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**National Cancer Institute Awards UAMS Researchers
\$2.26 Million to Continue Multiple Myeloma Study**

LITTLE ROCK — University of Arkansas for Medical Sciences (UAMS) researchers Teresita Bellido, Ph.D., and Jesus Delgado-Calle, Ph.D., recently received a five-year, \$2.26 million continuation award from the National Cancer Institute.

Bellido is a professor and chair of the Department of Physiology and Cell Biology in the UAMS College of Medicine, while Delgado-Calle is an associate professor in the department.

The R01 grant, originally awarded in March 2017, supports the study, “Contribution of Osteocytes to the Musculoskeletal Effects of Multiple Myeloma.”

The overall goal of the study is to determine the role of osteocytes, the most abundant type of bone cells living within mineralized bone, in multiple myeloma tumor microenvironment, which consists of the environment around a tumor, including nearby blood vessels and healthy immune cells. The current grant will use genetic and pharmacological approaches to investigate the contribution of osteocyte-derived FGF23 on multiple myeloma growth, the associated bone disease, and resistance to chemotherapy. Results from these studies will pave the road for the development of new therapeutic interventions targeting osteocytes.

“It is exciting to continue working on this project. We were very productive in the first cycle of this grant and established a paradigm shift in the field of cancer in bone by showing that osteocytes, cells buried within the bone mineral, are part of the niche that regulates multiple myeloma cancer growth,” said Bellido.

“These funds will allow us to study the consequences of interrupting the communication between myeloma cancer cells and osteocytes on tumor growth, bone disease and resistance to chemotherapy,” Delgado-Calle said.

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The continuation award, which runs through June 2028, also allows for an investigation of the impact of Burosumab, an anti-FGF23 neutralizing antibody, on different aspects of multiple myeloma disease and how it interacts with other treatments commonly used to treat myeloma patients, Delgado-Calle added.

Bellido noted the educational facet of the award.

“An important aspect of this research is the opportunity to train junior investigators and research personnel. Our team is composed to highly trained technical personnel, a staff scientist, two graduate students and one postdoctoral fellow. I look forward to seeing them presenting the work in scientific meetings, writing manuscripts and advancing their careers.”

UAMS is the state’s only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; a hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS’ clinical enterprise. UAMS is the only adult Level 1 trauma center in the state. UAMS has 3,240 students, 913 medical residents and fellows, and five dental residents. It is the state’s largest public employer with more than 11,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children’s, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on [Facebook](#), [Twitter](#), [YouTube](#) or [Instagram](#).

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