VANDERBILT UNIVERSITY MEDICAL CENTER

Vanderbilt Orthopaedic Institute

A postdoctoral position is available in the Department of Orthopaedic Surgery at VUMC. The postdoctoral researcher will work as part of a high-energy translational research team broadly focused on determining the molecular mechanisms of the immediate and late complications following severe injury. Specifically, this position will be supported by a VA-funded project investigating mouse models of polytrauma that cause complications during the repair of musculoskeletal tissue. Studies will involve injuries to bone, muscle, and skin; assessments of fibrosis, fracture repair, cognitive function, pain sensitivity, and quantification of hyperinflammation markers. In addition to the animal work, the postdoctoral researcher will have the opportunity to collaborate on clinical research projects assessing patient responses to surgery and trauma prospectively.

Applicants being sought will have completed a PhD in molecular biology, pathology, biomedical engineering, or pharmacology. Beyond these fields of study, applicants with dissertation research related to musculoskeletal biology, matrix biology, or biochemistry will also be considered. Preference will be given to candidates with expertise handling rodents, *in vivo* imaging (such as DXA, high-resolution QCT, fluorescence and bioluminescence imaging), assessing cognitive function of rodents, and performing histology or multiplex ELISAs. Applicants should desire to work as part of a collaborative research team and possess excellent written and oral communication skills.

The postdoctoral researcher will work closely with Dr. Jeffry Nyman (Department of Orthopaedic Surgery and Biomedical Engineering) and Dr. Jonathan Schoenecker (Department of Orthopaedic Surgery, Pathology, Pharmacology and Pediatrics) as well as research staff and students of the Vanderbilt Center for Bone Biology. Expectations include working independently and efficiently, communicating clearly across multiple disciplines (biology, engineering, imaging, orthopaedics, and endocrinology), preparing high quality figures and manuscripts, and interacting with clinicians and translational scientists.

Interested candidates should submit a cover letter with future research plans, curriculum vitae, and the names and e-mail addresses of three (3) references to jeffry.s.nyman@vumc.org.