

Investigator:	<b>Moulay Hicham Drissi</b> Phone: (404) 321-6111 ext. 3248 Email: mdrissi@emory.edu
Primary Research Interest:	Biology
Description of Research:	<p>The research in my laboratory focuses on establishing the cellular and molecular mechanisms that govern skeletal tissue repair and regeneration. Specifically, our goal is to identify molecular switches that can influence disease progression and potentially enhance our therapeutic strategies to treat osteoporosis, osteoarthritis, fracture healing, degenerative disc disease and traumatic injuries to the joints. My current NIH funded program has been focusing on establishing a for for a key regulator of hematopoiesis in bone turnover during skeletal homeostasis and bone repair. The other Program is geared towards establishing a cell based therapy for intervertebral disc degeneration using pluripotent stem cells. Finally, My laboratory has developed a novel stem cell strategy to regenerate articular injuries with permanent cartilage. This stem cell grant from the Connecticut stem cell initiative recently expired and I am ready to submit a new application to a federal funding agency to continue this highly relevant work to the VA. I have worked in collaboration with the pharmaceutical industry and received unrestricted grant funding from Merck to study the role of Cathepsin K inhibition on fracture healing and osteoarthritis. My laboratory continues to explore the potential of such therapies for musculoskeletal injuries.</p>
Relevance to VA:	<p>I have had a long standing commitment to skeletal tissue repair and regeneration for the past 15 years. My commitment to better understanding the mechanisms of fracture repair to accelerate and improve healing is also complimented by my interest in cartilage and intervertebral disc repair and regeneration using stem cells. These lines of research are highly relevant to the VA as our veterans often suffer from orthopedic related injuries that fail to heal properly. From an academic perspective, I have consistently served as an opinion leader on DOD grant evaluations as it pertains to post-traumatic osteoarthritis, bone repair and regeneration and osteoarthritis. I have also served as an ad-hoc reviewer for the VA in the past as an expert in metabolic bone diseases. My commitment to advancing therapeutic strategies to enhance VA patient care is underscored by my sustained commitment to orthopedic translational research as Vice Chair of Research in The Department of Orthopedic Surgery.</p>