UNIVERSITY OF MIAMI THE DR. JOHN T. MACDONALD FOUNDATION BIOMEDICAL NANOTECHNOLOGY INSTITUTE BioNIUM





INTERNATIONAL WOMEN'S DAY

The Biomedical Nanotechnology Institute at the University of Miami (BioNIUM) is dedicated to honoring all female scientists, faculty, administrative staff, students, & postdocs who have made significant contributions.

On International Women's Day we would like to introduce some of these inspiring women for their leadership, support and advancement to BioNIUM:



Sylvia Daunert, Pharm.D., M.S., Ph.D. Professor and Lucille P. Markey Chair

Director of BioNIUM

Dr. Daunert's research focuses on the development of bio-inspired nanotechnologies to solve biomedical and environmental problems. Her group genetically engineers living cells and proteins for environmental detection, molecular sensing, molecular diagnostics, point-of-care tests, biomarker identification, and drug delivery. Dr. Daunert's work has been featured in over 250 publications, patents, and highlighted by the scientific media and popular press.



Sapna Deo, Ph.D.

Professor of Biochemistry and Molecular Biology, Director of Graduate Studies

Director of Molecular Medicine Pathway

Dr. Deo's research interest is in the area of bionanotechnology and biosensors. Her research interest include development of targeted delivery systems based on nanocarriers for targeted delivery, imaging, and sensing applications in biomedical field Dr. Deo is a author and coauthor of over 110 scientific publications and several patents and a recipient of the NSF-CAREER Award.



Shanta Dhar, Ph.D.

Associate Professor of Biochemistry and Molecular Biology. Dr. Dhar's research interests lie at the interface of chemistry and biology with particular emphasis on nanocarrier mediated intracellular delivery of payloads for potential applications in various diseases. Dr. Dhar's lab develops technologies that use a combination of conventional methods of cancer treatment and immunotherapy in a single nanoparticle platform.



Courtney Dumont, Ph.D.

Associate Professor of Biomedical Engineering, Director of BioNIUM Outreach

Dr. Dumont was awarded the inaugural Junior Frost Fellow Award in chemistry for her targeted drug delivery strategies following nerve injury. Her lab continues to develop new biomaterial, stem cell, and drug delivery strategies that address intrinsic and extrinsic barriers to spinal cord repair and works closely with members of the Miami Project to Cure Paralysis to continue to redefine our understanding of the pathophysiology after injury and identify new therapeutic targets.



Mercè Jordà, M.D., Ph.D., MBA

Professor and Joseph R. Culter Jr. Chair Department of Pathology & Laboratory Medicine She is a board certified Anatomic and Clinical Pathologist and Cytopathologist, who has worked over 25 years at the University of Miami Miller School of Medicine serving as a senior academic, consultative pathologist, and as medical director of several

as a senior academic, consultative pathologist, and as medical director of several UHealth facilities mainly focused on cancer care, with direct impact in healthcare management. Dr. Jordà areas of research interest includes Genitourinary and Breast diseases and Cytopathology. She is serving as the Co-Principal investigator in multiple awarded grants, she is a member of several major editorial boards and cancer journals, she is the editor of 2 books, and she is author and co-author of over 160 peer-reviewed journal articles and book chapters.



Ida Collazo, MS. MA

Ms. Collazo holds an Undergraduate degree from Rutgers University where she specialized in History. She earned an MA degree in International Economics and Inter-American Studies from the University of Miami, School of International Studies and an MS degree in Management Science and Research Administration from Emmanuel College, in Boston, Mass . She has been with the University of Miami since 1992 and with the Biochemistry and Molecular Biology Department since , 2000. She joined the Bionium Institute alongside, Dr. Sylvia Daunert as Administrator in 2018. MS, Collazo is an active member of NCURA (National Council of University Research Administrators) and an active member of SRA, Society of Research Administrators.

Shara Zeitlin, BS. Business Administration



Senior Project Coordinator

Ms. Zeitlin graduated with a Business Administration degree with a concentration in Marketing. She has been with the University of Miami since 2015 and joined the Biochemistry and Molecular Biology Department since 2020. Shara is involved with managing the Institutes website, seminar series, events, fundraising & other research projects. Aside from monitoring their twitter and facebook page, Shara has launched BioNIUM's monthly newsletter and also Instagram page. She also assists with administration and the Nanofabrication Facility.



Simona Nagyova, MBA

Executive Assistant to the Chair

Ms. Nagyova earned her MBA and joined the Department of Biochemistry and Molecular Biology in 2020. She enjoys being a part of the BioNIUM team by assisting students, faculty and leadership with administration. Her assistance allows her leadership team the ability to generate new knowledge through their research to educate the next generation of scientists. "It makes me feel proud that their discoveries, and technologies that solve global biomedical and environmental challenges, are making a positive impact on millions of lives"



Omaida C. Velazquez, M.D., F.A.C.S.

Professor and Chair, DeWitt Daughtry Family Department of Surgery Surgeon-in-Chief for Jackson Health System & Miami University of School of Medicine She is a member of the American Surgical Association (ASA), an elite group composed of the nation's most prominent surgeons from the country's leading academic medical institutions. Dr. Velazquez serves as the Executive Dean of Research, Research Education and Innovative Medicine for the Miller School of Medicine. Dr. Velazquez is the Principal Investigator of a NIH-funded basic science laboratory that investigates endothelial cell biology, angiogenesis, and vasculogenesis.



Norma Kenyon, Ph.D.

Vice Provost for Innovation |Chief Innovation Officer |Professor of Surgery Under her leadership, the U Innovation team, including the Office of Technology Transfer and the Wallace H. Coulter Center for Translational Research has successfully increased the number of licensing agreements and startups emanating from faculty innovations across the university's 11 schools and colleges. The Launch Pad and Launch Pad Med provide mentoring for emerging student, alumni and faculty entrepreneurs throughout the university community, and Kenyon established the 'Cane Angel Network to provide investment opportunities to all startups connected to the university.



Alice Tomei, Ph.D.

Assistant Professor in the department of Biomedical Engineering |Director of the Islet Immunoengineering Laboratory

Dr. Tomei's background uniquely combines expertise in bioengineering and immunology and she is applying her skills to the development of novel immunoengineering platforms to prevent rejection after islet transplantation and to promote antigen-specific tolerance for a cure of type-1 diabetes. Dr. Tomei was awarded the Eliahu I. Jury Early Career Research Award for obtaining major research grants in 2016 and the Alexander Orr Excellence in Teaching Award in 2018. These important achievements further highlight her recognition in the field of immunoengineering for type-1 diabetes.



Erin Koberz, Ph.D.

Vice Provost for Research and Tenured Professor in the Departments of Medicine, Public Health Sciences, and Obstetrics and Gynecology | Associate Director of Population Science and Cancer Disparities | Chief of Population Health and Cancer Disparities for UHealth Oncology Service line. Dr. Kobetz also serves as Program Director for the Community Engagement and Multidisciplinary Team Science Components of UM's Clinical Translational Science Institute (CTSA). Dr. Kobetz established Patnè en Aksyon (Partners in Action), Sylvester's first ever campus community partnership in Little Haiti, the largest enclave of Haitian settlement, and remains committed to integrating diverse stakeholders into the translational research continuum. Dr. Kobetz currently works as the Principal Investigator of multiple grants from the National Cancer Institute (NCI) and National Institute of Minority Health and Health Disparity (NIHMD,) to support collaborative science with numerous South Florida communities



Alessia Fornoni, MD, Ph.D.

Dr. Fornoni is tenured Professor of Medicine and Molecular and Cellular Pharmacology at the University of Miami Miller School of Medicine. She is the Chief of the Katz Family Division of Nephrology and Hypertension and serves as and Director and Chair of the Peggy and Harold Katz Drug Discovery Center. She is also the Associate Director of the MSTP program and the Co-Director of the CTSI/ KL2 program. She has received prestigious awards: among them, she became a member of ASCI and of AAP. She was recipient of the best graduate school mentor of the year award in 2016, the Provost Scholar Award in 2018, the best faculty mentor in the Department of Medicine 2019, the Andrew Schally Research award in 2019, the WIAM Leadership Award in 2019, the Barkin/Roger Outstanding Mentor Award in 2020. Her contributions have been published in high impact journals: JCI, NEJM, Nature Medicine, Cell Metabolism, Science Translational Medicine, Nature Communication, Journal of Biological Chemistry, Diabetes among others. Through her pioneering work on insulin signaling, cholesterol metabolism and sphingolipid-related pathways, Dr. Fornoni uncovered novel pathogenetic mechanisms and therapeutic approaches for glomerular disorders. Her internationally recognized research findings, which are now being translated into humans with novel therapeutic applications, have challenged existing paradigms and have dramatically altered the research direction in these areas.

Once again, **BioNIUM** would like to thank these incredible female scientists, engineers, entrepreneurs & administrators for everything they do.



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