez, Puerto Rico.
- 173 **Assessing Factor Stability of Beliefs and Clinical Concerns in a DoxyPEP Survey Instrument: An Exploratory Factor Analysis Among Pharmacists in Puerto Rico.** Sayel Rivera, Emily Álvarez, Ana M. Figueroa, Yanitzia M. Díaz. University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, San Juan, Puerto Rico.

- 174 Association of COVID-19 with New-Onset or Exacerbated Rheumatoid Arthritis in Puerto Rico: Analysis of a National Medical Claims Database.** Alanis N. Morales Torres¹, Ramón Scharbaai-Vázquez¹, Raymond L. Tremblay^{1,2}. ¹San Juan Bautista School of Medicine, Caguas PR; ²University of Puerto Rico Humacao Campus, Humacao, PR.
- 175 Smurf Bees: An Assay to Determine Intestinal Integrity as a Measure of Health Decline with Age or Other Factors in Honey Bees (*Apis mellifera*).** Jesús Ortiz-Ortiz, Héctor De Jesús-Cortés, Felipe Rosa, José Luis Agosto-Rivera, Tugrul Giray, Imilce A. Rodríguez-Fernández. College of Natural Sciences, Department of Biology, University of Puerto Rico, Río Piedras Campus.
- 176 Impacto de la Pandemia de COVID-19 en la Prestación de Servicios de Salud Mental: Percepciones de Profesionales de la Salud en Puerto Rico.** Yaritza N. Reyes Medina, DrPH, MPH¹; Ruth Ríos Motta, PhD¹; Enid J. García Rivera, MD, MPH²; Karen G. Martínez González, MD, MSc³; Souhail Malavé Rivera, PhD, MSc⁴. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Departamento de Administración de Servicios de Salud, San Juan, Puerto Rico; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Medicina, Centro Dotal de Investigaciones de Servicios de Salud, San Juan, Puerto Rico; ³Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Medicina, Departamento de Psiquiatría, San Juan, PR; ⁴Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Centro de Investigación y Evaluación Sociomédica, San Juan, PR.
- 177 Attitudes and Knowledge about OUD Treatment among Pharmacists and Pharmacists in Training in Puerto Rico.** Ivánshka Hernández, MS¹; Angélica Inglés, MPH¹; Christian Torres, MS¹; Naydi Pérez Ríos, MS²; Darlene Santiago, PhD³. ¹University of Puerto Rico, Medical Sciences Campus, School of Public Health, Department of Epidemiology and Biostatistics, San Juan, PR; ²University of Puerto Rico, Medical Sciences Campus, Hispanic Alliance for Clinical and Translational Research, San Juan, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmaceutical Sciences, San Juan, PR.
- 178 Synthesis, Electrochemistry, and In Vitro Anticancer Activity of (Z)- and (E)-2-Substituted-3-Ferrocene-Acrylonitrile Compounds.** William O. Mendoza-Morales¹, Esteban Rodríguez¹, Zulma Ramos¹, Jemily Acosta-Mercado³, Dalice M. Piñero-Cruz³, Aliana González², Claudia A. Ospina², Enrique Meléndez⁴, Eliud Hernández O'Farrill^{1*}. ¹University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmaceutical Sciences, San Juan, Puerto Rico; ²Interamerican University of Puerto Rico, Bayamón Campus, Department of Natural Sciences and Mathematics, Bayamón, Puerto Rico; ³University of Puerto Rico, Río Piedras Campus, College of Natural Sciences, Department of Chemistry, San Juan, Puerto Rico; ⁴University of Puerto Rico, Mayagüez Campus, Department of Chemistry, Mayagüez, Puerto Rico.
- 180 Determinantes Sociales de la Salud y la Adherencia a los Medicamentos en Adultos con Enfermedad Renal Crónica en Etapa Prediálisis.** Maribelis Rivera Fuentes, Nancy Dávila Ortiz. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería, San Juan, Puerto Rico.
- 181 Identifying and Characterizing Curcumin as a Natural Compound That Promotes Longevity and Health span in *Drosophila melanogaster*.** Naomi Z. Serrano-Colón¹, Linoshka Nieves-González^{1,2}, Imilce Rodríguez Fernández¹. ¹College of Natural Sciences, University of Puerto Rico – Río Piedras Campus, San Juan, Puerto Rico.
- 182 Associating and Correlating Clinical and Imaging Features in Glioblastoma Patients with Differential Survival Outcomes.** Javier A Velázquez¹; Pamela R Jackson, PhD^{2,3}; Lee Curtin, PhD²; Kamala Clark-Swanson²; Kristin R. Swanson, PhD^{2,3,4}. ¹Division of UPR School of Medicine; ²Mathematical Oncology Systems Analysis Imaging Center (MOSAIC), Department of Neurosurgery, Cedars-Sinai Medical Center, Los Angeles, CA; ³Department of Computational Biomedicine, Cedars-Sinai Medical Center, West Hollywood, CA; ⁴Department of Pathology and Laboratory Medicine, Cedars-Sinai Medical Center, Los Angeles, CA.
- 183 Prevalence and Associated Factors of Polysubstance Use Among Adolescents in Puerto Rico.** Yaniliss Vázquez, Juan C. Reyes-Pulliza, Linnette Rodríguez-Figueroa, Margarita Moscoso Álvarez, Héctor M. Colón. Department of Biostatistics and Epidemiology, Graduate School of Public Health, University of Puerto Rico, San Juan, PR.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 184** **Suppression of Sustained Proliferative Signaling in Highly Aggressive Prostate Cancer Cells by 5-Azacytidine-Induced Epigenetic Reprogramming.** Daniela M. González Alvarado¹, Gabriela Castro², Ralphdy Vergne¹, Stephanie Montalvo³, Caleb Santiago¹, Lenin Godoy¹, Carmen Ortiz, PhD¹. ¹Ponce Health Science University, Ponce PR; ²Pontificia Universidad Católica de Puerto Rico, Ponce PR; ³Universidad de Puerto Rico, Recinto de Mayagüez.
- 185** **Transition from Physical Therapist Assistant to Doctor of Physical Therapy: Experiences in the Process of Change.** Nicole M. Delgado-Coss, Marycarmen Ortiz-Torres, Jesús J. Colón-De León, Wilitza Martínez-Rivera, Lypzia M. Vélez-Jiménez. University of Puerto Rico, Medical Sciences Campus, School of Health Professions Department of Graduates Programs, Doctor of Physical Therapy Program, San Juan, Puerto Rico.
- 186** **Early Age of E-cigarette Initiation and Polysubstance Use Among Adolescents in Puerto Rico.** Gabriel E. Santos Reyes¹, Juan C. Reyes-Pulliza², Linnette Rodríguez-Figueroa², Margarita Moscoso Álvarez², Héctor M. Colón². ¹University of Puerto Rico Medical Sciences Campus; ²Department of Biostatistics and Epidemiology, Graduate School of Public Health, University of Puerto Rico, San Juan, Puerto Rico.
- 187** **Development of CRISPR-Cas9-Loaded Nanoliposomes for the Treatment of Liver Cancer.** Joshua Nieves-Reyes¹, Pablo Vivas-Mejía^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ²University of Puerto Rico, Comprehensive Cancer Center, San Juan, Puerto Rico.
- 188** **Precision of Automated Landmarking Procedures for Estimating Cranial Shape: An Assessment of the (M)ALPACA Algorithm Using Rhesus Macaque Crania.** Samari A. Betancourt García, BSc¹; Karina Landrón García, BSc²; María D. Ruiz Quiñones, BSc³; Catalina I. Villamil Ríos, PhD³. ¹University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences, Department of Biology, 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, Caribbean Primate Research Center, Laboratory of Primate Morphology, San Juan, Puerto Rico.
- 189** **Understanding the Descriptive Epidemiology of Male Breast Cancer in Puerto Rico, 2000-2022.** Pol Comellas-Sáenz¹, Angélica Rosario-Santos¹, Carlos Torres-Cintrón², Rosa V. Rosario-Rosado¹. ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²Puerto Rico Central Cancer Registry, University of Puerto Rico Comprehensive Cancer Center.
- 190** **Endemic Puerto Rican Plant Extracts Demonstrate Potent Antiplasmodial Activity.** Freddie J. Ortiz Colón¹, Reydiliz Nieves Acevedo³, Emilee Colón Lorenzo², Roberto G. Díaz González², José G. Ortiz¹, Claudia A. Ospina³, Adelfa E. Serrano². ¹UPR-MSC, Department of Pharmacology and Toxicology; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Microbiology and Medical Zoology, San Juan, Puerto Rico, 00936; ³Department of Natural Sciences and Mathematics, Inter American University of Puerto Rico, Bayamón, PR 00957.
- 191** **Comparación de las Características Sociodemográficas de los Inmigrantes en Puerto Rico: 2005-2009 y 2019-2023.** Emanuel de la Cruz Travieso; Emma E. Bruno Quiroz, DrPH, HSAM; Luz E. León López, PhD. Programa Graduado de Demografía, Escuela Graduada de Salud Pública, Universidad de Puerto Rico, Recinto de Ciencias Médicas.
- 192** **Perfil de Salud de Veteranos en Puerto Rico: 2019-2023.** Tiara de P. de la Rosa Silva, Emma E. Bruno Quiroz. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Programa Graduado de Demografía, San Juan, Puerto Rico.
- 193** **Development and Validation of Clopidogrel in Plasma of the Hispanic Caribbean Population Using UHPLC-MS/MS.** Valeria Miranda-Bravo¹, Andy Acevedo-Román³, Mariela Deliz-Rueda³, Beatriz Zayas-Rivera², and Joseph Bloom-Oquendo¹. ¹Department of Pharmaceutical Science, School of Pharmacy, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ²School of Science, Technology and Environment, Ana G. Méndez Cupey Campus, San Juan, Puerto Rico; ³University of Puerto Rico, Río Piedras Campus, San Juan, Puerto Rico.
- 194** **Clinical Course of PICU Patients After Spinal Fusion: Associations Between Blood Loss-Related Complications and Opioid Dosing.** Luis A. Rodríguez González BS¹; Nicole A. Martínez Martínez²; Natasha L. Pérez Nieto BS¹; Anabel Puig Ramos PhD³; Ricardo García de Jesús MD³; Humberto Guzmán Pérez, MD⁴. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR; ²University of Puerto Rico, Río Piedras Campus, Biology Major, San Juan, P.R.; ³University of Puerto Rico, Medical Sciences Campus, Department of Pediatrics, University Pediatric Hospital, San Juan, PR; ⁴University of Puerto Rico, Medical Sciences Campus, Department of Orthopaedic Surgery, San Juan, PR.

- 195 Cross-Population Analysis of High-Risk HPV in Women Born in Puerto Rico and the Dominican Republic.** Lizandra M. Domínguez-Orona¹, Shadaira N. Morales-Rivera¹, Natalie M. Meléndez-Vázquez², Josefina Romaguera¹, Filipa Godoy-Vitorino^{2*}. ¹Department of Obstetrics and Gynecology, University of Puerto Rico, School of Medicine, Medical Sciences Campus, San Juan, PR 00936, USA; ²Department of Microbiology and Medical Zoology, University of Puerto Rico, School of Medicine, Medical Sciences Campus, San Juan, PR 00936, USA. *Corresponding author: filipa.godoy@upr.edu.
- 196 Conectividad Tecnológica y Trauma: Un Análisis Cualitativo de Foros Comunitarios en Puerto Rico.** Valeria Schleier Albino, MPH¹; Edna Acosta Pérez, PhD, MSc¹; Marizaida Sánchez Cesáreo, PhD¹; Yashira M. Sánchez Colón, PhD, MS²; Mayra L. Roubert Rivera, DrPH, MS²; Christine Miranda Díaz, PhD, MPHE³; Yari Valle, DrPH¹. ¹Escuela Graduada de Salud Pública, Recinto de Ciencias Médicas, Universidad de Puerto Rico; ²Programa de Salud Pública, Ponce Health Sciences University; ³Medicina Interna, Universidad Central del Caribe.
- 197 A Medical Program to Provide a Medical Examination for Individuals that May Have Been Exposed to Asbestos in a Non-Industrial Setting.** Angélica M. Mulgado-Nieves¹, José A. Norat Ramírez¹, Edgar Pérez Matías¹, Linnette Rodríguez Figueroa², Hernando Mattei³. ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Environmental Health, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Social Sciences, San Juan, Puerto Rico.
- 198 Yeast Split-Intein Mediated Protein Ligation (ySIMPL) for Detecting Protein-Protein Interactions of Mechanosensory Proteins.** Natalie Morel¹, Sahily González Crespo², Pedro R. Martínez Vélez², Lilliam Villanueva Alicea², Nayhiara Yin Díaz², Zhong Yao³, Igor Stajlar³, and José R. Rodríguez Medina². ¹Columbia University Medical Center, Department of Neurology, New York, NY; ²University of Puerto Rico Medical Sciences Campus, School of Medicine, Department of Biochemistry, San Juan, PR; ³University of Toronto, Departments of Molecular Genetics and Biochemistry, Toronto, Canada.
- 199 Expression and Purification of the Bacterial Toxin Uropathogenic Specific Protein.** Mikaela A. Ríos Colón^{1,2}, Gabriel Jiménez^{1,2}, Lisette Pérez^{1,2}, Abel Baerga Ortiz^{1,2}. ¹University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ²University of Puerto Rico Molecular Sciences Research Center, San Juan, Puerto Rico.
- 200 Outdoor Bioallergens and Maternal Health after Natural Disasters: Scoping Review.** Eduardo Llegus Santiago¹, Andreliz Matos Álvarez², Mairim Soto Ortiz², Claudia P. Amaya Ardila³, Evangelia Morou Neofotistou², Karen Martínez González⁴, Benjamín Bolaños Rosero⁴, Luis Bonilla Soto¹, Carmen Buxó Martínez². ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Environmental Health Department; ²University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine; ³University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Biostatistics and Epidemiology Department; ⁴University of Puerto Rico, Medical Sciences Campus, School of Medicine.
- 201 Characterization of Outer Membrane Vesicles (OMVs) from pks+ *E. coli* strains NC101 and DH10B.** Lisette Pérez-Rovira^{1,2}, Jeremy J. Colón-Morales^{2,3}, Grace Vélez-Crespo², Luis Prieto-Costas², Abel Baerga-Ortiz^{1,2,3}. ¹Comprehensive Cancer Center of Puerto Rico; ²UPR Molecular Research Center; ³Medical Sciences Campus, University of Puerto Rico.
- 202 Defining the *Drosophila* NMJ as a Model System to Study Synaptic Maladaptation to Alcohol Exposure.** Keisha M. Serrano-Arroyo^{1,2,3}, and Bruno Marie^{1,2,4}. ¹Institute of Neurobiology, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ²Molecular Sciences Research Center, University of Puerto Rico, Puerto Rico; ³Department of Physiology, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ⁴Department of Anatomy and Neurobiology, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 203 Metabolomic Profiling of Fresh and Formalin-Fixed Paraffin-Embedded Samples Reveals Metabolome Alterations in Penile Cancer.** Andrés Hernández-González, BS^{1,2}; María Sánchez-Vázquez, MS²; Luis Torres-Peña³; Keren Valentín-López, BS⁴; Carlos Rivera-López, MD⁵; Brandon Torres-Rivera, MD⁵; María Marcos-Martínez, MD⁶; Antonio Puras-Báez, MD⁵; Nataliya Chorna, PhD⁴; Magaly Martínez-Ferrer, PhD^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmaceutical Sciences, San Juan, Puerto Rico; ²University of Puerto Rico, Comprehensive Cancer Center, Division of Cancer Clinical & Translational Research, San Juan, Puerto Rico; ³University of Puerto Rico, Río Piedras Campus, Department of Biology, San Juan, Puerto Rico; ⁴University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Biochemistry, San Juan, Puerto Rico; ⁵University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Surgery, Urology Section, San Juan, Puerto Rico; ⁶University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pathology and Laboratory Medicine, San Juan, Puerto Rico.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 204 Amphetamine Use, Mental Health, and Early Clinical Exposure Among First-Year Medical Students in Puerto Rico.** Erik Vélez-Pérez, MD-MPH(c)^{1,2,3}; Mariadelmar Conde-Álvarez, MPH^{1,3}; Eliut Rivera-Segarra, PhD²; Alíxida Ramos-Pibernus, PhD². ¹Psicosis Foundation LLC, Ponce, Puerto Rico; ²Ponce Health Sciences University, School of Medicine & Ponce Research Institute, Ponce, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 205 Food Insecurity and Health-Related Behaviors of Puerto Rican Adults with Diabetes During the COVID-19 Pandemic.** Marleana M. Rolón-Sanfeliz, BA; Eduardo Cumba-Avilés, PhD. University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, Puerto Rico.
- 206 Evaluating the Prevalence of APOE Polymorphisms (rs429358 and rs7412) and Their Association with Inflammatory Biomarkers in a Caribbean Population.** Agnes Lugo-Martínez*, Marieli Ruiz-Cortés*, Frances Marín-Maldonado, Jorge Duconge-Soler, José Colón-Sáez. University of Puerto Rico Medical Sciences Campus School of Pharmacy, San Juan, Puerto Rico. *Contributed equally.
- 207 Site-Specific Oral Microbiome Patterns in Puerto Rican Head and Neck Cancer Patients.** Gabriela García-Quiñones^{1,3}, Jaleniz Suárez-Pérez², Orlando Castro-Ortiz¹, María Sánchez-Vázquez¹, Filipa Godoy-Vitorino², Magaly Martínez-Ferrer^{1,3}. ¹University of Puerto Rico Comprehensive Cancer Center, Division of Cancer Clinical & Translational Research, San Juan, PR; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Microbiology and Medical Zoology, San Juan, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmaceutical Sciences, San Juan, PR.
- 208 Elucidating the Anticancer Therapy Potential of Phytoestrogen 8-prenylnaringenin on Inflammatory Breast Cancer Cells.** Jeanette Ocasio Miranda, Delismari Caro Aquino, Esther A. Peterson Peguero. Department of Biology, University of Puerto Rico, Río Piedras, PR.
- 209 Environmental Noise and Air Quality Compliance Assessment from an Active Landfill Operation on a Community in San Juan, Puerto Rico.** Abdiel D. Soto Colón, Adriana B. Morales Delgado, Amanda Capestany Rivera, Christopher González Román, Erick Santiago Lugo, Karimar Cuevas Mena, Kiara Hernández Cárdenas, Margarita Irizarry Cardona, Yaira Almestica Martínez, Edgar Pérez Matías, Sergio Caporali Filho. Industrial Hygiene Program, Department of Environmental Health, Graduate School of Public Health, Medical Sciences Campus, University of Puerto Rico, San Juan, Puerto Rico.
- 210 Factors Associated with Unfulfilled Contraceptive Preference Among Women in Puerto Rico.** Valeria C. Funes¹, Shakira Suglia², Andrea López-Cepedo³. ¹Rollins School of Public Health, Atlanta, Georgia; ²Rollins School of Public Health, Dept. of Epidemiology, Atlanta, GA; ³University of Puerto Rico, School of Public Health, Dept. of Nutrition.
- 211 Características Sociodemográficas de los Fallecidos en Puerto Rico entre Septiembre de 2017 - Marzo de 2018.** Nilda Karlich Ríos Morales, Ana Luisa Dávila Román, Emma E. Bruno Quiroz. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Facultad de Ciencias Biosociales y Escuela Graduada de Salud Pública, Departamento de Ciencias Sociales, San Juan Puerto Rico.
- 212 Características del Intervalo Protogenésico en Puerto Rico: 2015–2021.** Angélica M. Fernández Matos, Ana Luisa Dávila. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Departamento de Ciencias Sociales, Programa de Demografía, San Juan, Puerto Rico.
- 213 Profile of Postoperative Anemia Following Gastric Sleeve and Gastric Bypass in the Central and North Area of Puerto Rico.** María E. Negrón-Pagán¹, Mireily E. Vargas-López¹, Linda R. Pérez-Laras², Elinette M. Albino¹. ¹University of Puerto Rico Medical Sciences Campus, School of Health Professions, Clinical Laboratory Sciences Program, San Juan, Puerto Rico, ²San Juan Bautista School of Medicine, Caguas, PR.
- 214 Prevalence of Anemia and Biochemical Alterations in Patients After Bariatric Surgery in Southern Puerto Rico.** Mireily Vargas-López¹, María Negrón-Pagán¹, Linda R. Pérez-Laras², Elinette M. Albino¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Health Professions, Clinical Laboratory Sciences Program, San Juan, Puerto Rico; ²San Juan Bautista, School of Medicine.
- 215 Características Sociodemográficas de Personas Finadas en Base al Método de Disposición en Puerto Rico entre el 2015 y el 2023.** Alexis J. Doreste Rodríguez, Dra. Ana Luisa Dávila. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, Departamento de Ciencias Sociales, San Juan, Puerto Rico.
- 216 Associations Between Chronic Comorbidities and Health-Related Quality of Life in Breast Cancer Survivors: A Moderation Analysis of Social Support.** Daniela López-Vallejo, BS¹; Cynthia M. Pérez, PhD¹; Lorena González-Sepúlveda, MS²; Marievelisse Soto-Salgado, DrPH, MS². ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²University of Puerto Rico Comprehensive Cancer Center, Division of Cancer Control and Population Sciences, San Juan, Puerto Rico.

- 217 Association Between Hypertension and Health-Related Quality of Life in Cancer Patients from Puerto Rico: The Moderating Role of Sex at Birth.** Juan E. Santiago-García, BS¹; Cynthia M. Pérez, PhD¹; Lorena González-Sepúlveda, MS²; Marievelisse Soto-Salgado, DrPH². ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, PR; ²University of Puerto Rico Comprehensive Cancer Center, Division of Cancer Control and Population Sciences, San Juan, PR.
- 218 Diabetes and Health-Related Quality of Life in Cancer Survivors: Cross-Sectional Analysis of Physical, Functional, Emotional, and Social Domains.** Dilarys M. Seoane-Martínez, BS¹; Cynthia M. Pérez, PhD¹; Lorena González-Sepúlveda, MS²; Marievelisse Soto-Salgado, DrPH². ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²University of Puerto Rico Comprehensive Cancer Center, Division of Cancer Control and Population Sciences, San Juan, Puerto Rico.
- 219 Actividad Física, Salud Mental y Uso de Redes Sociales: Relación con Estrés, Ansiedad, Depresión y Soledad en Estudiantes Universitarios.** Hannah M. Maldonado-Cruz^{1,2}; Jatniel J. Negrón-Quintana^{1,2}; Rodrigo H. Ramírez Lamprea^{1,2}; Gia S. Pérez-Colón^{1,2}; Yaisha M. Camis-Bonilla^{1,2}; Julián M. Hernández-Torres, MPH³; Yamil Ortiz-Ortiz, PhD^{1,2}. ¹Universidad de Puerto Rico, Recinto Río Piedras, Facultad de Ciencias Sociales, Departamento de Psicología, San Juan, Puerto Rico; ²Centro de Investigaciones Sociales, Laboratorio de Investigación de Tecnologías Emergentes, San Juan, Puerto Rico; ³Universidad de Puerto Rico, Recinto de Ciencias Médicas, San Juan, Puerto Rico.
- 220 Medication Inertia in Type 2 Diabetes Management Among Patients with Poor Glycemic Control in Puerto Rico.** Ariana N. Alonso Arocho, BS¹; Astrid Morales MD^{1,3}; Yareliz Sánchez-Rivera, BS¹; Enid J. García-Rivera MD, MPH^{1,2}. ¹University of Puerto Rico School of Medicine; ²Endowed Health Services Research Center, School of Medicine, Medical Sciences Campus, University of Puerto Rico, San Juan, PR; ³NeoMed Center, Trujillo Alto, PR.
- 221 Exploring Quality of Life Among Women Living with and Without HIV Following Cervical Cancer and Pre-Cancer Post-Treatment in Puerto Rico.** Alanis Díaz-Nieves, BS¹; Melisa Ramos-Sepúlveda, MPHE, CHES^{1,2}; Karina Torres Mojica, MPH¹; Verónica M. García-Ramírez, MS¹; Lorena González-Sepúlveda, MS¹; Edna Acosta-Pérez, PhD³; Tatiana Pérez-Rodríguez, MPH³; Alexander de Jesús-Blest, BS¹; Vivian Colón-López, PhD¹; Sharee Umpierre, MD⁴; Ana P. Ortiz, PhD, MPH^{1,5}; Marievelisse Soto-Salgado, DrPH, MS¹. ¹University of Puerto Rico (UPR) Comprehensive Cancer Center, Division of Cancer Control and Population Sciences, San Juan, Puerto Rico; ²UPR Medical Sciences Campus (UPR-MSC), School of Medicine, Department of Biochemistry, San Juan, PR; ³UPR-MSC, Alliance for Clinical and Translational Research Consortium, San Juan, PR; ⁴UPR-MSC, Department of Obstetrics and Gynecology, School of Medicine, San Juan, Puerto Rico; ⁵UPR-MSC, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, PR.
- 222 Chronic Physical Diseases and Mental Disorders: Prevalence and Association in Hispanic Adults During the Pandemic.** Tanya P. Serrano-Negrón, BA; Luna Olivera-Mercado, HSDG; Eduardo Cumba-Avilés, PhD. University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, PR.
- 223 Quality Control of Procured Human Heart Samples via Immunohistochemistry.** Leamsi J. Soto Ortiz^{1,2}, Natalia Torres³, Martin Tristani-Firouzi³. ¹University of Utah Medical Student Research Program; ²University of Puerto Rico School of Medicine, San Juan, PR; ³Nora Eccles Harrison Cardiovascular Research & Training Institute, Salt Lake City, UT.
- 224 Analyzing the Association of School Exclusion Disciplines on Opioid Misuse Among Justice-Involved Adolescents.** Dylanis López Ruiz^{1,3} (corresponding author); Hannah Jacob¹; Samay Shah¹; Elzbieta Wiedbusch^{1,2}; James-Angelo Suárez^{1,2}, MPH; Kimberly A. Johnson^{1,2}, PhD; Micah E. Johnson^{1,2}, PhD. ¹University of South Florida, Substance Misuse and Addictions Research Traineeship Lab; ²University of South Florida, Department of Mental Health Law and Policy; ³Escuela de Medicina San Juan Bautista.
- 225 Optimizing Glioblastoma Therapy: Enhancing TMZ Cytotoxicity with a Selective PARP1 Inhibitor Background.** Fabiola T. Matos-Jiménez¹, Shiv Gupta², Ann C. Mladek², Danielle Burgenske², Jann N. Sarkaria². ¹University of Puerto Rico School of Medicine; ²Mayo Clinic- Rochester, MN.
- 226 Depression Among Child Survivors of Sexual Violence in Puerto Rico: A Retrospective Chart Review (2016-2024).** Coral Mari-Chantada¹, Melissa Villarreal^{1,2}, Galen Herron^{1,3}, Osvaldo Conde^{1,4}, Eduardo Montoya-Perea^{1,5}, Linda Pérez-Laras^{1,6}, Linda Laras^{1,6}. ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²University of California San Diego, School of Medicine, Department of Pediatrics, Rady Children's Hospital—San Diego, San Diego, California, USA; ³Madigan Army Medical Center, Joint Base Lewis–McChord, Washington, USA; ⁴University of Miami/Jackson Health System, Department of Anesthesiology, Miami, Florida, USA; ⁵University of California, San Francisco–Fresno, Department of Emergency Medicine Fresno, California, USA; ⁶Centro Salud Justicia de Puerto Rico, Caguas, Puerto Rico.
- 227 Measuring Environmental Sustainability in Orthopaedic Surgery: A Scoping Review of Life Cycle Assessment and Material Flow Analysis Methodologies.** Andrea N. Fábregas Román, Gonzalo F. Del Río Montesinos, Teresa Montesinos, MD. Universidad Central del Caribe, School of Medicine, Bayamón, P.R.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

2ND POSTER SESSION

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

Thursday, March 26, 2026

11:30 am to 1:00 pm

- 228 Impact of TAP Block on Recovery in Gynecologic Oncology Surgery: Secondary Analysis Within an ERAS Protocol.** Eliam L. Aguilar Rollero, BSN, RN, SRNA¹; Sherily Pereira Morales, PhD^{1,2}; Nelson Guilbe, MD². ¹University of Puerto Rico, Medical Sciences Campus, School of Nursing, San Juan, Puerto Rico; ²University of Puerto Rico Comprehensive Cancer Center Hospital, San Juan, Puerto Rico.
- 229 Genetic and Clinical Profiles of Early-Onset Prostate Cancer in Puerto Rican Men: A Preliminary Characterization.** Gustavo Alayón-Rosario¹, Sebastián Bernaschina-Rivera^{1,4}, Natalia Yordán-Fernández², Juliana Meléndez-Ojeda², Gabriela Castro-Morales³, Lenin Godoy-Muñoz¹, Laura F. Rodríguez-Fernández⁶, Fabiola A. Benítez Ríos^{5,8}, Carmen Ortiz-Sánchez¹, Gilberto Ruiz-Deyá^{1,7}. ¹Ponce Health Sciences University, School of Medicine, Ponce, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ³Pontificia Universidad Católica de Puerto Rico, Ponce, Puerto Rico; ⁴Maimonides Medical Center, Department of Urology, Brooklyn, New York; ⁵Boston Children's Hospital, Department of Pediatrics, Harvard Medical School, Boston, Massachusetts; ⁶University of Puerto Rico, Medical Sciences Campus, Department of Urology, San Juan, Puerto Rico; ⁷St. Luke's Episcopal Hospital, Department of Urology, Ponce, Puerto Rico; ⁸Boston Children's Hospital, Division of Genetics and Genomics, Boston, Massachusetts.
- 230 Neurofibromatosis Type 1 and Systemic Lupus Erythematosus in a Pediatric Patient: A Diagnostic Challenge and Rare Co-occurrence.** Valeria Martínez¹; Sofía Otero¹; Alexandra Rodríguez, MD²; Miosotis Harrison, MD²; Ariana Alvarado, MD²; José Maldonado, MD²; Carla Santiago, MD, FAAP³; Yasmín Pedrogo, MD, FAAP³; Marta Suárez, MD, FAAP⁴; Liza Vázquez, MD, FAAP⁵. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Pediatric Residency Program, San Juan, Puerto Rico; ³University of Puerto Rico, School of Medicine, Department of Pediatrics, San Juan, Puerto Rico; ⁴University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics, Pediatric Nephrology, San Juan, Puerto Rico; ⁵Hospital Español Auxilio Mutuo, Pediatric Rheumatology, San Juan, Puerto Rico.
- 231 Safer Sunscreen: Cytotoxicity of UV Filters on Human Corneal Epithelial Cells.** Ana I. Hernández González¹, Leonardo de Castro², Carolina Moreira², Ali Khodor², Víctor L. Pérez². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, Florida.
- 232 Serum Sulfatase 2 (SULF2) as a Potential Predictive Biomarker for Cirrhosis Progression and Risk of Hepatocellular Carcinoma.** Alexandra Soto-Millán¹; Amerti Guta²; Yassin Kolley³; Matthew A. Cooley, PhD, MLS(ASCP)CM⁴; Karimatu Jalloh⁵; Nellie Campbell, MS⁶; Fowsiyo Y. Ahmed, MB, BS⁶; Marco YW Zaki^{6,7}; Lewis R. Roberts, MB ChB, PhD⁶. *Co-first authors. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Mayo Clinic Graduate School of Biomedical Sciences, Center of Clinical and Translational Science, Rochester, Minnesota; ³University of Minnesota, Department of Biology, Rochester, Minnesota; ⁴U.S. Army Medical Research Institute of Infectious Diseases, Diagnostic Systems Division, Frederick, Maryland; ⁵University of Pennsylvania, Perelman School of Medicine, Department of Surgery, Philadelphia, Pennsylvania; ⁶Mayo Clinic, Department of Internal Medicine, Division of Gastroenterology and Hepatology, Rochester, Minnesota; ⁷Minia University, Department of Biochemistry, Faculty of Pharmacy, Minia, Egypt.
- 233 Caribbean Botanical Antioxidants: Therapeutic Potential in Oral Health.** Michela Capoferri¹, José Ignacio García Muñoz¹, Lucía Gimeno-Mallench¹, Alejandro Ponce-Mora¹, Gildas Bertho^{2,3}, Gerardo Cebrián-Torrejón⁴, Salvatore Sauro¹, Eloy Bejarano¹. ¹School of Health Sciences, Universidad Cardenal Herrera-CEU, CEU Universities, Alfara del Patriarca, Spain; ²Laboratory of Pharmacological and Toxicological Chemistry and Biochemistry (UMR 8601 CNRS), University Paris Cité, 75006 Paris, France; ³BioMedTech Facilities-INSERM US36|CNRS UAR2009, University Paris Cité, 75006 Paris, France; ⁴Laboratoire COVACHIM-M2E EA 3592, Université des Antilles, 97157 Pointe-à-Pitre, France.
- 234 Natural and Synthetic Cyclodextrin-Antioxidant Complexes for Dentine Protection.** Michela Capoferri, María Isabel Fortea Gorbe, Salvatore Sauro*, Adrián Alambiaga Caravaca, Eloy Bejarano, Mario Inclán. Universidad CEU Cardenal Herrera, Facultad de Ciencias de la Salud, Departamento de Farmacia, Valencia, España.

- 235 Sociodemographic Factors and Health Insurance Status Among Out-of-Hospital Cardiac Arrest (OHCA) Patients in Puerto Rico.** Mary J. Torres-Guzmán, MS; Juan P. Rosa-Cortés, MS; Alexis J. Rodríguez-Octaviani, MS; Alejandra P. Méndez-Pérez, MS; Haydee M. Rincón-Peona, EM PGY; Enid J. García-Rivera, MD, MPH; Juan A. González-Sánchez, MD, FACEP. UPR School of Medicine, San Juan, PR; University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center, San Juan, PR.
- 236 Impact of Cardiometabolic Comorbidities on Survival in Out-of-Hospital Cardiac Arrest Patients.** Alexis J. Rodríguez-Octaviani, MS; Alejandra P. Méndez-Pérez, MS; Mary J. Torres-Guzmán, MS; Juan P. Rosa-Cortés, MS; Carlos Rodríguez-Prado, EM PGY; Enid J. García-Rivera, MD, MPH; Juan A. González-Sánchez, MD, FACEP. UPR School of Medicine, San Juan, PR; University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center, San Juan, Puerto Rico.
- 237 Bystander CPR, AED Use, and Event Location Patterns in Out-of-Hospital Cardiac Arrest (OHCA) from a Puerto Rico Cohort.** Alejandra P. Méndez-Pérez, MS; Alexis J. Rodríguez-Octaviani, MS; Mary J. Torres-Guzmán, MS; Juan P. Rosa-Cortés, MS; Carlos Rodríguez-Prado, EM PGY; Enid J. García-Rivera, MD, MPH; Juan A. González-Sánchez, MD, FACEP. UPR School of Medicine, San Juan, PR; University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center, San Juan, Puerto Rico.
- 238 Airway Management, CPR Time, and Medication Use in Out-of-Hospital Cardiac Arrest: Insights from EMS Operations in Puerto Rico.** Alejandra P. Méndez-Pérez, MS; Alexis J. Rodríguez-Octaviani, MS; Juan P. Rosa-Cortés, MS; Mary J. Torres-Guzmán, MS; Haydee M. Rincón Peona, EM PGY; Enid J. García-Rivera MD, MPH; Juan A. González-Sánchez, MD, FACEP. UPR School of Medicine, San Juan, PR; University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center, San Juan, Puerto Rico.
- 239 Emergency Department ROSC, Sustained ROSC, and Hospital Disposition after Out-of-Hospital Cardiac Arrest.** Juan P. Rosa-Cortés, MS; Mary J. Torres-Guzmán, MS; Alejandra P. Méndez-Pérez, MS; Alexis J. Rodríguez-Octaviani MS; Axel Núñez-Rivera, EM PGY; Enid J. García-Rivera, MD, MPH; Juan A. González-Sánchez, MD, FACEP. UPR School of Medicine, San Juan, PR; University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center, San Juan, Puerto Rico.
- 240 Mixed-Metal Transferrin Complexes as Potential Vehicles for Titanium (IV) Delivery into Cancer Cells.** Selene L. Schiavone-Chamorro¹, Diana I. Umpierre-Díaz², Oscar Claudio-Ares², Arthur D. Tinoco². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, Department of Chemistry, San Juan, Puerto Rico.
- 241 Mitigating Fall and Hip Fracture Risk Through Stage-Specific Exercise in Older Adults with Diabetic Neuropathy: A Narrative Review.** Emmanuel J. Rodríguez Rivera¹, William Micheo, MD². 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 Physical Medicine and Rehabilitation, San Juan, Puerto Rico.
- 242 Stability of the Gut Microbiome Across Genetic and Behavioral Risk Factors in Hispanic Adults With MASLD.** Andrea Pi-Rivera, BS¹; Jaleniz Suárez-Pérez, BS²; Laura Bermúdez-Martínez, BS⁶; Carolina I. González-Frontera, MS⁷; Carlos F. Ríos-Bedoya, MPH, ScD³; Filipa Godoy-Vitorino, PhD²; José F Rodríguez-Orengo, PhD, MPH^{3,4}. 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 Microbiology and Medical Zoology, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Biochemistry, San Juan, Puerto Rico; ⁴FDI Clinical Research, San Juan, Puerto Rico; ⁵McLaren Health Care, Graduate Medical Education, Grand Blanc, MI, USA; ⁶Universidad Central del Caribe School of Medicine, Bayamón, Puerto Rico; ⁷School of Medicine, Ponce Health Sciences University, Ponce, Puerto Rico.
- 243 Global Disparities in Orthopaedic Surgery: A Narrative Review.** Gonzalo F. Del Río Montesinos¹, Andrea Fábregas Román¹, Nelson Molina Lara¹, David Vázquez Rodríguez¹, Lancelot Benn². ¹Universidad Central del Caribe, Bayamón, Puerto Rico; ²Orthopaedic Surgery Department, University of Missouri-Kansas City, Kansas City, Missouri, United States of America.
- 244 Stage-Specific Molecular and Immune Signatures in Colorectal Cancer.** Sophia Colón-Serrano^{1,2}, Camille N. Zenón-Meléndez¹, Sheila López-Acevedo¹, Yakshi N. Ortiz-Maldonado¹, Madeline M. Mártir-Ocasio¹, Gabriela M. Chardón-Galíndez¹, Elba V. Caraballo¹. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, PR; ²University of Puerto Rico Medical Sciences Campus, School of Medicine, San Juan, PR.
- 245 Synergistic Properties on TBX5 and GATA4 on Cardiac Regulatory Activity.** Adriana C. Barreiro-Rosario^{1,2}, Jessica M. Rodríguez-Ríos¹, José A. Rodríguez-Martínez¹. ¹University of Puerto Rico, Río Piedras Campus, Department of Biology, San Juan, PR; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 246 Post-Mastectomy Breast Reconstruction Techniques and Outcomes in Puerto Rico.** Lionell Rivera-Barredo¹, Dalina Serrano¹, Natalia Yordán¹, Víctor Sánchez¹, Liara S. Ortiz-Ocasio¹, Ángel Rivera-Barrios^{1,2}. 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 Surgery, Plastic Surgery Division, San Juan, Puerto Rico.
- 247 Falls Profile Among Amyotrophic Lateral Sclerosis Patients in Puerto Rico.** Diego Suárez-Irizarry¹, Frances Aponte-Caraballo^{1,4}, Fernando Padrón-Del Pozo¹, Taliana Salcedo-Rosado², Darlene Molina³, Valerie Wojna^{1,4}, Brenda Deliz-Roldán^{1,4}. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Neurology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ³University of Puerto Rico, Río Piedras Campus, Department of Biology, San Juan, Puerto Rico; ⁴Caribbean Hispanic Amyotrophic Lateral Sclerosis Center for Clinical Trials (CHALS-CCT), School of Medicine, Neurology Section, University of Puerto Rico, Medical Sciences Campus.
- 248 Change in E-Vapor Product Use Among Puerto Rican Youth, Hispanic Youth in U.S., and Overall Youth in U.S.** Viviana M. Fernández Vicente, BS¹; Emmanuel J. Santiago González, BS¹; 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.
- 249 Evaluation of Edelfosine as an Anti-Inflammatory Modulator of Microglial Phagocytosis Activity.** Sebastián Méndez Cruz, Arot Vázquez Pulliza, Antonio Henrique Martins-Baccin, Yancy Ferrer Acosta. University of Puerto Rico Medical Sciences Campus, School of Medicine, Anatomy and Neurobiology Department, San Juan, PR 00935.
- 250 Longitudinal Evaluation of Long COVID Symptom Persistence and Its Association with Moderate to Severe COVID-19 in a Hispanic Cohort from Puerto Rico.** Omar A. Benítez Esteve, BS¹; Bárbara A. Ramos Sanfiorenzo, MS²; Miciely C. Aponte-Reyes, BS¹; Victoria A. Blaiotta-Vázquez, MPH¹; Allen A. Román-Roubert, BS¹; Natalia A. Alvarado-Ramos, BS¹; Enid J. García Rivera, MD, MPH^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus, Department of Medicine, San Juan, Puerto Rico; ²Endowed Health Services Research Center, Department of Medicine, San Juan, Puerto Rico.
- 251 Perspectives on the Implementation of HPV Self-Collection in a Federally Qualified Health Center in Texas.** Christopher Rodríguez, MS¹; Héctor Sánchez, MPH²; Susan Parker, PhD²; Javier Vásquez³; Blanca Cavazos³; Prajakta Adsul⁴; Jane Montealegre, PhD². ¹San Juan Bautista School of Medicine, Puerto Rico; ²The University of Texas MD Anderson Cancer Center, Houston; ³Su Clínica, Harlingen, Texas; ⁴The University of New Mexico, Albuquerque.
- 252 Increase in Microvascular Complications After the COVID-19 Pandemic in Patients with Diabetes Mellitus in Puerto Rico: A Retrospective Cohort Study.** Adriana López-Avilés, BS¹; Keishla Jiménez-Ortega, MD²; Angélica Vázquez-Colón MD²; Carolina Batlle-Camero, MS¹; Jeffrey Pérez-Carrasquillo, BS¹; Yanni Rivera-Rodríguez, BS³; Yareliz Sánchez-Rivera, BS¹; Pedro López-Martínez, MD¹; Loida A. González-Rodríguez, MD FACE². 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 Medicine, Endocrinology, Diabetes and Metabolism Division, San Juan, Puerto Rico; ³San Juan Bautista School of Medicine, Caguas, Puerto Rico.
- 253 High Glucose-Induced Activation of Microglia: Insights into Neuroinflammation in Diabetes.** *Jorge García¹, Sebastián Hernández¹, Andrea Bahamundi¹, Ricardo Laboy¹, Yaritza Inostroza-Nieves, PhD². ¹San Juan Bautista School of Medicine, Department of Biomedical Sciences, Caguas, Puerto Rico; ²San Juan Bautista School of Medicine, Department of Physiology and Neuroscience, Caguas, Puerto Rico.
- 254 An Analysis of Hymen Type, Tanner Stage, and Menarche in Girls Receiving Treatment for Child Sexual Abuse at the Puerto Rico Health Justice Center.** Sophia Pruitt¹, Angelie Carrión-Vélez¹, Leonardo Torres-Ramos¹, Michelle Alvarado-Acosta¹, Lucianne Rosario-Rodríguez¹, Linda Pérez-Laras^{1,2}, Linda Laras². ¹San Juan Bautista School of Medicine, Caguas, PR; ²Puerto Health Justice Center, Caguas, PR.
- 255 Delays in ILD Management Following Radiologic Evidence of Interstitial Lung Abnormalities.** Gabriel F. Pérez Pagán. Universidad Central del Caribe School of Medicine, Puerto Rico.
- 256 DNMT1 Inhibition Suppresses EMT-Driven Invasion and Migration in Docetaxel-Resistant Prostate Cancer.** Solimar Esteves-Vega¹, Gabriela Castro², Shakira Abad², Valerie Rodríguez¹, Stephanie Montalvo³, Rodniel Avilés¹, Ralphdy Vergne⁴, Gustavo Alayón¹, Caleb Santiago⁴, Lenin Godoy⁴, Gilberto Ruiz-Deyá¹, Jong Y. Park⁵, Carmen Ortiz-Sánchez⁴. ¹Ponce Health Sciences University-School of Medicine, Ponce, Puerto Rico; ²Pontificia Universidad Católica de Puerto Rico, Ponce, Puerto Rico; ³University of Puerto Rico at Mayagüez, Mayagüez, PR; ⁴Ponce Research Institute, Ponce Health Sciences University, Ponce, Puerto Rico; ⁵Department of Cancer Epidemiology, H. Lee Moffitt Cancer Center, Tampa, FL, USA.

- 257 Maternal Complications and Outcomes by Type of Diabetes Mellitus in Pregnant Women in Puerto Rico: A Retrospective Study.** Verónica R. Dávila-Parrilla, BS¹; Karla Lugo, BS²; Priscilla Rodríguez Torres, MD³; Ana Muñoz Matta, MD³. ¹Universidad Central del Caribe, School of Medicine; ²University of Puerto Rico School of Medicine, Medical Sciences Campus; ³University of Puerto Rico Medical Sciences Campus, Obstetrics and Gynecology Department.
- 258 Subclinical Glutaryl carnitine (C5DC) Elevation as a Potential Biomarker in Neurogenetic Risk in Puerto Rican Children.** Paola Colón-Terrón^{1,5}, Linda Pérez^{1,4}, Simón Carlo^{2,3}, Alberto Santiago-Cornier^{2,3}, Elinette M. Albino^{4,5}. ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²Ponce Health Sciences University; ³Genetic Diagnostic Group; ⁴School of Health Professions, University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ⁵Puerto Rico Genetics Laboratory, San Juan, Puerto Rico.
- 259 Impact of Power Outages on Health Care for Adults with Chronic Diseases in Puerto Rico.** Emmanuel J. Santiago-González¹, Enid J. García-Rivera², Marielis Colón-Ramos², Fabiola N. González-Díaz³, María C. González-Prieto², Yaritza Rivera-Pizarro², Guillermo J. Vázquez-Fernández¹, Pilar D. Cardona-Del Valle⁴. ¹School of Medicine- University of Puerto Rico; ²Endowed Health Services Research Center, School of Medicine-University of Puerto Rico; ³Family Medicine Residency Program, School of Medicine-University of Puerto Rico; ⁴Carlos Albizu University.
- 260 Long-Term Outcomes and Cost-Effectiveness of Advanced Technologies in Lumbar Spine Surgery: A Scoping Review.** David Vázquez Rodríguez¹, Gonzalo F. Del Río Montesinos¹, Andrea N. Fabregas¹, Nelson I. Molina Lara¹, Lancelot Benn². ¹Universidad Central Del Caribe (UCC), Bayamón, Puerto Rico, USA; ²Orthopaedic Surgery Department, University of Missouri-Kansas City, Kansas City, MO, USA.
- 261 Using Platelet-Rich Plasma and Bone Marrow Aspirate Concentrate Injectables to Conservatively Treat Partial ACL Injuries: A Narrative Review.** Rafael E. Rodríguez Rivera, William Micheo. University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 262 The Predicted Damaging Effects of *PLA2G4EL2* Gene Mutations on Eggshell Strength in *Amazona vittata*.** Alanis Torres Colón¹, Wilson Leung², Juan C. Martínez Cruzado¹. ¹Department of Biology, University of Puerto Rico at Mayagüez, Mayagüez, Puerto Rico; ²Department of Biology, Washington University in St. Louis, St. Louis, Missouri, USA.
- 263 Association of Menopausal Status with High-Risk HPV Infection and Cervical Cytologic Abnormalities.** Shadaira N. Morales-Rivera¹, Ariana Gutiérrez-Morales², Josefina Romaguera-Agrait³, Filipa Godoy-Vitorino⁴. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico; ⁴University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Microbiology, San Juan, Puerto Rico.
- 264 Impact of Social Determinants of Health on Genetic Care Uptake in Lynch Syndrome Patients in Puerto Rico.** Kayla M. Centeno-Méndez¹, Hilmaris Centeno², Julie Dutil³, Veroushka Ballester⁴, Marcia Cruz-Correa³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Comprehensive Cancer Center of the University of Puerto Rico; ³Comprehensive Cancer Center of the University of Puerto Rico, Division of Clinical and Translational Cancer Research; ⁴Comprehensive Cancer Center of the University of Puerto Rico, Division of Cancer Medicine, San Juan, Puerto Rico.
- 265 Inflammatory Markers in Robotic Versus Conventional Total Knee Arthroplasty: A Scoping Review.** José I. Acosta Julbe¹, Juan Silva Aponte¹, Derick Rodríguez Reyes³, Bryan G. Pons Adorno², Ángel A. Cintrón Stuart⁴, Antonio Otero¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Orthopaedic Surgery Section, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ³Ponce Health Sciences University, School of Medicine, Orthopaedic Surgery Section; ⁴San Juan Bautista School of Medicine, Caguas, Puerto Rico.
- 266 CDCH Expression and Retrograde Nerve Labeling of *Biomphalaria*'s CNS, an Intermediate Snail Host for Human Schistosomiasis.** Yaniushka Fernández-Roche³, Natali M. Colón-Santiago, BS^{1,2}; Arelys Rivas-Jiménez^{1,2}; Mark W. Miller, PhD^{1,2}. ¹University of Puerto Rico, Medical Sciences Campus, Institute of Neurobiology; ²University of Puerto Rico, Medical Sciences Campus, Department of Anatomy & Neurobiology, San Juan, Puerto Rico; ³University of Puerto Rico, Río Piedras Campus, Social Sciences Faculty, Department of Psychology, San Juan, Puerto Rico.
- 267 Sel1L-Hrd1 ER-Associated Degradation Complex as a Novel Therapeutic Target in Leukemia.** Alondra Quiñones Santiago^{1,2}, Madison Gohman^{2,3}, Peter Gordon MD/PhD^{2,3}. ¹Inter American University of Puerto Rico - San Germán; ²Masonic Cancer Center; ³University of Minnesota Twin Cities, Department of Pediatrics.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 268 Silver-Doped Zinc Oxide Nanoparticles as a Novel Antimicrobial Platform Against *Salmonella typhimurium*.** Ian Alexander Passalacqua Montes, Myrna Reyes Blas. University of Puerto Rico at Ponce, Department of Chemistry and Physics, Laboratory of Investigation in Nanotechnology and Characterization (LINC).
- 269 Design and Validation of a High-Throughput Screening Platform to Identify Compounds that Promote Healthspan in *Drosophila melanogaster*.** Linoshka Nieves-González, Naomi Z. Serrano-Colón, Imilce Rodríguez-Fernández. College of Natural Sciences, University of Puerto Rico–Río Piedras Campus, San Juan, Puerto Rico.
- 270 POF1B, a Downstream Effector of PVT1 exon 9, Interacts with Androgen Receptor in Neuroendocrine Prostate Cancer.** Carlos I. González¹, Rachel Bonacci², Olorunseun Ogunwobi². ¹University of Puerto Rico, Río Piedras Campus; ²Michigan State University.
- 271 *Klebsiella pneumoniae* as an Etiological Factor of Bovine Mastitis in Puerto Rico.** Nayr Vega Pérez¹, Débora Torres Centeno¹, Zaidlys Hernández Vargas¹, Gloribel Seguí Méndez¹, Linda Hernández Pérez¹, Guillermo Ortiz-Colón², Juliana Pérez Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 272 Neuroinflammation in Caribbean Hispanic Alzheimer's Disease Patients: Plasma Cytokines as Early Risk Biomarkers.** Fabiola A. Cádiz Medina¹, Frances M. Marín Maldonado², Vanessa Sepúlveda Rivera³, Angélica B. Arroyo Cruz⁴, Jorge Duconge Soler², José Colón Sáez². ¹University of Puerto Rico Río Piedras Campus, College of Natural Sciences, Department of Biology, San Juan Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmaceutical Sciences, San Juan, Puerto Rico; ³University of Puerto Rico, School of Medicine, Department of Internal Medicine, San Juan, Puerto Rico; ⁴University of Puerto Rico, Medical Sciences Campus, Alliance for Clinical and Translational Research, San Juan, P.R.
- 273 Early Physical Therapy as a Protective Factor for 30-Day Readmission After Total Knee Arthroplasty in Puerto Rico: Real-World Evidence.** Javier E. Rodríguez¹, Manuel A. Ramírez², Luis A. Pérez, MD². ¹Pennsylvania State University, College of Health and Human Development, Department of Biobehavioral Health, State College, Pennsylvania; ²FARO LLC, San Juan, Puerto Rico.
- 274 Amino Acids Fuel Mitochondrial Energy Metabolism in the Mouse Hippocampus During Running Exercise.** Brendimar Sierra Medina¹, Alejandra Vázquez Medina², Sebastián Rodríguez Soto³, Karina Marín Hernández⁴, Danniela Rivera Ortiz¹, Briana Bello Rivera⁴, Arianna Guzmán Torres³, Diego Martínez Rodgers⁴, Johannee Rivera Nazario¹, Luis Limardo Sánchez⁴, Nataliya Chorna². ¹Interdisciplinary Department, University of Puerto Rico, Río Piedras Campus, San Juan, PR; ²Department of Biochemistry, University of Puerto Rico, School of Medicine, San Juan, PR; ³Department of Chemistry, University of Puerto Rico, Río Piedras Campus, San Juan, PR; ⁴Department of Biology, University of Puerto Rico, Río Piedras Campus, San Juan, PR.
- 275 Prevalence of Sarcopenia and Osteopenia in Older Veterans in Puerto Rico: Association with Functional and Clinical Assessment (Exercise Physiology/Whole Body Composition).** Irma L. Molina-Vicenty, MD^{1,2,3}; Carlos Padilla, PhD^{1,8}; Walter Frontera MD, PhD⁷; Isabel Borrás, MD⁴; María García-Guerra, PT⁴; Gerardo Jovet-Toledo, MS¹; Angélica Rodríguez-Stoehr, CNMT³; Lesbia Ocasio-Padilla, CNMT³; Zayra Reyes-Feliciano, RN³; María Frontera Rodríguez^{1,2,6}; Sebastián Frontera Rodríguez^{1,2,6}; Alejandra García-Ferré, BS^{1,2}; Gerardo Cintrón-Vélez^{1,2,6}; Lydienid Rodríguez-Ortiz, CNMT^{1,2}; Alejandro Velázquez-Pérez^{1,2,5}; Kiara C. Ortiz-Camacho^{1,2,10}; Xiomara S. Molina-Perez^{1,2,10}; Lyan M. Cabello-Ballester^{1,2,9}; Michael I. Soler-Llompert^{1,2,9}; Andrea Paola Pereira-Rodríguez^{1,2,10}; Alejandra P. González-Ocasio^{1,2,6}; David A. Ramírez-Alameda^{1,2,6}; Gabriel A. Madera-Santiago^{1,2,11}; Juan A. Arill-Fernández^{1,2,6}. ¹VA Caribbean Health Care System, Research and Development Service, Nuclear Medicine and Molecular Imaging Research Section, San Juan, PR; ²VA Caribbean Health Care System, ACOS/Research and Development Service, San Juan, PR; ³VA Caribbean Health Care System, Nuclear Medicine Department, San Juan, PR; ⁴VA Caribbean Health Care System, Physical Medicine & Rehabilitation Department, San Juan, PR; ⁵University of Puerto Rico, Humacao Campus, Biology Department, San Juan, PR; ⁶University of Puerto Rico, Río Piedras Campus, Biology Department, San Juan, PR; ⁷University of Puerto Rico, Medical Sciences Campus, San Juan, PR; ⁸University of Puerto Rico, Mayagüez Campus, Mayagüez, PR; ⁹University of Puerto Rico, Río Piedras Campus, Study of Interdisciplinary Sciences Program, San Juan, PR; ¹⁰San Juan Bautista School of Medicine, Doctor in Medicine Program, Caguas, PR; ¹¹University of Puerto Rico, Bayamón Campus, Biology Department, Bayamón, PR.
- 276 Slowpoke Potassium Channel Regulates Alcohol-Tolerance Acquisition in *Drosophila Melanogaster* Through the Ventrolateral Neurons.** Natalia C. Álvarez-Cortés^{*1}, Ian A. Mercado-Suárez², Alfredo Ghezzi¹. ¹Department of Biology, University of Puerto Rico, Río Piedras, San Juan, PR; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR.
- 277 PFOA-Induced Survival Loss and Oxidative Stress in *Drosophila melanogaster*: A Sex-Dependent Toxicity Study.** Adrián Rivera Alsina, Enrique Rodríguez Borrero, PhD. University of Puerto Rico at Cayey.

- 278 Exploring the Association Between Sleep Duration, Mental Health, Social Media Use and Videogame Time: A Secondary Analysis.** Yaisha M. Camis-Bonilla^{1,2}; Gia S. Pérez-Colón^{1,2}; Reshma R. Sabunani-Ferrer^{1,2}; Hanna M. Maldonado Cruz^{1,2}; Julián M. Hernández-Torres, MPH³; Yamil Ortiz-Ortiz, PhD^{1,2}. ¹University of Puerto Rico, Río Piedras Campus, Faculty of Social Sciences, Department of Psychology, Río Piedras, Puerto Rico; ²Social Research Center, Emergent Technologies Research Laboratory, Río Piedras, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
- 279 Maternal Respiratory Syncytial Virus Vaccination During Pregnancy.** Amanda S. Pérez González¹; Gianelle García Fuentes¹; Adriana Carattini Velázquez¹; Lourdes García Fragoso, MD²; Alejandra Rodríguez Alemañy, MD²; Zayhara Reyes Bou, MD²; Inés García García MD². ¹Department of Biology, Río Piedras Campus, University of Puerto Rico, Neonatology Section; ²Department of Pediatrics, Medical Sciences Campus, University of Puerto Rico.
- 280 Discovery and Development of Anxiolytic Agents from Tropical Marine Algae using *Drosophila melanogaster* as a Behavioral Model.** Layza M. Alicea López¹, Gabriela I. Hernández Alicea², Fabián A. Santiago Rodríguez¹, Paola N. Guzmán Torres¹, Ana M. Torres Cardona¹, Adriann Torres Pedraza³, Ricardo Chiesa¹. ¹Department of Biology, University of Puerto Rico-Cayey; ²General Sciences Program, University of Puerto Rico-Cayey; ³Department of Social Sciences, University of Puerto Rico-Cayey.
- 281 Levels of Vitamin D in Chronic Spinal Cord Injury Veterans Residing in Puerto Rico.** Luzimar Conaway Mediavilla, MD, FACP¹; Sophia K. Morales Sotográs^{1,2}. ¹VA Caribbean Health Care System, San Juan PR; ²University of Puerto Rico, Río Piedras Campus.
- 282 Synthesis, Characterization, Docking Studies, and Anti-Proliferative Activity of Ferrocene-based Compounds in MCF-7 Breast Cancer Cell Line.** Zoamy Soto Ramírez¹, Mariola M. Flores Rivera², José A. Carmona Negrón², Dalice Piñero Cruz³, Enrique Meléndez². ¹University of Puerto Rico, Mayagüez Campus, Department of Biology, Mayagüez, Puerto Rico; ²University of Puerto Rico, Mayagüez Campus, Department of Chemistry, Mayagüez, Puerto Rico; ³University of Puerto Rico, Río Piedras Campus, College of Natural Sciences, Department of Chemistry, San Juan, Puerto Rico.
- 283 Immune Bridges Between Alzheimer's, SLE, and Type 1 Diabetes Through Gene Expression Analysis.** Gustavo Bertrán^{1,2}, Diego Santiago^{2,3}, Eugenio Ibarra^{2,3}, Justin Vélez^{2,4}, Larasofía Mateo^{2,3}, Lianyenís Torres^{2,3}, Clara E. Isaza^{1,2,5}, Mauricio Cabrera^{2,4,5}. ¹Graduate Program in Biology, University of Puerto Rico-Mayagüez; ²The Applied Optimization Group, University of Puerto Rico-Mayagüez; ³Department of Biology, University of Puerto Rico-Mayagüez; ⁴Department of Industrial Engineering, University of Puerto Rico-Mayagüez; ⁵Graduate Program in Bioengineering, University of Puerto Rico-Mayagüez.
- 284 Evaluating the Effects of Different Concentrations of the Probiotic *Lactiplantibacillus plantarum* on the Locomotion of Young and Old *Drosophila*.** Camila S. Marco-Colón, Karina Y. Torres Santiago, Geraldine M. Ortiz-Sosa, Dr. Imilce A. Rodríguez-Fernández. College of Natural Sciences, Department of Biology, University of Puerto Rico, Río Piedras Campus.
- 285 Antimicrobial Screening of Fire Ant-Associated Actinobacteria.** Francisco F. Zapata, Amanda S. Jiménez, Leobaldo J. Luna, Matías J. Cafaro. University of Puerto Rico at Mayagüez, Department of Biology, Mayagüez, Puerto Rico.
- 286 Neuroproteomic Effects and Behavioral Characterization of Anxiolytic Natural Products from Tropical Marine Algae.** Xandra M. Peña Díaz^{1,2}, Jorlyann M. Campos Ortiz^{1,2}, Yadira M. Cantres-Rosario², Ana E. Rodríguez de Jesús², Loyda M. Meléndez^{2,3}, Ricardo Chiesa¹. ¹Department of Biology, University of Puerto Rico-Cayey; ²Translational Proteomics Center, Research Capacity Core, Center for Collaborative Research in Health Disparities, University of Puerto Rico-Medical Sciences Campus; ³Department of Microbiology, UPR-MSU.
- 287 Association of Selective Serotonin Reuptake Inhibitors in the Occurrence of Craniofacial Malformations: A Narrative Review.** Darellys P. Berríos Plaza, B.S.; Eduardo Llegus Santiago, DrPHc, MPH; Mairim Soto Ortiz, DrPH, MPH; Carmen J. Buxó Martínez, DrPH, MPH, MSc. University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine, Dental and Craniofacial Genomics Core.
- 288 Análisis de Datos Secundarios: Comparación de Variables de Salud Mental Durante la Adolescencia en Puertorriqueños.** Rodrigo H. Ramírez-Lamprea, Jatniel J. Negrón-Quintana, Hannah M. Maldonado-Cruz, Gia S. Pérez-Colón, Yamil Ortiz-Ortiz, Ismael J. Castillo-Reyes. Universidad de Puerto Rico, Recinto de Río Piedras, Departamento de Psicología, San Juan, Puerto Rico.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 289 **Regional Morphological Plasticity Associated with Dietary Change in Rhesus Macaque Mandibles.** Geraldine Serrano Cignarella¹, Catalina Villamil Ríos². ¹University of Puerto Rico, Río Piedras Campus, Department of Biology; ²Caribbean Primate Research Center, UPR-RCM.
- 290 **COVID-19–Associated Dysregulation of Key Placental Proteins During Pregnancy.** Luisa F. Rodríguez¹, Ana E. Rodríguez de Jesús², Yadirá M. Cantres-Rosario², Eduardo L. Tosado-Rodríguez³, Abiel Roche³, María Correa⁴, Loyda M Meléndez^{5,2*}. ¹Department of Interdisciplinary Science, University of Puerto Rico, Río Piedras Campus; ²Translational Proteomics Center, Research Capacity Core, Center for Collaborative Research in Health Disparities, University of Puerto Rico-Medical Sciences Campus; ³Integrated Informatics, Research Capacity Core, Center for Collaborative Research in Health Disparities, University of Puerto Rico-Medical Sciences Campus; ⁴Department of Pathology, University of Puerto Rico, Medical Sciences Campus; ⁵Department of Microbiology and Medical Zoology, University of Puerto Rico-Medical Sciences Campus.
- 291 **A Descriptive Study of Incidence of Comorbidities and Maternal Outcomes in Hispanic Women in Puerto Rico with an Obesity BMI.** Vivian Vázquez-Román¹; Priscilla Rodríguez-Torres, MD²; Ana T. Muñoz Matta, MD²; Josefina Romaguera-Agrait, MD, MPH, FACOG². ¹University of Puerto Rico, Río Piedras Campus, Natural Sciences Faculty, Department of Biology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico.
- 292 **Alpha-7 Nicotinic Acetylcholine Receptor ($\alpha 7nAChR$) Agonist SEN12333 Induces Donor-Dependent Effects in HIV-1 Replication Levels from Microglia.** Yulia Coriano-Torres¹, Jeremy J. Pérez-Marrero², Gabriel A. Moreno¹, Fernando Padrón-Del Pozo³, Elaine Rodríguez³, Lester J. Rosario-Rodríguez³, Valerie Wojna³. ¹University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences, Department of Biology, San Juan, PR; ²University of Puerto Rico, Bayamón Campus, Department of Biology, Bayamón, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Internal Medicine, San Juan, PR.
- 293 **Assistive Technologies in ALS: Timing, Selection, and Clinical Impact.** Darlene D. Molina-Tosado¹, Frances M. Aponte-Caraballo^{3,4}, Valerie Wojna^{2,3}, Brenda Deliz-Roldán^{2,3}. ¹University of Puerto Rico, Río Piedras Campus, Department of Biology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Neurology, San Juan, Puerto Rico; ³Caribbean Hispanic Amyotrophic Lateral Sclerosis Center for Clinical Trials (CHALS-CCT), School of Medicine, Neurology Section, University of Puerto Rico, Medical Sciences Campus; ⁴University of Puerto Rico, Medical Sciences Campus, Graduate School of Health, Department of Environmental Health.
- 294 **Biochemical and Molecular Identification of *Escherichia coli* Isolates from Milk Samples from Cows with Subclinical Mastitis in Puerto Rico.** Gloribel Seguí Méndez¹, Zaidlys Hernández Vargas¹, Alanis Rosa González¹, Gabriela Méndez Ríos¹, Guillermo Ortiz-Colón², Juliana Pérez-Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 295 **Investigating the Inflammatory Cytokine Profile of Milk from Cows with Subclinical Mastitis.** Elyam Méndez Hernández¹, José Chaparro Galloza¹, Mariely Morales Burgos¹, Amarys Corchado Vargas¹, Derek Rodríguez Román¹, Guillermo Ortiz-Colón², Juliana Pérez Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 296 **Antibiotic Resistance Profile of *Staphylococcus aureus* Isolates Causing Mastitis.** Alanis Rosa González¹, Gloribel Seguí Méndez¹, Zaidlys Hernández Vargas¹, Guillermo Ortiz-Colón², Juliana Pérez-Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 297 **Design and Synthesis of TRIP13 Inhibitors for HPV-Driven Cancer.** Leonel Lizardi Rodríguez¹, Kaitlyn Nieves Serra², Cornelis Vlaar². ¹University of Puerto Rico, Río Piedras, Department of Biology; ²University of Puerto Rico, Medical Sciences Campus, School of Pharmacy.
- 298 **Periodic Assessment of Bacteria and Heavy Metals in Yabucoa's Bay.** Valentina Méndez De León; Bryan Lugo; Leyshka Vivas; Denisse Alequín Torres, PhD; Frances Lugo, PhD. Interamerican University of Puerto Rico, Fajardo Campus.
- 299 **Isolation and Characterization of *Pseudomonas aeruginosa* in Milk Samples from Cows Diagnosed with Clinical Mastitis.** Adrián Cintrón Hernández¹, Javier Nazario-Cáceres¹, Guillermo Ortiz-Colón², Juliana Pérez-Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 300 **Characterizing the *Streptococcus spp.* Isolates Causing Mastitis in Puerto Rico.** Gabriela Méndez Ríos¹, Stephanie M. González-Avilés¹, Gloribel Seguí Méndez¹, Alanis Rosa González¹, Zaidlys Hernández Vargas¹, Guillermo Ortiz-Colón², and Juliana Pérez-Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR and ²University of Puerto Rico in Mayagüez, PR.

- 301 Anti-Tumor Mechanisms of the Tobacco-Derived Cembranoid 4R in Non-Small Cell Lung Cancer.** Alexander Montalvo Berríos¹, José Cirino Simonet², Yancy Ferrer Acosta³. ¹University of Puerto Rico, Bayamón Campus, Biology Department, Bayamón PR; ²Universidad Central del Caribe-School of Medicine, Neuroscience Department, Bayamón, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Anatomy & Neurobiology Department, San Juan PR.
- 302 Bioprospecting of Coastal Fungi for the Degradation of Petrochemicals and Synthetic Dyes.** Coraliz J. Lafontaine Gutiérrez, Giannina M. Martell Piovonetti, Nataly Vidal Figueroa, Matias J. Cafaro*. University of Puerto Rico, Mayagüez Campus, College of Arts and Sciences, Department of Biology, Mayagüez, Puerto Rico.
- 303 Desodorantes y Cáncer de Mama: Estudio Piloto Sobre Determinantes de Acceso a Productos sin Aluminio en el Casco Urbano de Río Piedras.** Soledad Martínez^{1,2}, Nancy R. Cardona Cordero¹, Brenda J. González¹, Omayra Salgado¹, Ana P. Ortiz¹. ¹Division of Cancer Control and Population Sciences, University of Puerto Rico Comprehensive Cancer Center, San Juan PR 00936; ²Department of Natural Sciences, University of Puerto Rico, Río Piedras, San Juan PR 00925.
- 304 Investigating the Role of the Endocannabinoid System in Chronic Inflammation of the Mammary Gland.** Mariely Morales Burgos¹, Amarys Corchado Vargas¹, Derek Rodríguez Román¹, Elyam Méndez Hernández¹, Neichary Soto Acevedo¹, Guillermo Ortiz Colón², Juliana Pérez Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 305 Evidence of Dysregulation of Endocannabinoid Synthesizing and Degrading Enzymes during Mastitis.** Derek Rodríguez Román¹, Mariely Morales Burgos¹, Amarys Corchado Vargas¹, Guillermo Ortiz-Colón², Juliana Pérez Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 306 Innate Immune Receptors and their Role in Chronic Inflammation of the Mammary Gland.** Gerardo Meléndez Teran¹, Mariely Morales Burgos¹, Derek Rodríguez Román¹, Amarys Corchado Vargas¹, Guillermo Ortiz-Colón², Juliana Pérez Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 307 A Systematic Review on Endocrine Disruptors in Menstrual Hygiene Products: Their Health Impact, the Availability, and Accessibility in Aibonito, Puerto Rico.** Alanis N. Cordero Cartagena¹, Brenda J. González², Ana P. Ortiz², Nancy R. Cardona Cordero². ¹Department of Natural Sciences, University of Puerto Rico Cayey, Cayey PR 00736; ²Division of Cancer Control and Population Sciences, University of Puerto Rico Comprehensive Cancer Center, San Juan PR 00936.
- 308 Toll-like Receptor 3 and Signaling Molecules Expression in Chronic Inflammation of the Mammary Gland.** Amarys Corchado-Vargas¹, Mariely Morles-Burgos¹, Derek Rodríguez¹, Guillermo Ortiz-Colón², Juliana Pérez-Laspiur¹. ¹University of Puerto Rico in Aguadilla, PR; ²University of Puerto Rico in Mayagüez, PR.
- 309 Predictive Value of Serum Biomarkers for Neurological Complications in Acute Ischemic Stroke: A Narrative Review.** Ricardo E. Calderón Rivera¹, Noelia C. Morales Cardona². ¹University of Puerto Rico, Río Piedras Campus, Department of Biology, San Juan, Puerto Rico; ²Johns Hopkins University, School of Medicine, Department of Neurology, Division of Neurocritical Care, Baltimore, Maryland, United States.
- 310 Preliminary Analysis of Gene Regulation by 40Hz Stimulation in Alzheimer's Disease Mice Model Revealed via Optimization-Based Gene Profiling.** Andrew G. Morales Ruiz^{1,3}, Delaia Z. Torres López^{1,3}, Jahianna C. Ramírez Montalvo^{1,3}, Wilnelys Rivera López^{1,3}, Mauricio Cabrera Ríos^{2,3}, Clara E. Isaza Brando^{1,3}. ¹University of Puerto Rico, Mayagüez Campus, Department of Biology, Mayagüez, Puerto Rico; ²University of Puerto Rico, Mayagüez Campus, Department of Industrial Engineering, Mayagüez, Puerto Rico; ³University of Puerto Rico, Mayagüez Campus, The Applied Optimization Group, Mayagüez, Puerto Rico.
- 311 Phentermine Use Prior to Surgery and Intraoperative Hemodynamics: Evidence from a Multisite Retrospective Cohort.** María F. Acevedo Kury¹, Valentina Hernández Romero², Zulma D. Sosa Cárcamo², Ridwan Ahmad², Adam Jacob, MD³, Joan Irizarry Alvarado, MD². ¹University of Puerto Rico, Cayey Campus, Department of Biology, Cayey, Puerto Rico; ²Mayo Clinic, Division of General Internal Medicine, Jacksonville, Florida, United States; ³Mayo Clinic, Division of Anesthesiology, Rochester, Minnesota, United States.
- 312 Assessing the Biodistribution and Toxicity of Fluorescently Dyed Nano-Polystyrene in *Artemia salina* Nauplii.** Beatriz M. Purcell Collazo¹, Camila M. Martínez Llaurador², Claudia S. Jiménez Vélez², Melissa I. Ortiz Román, PhD¹, Félix R. Román Velázquez, PhD¹. ¹University of Puerto Rico, Mayagüez Campus, Department of Chemistry, Mayagüez, PR; ²University of Puerto Rico, Mayagüez Campus, Department of Biology, Mayagüez, PR.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 313 Elucidating Structure and Function of Human Proteins with Limited Knowledge Using Bioinformatics.** Zaimar K. Custodio Dalmau¹, Elga V. Rivera Padró¹, Andrés Moya Rodríguez². ¹University of Puerto Rico, Mayagüez Campus, Faculty of Arts and Sciences, Department of Biology, Mayagüez, Puerto Rico; ²University of Puerto Rico, Mayagüez Campus, Faculty of Arts and Sciences, Department of Chemistry, Mayagüez, PR.
- 314 AphtheraTM Intraocular Lens in a Latino Population: A Case Series.** Kevin Santiago¹, Natalio J. Izquierdo², José J. López-Fontanet³, Miguel A. Santiago⁴. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Ophthalmology, San Juan, Puerto Rico; ²Instituto de Ojos de Puerto Rico, Department of Ophthalmology, Carolina, Puerto Rico.
- 315 Nanoparticle-Mediated Delivery of Edelfosine to Limit Macrophage Adhesion During Seizure-Related Inflammation.** *Paola N. Gracia Ayala¹, Abriel J. Rivera Rivera², Arot L. Velázquez³, Yancy Ferrer Acosta⁴. ¹Department of Biology, University of Puerto Rico, Bayamón; ²Department of Science and Technology, Interamerican University of Puerto Rico, Arecibo; ³Department of Biology, University of Puerto Rico, Río Piedras; ⁴Department of Anatomy and Neurobiology, University of Puerto Rico Medical Sciences Campus.
- 316 Attenuation of $\alpha 7$ Nicotinic Acetylcholine Receptor Dysregulation by Nicotine in the Context of SARS-CoV-2 Spike Protein Exposure.** Sonia Corretjer-Farinacci¹, Rolando Irizarry-Álvarez², Adriana Rodríguez-Aponte³, Angelie Ocasio⁴, Deilyan De Jesús⁴, Manuel Delgado Vélez^{5,6}; José A. Lasalde Dominiccí^{4,5}. ¹University of Puerto Rico Medical Sciences Campus, School of Medicine; ²San Juan Bautista, School of Medicine; ³Universidad Central del Caribe, School of Medicine; ⁴Department of Biology, University of Puerto Rico, Río Piedras Campus; ⁵University of Puerto Rico, Molecular Sciences Research Center; ⁶Department of Pharmaceutical Sciences, Medical Sciences Campus.
- 317 Food Insecurity Among Hispanic Young Adults from Puerto Rico Enrolled or Not as University Students During the COVID-19 Pandemic.** Carla E. Figueroa-Ortiz, HSDG; Eduardo Cumba-Avilés, PhD; Karolina Martínez-Urbáez, HSDG. University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, Puerto Rico.
- 318 Hispanic Students from Public and Private Universities Living in Puerto Rico During the Pandemic: Rates of Mental Disorders and Treatment.** Camila A. Hueca-Santiago, HSDG; Eduardo Cumba-Avilés, PhD; Marleana M. Rolón-Sanfeliz, BA. University of Puerto Rico, Río Piedras Campus, College of Social Sciences, Institute for Psychological Research, San Juan, Puerto Rico.
- 319 Long Coronavirus Disease 2019 (COVID-19) in Children and Adolescents in Puerto Rico: Preliminary Findings.** Alondra Díaz Dávila¹; María Vázquez Campos¹; Sherley Collado²; Gabriela De León Albors²; Lourdes García Fragoso, MD³; Inés García García, MD³. ¹University of Puerto Rico, Río Piedras Campus, Department of Biology; ²University of Puerto Rico, Medical Sciences Campus, Department of Pediatrics; ³University of Puerto Rico, Medical Sciences Campus, Department of Pediatrics, Neonatology Section.
- 320 Multi-Tool Bioinformatic Workflow for Functional and Structural Characterization of Unknown Human Proteins.** Elga V. Rivera Padró¹, Zaimar K. Custodio Dalmau¹, Andrés Moya Rodríguez². ¹Biology Department, University of Puerto Rico–Mayagüez; ²Chemistry Department, University of Puerto Rico–Mayagüez.
- 321 Elucidating the Neuroprotective Role of WDR33 Against α -Synuclein-Induced Cytotoxicity.** Sofía Encarnación Burgos^{1,2}; Praveen Patnaik, PhD²; Shivanni Thangaraju, MS²; Vikram Khurana, MD/PhD². ¹University of Puerto Rico, Cayey Campus, Department of Biology, Cayey, Puerto Rico; ²Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts, USA.
- 322 Molecular Mechanisms of Alcohol Tolerance: The Role of miR-9 in BK Channel Regulation via Wnt/ β -Catenin Signaling.** Gabriela Encarnación Burgos¹, Sofía Encarnación Burgos¹, Yaren Peña Señeriz², Cristina Velázquez-Marrero, PhD³. ¹University of Puerto Rico, Cayey Campus, Department of Biology, Cayey, Puerto Rico; ²The University of Texas Health Science Center, San Antonio, Texas; ³University of Puerto Rico, Medical Sciences Campus, Institute of Neurobiology, San Juan, Puerto Rico.
- 323 Epidemiology and Age-Related Patterns of Genitourinary Trauma in Puerto Rico.** Roberto C. Matos-Figueroa, BS^{1,2}; Carlos R. Garriga-Santiago, BS^{1,2}; Ediel O. Ramos-Meléndez, MPH, DrPH²; Lourdes Guerrios-Rivera, MD, MSc²; Pablo Rodríguez-Ortiz, MD, FACS, FCCM, FACP, FCCP^{2,3}. ¹University of Puerto Rico School of Medicine, Medical Sciences Campus, San Juan, Puerto Rico; ²Department of Surgery, Trauma Research Program, Medical Sciences Campus, University of Puerto Rico, San Juan, Puerto Rico; ³Puerto Rico Trauma Hospital, San Juan, Puerto Rico.

- 324 Crusted Scabies Masquerading as Psoriasis in a 4-Year-Old Girl.** Angélica C. Marrero, MD¹; Kerely Lorenzo, BS²; María I. Aguilar Pescozo, MD¹; Camila Fontane, MD³; Andrea P. Caro, MD³; Oscar Nevárez Pomales, MD³. ¹San Juan City Hospital, Department of Pediatrics, 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, Department of Dermatology, San Juan, Puerto Rico.
- 325 Trends in CIP Hospitalizations and Cannabis Licenses for Patients with Dopaminergic Disorders in Puerto Rico.** Dalina Serrano^{1*}, Elizabeth Velázquez^{1*}, Anna Velázquez², Diana Díaz, Karen Martínez¹. University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; University of Puerto Rico Río Piedras, San Juan, PR; Department of Psychiatry, University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 326 When Pierre Robin Isn't the Full Story: Chromosome 1p36 Deletion Syndrome with Craniofacial Abnormalities.** Kiara T. González-González, MS¹; Paola A. Babilonia-Beltrán, MS²; Juliara Ortiz-Santana, MD³; Charles Castro-Soto, MD³; Manuel Iglesias, MD³; Jennifer Ruiz-Boada, MD³. ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²Ponce Health School of Medicine, Ponce, Puerto Rico; ³University of Puerto Rico-School of Medicine, Department of Pediatrics, San Juan, Puerto Rico.
- 327 Improving Uptake of Lung Cancer Screening for Survivors of Common Cancers.** Fabiola Agramonte Bravo, MS¹; Mahmoud Ali, BS²; Gleneara Bates-Pappas, PhD³; Jamie S. Ostroff, PhD³; Francesca Gany, MD⁴; Alexis Chidi, MD, PhD, MSPH⁵. ¹University of Puerto Rico School of Medicine, San Juan, PR; ²City University of New York School of Medicine, New York, NY; ³Department of Psychiatry and Behavioral Sciences, Memorial Sloan Kettering Cancer Center, New York, NY; ⁴Immigrant Health and Cancer Disparities Service, Department of Psychiatry and Behavioral Sciences, Memorial Sloan Kettering Cancer Center, New York, NY; ⁵Thoracic Surgery Service, Department of Surgery, Memorial Sloan Kettering Cancer Center, New York, NY.
- 328 Predicción Mediante Redes Neuronales de la Terapia Antibiótica Óptima: Tratamiento Combinado Versus Secuencial en *Escherichia coli*.** Anthony S. Bustos Espinosa, Pedro Vásquez. Universidad de Puerto Rico, Recinto de Mayagüez, Departamento de Ciencias Matemáticas, Mayagüez, Puerto Rico.
- 329 Prenatal Detection and Postnatal Challenges in a Complex Neonatal Renal Case: A Multidisciplinary Approach.** Dianiris Astacio Rodríguez, MD, PGY1¹; Claudia Sotomayor Rivera, MD PGY2²; Luis Vélez Lozada, MD, PGY1³; Belinda Beauchamp, MD¹; Wilma Rodríguez, MD². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics, San Juan, PR; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Radiological Sciences, San Juan, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pediatrics & Department of Internal Medicine, San Juan, PR.
- 330 Raising Awareness Beyond Altered Mental Status: PRES Presenting with Headache in Hypertensive Emergency.** Alexandra Rivera-Castro, MD; Nicole Rassi-Stella, MD. Department of Internal Medicine, University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico.
- 331 Unraveling a Diagnostic Dilemma: Cocaine-Induced Vasculitis versus Lupus Vasculitis in a Patient with Oronasal Fistula.** Eva M. Chaves Guzmán, MD ¹; Ashley Vincenty, MD²; Nicole Rassi Stella, MD¹; Cristina Fernández Hernández, MD¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Internal Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Neurology, San Juan, Puerto Rico.
- 332 Clinical Course and Management of WNT-Mutated Medulloblastoma in a Young Adult: A Case Study.** Celinés Rodríguez-Acevedo, MPH; Rocío Rivera-Valentín MD/PhD. University of Puerto Rico Comprehensive Cancer Center.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

3RD POSTER SESSION

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

Friday, March 27, 2026

11:30 am to 1:00 pm

- 333 From Fibroadenoma to Phyllodes Tumor: Diagnostic and Therapeutic Insights in a Pediatric Case Report.** Yamina Rodríguez Montes, Rocío K. Rivera Valentín. University of Puerto Rico, Comprehensive Cancer Center, San Juan, Puerto Rico.
- 334 An Atypical Presentation of APDS in a Pediatric Patient with Episodic Neutropenia: A Case Report.** Sindy Y. Canales-Díaz, PharmD; Rocío Rivera-Valentín MD/PhD. University of Puerto Rico Comprehensive Cancer Center.
- 335 Patrones de Desigualdad y Vulnerabilidad Socio-Espacial en San Juan, Puerto Rico: Una Exploración.** Carlos G. Feliciano Collazo. Instituto de Estadísticas de Puerto Rico, San Juan, Puerto Rico.
- 336 Silent Side Effects: Presentation of ART-Related Lactic Acidosis in Infants presenting to the Emergency Department.** Joanna Mercado-Alvarado¹, Laiza Rivera-Figueroa², Aisha Droz-López², Yolymer Poventud-Rodríguez¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Emergency Medicine, Carolina, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Emergency Medicine Residency Program, Carolina, Puerto Rico.
- 337 Don't Shrug it Off: The Shoulder Pain That Warned a Necrotic Splenic Abscess.** Wilfredo Gutiérrez-Cotto¹, Joanna Mercado-Alvarado¹, Nicole Carrillo-Colón², Jorge Gutiérrez-Vélez², Yolymer Poventud-Rodríguez¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Emergency Medicine, Carolina, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Emergency Medicine Residency Program, Carolina, Puerto Rico.
- 338 When Weakness Whispers: A Case of Late Genetic Diagnosis of a Congenital Myasthenic Syndrome.** Mariela M. Rosas González¹, Brenda Deliz, MD². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Department of Neurology, San Juan, Puerto Rico.
- 339 Pediatric Insights: A Distinctive Case of Acute Intermittent Porphyrria.** Fiorella Raffucci Velázquez, MD; Juliara Enid Ortiz Santana, MD; Paola Montalvo Miró, MD; Charles Castro Soto, MD; Carlos Ocasio López, MD, FAAP, FCCM; Ricardo García De Jesús, MD, FAAP, FCCM; Frances Vélez, MD. University Pediatric Hospital, Pediatric Intensive Care Unit, San Juan, PR. San Juan City Hospital, Department of Pediatrics, San Juan, PR.
- 340 White Lung and Adnexal Cystic Mass, What is the Correlation? Catamenial Hemothorax.** Fiorella Raffucci Velázquez, MD; Paola Montalvo Miró, MD; Carlos Ocasio López, MD, FAAP, FCCM; Ricardo García De Jesús, MD, FAAP, FCCM; Juliara Enid Ortiz Santana, MD; Charles Castro Soto, MD. University Pediatric Hospital, Pediatric Intensive Care Unit, San Juan, PR. San Juan City Hospital, Department of Pediatrics, San Juan, PR.
- 341 When Device Malfunction Mimics Disease Progression: Lead Malposition in CRT-D Therapy.** Ángel S. Pagán Jiménez, MD¹; Ricardo J. Rivera Muñiz, MD²; Jeandelize Soto, MD³; Natalia Laguna, MD¹; Ricardo Muñoz, MD¹; Marcel Mesa, MD³. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Internal Medicine, San Juan, Puerto Rico; ²VA Caribbean Healthcare Medical Center, Department of Internal Medicine, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Cardiovascular Diseases, San Juan, Puerto Rico.
- 342 Scleromyxedema Following PD-1 Inhibitor Therapy: A Rare Immune-Related Adverse Event Associated with Dostarlimab.** Lilliana Serrano-Arroyo, MD, MPH¹; Verónica Vestal, MD²; Marely Santiago, MD³; Salvador Vilá Pérez, MD¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Rheumatology, San Juan, PR; ²University of Puerto Rico, Comprehensive Cancer Center, San Juan, PR; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Dermatology, San Juan, PR.
- 343 Increased Risk of Surgical Complications in Post-Bariatric Plastic Surgery Patients: A Descriptive Study.** Jorge Carrillo, BS¹; Michelle Ouviaña, BS¹; Grecia Carrasquillo, BS¹; Eliomar Rosa, BS¹; Gabriel Estrada, BS¹; Juan Maldonado, MD². ¹San Juan Bautista School of Medicine, Exit 21 172 St. Urb. Turabo Gardens, Caguas, PR 00739 United States; ²Department of Plastic Surgery, Auxilio Mutuo Hospital, Ave. Ponce de León, Stop 37 ½ Hato Rey, PR 00919, United States.

- 344 Emergence of Autistic-like Features in a Child with Rolandic Epilepsy and CNTNAP2 Variant: A Longitudinal Case Report.** Adanis Bravo, Leyshka Yin, Yesenia Vélez, Karen Cruz. San Juan Bautista School of Medicine.
- 345 Post-Esophagectomy Paraconduit Hiatal Hernia (PCHH) Repair with Mesh.** Ariana I. Rodríguez De Jesús, Mark F. Berry. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Department of Cardiothoracic Surgery, Stanford University School of Medicine, Stanford, CA, United States; ³Stanford Cardiovascular Institute.
- 346 Material Hardships, Behavioral Health, and Nutritional Status of Children Living in Southern Puerto Rico.** Antonio Quiñones-Negrón, MS¹; Carola Ponce-Ortiz, MS¹; Natalie López-Rivera, BS¹; Kamalich Muniz-Rodríguez, DrPH²; Tathiana M. Roldán-Vázquez, MD¹; Deytzalie J. Rodríguez-Hernández, BS³; Odette Olivieri-Ramos, MD¹; Luisa I. Alvarado-Domenech, MD¹; Mary Rodríguez-Rabassa, PsyD, MSc^{1,3,4}. ¹Ponce Health Sciences University, Applied Research in Pediatrics, Department of Pediatrics, Ponce, Puerto Rico; ²Ponce Research Institute, Ponce, Puerto Rico; ³Ponce Health Sciences University, School of Behavioral and Brain Sciences, Ponce, Puerto Rico; ⁴Ponce Research Institute, PHSU Specialized Center in Health Disparities, Ponce, Puerto Rico.
- 347 From Ultrasound to Embolization in Uterine Arteriovenous Malformation: A Clinical Case Review.** Alejandra Cardona Del Valle, MD; Natalia Yordán Fernández; Adian Rodríguez; Ivonne Ojeda. University of Puerto Rico School of Medicine.
- 348 Scrotal Edema and Cellulitis as the Initial Presentation of AIDS in an Undiagnosed HIV-Positive Patient: A Case Report.** Ariel E. Barbosa Ruiz, MD; Lara Oliver, MD; Ramphis Morales, MD. Department of Urology, University of Puerto Rico Medical Sciences Campus.
- 349 Trusting the Patient Over the Pattern: Uncovering a Benign Osteochondroma Behind Atypical Pain.** Jahdiel Berrios-Rodríguez, Nicole Carrillo-Colón, María Ramos-Fernández. University of Puerto Rico, School of Medicine, San Juan, Puerto Rico.
- 350 Cutaneous Warning Signs of a Hidden Malignancy.** Bianca C. Rodríguez Martínez¹, Mariana B. Sadurní García², Natalia Pelet Del Toro², Oscar Nevárez Pomales². ¹University of Puerto Rico, Medical Sciences Campus, Department of Pediatrics; ²University of Puerto Rico, Medical Sciences Campus, Department of Dermatology.
- 351 Unusual Joint Involvement in Remitting Seronegative Symmetrical Synovitis with Pitting Edema Syndrome.** José M. Bretón, MD; Edwin Plaza-Lamoli, MD; Vanessa Rodríguez-González, MD; Luis M. Vilá, MD, MACR. Division of Rheumatology, University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 352 Catching the “Puff of Smoke”: Early identification of Moyamoya Disease.** Claudia B. Sotomayor-Rivera MD¹; Mauricio Cáceres-Chacón MD, PhD¹; Rafael Rodríguez-Mercado, MD²; Ivonne Ojeda, MD¹. ¹Dept. of Diagnostic Radiology; ²Dept. of Neurosurgery, University of Puerto Rico School of Medicine, San Juan, PR.
- 353 Dupilumab as a Steroid-Sparing Agent in Pemphigus Vulgaris: A Case Report.** Cristina P. Gerena-Maldonado, MD¹; Abdiel J. Alicea-Negrón, BS²; Camila Fontane-Hoyos, MD¹; Melanie Medina, MD¹; Mariana Irizarry, BS²; Oscar W. Nevárez-Pomales, MD¹. ¹Department of Dermatology, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine.
- 354 A Case of Recurrent Anti-NMDA Receptor Encephalitis in a Young Woman with Acute Neuropsychiatric Symptoms.** Diego Calo-López, MD; Andrea Oyola-Suárez, MD; Ruth Santos, MD. University of Puerto Rico, School of Medicine, Department of Medicine.
- 355 Beyond the Scan: Lessons from Four Remarkable Nuclear Medicine Cases.** Nicole Febles-Sierra, MD; Christian Irizarry-Cruz, MD; Frieda Silva-Hernández, MD. University of Puerto Rico, Medical Sciences Campus, Department of Radiological Science, Nuclear Medicine Section, San Juan, Puerto Rico.
- 356 Neonatal Staphylococcal Scalded Skin Syndrome with Incidental Abdominal Findings: A Case Report.** Génesis A. Sánchez Sánchez, MD¹; Antonio J. Rodríguez Quiñones, MD¹; Kelly L. Rivera Escobar, MD¹; María I. Aguilar Pescozo, MD¹; Marie F. Ilarraza Lugo, MD, FAAP¹; Patricia A. Rodríguez Reyes, MD, FAAP²; Leonardo Hormaza Laracuente, MD, FAAP³. ¹San Juan City Hospital, Department of Pediatrics, San Juan, Puerto Rico; ²San Juan City Hospital, Pediatric Infectious Disease section, San Juan, Puerto Rico; ³San Juan City Hospital, Pediatric Gastroenterology section, San Juan, Puerto Rico.
- 357 Thrombotic Thrombocytopenic Purpura with Multisystem Involvement in a Patient with Underlying Mixed Connective Tissue Disease.** Edwin Plaza-Lamoli, MD; José M. Bretón, MD; Emilio Cepeda-Terrasa, Noelia Rodríguez-Pérez, MD. Division of Rheumatology, University of Puerto Rico, Medical Sciences, San Juan, Puerto Rico.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 358 **Low Impact Fractures Leading to a Rare Diagnosis of Osteopetrosis with Renal Tubular Acidosis.** Bianca C. Rodríguez Martínez, MD¹; Paola Marie Torres García, MD²; Xamayta Negroni-Balasquide, MD³. ¹University of Puerto Rico, Medical Sciences Campus Department of Pediatrics; ²San Juan City Hospital, Department of Pediatrics; ³University of Puerto Rico, Medical Sciences Campus, Department of Pediatric Nephrology.
- 359 **There's More Than Meets the Eye: Atypical Peri-Orbital Cellulitis.** Nicole Carrillo, María Ramos-Fernández. University of Puerto Rico, School of Medicine.
- 360 **Bridging the Gap: Hemophilia A, Severe Bleeding, and System Barriers in Emergency Care Purpose.** Daniel Cancio-Amadeo, MD; Eva Morell, MD; Wilfredo Gutiérrez-Cotto. University of Puerto Rico, Medical Sciences Campus.
- 361 **Assessing the Impact of Funding Changes on Research and Workforce Stability in Puerto Rico.** Katherine Matos-Jiménez, Emma D. Fernández-Repollet. University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
- 362 **Evaluación Cuantitativa del Aprendizaje en Talleres de Reducción de Daños por Uso de Sustancias: Análisis Pre-Pos (Ene-Mar 2025).** Charnín M. Negrón^{1,2}; Amara B. Marrero-Torres^{1,2}; Janlouis Rodríguez-Figueroa^{1,3}; Eduardo Torres-Rodríguez^{1,2}; Eduardo J. Zavala-Mendoza^{1,2,3,4}. ¹División de Salud Pública para la Prevención de Sobredosis por Sustancias Psicoactivas, Departamento de Salud de Puerto Rico; ²Componente de Evaluación, Mejora Continua y Política Pública; ³Componente de apoyo del Opioid Settlement Agreement (OSA); ⁴Universidad de Puerto Rico, Recinto de Río Piedras, San Juan, Puerto Rico.
- 363 **Establishment of an Internship Program to Strengthen Public Health Training in Integrated Vector Management for University Students in Puerto Rico.** Katherine M. Torres-Nieves, Jania P. García-Zeno, Rafael A. Saavedra-Hernández, Julieanne Miranda-Bermúdez, Stephen H. Waterman, Grayson C. Brown. Puerto Rico Sciences, Technology and Research Trust, Puerto Rico Vector Control Unit, San Juan, Puerto Rico.
- 364 **Community Participation in the Integrated Mosquito Control Program in Bayamón, Puerto Rico.** Rafael E. Mercado-Rivera¹, Jania P. García-Zeno¹, Rafael A. Saavedra-Hernández¹, Charon Gwynn¹, Stephen H. Waterman¹, Coral Rosado-Santiago², Julieanne Miranda-Bermúdez¹, Grayson C. Brown¹. ¹Puerto Rico Vector Control Unit, Puerto Rico Science, Technology, and Research Trust; ²Dengue Branch, Centers for Disease Control and Prevention (CDC), Puerto Rico.
- 365 **Desarrollo de un Índice Municipal para Identificar Disparidades en Servicios de Reducción de Daños por Uso de Sustancias en Puerto Rico, Ago.-Sep. 2024-2025.** Alexis Bonilla-Rosa^{1,2}, Amara B. Marrero-Torres^{1,2}, Janlouis Rodríguez-Figueroa^{1,3}, Eduardo Torres-Rodríguez^{1,2}, Eduardo J. Zavala-Mendoza^{1,2,3,4}. ¹División de Salud Pública para la Prevención de Sobredosis por Sustancias Psicoactivas, Departamento de Salud de Puerto Rico; ²Componente de Evaluación, Mejora Continua y Política Pública; ³Componente de apoyo del Opioid Settlement Agreement (OSA); ⁴Universidad de Puerto Rico, Recinto de Río Piedras, San Juan, PR.
- 366 **Exploratory Study of Psychosocial, Academic, and Structural Factors Influencing Graduate Students' Success Through a Psychoeducational Support Model.** Eileen Seguinot, Rose Marrero. University of Puerto Rico, Río Piedras Campus, Department of Counseling for Student Development (DCODE), San Juan, PR.
- 367 **Bayh-Dole, iEdison, and Federal Compliance in Patent Management at the University of Puerto Rico Medical Sciences Campus.** María C. Ruiz-Bolívar, Emma Fernández-Repollet. University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico.
- 368 **Nivel de Satisfacción de un Grupo de Adultos Mayores y Estudiantes del Recinto de Ciencias Médicas con una Clínica de Cernimiento Interprofesional Realizada en una Égida del Área Metropolitana de San Juan.** Myriam Ortiz Torres, PhD, CCC-SLP; Ana Font Rivera, PT, PhD, MPH. Escuela de Profesiones de la Salud, Recinto de Ciencias Médicas, Universidad de Puerto Rico.
- 369 **Evaluation of an Online Training Program in Child-Centered Play Therapy and Child-Teacher Relationship Training for Head Start and Child Care Providers.** Zulmarie Hernández, Paul Fericelli. Inter American University of Puerto Rico, Metropolitan Campus, Department of Social Work, San Juan, Puerto Rico.
- 370 **Comunicación y Educación en Salud: Interdependencia, Conexiones y Desarrollo de Capacidades.** Marcilyn Colón-Colón, María T. Borges-Cancel, Hiram V. Arroyo-Acevedo, Rosalie Ayala-Colón, Yiselly M. Vázquez-Guzmán, Ivelisse M. García-Meléndez. Escuela Graduada de Salud Pública, Universidad de Puerto Rico, Recinto de Ciencias Médicas.
- 371 **Construyendo Capacidad en Adicciones: Tres años de Intervenciones Educativas en la Universidad Central del Caribe (2022-2025).** Luz N. Ramos, Samary Ortiz, Andrés Calvo, Jesmarie Aulí, Gilberto Alemán. Universidad Central del Caribe, Decanato de Ciencias y Tecnología de la Salud.

- 372 Towards a Healthier Future: A Community-Driven Jurisdiction Plan for Alzheimer's and Related Dementias in Puerto Rico.** Elba L. González¹, Adia C. Aponte¹, Bridgette N. Troche¹, Marianne Cartagena¹. Puerto Rico Department of Health, Alzheimer's Disease Coordination Center.
- 373 Estrategias a Multinivel para Atender la Diabetes en Puerto Rico con un Enfoque desde la Salud Poblacional.** Frances M. Aponte Caraballo, MS¹; Ariana Carreras Espinosa, MS, MPH²; Ivánshka N. Hernández Rivera, MS²; Cristina Del C. Agosto Pagán, MPH³. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Salud Pública, Departamento de Salud Ambiental, San Juan, Puerto Rico; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Salud Pública, Departamento de Ciencias Sociales, San Juan, Puerto Rico; ³Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Salud Pública, Departamento de Administración de Servicios de Salud, San Juan, Puerto Rico.
- 374 Tracheostomy Care in Medically Complex Patients in University Pediatric Hospital.** Jennifer Espinosa Rosa, MD; Josué Sierra Ortiz, MD; Perla Rodríguez González; Nerian Ortiz, MD, FAAP. Department of Pediatrics, School of Medicine, Medical Sciences Campus.
- 375 Estrategias de Reclutamiento del Centro Hispano de Excelencia en la Escuela de Medicina de la UPR: Análisis de Clubes de Medicina y la Generación Z.** Keylianise Espinosa Sotomayor¹, Emanuel de la Cruz Travieso², Tiara de P. de la Rosa Silva², Ileana M. Ayala Fontáñez³. ¹Universidad de Puerto Rico, Recinto de Río Piedras, Departamento de Química; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública; ³Escuela de Medicina, Universidad de Puerto Rico, Recinto de Ciencias Médicas.
- 376 Rol de las Campañas de Concienciación sobre la Percepción Pública de la Salud Mental.** Yanibell Méndez Torres. Ana G. Méndez University, Florida, USA.
- 377 Estrategias Comunicativas y Visuales en Campañas Sociales Digitales: Análisis de su Claridad, Coherencia y Eficacia en la Percepción Pública.** Yanibell Méndez. Ana G. Méndez University, Florida, USA.
- 378 Improving Postoperative Pain Management in Total Knee Arthroplasty (TKA): An Evidence-Based Implementation of Adductor Canal and IPACK Nerve Blocks.** Lina Marcela Borrero González, Pamela J. Cabrera Pérez, Valentina Monroy, Zulma C. Peña Cordero, Francisco Sampedro, Juan Rodríguez, Milagros Figueroa. University of Puerto Rico, Medical Sciences Campus, School of Nursing- Department of Graduate Studies, Nurse Anesthesia Program, San Juan, Puerto Rico.
- 379 CDH1 Loss, Epigenetic Modulation, and Pro-Inflammatory Gene Environment Interaction in Orofacial Clefts: A Narrative Review.** Nachele Rivera; Mairim Soto, PhD; Carmen Buxó-Martínez, MPH, DrPH; Lydia M. López del Valle, DMD, MPH. University of Puerto Rico School of Dental Medicine, Research Center.
- 380 El Rol de las Relaciones Laborales en la Prevención de Riesgos y el Empoderamiento de los Trabajadores en Puerto Rico.** 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.
- 381 Impact of the VIONE Deprescribing Tool on Medication Optimization at VA Caribbean Health Care System (VACHS) Mental Health Clinics.** Dailene A. Carrión Domínguez, PharmD; Madelyn Cartagena-González, PharmD, BCGP; José García-Toledo, PharmD, BCPP, NCTTP. VA Caribbean Healthcare System, Pharmacy Service, San Juan, Puerto Rico.
- 382 Association Between Symptoms of Depression and Anxiety and Metabolic Syndrome in Young Adults in Puerto Rico.** María Fernanda Mendoza, Gilberto Ramos, Milagros C. Rosal, Cynthia M. Pérez. University of Puerto Rico, School of Public Health, San Juan, PR; UMass Chan Medical School, Worcester, MA; Centro Comprensivo de Cáncer de la Universidad de Puerto Rico.
- 383 Spatial Patterns of Population Aging in Puerto Rico at the Municipal Level, 2024.** Lanelotte Oliveras Vega. Puerto Rico Institute of Statistics, San Juan, Puerto Rico.
- 384 Spatial Clustering of Predominant Cancer Types in Puerto Rico, 2010-2019.** Yoel Velázquez Oliver¹, Hilmaris Centero Girona¹, Liliana M. Castro-Jiménez¹, Brenda C. Torres-Velásquez¹, Carlos Torres-Cintrón², Elba V. Caraballo¹. ¹University of Puerto Rico Comprehensive Cancer Center, San Juan, PR; ²Puerto Rico Central Cancer Registry.
- 385 The Impact of Diet Composition on Reductions in Anxiety-like Behaviors in the Blind Mexican Cavefish.** Ángel Márquez Otero^{1,4}, Julián Navarro Pagán^{1,4}, Dhalma Bayron Ho^{1,4}, Paola Figueroa Colón^{2,4}, Alexander Figueroa Negrón^{2,4}, Luis Pérez Fabregat^{3,4}, Roberto Rodríguez^{1,4}. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Anatomy and Neurobiology, San Juan, Puerto Rico;



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- ²University of Puerto Rico, Bayamón Campus, Biology Department, Bayamón, Puerto Rico; ³University of Puerto Rico, Río Piedras Campus, Biology Department, San Juan, Puerto Rico; ⁴Molecular Sciences Research Center, San Juan, Puerto Rico.
- 386** **Análisis del Registro de Casos de Enfermedad de Alzheimer en Puerto Rico: Importancia del Diagnóstico Temprano.** Valeria Colón Miranda, MSc; Marcos Felici, MPH; Marianne Cartagena Colón, PhD. Departamento de Salud de Puerto Rico – Centro para la Coordinación de Servicios a Personas Afectadas por la Enfermedad de Alzheimer.
- 387** **Voces sobre Conducta Suicida: Análisis de Contenido de un Grupo Focal con Estudiantes Universitarios.** Irma Jessica Santiago Santiago. Universidad de Puerto Rico en Bayamón, Departamento de Consejería y Servicios Psicológicos, Bayamón, Puerto Rico.
- 388** **Home-Based Physiotherapy Protocol to Increase Physical Activity Levels and Adherence in Older Adults with Type 2 Diabetes.** Wilitza Martínez-Rivera¹, Elsa M. Orellano-Colón¹, Alexis Ortiz², Walter R. Frontera-Roura³, Claudia P. Amaya-Ardilla⁴. ¹School of Health Professions, University of Puerto Rico, Medical Sciences Campus; ²Physical Therapy Program, St. Edwards University, Austin, Texas; ³School of Medicine, University of Puerto Rico, Medical Sciences Campus; ⁴School of Public Health, University of Puerto Rico, Medical Sciences Campus.
- 389** **Impact of Cumulative Stressful Life Events on Suicidal Behavior in a Representative Sample of 6th-12th Grade Students in Puerto Rico, 2022-24.** Linnette Rodríguez-Figueroa¹, Abdiel D. Soto-Colón¹, Margarita R. Moscoso-Álvarez², Juan C. Reyes-Pulliza¹, Héctor M. Colón¹. ¹University of Puerto Rico, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²Universidad Central del Caribe, School of Medicine, Department of Family Medicine, Bayamón, Puerto Rico.
- 390** **Qualitative Microbiological Evaluation of a Dynamic Fenestration Prototype for Airborne Contamination Control.** Sarah Naji-Naji¹; Ricardo Nieves-Santiago², BS; Isabela S. Torres-Jiménez³; Lorena Quiñones-Ruvira¹; Abraham Schwartz, PhD²; Emma Fernández-Repollet, PhD². ¹University of Puerto Rico, Río Piedras Campus, ²University of Puerto Rico, Medical Sciences Campus, ³Interamerican University, San Germán, PR.
- 391** **Uso de Sustancias, Estrés Académico y Calidad de Vida en Estudiantes de la Universidad de Puerto Rico.** Juan L. Negrón Ayala¹, Areliz Quiñones Berríos², Iván Rosario Villafañe³, & María F. Mendoza Soto¹. ¹Universidad de Puerto Rico, Departamento de Ciencias Sociales, Escuela de Salud Pública, Recinto de Ciencias Médicas, San Juan, Puerto Rico; ²Universidad de Puerto Rico, DECODE, Recinto de Río Piedras, Río Piedras, Puerto Rico; ³Departamento de Justicia Criminal, Universidad de Puerto Rico en Carolina, Carolina, Puerto Rico.
- 392** **Development of an Intrinsic Multi-Spectrometer.** Camillo Cangani, Ricardo Nieves, Abe Schwartz, Emma D. Fernández-Repollet. University of Puerto Rico, Medical Sciences Campus.
- 393** **Validation of a Patent Combining Intrinsic Spectra of Different Wavelength Ranges Obtained from Different Instruments.** María Fernández Machado¹, Alex Díaz¹, Abe Schwartz², Emma Fernández-Repollet². ¹University of Puerto Rico, Río Piedras Campus; ²University of Puerto Rico, Medical Sciences Campus.
- 394** **Designing Workplace Ergonomics Training Programs Based on Employee Insights in Puerto Rico.** Samuel A. Bonet-Olivencia, Sara Soto-Rivera, Jossmarie Santiago-Burgos, Adriana Vázquez-Cuevas, Emmanuel Alemán-Alicea. University of Puerto Rico, Mayagüez Campus, Mayagüez, Puerto Rico.
- 395** **A Human-Centered mHealth Design for Culturally Relevant Diabetes Education in Puerto Rico.** Samuel A. Bonet-Olivencia, Jeriel Sáez-González, Alejandra Morales-Acosta, John Cruz-Delgado. University of Puerto Rico, Mayagüez Campus, Mayagüez, Puerto Rico.
- 396** **Growing IDEAS: Puerto Rico Nursing Workforce.** Noemy Díaz-Ramos¹, Danielle Jones², Angela Lober², Josmarie Ortiz Cotto¹, Lourdes Irene López¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Nursing, San Juan, Puerto Rico; ²Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), Washington, DC, United States.
- 397** **Living Arrangements or Companionship and Economic Income as Factors in the Development of Anxiety and Stress Symptoms Among Adults Aged 60 or Older with Chronic Conditions.** Carolina Quiles Bengochea, MPH¹; Dayaneira Rivera Alers, MPH^{1,3}; Manuel Rivera Vélez, MPH^{1,5}; Zindie Rodríguez Castro, MD¹; Cynthia Cortés Castro, MSW, LCSW¹; Guillermo Armaiz Pena, PhD^{1,2,3}; Eida M. Castro Figueroa, PsyD, MSc^{1,2,4}. ¹Ponce Research Institute, Ponce, PR, USA; ²Ponce Health Sciences University, School of Medicine, Ponce, PR; ³Ponce Health Sciences University, School of Dental Medicine, Ponce, PR; ⁴Ponce Health Sciences University, School of Behavioral and Brain Sciences, Ponce, PR; ⁵Ponce Health Sciences University, School of Public Health, Ponce, PR.

- 398 Elevated Cardiometabolic Complications and Mood Disorders in Puerto Rican Women with Polycystic Ovary Syndrome: Findings from a Clinical Cohort.** Loida A. González-Rodríguez, MD, FACE¹; Angélica Vázquez-Colón, MD¹; Juan Santiago-García, BS²; Josefina Romaguera, MD, MPH³; Alberto de la Vega, MD³; Ricardo Azziz, MD, MPH, MBA⁴; Cynthia M Pérez, PhD². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Medicine, Endocrinology, Diabetes and Metabolism Division, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, PR; ⁴University of Alabama at Birmingham, Schools of Medicine and Public Health, Departments of Obstetrics & Gynecology, Medicine, and Healthcare Organization & Policy, Birmingham, Alabama, United States.
- 399 Barriers in Smoking Cessation Interventions in Dental Clinics at University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine.** Elba C. Díaz Toro¹, Leslie M. González Morales¹, Jessica A. Jaramillo Criado², Alberto J. Rivera Cabrera³, Alejandra Fleites González³, Camille Melecio López³, Eduardo Ramírez de Arellano Laureano¹, Fabiola M. Ramírez Rubio¹, Diego A. Quiñones Donate³, Stephanie Santiago Pérez³. ¹University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine, ²University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, ³University of Puerto Rico, Río Piedras Campus, Faculty of Natural Sciences.
- 400 Assessing Energy Insecurity and its Effects on Health and Well-Being in Puerto Rico.** Enid J. García-Rivera¹, Marielis Colón-Ramos¹, María C. González-Prieto¹, Yaritza Rivera-Pizarro¹, Fabiola N. González-Díaz², Emmanuel J. Santiago-González³, Guillermo J. Vázquez-Fernández³, Pilar D. Cardona-Del Valle⁴. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Family Medicine Residency Program; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine; ⁴Carlos Albizu University, Psychology Graduated Program.
- 401 Intrinsic Processing Reveals Hidden Content in Hematoxylin and Eosin-Stained Tissue.** Abe Schwartz¹, Guillermo Puebla¹, Gabriela Anzalotta²; Emma D. Fernández-Repollet¹. ¹University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico, ²University of Puerto Rico, Río Piedras Campus, San Juan, PR.
- 402 Sedentary Behavior and Depressive Symptoms in Young Adults: Sex at Birth as a Potential Modifier.** Christian A. Torres-Franqui¹, Rosa V. Rosario-Rosado¹, Angélica M. Rosario-Santos¹, Farah A. Ramírez-Marrero², Milagros C. Rosal³, Cynthia M. Pérez-Cardona¹. ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, Department of Exercise Physiology, San Juan, Puerto Rico; ³University of Massachusetts Chan Medical School, Department of Population and Quantitative Health Sciences, Worcester, Massachusetts, USA.
- 403 Aging, Chronic Conditions, and Family Care in Las Carolinas, Caguas: A Descriptive Community Profile.** Aragné Salazar Mendoza, MPH; Coralys Cuevas Hornedo, MPH; Daliany C. Pabón Mercado, MPH; Marisol Peña-Orellana, EdD, MS; Ivette Bustelo Ortiz, MPH; Christian L. De Pablo Serrano, MPH; María Del Mar Conde Álvarez, MPH; Thairys' N. Flores Ocasio, MPH; Miguel A. García Rodríguez, MPH; Enrique Jaén Rivera, MPH; Amanda I. Lugo Garcés, MPH; Beatriz R. Nuñez Vega, MPH; Sofía A. Rosado Collazo, MPH. 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, PR.
- 404 Efecto del Tratamiento Dental bajo Anestesia General en la Calidad de Vida Relacionada con la Salud Bucal de Adultos con Necesidades Especiales: Revisión Sistemática.** Yely Cárdenas Araujo, DDS; Lydia López del Valle, DMD, MPH; Mairim Soto Ortiz, DrPH, MPH; Mitzzy Pérez Velázquez, DMD. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Medicina Dental.
- 405 El Entorno Construido como Determinante Social de la Salud: Impacto en la Prestación de Servicios de VIH en Puerto Rico.** Alejandra V. Achaval Marcano¹, Yarinette Vera Martínez², Yarieliz G. Rodríguez-Feliciano¹, Iliá Otero Cruz¹, Carlos E. Rodríguez Díaz³, Edda Santiago Rodríguez¹. ¹University of Puerto Rico, Medical Sciences Campus, School of Public Health, San Juan, PR; ²George Washington University, Milken Institute of School of Public Health, Washington D.C., USA; ³Boston University, School of Public Health, Massachusetts, USA.
- 406 Dental Caries: The Most Studied Oral Disease in the Pediatric Population of Puerto Rico.** Heriberto Gómez-Hierro¹, Juan E. Santiago-García¹, Rosa V. Rosario-Rosado¹, Elaine M. Pagán-Ortiz². ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine, San Juan, PR.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 407 Risk of Developing a Second Primary Cancer after Radiation Therapy in the First Course of Treatment for Breast Cancer in Adult Women in Puerto Rico.** Michael Santiago-Marrero, MS¹; Rosa V. Rosario-Rosado, DrPH¹; Carlos R. Torres-Cintrón MPH²; Israel Almodóvar-Rivera, PhD³. ¹University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ²Puerto Rico Central Cancer Registry, University of Puerto Rico Comprehensive Cancer Center; ³University of Puerto Rico at Mayagüez.
- 408 Relationship Between Physical and Emotional Well-being and Self-Rated Health in Vulnerable Older Adults in Post-Pandemic Puerto Rico.** Natalie A. Calderón¹; Edna Acosta, PhD, MSc^{2,3}; Carlamarie Noboa, PhD, MS³. ¹University of Puerto Rico, Medical Sciences Campus, San Juan, PR; ²University of Puerto Rico Medical Sciences Campus, Graduate School of Public Health, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, Hispanic Alliance Clinical and Translational Research, San Juan, P R.
- 409 Bus Commuters' Population in Puerto Rico: Their Sociodemographic Shape and Variations in a Decade: 2009-2013 & 2019-2023.** Dilmayris Barea Freytes^{1,2}, Alberto L. Velázquez Estrada^{1,2}. ¹Independent researchers; ²MS-University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Demographic Sciences Program.
- 410 Association Between Cardiovascular Diseases and Tobacco Use Among Adults Aged 18 and Older: Puerto Rico, 2023.** Kaitleen Rodríguez Corretjer, Alex Cabrera Serrano, Fernando J. Mercado Ortiz, Graciela Marrero Gerena. Puerto Rico Department of Health, San Juan, Puerto Rico.
- 411 Somatic Mutations in Early-Onset Colorectal Cancer: A US Hispanic Cohort.** Izabella M. Espinal-San Miguel¹, María González-Pons¹, Julie Dutil¹, Ingrid Montes-Rodríguez¹, Luis D. Borrero-García¹, Lenis Rovira-Torres², Leslie Casiano¹, Anna M. Nápoles³, Jung S. Byun³, Eliseo Pérez-Stable³, Kevin L. Gardner⁴, Marcia Cruz-Correa¹. ¹Univ. of Puerto Rico Comprehensive Cancer Center, Division of Clinical and Translational Research, San Juan, PR 00935; ²Univ. of Puerto Rico Medical Sciences Campus, School of Medicine, San Juan, PR 00936; ³National Institute on Minority Health and Health Disparities, National Institutes of Health, Bethesda, MD 20892; ⁴Columbia University Irving Medical Center, Department of Pathology and Cell Biology, New York, NY 10032.
- 412 Non-medical Barriers to Breast Cancer Diagnosis Among a Cohort of Women in Puerto Rico: Findings from the START-PR Study (2023-2025).** Natalia I. Negrón-Morales, BS¹; Lorena González-Sepúlveda, MS¹; Cynthia M. Pérez, PhD²; Marievelisse Soto-Salgado, DrPH, MS¹. 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, San Juan, Puerto Rico.
- 413 Modelado Predictivo de la Supervivencia y Recuperación de *Listeria monocytogenes* en Salmón y Cerdo al Aplicar la Cocción Sous Vide a 55 °C.** Montserrat Vila-Brugalla^{1,2,3}, Sasha M. Rivera-Sánchez^{1,4}, Artur X. Roig-Sagués¹, M. Manuela Hernández-Herrero¹. ¹Centre d'Innovació, Recerca i Transferència en Tecnologia dels Aliments, TECNIO CERTA-UAB, Departament de Ciència Animal i dels Aliments, Universitat Autònoma de Barcelona, Bellaterra, España; ²Agència de Salut Pública de Barcelona (ASPB), Barcelona, España; ³Institut de Recerca Sant Pau (IR SANT PAU), Barcelona, España; ⁴Universidad de Puerto Rico, Recinto de Río Piedras, Facultad de Ciencias Naturales, Programa de Nutrición y Dietética, San Juan, PR.
- 414 Association Between Sleep Disturbance and Health Related Quality of Life Among Cancer Survivors in Puerto Rico.** Gabriela M. Vera-Santiago, BS¹; Lorena González-Sepúlveda, MS¹; Adrianna I. Acevedo-Fontáñez, PhD, MS^{2,3}; Cynthia M. Pérez, PhD⁴; Ana C. Sala, PsyD, MS⁵; Marievelisse Soto-Salgado, DrPH, MS¹. ¹University of Puerto Rico Comprehensive Cancer Center, Division of Cancer Control and Population Sciences, San Juan, Puerto Rico; ²University of Pittsburgh, Department of Psychiatry, Pittsburgh, Pennsylvania; ³University of Pittsburgh, Division of Pulmonary, Allergy, Critical Care and Sleep Medicine, Pittsburgh, Pennsylvania; ⁴University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Biostatistics and Epidemiology, San Juan, Puerto Rico; ⁵University of Puerto Rico Comprehensive Cancer Center, Division of Cancer Medicine, San Juan, PR.
- 415 Integrated Behavioral Health in a Family Medicine Inpatient Service: Findings from a Secondary Hospital in Puerto Rico.** Susan M. Nieves Cruz, PsyD¹; Sara A. Molina-Santana, PsyD¹; Ariany A. Lozano Torres²; Sofía Rosendo Mercado³; María de Jesús García, LCP, PhD⁵; Martha L. Villareal Morales, PhD⁵. ¹Primary Care Psychology Program, Ponce Health Sciences University; ²MMC Summer Research Internship Program, San Juan Bautista School of Medicine; ³MMC Summer Research Internship Program, Universidad de Puerto Rico, Recinto de Arecibo; ⁴Behavioral Sciences/Family Medicine Department; ⁵Manatí Medical Center, Graduated Medical Education Department.
- 416 Intensidad del Dolor y Cantidad de Opioides en Pacientes Postoperados de Reemplazo Total de Rodilla: Analgesia Basada en Opioides versus Multimodal.** Berenice Pérez Rivera, PhD, MSN, RN^{1,2}; Milagros I. Figueroa Ramos, PhD, MSN, RN, FCCM¹; Sheryly Pereira Morales, PhD, RNA, FAAN¹; Carmen Mabel Arroyo Novoa, PhD, MSN, RN, FCCM¹. ¹Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela de Enfermería; ²Hospital Ashford, San Juan, PR.

- 417 Differential Expression of EMT-Associated Genes in Primary and Metastatic BRAF-Mutated Melanoma.** Víctor Raimundí¹, Tyrel Porter². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine; ²Universidad Central del Caribe, School of Medicine.
- 418 Preoperative Versus Surgical Assessment of Donor Heart Defects: Opportunities for Diagnostic Improvement.** Miguel J. Álvarez-Cortés^{1,3}; Chawannuch Ruaengsri, MD^{2,3}. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²Division of Cardiothoracic Surgery, Stanford University; ³Stanford Cardiovascular Institute.
- 419 Thyroid Dysfunction and Cognitive Decline: Investigating Cognitive Risk in a Hispanic-Caribbean Population with Genetic Predisposition to Alzheimer's.** Gustavo Rivera, Eric Miranda, Anais Numan, Camila Santos, Arnaldo Castillo, Ian Belén, Aleyda Maldonado, Ivonne Z. Jiménez Velázquez. University of Puerto Rico, Medical Sciences Campus, Department of Medicine, San Juan, Puerto Rico.
- 420 Time Intervals and System Performance in Out-of-Hospital Cardiac Arrest: Insights from a Puerto Rico Cohort.** Mary J. Torres-Guzmán MS²; Juan P. Rosa-Cortés MS²; Alexis J Rodríguez-Octaviani, MS²; Alejandra P. Méndez-Pérez, MS²; Axel Núñez-Rivera, EM PGY²; Enid J. García-Rivera, MD; Juan A. González-Sánchez, MD.
- 421 A Descriptive Analysis of Pregnancy Outcomes in Women with Type 1 Diabetes at the UPR University District Hospital in 2024.** Karla S. Lugo López, BS¹; Priscilla Rodríguez Torres, MD²; Verónica R. Dávila Padilla, BS³; Ana G. López Rexach, MD²; Vivian A. Vázquez Román⁴; Josefina Romaguera Agrait, MD²; Ana Muñoz Matta, MD². ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine; ²University of Puerto Rico Medical Sciences Campus, School of Medicine, Obstetrics and Gynecology Department; ³Universidad Central del Caribe School of Medicine; ⁴University of Puerto Rico, Río Piedras Campus.
- 422 Machine Learning Models for Predicting Prostate Cancer Risk in Hispanic Men.** Ricardo J. Rodríguez-Colón, PhD¹; Amaia V. Varela-Parrilla^{1,2}; Zinned C. Medina-Nieves, MS¹; María M. Sánchez-Vázquez, MS¹; Magaly Martínez-Ferrer, PhD^{1,3}. ¹University of Puerto Rico Comprehensive Cancer Center, Division of Cancer Clinical & Translational Research, San Juan, Puerto Rico; ²University of Puerto Rico, Río Piedras Campus, Department of Biology, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Pharmacy, Department of Pharmaceutical Sciences, San Juan, Puerto Rico.
- 423 Androgen Excess Is Linked to Depressive Symptoms in Reproductive-Age Women with Polycystic Ovary Syndrome: Evidence from a Clinical Sample.** Yanni Rivera-Rodríguez, BS¹; Keishla Jiménez-Ortega, MD²; Angélica Vázquez-Colón MD²; Maia Arraiza Truust, BS³; Josefina Romaguera, MD, MPH⁴; Loida A. González-Rodríguez, MD, FACE². ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Medicine, Endocrinology, Diabetes and Metabolism Division, San Juan, Puerto Rico; ³University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ⁴University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico.
- 424 Sequential Inhibition of CDK4/6, with Palbociclib, and the Mitotic Kinase TTK as a Potential Treatment in Triple-negative Breast Cancer Cell Lines.** Gretchen M. Albarrán Acosta, BS; Janangelis López Ramos, BS; Magda N. Álvarez Rodríguez, MS; Alexandra N. Aquino Acevedo, PhD; Harold I. Saavedra, PhD. Basic Sciences Department, Pharmacology Division, Ponce Research Institute of the Ponce Health Sciences University.
- 425 Association of BMI With Genetic Mutations in Latino Patients with Bardet-Biedl Syndrome.** Fabiola Rosa¹, Ricardo Murati². ¹Universidad Central del Caribe; ²Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública, San Juan, Puerto Rico.
- 426 Outcomes of Tibial Shaft Nonunions: A Systematic Review and Meta-Analysis.** Benjamín Nieves-López¹, Jorge Ochoa¹, José I. Acosta Julbe², Juan Silva-Aponte², Norberto Torres Lugo², Diego Román-Soto³, Marcos González⁴, Norman Ramírez-Lluch¹, Luis Lojo-Sojo². ¹University of Puerto Rico, Medical Sciences Campus; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Orthopedic Surgery Section; ³Universidad Central del Caribe-School of Medicine; ⁴Harvard University.
- 427 Regional Variation in Medicare Part D Prescribing Trends for Benign Prostatic Hyperplasia From 2013 to 2023.** Ángel Vega¹; Sebastian Bernaschina², Katiana Vázquez-Rivera², Ariel Schulman². Universidad Central del Caribe, Bayamón, PR; Urology Department, Maimonides Medical Center, Brooklyn, NY; Ariel Schulman.
- 428 Neoadjuvant Pembrolizumab in Resectable High-Risk Cutaneous Squamous Cell Carcinoma: A Systematic Review of Early Outcomes.** Rychel Torres¹, Cristina Gerena-Maldonado², Ángel Vega¹, Cristina Brau². ¹Universidad Central del Caribe; ²University of Puerto Rico, Medical Sciences Campus.



Innovating Together for Healthier Futures

University of Puerto Rico, Medical Sciences Campus

- 429 Emergency Department Pharmacologic Management of Out-of-Hospital Cardiac Arrest: Utilization and Outcomes.** Axel Núñez-Rivera, EM PGY2; Enid J. García-Rivera, MD, MPH; Juan A. González-Sánchez, MD, FACEP. Medical Sciences Campus, School of Medicine; University of Puerto Rico, Medical Sciences Campus, School of Medicine, Endowed Health Services Research Center, San Juan, Puerto Rico.
- 430 Association between Mental Health Conditions and HIV Outcomes among People Living with HIV in a Community-Based Clinic of Puerto Rico.** Alexandra Conde-Toro, MD, DrPH, MS, MBA¹; Alicia Báez-Cruz, BA²; Itzamar Pastrana-Echevarría, MD³; Mileidy Hernández-Nieves, MD⁴; Alejandro Pinilla-Baquero, MS²; Oscar Lugo-Capera, MSc⁵; Diana Fernández-Santos, EdD, MS⁶; Ángel Mayor-Becerra, MD, MS⁷. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Family Medicine Residency Program, San Juan, Puerto Rico; ²Universidad Central del Caribe, School of Medicine, Bayamón, Puerto Rico; ³Hospital Episcopal San Lucas, Research Fellowship, Ponce, Puerto Rico; ⁴Hospital Pavía Arecibo, Internal Medicine Residency Program, Arecibo, Puerto Rico; ⁵Universidad Central del Caribe, School of Medicine, Academic Assessment and Research Office, Bayamón, Puerto Rico; ⁶Universidad Central del Caribe, School of Medicine, Associate Deanship for Research and Graduate Studies, Bayamón, Puerto Rico; ⁷Universidad Central del Caribe, School of Medicine, Clinical Center and Retrovirus Research Center, Bayamón, PR.
- 431 Newborn Feeding Practices and Factors Affecting Breastfeeding Rates in the Newborn Nursery, University District Hospital (UDH): A Retrospective Chart Review.** Natalia Calderón, MD¹; Alexandra Rodríguez, MD¹; Myrmarie Cruz, MD¹; Gabriel Rodríguez²; Lourdes García-Fragoso, MD, FAAP³; Nerian Ortiz, MD, FAAP⁴. ¹University of Puerto Rico, Medical Sciences Campus, School of Medicine, Pediatric Residency Program, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, PR; ³University of Puerto Rico, School of Medicine, Department of Pediatrics, Neonatal Section, San Juan, Puerto Rico; ⁴University of Puerto Rico, School of Medicine, Department of Pediatrics, San Juan, PR.
- 432 Outcomes of Pressure-Limited Ventilation vs Volume Target Ventilation in the NICU: Implications for Bronchopulmonary Dysplasia and Associated Morbidities in Preterm Infants.** Ly A. García Duprey, MD, FAAP; Juan Rivera González, MD, FAAP; Zayhara Reyes Bou, MD, FAAP; Lourdes García Fragoso, MD, FAAP; Inés García García, MD, FAAP. University of Puerto Rico, Medical Sciences Campus, School of Medicine, Pediatrics Department, Neonatology Section, San Juan.
- 433 Group B Streptococcus prevalence and its Relation to BMI in Pregnant Hispanic Women with Diabetes Mellitus Type 1, type 2 or Gestational Diabetes.** Priscilla M. Rodríguez Torres, MD¹; Verónica Dávila, BS²; Karla Lugo, BS³; Nianyelik Pizarro⁴; Josefina Romaguera, MD, MPH, FACOG¹; Ana Muñoz Matta, MD¹. ¹University of Puerto Rico Medical Sciences Campus, Obstetrics and Gynecology Department; ²Universidad Central del Caribe; ³University of Puerto Rico School of Medicine, Medical Sciences Campus; ⁴University of Puerto Rico, Río Piedras Campus.
- 434 Use of Aspirin Prophylaxis During Pregnancy to Prevent Risk of Preeclampsia in Puerto Rico: A Seven-Year Observational Study.** Marianna Martini, MD¹; Fabiola Lebrón²; Michael Cruz²; Arianna Robles²; Lydia Figueroa, MD³; Israel Matías, MD³; Norma Claudio, MD³; Lourdes García, MD³; Inés García, MD³. ¹San Juan City Hospital; ²UPR School of Medicine; ³UPR School of Medicine, Department of Pediatrics, Neonatology Section.
- 435 Breastfeeding Practices and Challenges during the First 6 Months of Life.** V. Jiménez Llovera, MD¹; L. Geroy Fleites, MD¹; B. García Fuentes²; M. Rosado Méndez²; C. Crespo Gayá²; J. Álvarez Marrero²; A. Álvarez Rivas²; Israel Matías González, MD³; Zayhara Reyes-Bou, MD³; N. Claudio Figueroa, MD³; L. García Fragoso, MD³; I. García García, MD³. ¹Department of Pediatrics, San Juan City Hospital; ²University of Puerto Rico, Río Piedras Campus²; ³University of Puerto Rico, Medical Sciences Campus.
- 436 Association between Anxiety, Depression, and Temporomandibular Disorders in Adults: A Scoping Review.** Asalah Fadi Abuhaiah¹, Lydia López del Valle². ¹University of Puerto Rico, Río Piedras Campus, Department of Biology; ²University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine.
- 437 The Association Between Periodontal Disease and Alzheimer's Disease in Older Adults: A Narrative Review.** Valeria Carrasquillo Alvarado¹, Lydia López del Valle². ¹University of Puerto Rico, Río Piedras Campus, Department of Biology; ²University of Puerto Rico, Medical Sciences Campus.
- 438 High Blood Pressure, Obesity and Gingivitis in a Group of PR Adolescents.** Diego Martínez; Naydi Pérez, MSD; Sona Rivas-Tumanayan, DMD, MPH, PhD; Lydia M. López del Valle, Lydia, DMD, MPH. University of Puerto Rico, Medical Sciences Campus, School of Dental Medicine and the Hispanic Alliance, Medical Sciences Campus.
- 439 Myomodulin Expression and Retrograde Nerve Labeling Analysis for the Central Nervous System of *Biomphalaria glabrata*.** Andrea I. Franco-Martínez¹; Natali M. Colón-Santiago, BS^{2,3}; Mark W. Miller, PhD^{2,3}. ¹University of Puerto Rico, Río Piedras Campus, San Juan, PR; ²Institute of Neurobiology; ³Department of Anatomy & Neurobiology, University of Puerto Rico, Medical Sciences Campus, San Juan, PR.

- 440 TFEB Regulates DVL2 via CLEAR Motifs to Modulate Wnt Signaling.** Ariana Ortega, Ángel Acevedo, Lakshya Baja. University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Pharmacology & Toxicology, San Juan, Puerto Rico.
- 441 Polysaccharide Peptide Significantly Reduces Glioblastoma Cell Viability: A Step Toward Developing Safer Adjunctive Therapies.** Carolina Nieves-Moreno¹, Glamaris Rosario-Sanfiorenzo², Giovanni Alicea-Pérez², Naiara Hernández-Santisteban³, Ashlín Álvarez-Flores¹, Yariselis Cardona-Maldonado², Vianka Girón-Núñez³, Fabiola Colón-Santiago⁴, Jeshua Colón³, Amanda Rivera³, Amanda Jové-Bravo³, Samuel Caldero², Angelina Cabeza², Eduardo Álvarez-Rivera⁴. ¹University of Puerto Rico, Arecibo Campus, Department of Biology, Arecibo, Puerto Rico; ²University of Puerto Rico, Bayamón Campus, Department of Biology, Bayamón, Puerto Rico; ³Interamerican University of Puerto Rico, Metropolitan Campus, Department of Science and Technology; ⁴Universidad Central del Caribe, School of Medicine, Department of Microbiology and Immunology.
- 442 Polysaccharide Peptide Reinforces Antiviral Immunity via the STAT-PKR-Interferon Pathway: A Mechanistic Route to Restrict HIV-1 Entry in T-Cells.** Naiara Hernández-Santisteban¹, Glamaris Rosario-Sanfiorenzo², Giovanni Alicea-Pérez², Carolina Nieves-Moreno³, Ashlín Álvarez-Flores³, Fabiola Colón-Santiago⁴, Julianness Correa-Haifa², Jeshua Colón¹, Amanda Rivera¹, Amanda Jové-Bravo¹, Betsy Santos-Merette¹, Nashalie Hernández-Paniagua¹, Khristian Belavan-Rosado¹, Fabiola Guevárez-Russe¹, Andrea Rodríguez-De La Rosa¹, Génesis Matos-Morales¹, Katiria Valentín-Paniagua¹, Eduardo Álvarez-Rivera⁴. ¹Interamerican University of Puerto Rico, Metropolitan Campus, Department of Science and Technology, San Juan, Puerto Rico; ²University of Puerto Rico, Bayamón Campus, Department of Biology, Bayamón, Puerto Rico; ³University of Puerto Rico, Arecibo Campus, Department of Biology, Arecibo, Puerto Rico; ⁴Universidad Central del Caribe, School of Medicine, Department of Microbiology and Immunology, Bayamón, Puerto Rico.
- 443 Erinacine Significantly Enhances Antiviral Signaling in CD4+ T-Cells: A Potent Immunomodulator for Future Viral and Neuroimmune Therapies.** Ashlín Álvarez-Flores¹, Glamaris Rosario-Sanfiorenzo², Giovanni Alicea-Pérez², Naiara Hernández-Santisteban³, Carolina Nieves-Moreno¹, Fabiola Colón-Santiago⁴, Jeshua Colón³, Amanda Rivera³, Amanda Jové-Bravo³, Betsy Santos-Merette³, Samuel Caldero², Nashalie Hernández-Paniagua³, Khristian Belavan-Rosado³, Fabiola Guevárez-Russe², Andrea Rodríguez-De La Rosa³, Génesis Matos-Morales³, Katiria Valentín-Paniagua³, Agneris Irizarry³, Carolina Felix-Rosario², Eduardo Álvarez-Rivera⁴. ¹University of Puerto Rico, Arecibo Campus, Department of Biology, Arecibo, Puerto Rico; ²University of Puerto Rico, Bayamón Campus, Department of Biology, Bayamón, Puerto Rico; ³Interamerican University of Puerto Rico, Metropolitan Campus, Department of Science and Technology, San Juan, Puerto Rico; ⁴Universidad Central del Caribe, School of Medicine, Department of Microbiology and Immunology, Bayamón, Puerto Rico.
- 444 Desafíos en el Manejo de Mpox en Puerto Rico: Perspectivas de Pacientes y Proveedores de Salud.** Sofía A. Barrios Arzuaga¹, Yarieliz G. Rodríguez-Feliciano², Glorián Carrasquillo Sánchez², Luis A. Arroyo Andújar², Edda Santiago Rodríguez². ¹University of Puerto Rico, Río Piedras Campus, San Juan PR; ²University of Puerto Rico, Medical Sciences Campus, School of Public Health, San Juan, Puerto Rico.
- 445 Bridging Simulations and Epidemiological Data: The Case of COVID-19 in Perú.** Jennifer N. Nadal¹, Ernesto P. Esteban, PhD². ¹University of Puerto Rico-Humacao, Department of Biology, Humacao, Puerto Rico; ²University of Puerto Rico-Humacao, Department of Physics and Electronics, Humacao, Puerto Rico.
- 446 Impact of Maternal BMI on Neonatal Outcomes Among Hispanic Women with Preeclampsia at the Medical Sciences Campus Hospital.** Isabel Rivera Morazzani¹; Priscilla Rodríguez Torres, MD²; Josefina Romaguera, MD, MPH, FACOG²; Israel Matías, MD³; Ana Muñoz Matta, MD². ¹University of Puerto Rico, Río Piedras Campus, Natural Sciences Faculty, Department of Biology, San Juan, Puerto Rico, ²University of Puerto Rico, Medical Sciences Campus, School of Medicine, Department of Obstetrics and Gynecology, San Juan, Puerto Rico, ³Department of Pediatrics, Neonatology Section, UPR School of Medicine, PO BOX 365067, San Juan, PR, 00936-5067.
- 447 Enhancing Timeliness in Newborn Screening: A Quality Improvement Initiative Using a Courier Service.** Alondra T. Martínez Martínez¹, Ledith Resto², Raymond L. Tremblay¹, Sulay Rivera². ¹University of Puerto Rico, Humacao Campus, Department of Biology, Humacao, PR; ²University of Puerto Rico, Medical Sciences Campus, Department of Pediatrics, PR NBS Program, San Juan, PR.
- 448 An Update on the Effects of Age on the Outcomes of Elbow Release in Arthrogyposis.** Sebastián A. Rodríguez-Pérez¹, Natalie Williams², Ramsey Tarazi², Malliena DeShields², Dan Zlotolow². ¹San Juan Bautista School of Medicine, Caguas, Puerto Rico; ²Shriners Children's Philadelphia, Philadelphia, Pennsylvania, United States of America.



Innovating Together *for Healthier Futures* University of Puerto Rico, Medical Sciences Campus

Acknowledgment of Abstract Reviewers

The Organizing Committee of the 46th Annual Research and Education Forum of the University of Puerto Rico - Medical Sciences Campus extends its deepest appreciation to the distinguished reviewers who generously contributed their time and expertise to the evaluation of the 490 abstracts submitted for this year's Forum.

The extraordinary number of submissions received for this edition significantly increased the rigor and scope of the review process. Many evaluators undertook a substantially higher workload than in previous years, carefully assessing an expanded number of abstracts to ensure a fair, thorough, and high-quality scientific program. This year's review panel reflects remarkable disciplinary and institutional diversity.

Reviewers represented the six schools within the Medical Sciences Campus—including Medicine, Dental Medicine, Nursing, Pharmacy, Health Professions, and Public Health—as well as support deanships, research centers, and the UPR Comprehensive Cancer Center. We were also honored by the participation of colleagues from other University of Puerto Rico campuses and from distinguished national and international institutions. This broad representation enriched the evaluation process and further strengthened the interdisciplinary character of the Forum.

We are profoundly grateful for your professionalism, commitment, and scholarly dedication. Your invaluable service is fundamental to maintaining the academic excellence and integrity of the Forum.

School of Medicine

Dr. Abel Baerga Ortiz
Dr. Aida L. Quintero Noriega
Dr. América Facundo Rosado
Dr. Ana M. Espino
Dr. Anabel Puig Ramos
Dr. Annabell C. Segarra Marrero
Dr. Antonio H. Martins Baccin
Dr. Armando L. Oliver Cruz
Dr. Bruno Marie Bordes
Dr. Caleb Feliciano Valls
Dr. Carlos A. Sariol
Dr. Carlos González Aquino
Dr. Carmen D. Zorrilla
Dr. Carmen L. Cadilla Vázquez
Dr. César I. Andino Colón
Dr. Christian A. Foy Parrilla
Dr. Débora H. Silva Díaz
Dr. Ediel Omar Ramos Meléndez
Dr. Enid J. García Rivera
Dr. Enrique Escobar Medina
Dr. Fernando L. Joglar Irizarry
Dr. Frieda Silva Hernández
Dr. Humberto Lugo Vicente
Dr. Idali Martínez Martínez
Dr. Idith R. Ortiz Ortiz

Dr. Inés García García
Dr. Ingrid L. Casas Dolz
Dr. Israel Matías González
Dr. Jennifer Barreto Estrada
Dr. José F. Rodríguez Orengo
Dr. José G. Conde Santiago
Dr. José R. Rodríguez Medina
Dr. Josefina E. Romaguera Agrait
Dr. Juan A. González Sánchez
Dr. Juan C. Jorge Rivera
Dr. Juana I. Rivera Viñas
Dr. Karen G. Martínez González
Dr. Keimari Méndez Martínez
Dr. Loida A. González Rodríguez
Dr. Lourdes García Frago
Dr. Loyda M. Meléndez Aponte
Dr. Luis A. Serrano Torres
Dr. Luis M. Vilá Pérez
Dr. María A. Sosa Llorens
Dr. María J. Crespo Bellido
Dr. María J. Marcos Martínez
Dr. María S. Correa Rivas
Dr. Maribel Tirado Gómez
Dr. Mayra Olavarría Cruz
Dr. Namir Jordán Díaz

Dr. Nilka De Jesús González
Dr. Pedro D. Gil De Rubio Cruz
Dr. Polaris González Barrios
Dr. Rafael Rodríguez Mercado
Dr. Raúl Pérez Torres
Dr. Ricardo García De Jesús
Dr. Ricardo R. González Méndez
Dr. Stephanie M. Dorta
Dr. Suranganie Dharmawardhane
Dr. Sylvette Nazario Jiménez
Dr. Valerie Wojna Muñiz
Dr. Vanessa Sepúlveda Rivera
Dr. Walter Frontera Roura
Dr. Walter I. Silva Ortiz
Dr. William F. Micheo Martínez
Dr. Yailis M. Medina González
Dr. Yancy Ferrer Acosta
Dr. Yasmín Pedrego Rodríguez
Dr. Yisel M. Cantres Rosario
Mr. Elvis Santiago Rodríguez
Ms. Arelis Tsetsakos Montalvo
Ms. Kyara M. Berríos Toledo
Ms. Patricia Figueroa Rodríguez
Ms. Riseilly Ramos Nieves
Ms. Yesenia M. Acevedo Rivera

School of Health Professions

Dr. Alexie M. Lugo Canales
Dr. Amarilis Rivas Vidal
Dr. Arnaldo Cruz Rivera
Dr. Bárbara Segarra Vázquez
Dr. Eduardo Correa Vázquez
Dr. Elinette M. Albino Rodríguez

Dr. Elsa M. Orellano Colón
Dr. Enid Rodríguez Santos
Dr. Jonathan E. Sotomayor
Dr. Kristian Pamas Velázquez
Dr. Luis Javier Santiago Ramos
Dr. Luz A. Ruiz Sánchez

Dr. Mitzarie Carlo Colón
Dr. Wanda I. Colón Ramírez
Dr. Wilitza Martínez Rivera
Dr. Yadiris López Rivera
Dr. Zullybel Mendoza Keppis
Prof. Maribel Pagán Delgado

Graduate School of Public Health

Dr. Ana Luisa Dávila Román
Dr. Andrea López Cepero
Dr. Carlos J. Rivero Quiles
Dr. Carlos J. Rodríguez Sierra
Dr. Carmen Milagros Vélez Vega
Dr. Carol Salas Pagán
Dr. Cynthia M. Pérez Cardona
Dr. Edda I. Santiago Rodríguez
Dr. Edgar Pérez Matías
Dr. Edgardo Ruiz Cora
Dr. Edna Acosta Pérez

Dr. Griselle Hernández Rivera
Dr. Heriberto A. Marín Centeno
Dr. Hiram V. Arroyo Acevedo
Dr. Ilia M. Torres Avillán
Dr. Imar Mansilla Rivera
Dr. José A. Norat Ramírez
Dr. José M. Pérez Díaz
Dr. José R. Carrión Baralt
Dr. Juan Negrón Ayala
Dr. Karen Agosto Valentín
Dr. Linnette Rodríguez Figueroa

Dr. Marcilyn Colón Colón
Dr. María T. Borges Cancel
Dr. Mariela Torres Cintrón
Dr. Miguel Sánchez Celada
Dr. Ralph Rivera Gutiérrez
Dr. Rosa V. Rosario Rosado
Dr. Souhail M. Malavé Rivera
Dr. Vivianna M. De Jesús Monge
Dr. Yiselly M. Vázquez Guzmán

School of Dental Medicine

Dr. Arlene Sánchez Castellano
Dr. Augusto R. Elías Boneta
Dr. Dunia Rodríguez Estrada

Dr. Evangelia Morou Neofotistou
Dr. Gianna N. Piovanetti Ortiz
Dr. Lidia M. Guerrero Rodríguez

Dr. Lydia M. López del Valle
Dr. Ramón F. González García

School of Nursing

Dr. Beatriz Díaz Santiago
Dr. Carmen Mabel Arroyo Novoa
Dr. Félix J. Román Hernández

Dr. Iris W. Cátala Torres
Dr. Ivelisse Rivera Rodríguez
Dr. Lourdes Irene López

Dr. Milagros I. Figueroa Ramos
Dr. Noemy Díaz Ramos
Prof. María C. Larriuz Serrano

School of Pharmacy

Dr. Bianca A. Torres Hernández
Dr. Eliud Hernandez O' Farrill
Dr. Frances M. Rodríguez Cintrón
Dr. Francisco J. Jiménez Ramírez
Dr. Jorge Duconge Soler

Dr. José O. Colón Sáez
Dr. Luz A. Silva Torres
Dr. Magaly Martínez Ferrer
Dr. Manuel Delgado Vélez
Dr. Robert A. Vélez Peña

Dr. Sayel Rivera García
Prof. Mayra L. Vega Gerena
Prof. Rafael García Berdecía



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

Retired Professors

Dr. Margarita Irizarry Ramírez

Dr. Nirzka M. Labault Cabeza

Dr. Raúl Mayo Santana

Deanship for Academic Affairs

Dr. Abiel Roche Lima
Dr. Andrew M. Seeds
Dr. Carlos A. Ortiz Reyes

Dr. Efraín Flores Rivera
Dr. Ligia M. Chávez Rodríguez
Dr. Luis E. Estremera De Jesús

Dr. Natalie M. Meléndez
Vázquez
Prof. Pedro A. Del Valle López

Deanship for Student Affairs

Dr. Carlos J. Cañuelas Pereira

Dr. Edna Pacheco Acosta

Dr. Frank J. Valentín Silva

Employee Assistance Program (PAS)

Dr. Luis M. Sánchez Caso

University of Puerto Rico, Mayagüez Campus

Dr. Alexandra Morales Reyes

University of Puerto Rico, Río Piedras Campus

Dr. Eduardo Cumba Avilés
Dr. Enrique U. Pérez Cardona
Dr. José A. Rodríguez Martínez

Dr. José M. Longo Mulet
Dr. Keyla T. Soto Hidalgo
Dr. Nancy Viana Vázquez

Dr. Purísima C. Centeno Alayón
Dr. Reinaldo Berríos Rivera

University of Puerto Rico at Arecibo

Dr. Rebecca Pastrana Mena

University of Puerto Rico at Bayamón

Dr. Laura I. Santiago Pérez

University of Puerto Rico at Cayey

Dr. Enrique Rodríguez Borrero

University of Puerto Rico at Humacao

Dr. Mario G. Ortiz Martínez

University of Puerto Rico Comprehensive Cancer Center

Dr. Jorge E. Martínez Jiménez
Dr. Luis D. Borrero García
Dr. Marienid Flores Colón

Dr. Marievelisse Soto Salgado
Dr. Sheila N. López Acevedo
Dr. Sol V. Pérez Mártir

Ms. Camille Zenón Meléndez
Ms. Lorena González Sepúlveda
Ms. Vilnery Rivera Figueroa

Alliance for Clinical and Translational Research

Dr. Carlamarie Noboa Ramos
Dr. Karen Pabón Cruz

Ms. Angélica Arroyo Cruz
Ms. Naydi Pérez Ríos

Ms. Tatiana Pérez Rodríguez

Ponce Health Sciences University

Dr. Aziza Mahmud Pérez
Dr. Carmen M. Ortiz Sánchez

Dr. Erica L. Carrero Vallés
Dr. José A. Oliveras Torres

Ana G. Méndez University

Dr. Eduardo L. Tosado Rodríguez

Dr. José W. Rodríguez Zayas

Interamerican University of Puerto Rico

Dr. Eva N. Rodríguez Cruz

San Juan Bautista School of Medicine

Dr. Grisel Burgos Barreto
Dr. Jorge Pérez Rivera

Dr. Linda Laras
Dr. Yamixa Delgado Reyes

Prof. Ada M. Cortés Rodríguez



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

Universidad Central del Caribe

Dr. Janaina Alves
Dr. José C. Martín Rodríguez

Dr. Luz N. Ramos Vargas
Mr. Oscar A. Lugo Capera

Puerto Rico Medical Services Administration (ASEM)

Dr. Alexandra Rivera Castro

Boston University

Dr. Carlos E. Rodríguez Díaz

University of Illinois, Urbana-Champaign

Mr. Kehvyn Cedeño Soto (*PhD student*)

Northwestern University (Chicago, Illinois, US)

Dr. Iván Santiago Marrero

The Ohio State University

Dr. Carlos Leiva Sánchez

Universidad Católica Santiago de Guayaquil

Dr. Jorge A. Oliveros Rivero

Universidad de Chile

Ms. Dahianira M. Camacho Monclova (*PhD student*)

ACKNOWLEDGMENTS

The Organizing Committee expresses its gratitude to the Medical Sciences Campus dedicated staff members who offered their support during all stages of the planning and implementation of the 2026 Research and Education Forum.

Deanship for Academic Affairs

Dr. Carlos A. Ortiz Reyes
 Dr. Vincent Sifres Fernández
 Mr. Carlos J. De León Martínez
 Mr. Ernesto Rivera Rivera
 Mr. Freddie Hernández Rivera
 Mr. Gastón Rodríguez Ortiz
 Mr. Gerardo E. Vélez Pérez
 Mr. Iván Marcano López
 Mr. Luis Alberto Rivera Álvarez
 Mr. Maximiliano Ayala Cruz
 Mr. Mikeas Toledo Jorge
 Mr. Neftalí Rosario Rojas
 Mr. Ricardo Loperena Galíndez
 Ms. Amariliz Burgos Santiago
 Ms. Arleen Cruz Zayas

Ms. Bárbara Santana Monge
 Ms. Gladys Schroeder Vargas
 Ms. Irisely López Ramos
 Ms. Jansé M. Vázquez Rodríguez
 Ms. Jo Ana Miranda Roldán
 Ms. Keishla M. Torres Montalvo
 Ms. María Santiago Hernández
 Ms. Mariroan Sellés Ramírez
 Ms. Olga Mirella López Torres
 Ms. Teresa Meléndez Ayala
 Ms. Vivette Resto Rivera
 Ms. Viviana García Domenech
 Prof. Charles W. Seguí Caballero
 Prof. Pedro Del Valle López

Chancellor's Office

Dr. Frankses M. Ortiz Soto
 Mr. Félix A. Oyola Velázquez
 Mr. José R. Hernández Torres
 Ms. Ivy K. Class Guzmán

Ms. Leslie Ann Nieves Santiago
 Ms. Lizzette Fonseca Rivera
 Ms. Mariana Cobián Rodríguez

Deanship for Administration

Eng. José L. Soto Figueroa

Mr. Ricardo Serrano Ortiz

Ms. María M. Santiago Morales

Deanship for Students Affairs

Ms. Jussett M. Vega Vega

Graduate School of Public Health

Mr. José M. Sobrino Delgado

Dr. Ivelisse M. García Meléndez

Dr. Yiselly M. Vázquez Guzmán

School of Medicine

Ms. Julia Prado Otero
 Ms. Lisa E. Santos Quiñones

Ms. Yanitsie Ramos Méndez
 Ms. Zuania Torres Rosa



Innovating Together *for Healthier Futures* University of Puerto Rico, Medical Sciences Campus

OUR SPONSORS



RCM

46th Annual Research
and Education Forum

2026

rcm 



Innovating Together
for Healthier Futures
University of Puerto Rico, Medical Sciences Campus

pcm 
resiste, cree y mantente...

pcm 