

Development Programs Ramp Up Research Success for Early-Career Physician-Scientists

A major benefit of being an early-career physician-investigator at the University of Miami Miller School of Medicine is all the research expertise nearby. Two programs help young researchers take full advantage of this invaluable resource.



The Resident Scholarly Activity Program offer hands-on, experiential learning.

The Resident Scholarly Activity Program (RSAP) – now more than 10 years old – helps residents and fellows develop a research idea by working one on one with an experienced faculty member.

“This is a successful program,” said Ana Palacio, M.D., MPH,

associate professor of clinical medicine at the Miller School and co-director of RSAP. “We offer hands-on, experiential learning, and residents and fellows are mentored and supported throughout.”

The program helps many first-time investigators achieve the ultimate goal – presenting their findings at a major medical conference or publication in a peer-reviewed journal.

This gives investigators the ability to choose the research they want to explore, which can make learning experiences more relevant.

“Our residents are given the opportunity to experience firsthand what academic medicine is; how knowledge is created, interpreted, and shared; and how their own lives fit into this continuum,” said Leonardo Tamariz, M.D., MPH, RSAP co-director and associate professor of medicine.

The RSAP program continues to evolve.

“Since its launch in 2007, we have tweaked RSAP in several ways to make it more resident-friendly,” Dr. Palacio said.

An initial one-month, mandatory rotation is now a voluntary, six-month program. The program is also more flexible – residents and fellows participate when they feel ready during their first, second, or third year of training.

Participants are encouraged to secure a concrete idea and a mentor in advance. RSAP staff can assist residents and fellows who need help with these requirements.

Another aim of the program is to help participants stay

focused on research goals.

“When someone graduates from residency or fellowship, they have a finite number of years to get a career started in research,” Dr. Palacio said. “If you don’t start thinking about your research right away, the train can leave the station, and it’s too late.”

Originally launched in the Department of Medicine at the Miller School, RSAP is now supported by the Office of Graduate Medical Education and has expanded to residents and fellows in all medical disciplines across campus.

Based on its success, RSAP also inspired the creation of the University of Miami Program in Research Education (UMPIRE) two years ago. Its mentors help junior faculty members take advantage of early-career grants, prioritize research efforts, and likewise transform their ideas into published results. UMPIRE is supported by the Educational Development Office and collaborates with the Miami Clinical and Translational Science Institute.

“New faculty are busy in clinic and face challenges seizing all the opportunities available to develop their own research careers,” Dr. Palacio said. “We can help faculty navigate these initial stages of their careers with a more hands-on curriculum.”

By elevating the research expertise of junior faculty, UMPIRE also creates a larger pool of mentors to guide residents and fellows.

“When we analyzed our data, we found that a key to success for

the residents is having mentors who are successful themselves – those who publish and know how to get grants,” Dr. Palacio added.

Oriana Damas, M.D., assistant professor of clinical medicine in the Division of Gastroenterology, exemplifies what these two programs hope to accomplish. As a resident, she participated in RSAP and published her research. Later, after completing a fellowship, she joined the Miller School faculty. Dr. Palacio has been mentoring her through the UMPIRE initiative.

“These programs have been extremely useful to my career development,” Dr. Damas said. “Through RSAP, I learned basic statistics and how to design my first publication, which is relevant to my current research.”

She just received a fundable score in a K23 early-career grant to study how genetics and dietary factors affect the development and severity of ulcerative colitis in Hispanic populations.

“As junior faculty, it was extremely helpful to become part of a program like UMPIRE,” Dr. Damas said. “Through this program, I learned about different institutional resources available to me on this campus. Most importantly, I was able to meet individually with UMPIRE mentors. They helped me power the analysis and design the methods section for a competitive K23 award, as well as address the reviewer’s critiques on two manuscript publications. This type of guidance for junior faculty is exceptional and extremely valuable.”

“Dr. Damas’ success makes our medical school stronger,” Dr.

Palacio said. “We hope that more junior faculty take advantage of these resources.”

On the whole, the two programs aim to improve the quality and number of research projects across the university.

“These programs are very successful relative to programs at other institutions,” Dr. Palacio said. “We think it’s because, in part, our programs are much more focused on the mentoring component. They are more intense and more in line with what the resident needs.”