



# HEMISPHERIC & *Global Report* 2022

UNIVERSITY OF MIAMI  
SCHOOL of NURSING  
& HEALTH STUDIES





Research Day 2022

At the School of Nursing and Health Studies, we **transform lives** and health care through **education, research, innovation, and service** across the hemisphere.

# WELCOME *Message*

As the COVID-19 pandemic began slowly receding from the foreground of our worldview, 2022 marked a continuing evolution into the hybrid sphere of international health education and an increasingly robust schedule of face-to-face hemispheric experiences, travel, and research collaborations. Here at the University of Miami School of Nursing and Health Studies (SONHS), this evolution culminated in our hosting the XVII Pan American Research Colloquium, a conference we had been planning collectively with our global partners at the Pan American Health Organization (PAHO) for over two years (see page 9). We approached this new era—best characterized by the phrase *VUCA* (volatility, uncertainty, complexity, and ambiguity)—with cautious optimism. But what transpired in November exceeded all of our best expectations. Hundreds of health professionals from dozens of countries arrived on our campus for a gloriously invigorating week. If the past two years taught us *anything*, it was to prepare for *everything*. The Colloquium was no exception.

Our gorgeous Miami sun mixed, appropriately, with tropical downpours. Undeterred by driving rain, we persevered. In those few days of collegiality, priceless new knowledge was sown, inspiring collaborations germinated, and borderless friendships blossomed. Like the Colloquium, which was themed “Building the Future of Nursing for Universal Health,” many endeavors detailed in this report focus on the vibrant work of preparing our health care community for tomorrow. The following pages offer an overview of innovative objectives, strategies, and outcomes in the areas of health care across the hemisphere, health disparities research, and our PAHO/WHO Collaborating Centre for Nursing Human Resources Development and Patient Safety. These successes—achieved in spite of countless challenges—are testament to our incredible faculty, staff, students, and global partners. This report offers insights into how we and our esteemed peer institutions have emerged from this global pandemic with an increased sense of adaptability and wisdom, along with renewed passion for pursuing universal health. Thank you for being a critical part of our ongoing work!

**Cindy L. Munro, PhD, RN, ANP-BC, FAAN, FAANP, FAAAS**

**Dean and Professor**

University of Miami School of Nursing and Health Studies

**Johis Ortega, PhD, APRN, ACNP-BC, ENP-BC, FNP-BC, FAAN, FAANP**

**Vice Dean for Academic Affairs, Associate Dean for Hemispheric & Global Initiatives, and Professor of Clinical**

University of Miami School of Nursing and Health Studies

## NOVEL • OPTIMISTIC • WORLD-CHANGING



# HEALTH CARE

*Across the Hemisphere*



## HEMISPHERIC LEADERSHIP

In recognition of his extensive participation and efforts, Dr. Johis Ortega was selected to serve as an international member on the Executive Council of the Asociación Latinoamericana de Escuelas y Facultades de Enfermería (**ALADEFE**) from 2022 to 2026. The nomination recognizes Dr. Ortega's significant contribution toward helping develop the Council's Work Plan to carry out ALADEFE's mission of promoting collaborations among the academic nursing community throughout Latin America and the Caribbean.



Dean Munro and Dr. Ortega welcome students from Universidad Francisco de Vitoria in Madrid, Spain

## INTERNATIONAL VISITORS

As pandemic-era travel restrictions lifted, we resumed our program of international observerships at SONHS. In 2022, we welcomed eight students from the **Universidad Francisco de Vitoria**, located in Madrid. These international students completed a month-long observership at the UHealth System hospital facilities, which allowed them to learn about U.S. health care processes. Within this immersive experience, the Spanish students had the opportunity to interact with medical experts and take part in clinical and educational activities furthering their health care training.

Other international visitors in 2022 included two long-time partners and collaborators from Peru's **Universidad Peruana Cayetano Heredia**: Dr. Cristina Guerra Giraldez, Director of International Relations, and Dr. Enrique Castañeda Saldaña, Chancellor. As part of their visit, they completed a tour of the School's Simulation Hospital Advancing Research and Education (S.H.A.R.E.™) and discussed future goals and opportunities.

In addition, Dr. Andrea Bernardes, Assistant Professor at the **University of São Paulo School of Nursing in Ribeirão Preto**, took some time on November 4 before attending the XVII Pan American Nursing Research Colloquium at UM to meet with Dr. Johis Ortega and other SONHS faculty.





Dr. González, fourth from right, in Chile

## PROMOTING THE NURSE PRACTITIONER ROLE IN CHILE

As **Pontificia Universidad Católica de Chile** (UC) welcomed its inaugural cohort of nurse practitioner students, SONHS continued its efforts to help graduate Latin America's first official nurse practitioners (NP). At the invitation of Lilian Ferrer, UC Santiago's vice dean of international affairs, SONHS associate professor Juan M. González taught the program's first advanced pathophysiology course. "This is the first program in Chile where they are officially and formally educating students into the role of the nurse practitioner," said Dr. González, Fellow of the American Association of Nurse Practitioners. UC pioneered its program with oncology nurses in response to a call from the government to increase health services for diagnosing, treating, and following up with cancer patients.

“ This was the first time most students at the graduate level had done any kind of simulation, and it was an important step to bring to light what advanced practice nurses really do. ”

– Dr. Juan González

Dr. González also led simulation activities designed to reinforce key ideas and skills of advanced practice nursing. "This was the first time most students at the graduate level had done any kind of simulation, and it was an important step to bring to light what advanced practice nurses really do," he added. "I am thrilled this program has come to fruition, and I applaud Dr. González's valuable contributions as a

clinical educator," said Dr. Johis Ortega, a long-time advocate for this effort. "This is a great example of strategic hemispheric collaboration with our PAHO partners. I am proud we could contribute to this one-of-a-kind, first-in-the-country program, which will increase critically needed access to high-quality patient-centered care and nurse practitioner education in Chile." In 2022, Dr. González also conducted webinars for UC students and faculty on chest x-ray and 12-lead electrocardiogram (ECG) interpretation for the nurse practitioner. The x-ray course provided a systematic approach to identifying pneumonias, pneumothorax, vascular diseases, and oncological findings, among other conditions, while the ECG webinar addressed myocardial ischemia and a wide variety of electrical anomalies.



Dr. Presti, left, in Chile

Dr. Carmen Presti, SONHS associate professor of clinical and an experienced cardiovascular intensive care unit (ICU) nurse practitioner (NP) at Miami's Jackson Memorial Hospital, presented at the **40<sup>th</sup> Congreso Chileno de Medicina Intensiva (Chilean Congress for Critical Care Medicine)**, hosted by **Sociedad Chilena de Medicina Intensiva** (SOCHIMI). Chilean nurse scientist Cristobal Padilla, Ph.D. '21, a SONHS alumnus, connected conference organizers with Dr. Presti, who presented on the nurse practitioner's role in the ICU, the care of patients on ECMO (extracorporeal membrane oxygenation), and novel strategies for hemodynamic monitoring. She also took part in an interdisciplinary panel addressing pros and cons of integrating advanced practice nurses into the ICU in Chile, where the APRN role is still in its infancy. "It made me appreciate how formalized our nurse practitioner role is here in the States," said Dr. Presti, who presented on the role of the NP at UC while in Santiago. She said more research coming from nurse scientists in Chile validating how additional training improves outcomes will help expand the role of nurses in that country.



“ I’m really excited to do the first one and continue building a program of research with Arab and Israeli colleagues I met there. ”

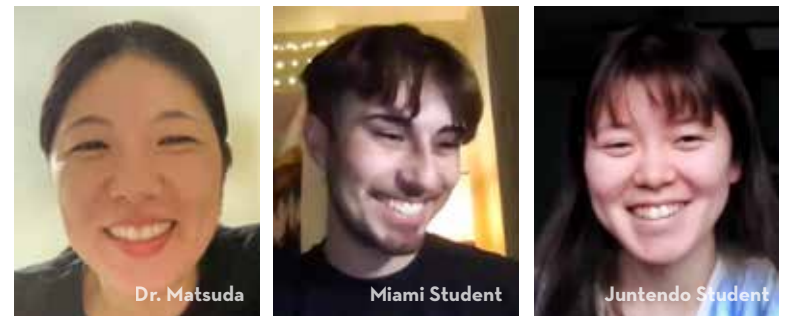
– Dr. Nicholas Metheny

## GLOBAL ENGAGEMENT HIGHLIGHTS

**Israel:** Dr. Nicholas Metheny, assistant professor at SONHS, was among 33 faculty—and one of just three nurses—chosen from hundreds of U.S. applicants to participate in the 2022 **Faculty Fellowship in Israel** program. Over the summer, he connected with Israeli colleagues with similar research interests and explored complexities of the Middle East during a two-week trip that included visits to cultural and historical sites such as Jerusalem, Tel Aviv, the Golan Heights, and the Dead Sea. Through support of the **Jewish National Fund-USA**, Fellows visited Druze communities in the Golan Heights, toured Christian-owned vineyards, listened to award-winning Palestinian journalists, spoke with former Prime Minister Ehud Olmert, and even went to Israeli settlements in the West Bank, as well as the Ezer Crossing between Israel and the Gaza Strip. “When I set foot in Israel for the first time and saw all these sites that I read about growing up—like the Sea of Galilee—it was so impactful,” said Dr. Metheny, whose research focuses on preventing and mitigating intimate partner violence mostly among same-sex couples. As a result of the experience, Dr. Metheny is already preparing a National Institutes of Health grant with two Israeli professors he met during the program. He notes there has never been a study about intimate partner violence with LGBTQ people in Israel. “I’m really excited to do the first one and continue building a program of research with Arab and Jewish colleagues I met there,” he said. “It shows how fruitful this experience was.”



**Japan:** Dr. Yui Matsuda, SONHS assistant professor, orchestrated the first-ever virtual student exchange between SONHS and **Juntendo University**. In Tokyo, it was early Sunday morning. In Miami, it was Saturday night. But the time gap collapsed as students from different worlds began discovering common interests. Starting with a lively game of “20 questions,” the exchange quickly moved on to shared pop culture passions, from Studio Ghibli movies to Taylor Swift music to Starbucks. By the end of the hourlong Zoom conference, the group was bonding over deeper subjects connected to their future careers, everything from clinicals and COVID guidelines to pediatric oncology, hospice care, research, and more.



Juntendo student Mayumi, for example, shared that a book she’d read about leukemia inspired her to become an oncology nurse. “I’m interested in chemical treatment, chemotherapy,” she said. SONHS senior Sammy Kumar confided that his interest in pediatric oncology arose from losing his mother to cancer when he was just 11. The trans-continental exchange gave all participants invaluable insights into new cultures and, as one Juntendo student pointed out, the rare chance to practice conversing in English.



# HEALTH DISPARITIES

*Research*



## LARGEST COHORT IN GRANT HISTORY

In 2022, SONHS welcomed its largest cohort into the prestigious Minority Health and Health Disparities Research Training Program (MHRT) Program, funded by the National Institutes of Health's National Institute on Minority Health and Health Disparities (NIMHD) to improve diverse representation of research scientists from health disparity populations in the biomedical, clinical, and social sciences. Several of the 16 participants selected hailed from programs at SONHS and the University of Miami. The rest came from institutions located across the U.S., including New York, North Carolina, Texas, Mississippi, Tennessee, and Pennsylvania. Their academic backgrounds ranged from molecular biology, biochemistry, and public health to global health studies, medicine, and nursing, with levels of education spanning from undergraduate to postdoctoral preparation. "We are incredibly excited to have such a large, diverse MHRT cohort this year," said Dr. Johis Ortega, principal investigator for the school's MHRT grant, which was renewed in 2020 for another five years. "This is our largest cohort since first receiving this prestigious grant in 2016."

Each participant was placed in one of the following locations for a 10-week mentored research experience: the University of Miami in Coral Gables, Florida; Nuevos Rumbos Corporation or Universidad de los Andes in Bogotá, Colombia; Universidad de Costa Rica's Center for Research in Tropical Diseases in San José, Costa Rica; Pontificia Universidad Católica Madre y Maestra School of Health Sciences in Santiago De Los Caballeros, Dominican Republic; the University of the West Indies in Kingston, Jamaica; and Universidad de las Américas Puebla (UDLAP) in San Andrés Cholula, Mexico. Visit [mhrt.sonhs.miami.edu](https://mhrt.sonhs.miami.edu) for more information.

<sup>1</sup> This grant is supported by the National Institute On Minority Health And Health Disparities of the National Institutes of Health under Award Number T37MD008647. The content of this article is solely the responsibility of the issuing institution and does not necessarily represent the official views of the National Institutes of Health.

“ We are incredibly excited to have such a large, diverse MHRT cohort this year.”

– Dr. Johis Ortega



**Colombia:** MHRT trainees Jessica Garafola (trainee spotlight) and Jahn Jaramillo worked on drug and alcohol intervention and impact studies taking place at Corporación Nuevos Rumbos in Bogotá under Dr. Augusto Perez, director. Julia Byerly helped plan cardiovascular disease prevention strategies under Dr. Diego Lucumi at Universidad de los Andes, Bogotá. Dr. Eric Brown served as U.S. mentor.



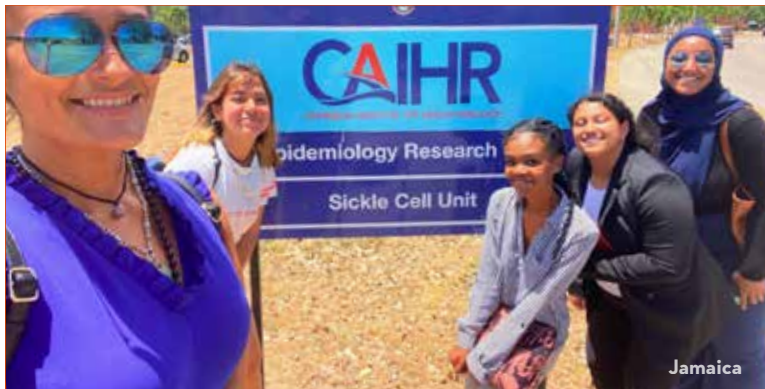
**Costa Rica:** Jenny Carpenter and Franklin Saeteros went to Costa Rica with the MHRT program to gain experience in the labs of Dr. Esteban Chaves Olarte and Dr. Eugenia Corrales-Aguilar, respectively, at Universidad de Costa Rica's Centro de Investigación Enfermedades Tropicales (Center for Research in Tropical Diseases). Dr. Karina Gattamorta (SONHS) was their U.S. mentor.



**Dominican Republic:** MHRT trainee Kimberly Thomas worked alongside researchers Dr. Johis Ortega (SONHS) and Dr. Jose Javier Sanchez at Pontificia Universidad Católica Madre y Maestra, focusing on electronic cigarette use among college students and physician knowledge and attitudes about the product. She was able to participate in the XVII International scientific research conference held on June 8-10, 2022 in Santo Domingo.



**Mexico:** Melissa Castillo and Kerri-Ann Scott received training at Universidad de las Americas Puebla (UDLAP). Castillo studied health service strategies for marginalized communities with Dr. Laura Pla, while Scott assisted Dr. Patricia Porras's investigation into endemic Puebla foods and diet improvement. Dr. Johis Ortega was their U.S. mentor.



**Jamaica:** Ana Borja, Layan Ibrahim, Nicole O'Dell, and Deanna Uddin were selected to conduct research with Dr. Marvin Reid, director of the Tropical Metabolism Research Unit at the University of the West Indies in Kingston, with U.S. mentor Dr. Denise Vidot, of SONHS.



**Miami:** Ye Chen, Taleah Frazier, and Luka Ojemaye took part in cross-cultural health disparity studies being conducted by MHRT mentors Dr. Denise Vidot (UM SONHS) and Dr. Marvin Reid (UWI). Cassandra Michel contributed to Dr. Roger McIntosh's BREATH (Brain Respiration Embodiment Affect & Translational Health) Lab at the University of Miami.

For additional information please visit: [www.mhrt.sonhs.miami.edu](http://www.mhrt.sonhs.miami.edu).



Ana Borja and Dr. Marvin Reid

## RESEARCH DAY

Research Day 2022 took place in the University of Miami Lakeside Village in November, coordinated to coincide with the XVII Pan American Nursing Research Colloquium. This gave members of the MHRT 2022 cohort the unique chance to discuss their research posters with an expanded audience of international health scientists in town for the prestigious biennial event. “I am exhilarated to further my research experience,” said UM student Cassandra Michel, one of several MHRT trainees who presented her findings at Research Day 2022. Michel was mentored by Dr. Roger McIntosh, director of the BREATH Lab in UM’s psychology department, on a study investigating whether HIV and/or pre-hypertension have an additive or interactive effect on cardiovascular reactivity.

## TRAINEE SPOTLIGHT

After earning a bachelor’s degree in biology and a Master of Health Administration degree, **Jessica Garafola, A.B.S.N. ’22**, spent three years as a legislative aide in Florida, helping get three health policy bills signed into law. Following these successes, Garafola traded politics for the Accelerated Bachelor of Science in Nursing (ABSN) program at SONHS, graduating in May 2022 with the school’s Excellence in Leadership Award. From politics to nursing, Garafola demonstrated a strong commitment to helping underserved populations. As a MHRT participant she spent 10 weeks in Bogotá, Colombia, working with her foreign mentor, Dr. Augusto Pérez Gómez, director of Corporación Nuevos Rumbos, on his ongoing behavioral health studies related to drug and alcohol use and abuse. Upon her return to the States, Garafola started a nurse residency at a California VA Health System.



Jessica Garafola and Dr. Victoria Behar Zusman



Brazil

**New Partners:** In 2022, SONHS added Bolivia and Brazil to its roster of global research partners. Bolivia’s Universidad Franz Tamayo (UNIFRANZ), and Brazil’s Universidade Federal da Bahia (UFBA) in Salvador.

The new MHRT partnership in Brazil came about serendipitously, after Brazilian nurse scientist Dr. Hudson Santos joined SONHS in the summer of 2022 from the University of North Carolina. Drs. Ortega and Santos visited Universidade Federal de Bahia on December of 7-12, to meet the research team and the leadership in preparation for the new cohort.



# PAHO/WHO *Collaborating Centre*

Elizabeth Madigan  
Chief Executive Officer  
Sigma Theta Tau International  
Honor Society of Nursing

## GLOBAL NETWORK NEWS

Dr. Johis Ortega was among the nurse leaders, practitioners, researchers, and educators from the global arena who gathered at the University of Botswana School of Nursing on June 16, 2022, for the **14<sup>th</sup> Biennial Global Network for WHO Collaborating Centres for Nursing and Midwifery (GNWHOCCNM)**. Representing SONHS and the PAHO/WHO Collaborating Centre, Dr. Ortega participated and joined in this important event to discuss the theme of the conference, “Nursing and Midwifery Workforce: A Catalyst for Achievement of Universal Health Coverage (UHC).” SONHS was elected treasurer of the **Pan American Nursing and Midwifery Collaborating Centres (PANMCC)**.



Dean Munro



Colloquium 2022



Colloquium 2022



Dr. Ortega

### XVII PAN AMERICAN NURSING RESEARCH COLLOQUIUM

Over 200 international members of the health professions came to the University of Miami from around the globe to attend the XVII Pan American Nursing Research Colloquium, which was hosted in November by the School of Nursing and Health Studies (SONHS). Many others attended the hybrid event virtually.

The biennial colloquium is presented by the World Health Organization (WHO) and the Pan American Health Organization (PAHO). The theme for 2022 was “Building the Future of Nursing for Universal Health/ Construyendo el Futuro de la Enfermería para la Salud Universal.”

Pre-Colloquium workshops were offered a range of topics, such as writing for publication, communicating research, and strategies for clinical teaching with simulation. Workshop attendees also had the opportunity to tour S.H.A.R.E.™ the school's five-story Simulation Hospital Advancing Research and Education.

SONHS Dean and Professor Cindy L. Munro, and Professor of Clinical Johis Ortega, Associate Dean for Hemispheric and Global Initiatives, served as conference co-chairs, organizing a warm welcome that included the UM marching band and cheerleading squad.

“We gather to work toward ‘Building the Future of Nursing for Universal Health,’ united by a compelling vision that has the power to be transformational at every level—from the infrastructure that supports health care to the nurse clinicians who deliver compassionate care, to the nurse educators who are preparing the next generation of nurses, to the nurse researchers who develop new knowledge and approaches to treatment, to the public health policy-makers who impact health care implementation,” said Dean Munro.

Elizabeth Iro, WHO Chief Nursing Officer, gave opening remarks virtually. Other keynote speakers included Pamela Cipriani, president of the International Council of Nurses, and Liz Madigan, chief executive officer of Sigma Theta Tau International Honor Society of Nursing. “Every nurse is a leader, and we need to help them recognize that,” said Madigan. She went on to encourage nurse scientists to “contribute to larger conversations” and “think outside of your usual scientific communities.”

Three plenary panels featured ten speakers presenting on health policy, research in Latin America and the Caribbean, and the WHO's State of the World's Nursing Report. A team of interpreters ensured that panel discussions as well as abstract and poster presentations were accessible in English, Spanish, and Portuguese.



Dr. Guillermo “Willy” Prado

UM prevention health scientist Dr. Guillermo “Willy” Prado, principal investigator for the NIH-supported Familias Unidas intervention, gave the closing address. The Maricel Manfredi Prize for an unpublished nursing research article was awarded to Sandra Patricia Osorio Galeano, a professor at Universidad de Antioquia, in Medellín, Colombia, for “Preliminary Design and Evaluation of the ACUNE Intervention: Actions for Empowering Neonatal Care”. The Roseni Rosângela de Sena Award for the best scientific research on nursing practice in primary health care from a graduate student went to Dulce María Carranza Oropeza, of the nursing school at Universidad Autónoma de Nuevo León, México, for her abstract, “Resilient leadership in nursing professionals”. The colloquium served to highlight research in Latin American and Caribbean countries in support of the United Nations’ 17 Sustainable Development Goals, calling for global action in health, justice, and prosperity, and disseminated emerging advances in nursing research from around the globe.



From left to right: Dr. Benjamin Puertas, Dr. Silvia Cassiani, Dean Cindy L. Munro and Dr. Felicia Knaul

“The colloquium is of vital importance in advancing nursing research and promoting international research collaborations among nurse scientists, and it plays a unique role in fostering the visibility and professional development of emerging nurse leaders, clinicians, and students from across the hemisphere,” said Dr. Ortega. “In spite of the challenges presented by the ongoing COVID-19 pandemic, the participants brought tremendous energy, hope, and promise to the gathering.”



Dr. Silvia Cassiani



Dr. Ortega with Manfredi Award recipient

Key collaborators included Silvia Cassiani, PAHO’s advisor of Nursing and Allied Health Personnel Development, and the PAHO Unit of Human Resources for Health, Nursing Programs. SONHS, to date the only U.S. site to host the colloquium, has successfully hosted the event twice (2012 and 2022).

## SONHS PAHO/WHO GLOBAL PARTNERS

- The Global Network of WHO Collaborating Centres for Nursing and Midwifery Development
- The Pan American Network of Nursing and Midwifery Collaborating Centers (PANMCC)
- Latin-American Association of Schools and Colleges of Nursing (ALADEFE)
- International Network of Nursing and Patient Safety Experts (RIENSEP)
- American Association of Colleges of Nursing (AACN)
- Sigma Theta Tau International Honor Society (STTI)

## PAHO/WHO CORE STAFF

Our PAHO/WHO Collaborating Centre operates with a small core staff, with additional support on a by-project basis from the considerable skills and expertise of UM School of Nursing and Health Studies faculty.



### SCHOOL OF NURSING AND HEALTH STUDIES

**Dean and Professor Cindy L. Munro, RN, ANP-BC, Ph.D., FAAN, FAANP, FAAAS**, is an accomplished nurse leader whose scientific contributions have helped change clinical practice and reduce health care costs by addressing hospital-acquired infection. She has an active research program in prevention of complications in mechanically ventilated adults, including ventilator-associated pneumonia and delirium. Dr. Munro is coeditor in chief of the American Journal of Critical Care. Her extensive experience and history of leadership in the nursing field align with the goals of SONHS and its PAHO/WHO Collaborating Centre to educate students and support the capacitation of an international health care workforce committed to nursing excellence and the delivery of quality care. These contributions to promoting nursing and health care research are in keeping with our Centre's commitment to creating and disseminating health knowledge and providing service focused on patient safety and workforce development locally and across the globe.



### CENTRE DIRECTOR

**Johis Ortega, PhD, APRN, ACNP-BC, ENP-BC, FNP-BC, FAAN, FAANP**, vice dean for Academic Affairs, associate dean for Hemispheric and Global Initiatives, and professor of clinical at SONHS. Dr. Ortega initiated a program of research in education, analyzing outcomes of nursing student international exchange programs. He led the establishment of the school's formal exchange agreements with hospitals and universities in Spain, Chile, Mexico, Haiti, Australia, the Dominican Republic, Brazil, Taiwan, and India. He co-created the Simulation Strategies Workshop for Patient Safety (Estrategias para la Enseñanza Clínica de Enfermería con Simuladores). His awards include the IV Annual Susana Espino Muñoz Academic Trajectory Award of the ALADEFE and UM School of Nursing Faculty of the Year Award. A founding member of RIENSEP, Dr. Ortega also holds membership in ALADEFE, the American Nurses Association, the American Academy

of Nurse Practitioners, the National League of Nursing, the American Association of Critical Care Nurses, and the National Organization of Nurse Practitioner Faculties. He collaborated with the Caribbean Community (CARICOM) on developing the Regional Nursing Body Strategic Framework for 2018-2022. He is a Fellow of the American Academy of Nursing and the American Association of Nurse Practitioners.



### PROJECT MANAGER

**Carlos Arismendi, MS**, serves as the primary liaison between the Centre Director, PAHO/WHO, and other collaborating centres and global partners. He is responsible for the PAHO/WHO CC's strategic planning and development of operations, overseeing implementation and execution of the Centre's terms of reference and work plan in accordance with the WHO's four-year centre designation periods. Mr. Arismendi's experience in business development strategy has allowed him to lead projects in Latin America, Asia, and Middle Eastern countries, including Joint Commission International accreditation, development, and implementation of clinical programs, such as bone marrow transplant, medical oncology, perioperative services, and nursing leadership, among others. He holds a bachelor's degree in Spanish literature and Latin American business from the University of Maryland and a master's degree in international management in public health from the University of Liverpool.

*Full-length bios are available online at [www.pahowho.sonhs.miami.edu/about-the-center/our-team](http://www.pahowho.sonhs.miami.edu/about-the-center/our-team).*

For additional information on our centre, please visit: [www.pahowho.sonhs.miami.edu](http://www.pahowho.sonhs.miami.edu).





