Dr. Juan Pretell Receives Rosa Family Award for Outstanding Work in Orthopaedics

Juan Pretell, M.D., a researcher at Sylvester Comprehensive Cancer Center and associate professor of orthopaedic surgery at the University of Miami Miller School of Medicine, has been selected as the 2021 Rosa Family Award winner for his contributions to the orthopaedic field. The award was created to recognize outstanding academic achievement, new programmatic development, and education — all vital pillars of the orthopaedic community.

“To receive this award was not only a recognition for my work within those pillars but also a recognition of the whole department, which includes our orthopaedic surgery residency program that is the core of our hard work,” Dr. Pretell said.

The Miller School Impact

Dr. Pretell became associate professor of orthopaedics in 2019, reflecting his long-term contributions to research, education, and service at the Miller School.

As a leader in the oncology division, he oversees and coordinates clinical research, which has led to 10 publications in national and international journals this year alone. He participates in the health system’s Breast Cancer Tumor Board, GU Cancer Tumor Board, and Dermatology Cancer
Tumor Board, and is also a member of national professional organizations, including the American Academy of Orthopedic Surgeons (AAOS) and the Musculoskeletal Tumor Society.

Dr. Sheila Conway, right, Chief of the Division of Orthopaedic Oncology in the Department of Orthopaedic Surgery at the Miller School of Medicine, presents Dr. Juan Pretell with the Rosa Family Award.

Dr. Pretell has fostered a collaborative environment supporting orthopaedics in research and education at the Miller School and improving the multidisciplinary care of orthopaedic patients within the University of Miami Health System. He is also part of the faculty of the International
Course Disasters in Arthroplasty.

Dr. Pretell is a member of the orthopaedic interest group, having several medical students shadow him during the year. He established permanent research guidance for students, creating a research group to teach them how to navigate publication steps while working on different projects.

His effort isn’t only noted at the Miller School but in external institutions working with students at Nova Southeastern University Dr. Kiran C. Patel College of Osteopathic Medicine and the Universidad Peruana Cayetano Heredia - Facultad de Medicina Alberto Hurtado, a Peruvian medical school.

Part of what made Dr. Pretell stand out in his nomination was being able to finalize the registration of UM into the tumor registry of the AAOS. Doing so made the division part of a national network of cancer centers and increased opportunities for inter-institutional research, while boosting the recognition of UM among other institutions, both nationally and internationally.

He has also been instrumental in making sure the latest technology in orthopaedic oncology is available at UHealth, including using patient-specific cutting jigs for complex resections and patient-specific endoprosthetic replacement for the reconstruction of major oncological resections. In addition, the use of navigation systems and implants such as carbon fiber nails/plates, IllumiNOS, and LUMIC prosthesis (which was the 15th case done in the USA) places the Sylvester Comprehensive Cancer Center as one of the top national centers.
Future Prospects

Dr. Pretell continues his main research interest in treating musculoskeletal metastatic diseases from carcinomas and sarcomas. His work focuses on developing ways to better assess risk for pathological fractures using advanced imaging such as PET-CT as well as for assessing aggressiveness and treatment response in sarcomas, treatment of soft tissue sarcomas regarding resections margins, and characteristics of different patient populations such as elderly patients.

“Recently, our division was included in the tumor registry of the AAOS, and we will work on including our patients so we can contribute nationally to the progress of our field,” he said. “I have also been working on a Da Vinci Robot, an aid for surgical resection of pelvic tumors. This facilitates the work in the inner pelvis, decreasing the time of open surgical fields during surgery. This is something that I have used once in the past for a peri-acetabular resection using 3-D printed custom jigs and the Da Vinci for dissection (with the urology team) in the inner pelvis. This revolutionary technique is still in the early exploration phase to see the real advantage and possibilities that can be obtained.”

The Rosa Family Award in orthopaedics is presented annually to one orthopaedic faculty member to recognize academic achievement, new programmatic development, and education. This award is meant to shine a light on those faculty who excel as teachers and contribute to the department as academic physicians, leaders, and innovators. The award ensures formal recognition for their accomplishments and contributions and provides funding for individualized faculty development opportunities. A longtime friend to the department, Dr. Howard
Rosa has been an advocate for advancing orthopaedic research, education, and clinical care.

In 2016, he generously endowed the Rosa Family Award to honor an orthopaedic faculty member each year to recognize their achievements in education, mentorship, and leadership.