



RUSH UNIVERSITY MEDICAL CENTER

Post-Doctoral Positions in Chicago

NIH T32 Training Grant in Joint Health
Rush University Medical Center
Chicago, IL.

PI: Rick Sumner, PhD

Co-Directors: Anne-Marie Malfait, MD, PhD
and Markus Wimmer, PhD

Overview

This multi-disciplinary post-doctoral training program in musculoskeletal biology emphasizes research training in joint health, encompassing three major programmatic areas: osteoarthritis, total joint replacement and small molecule therapeutics. Training will take place in the laboratories of NIH funded faculty in two basic science departments (Cell & Molecular Medicine and Physiology & Biophysics) and three clinical departments (Internal Medicine, Orthopedic Surgery and Pediatrics). The preceptors are internationally respected scientists and physician-scientists devoted to musculoskeletal research, with a special focus on osteoarthritis (including pain), cartilage and bone biology, total joint replacement, and muscle physiology. We encourage candidates with a medical, dental or veterinary degree to apply in addition to those with PhD's. Trainees will also have the opportunity to participate in a unique mentoring program. After completing our program, the trainees will be well-positioned to become independent, team-oriented principal investigators. The program also supports 3-month "short-term" training for medical students.

Web page: <https://www.rushu.rush.edu/nih-t32-training-grant-joint-health>

Eligibility

U.S. citizen or permanent residency status required

Application process

Please contact Dr. Sumner (rick_sumner@rush.edu) if you are interested. Feel free to contact the training grant faculty directly to learn more about their research.

Training Grant Faculty – Rush Joint Health T32

Mentor	Research area	e-mail
Chubinskaya, Susan	Osteoarthritis, cartilage trauma, human donor tissue	Susanna_Chubinskaya@rush.edu
Fill, Michael	Small molecule therapeutics, Intracellular Ca, muscle, ryanodine receptor, inositol trisphosphate receptor	Michael_Fill@rush.edu
Gupta, Vineet	Small molecule therapeutics, inflammation, autoimmune diseases, CD11b/CD18 agonists, lupus	Vineet_Gupta@rush.edu
Hallab, Nadim	Total joint replacement, Implant degradation, biological reactivity to implant debris, inflammasome, immunity, metal sensitivity	Nadim_Hallab@rush.edu
Jacobs, Josh	Total joint replacement, retrieval analysis, biocompatibility, corrosion and wear	Josh_Jacobs@rush.edu
Lundberg, Hannah	Total joint replacement, computational biomechanics, finite element analysis	Hannah@rush.edu
Maki, Carl	Small molecule therapeutics, cancer cell biology, p53, therapy resistance, osteosarcoma	Carl_Maki@rush.edu
Malfait, Anne-Marie	Osteoarthritis, pain, cartilage, heritable connective tissue diseases	Anne-Marie_Malfait@rush.edu
Mikecz, Kati	Inflammatory arthritis, rheumatoid arthritis, CD44 therapy, intravital video microscopy, leukocyte trafficking	Katalin_Mikecz@rush.edu
Miller, Rachel	Osteoarthritis, mechanical forces, pain, joint damage	Rachel_Miller@rush.edu
Plaas, Anna	Osteoarthritis, hyaluronan metabolism, inflammation, tendinopathy, regeneration	Anna_Plaas-Sandy@rush.edu
Pratap, Jitesh	Regulatory mechanisms of bone metastasis	Jitesh_Pratap@rush.edu
Pourzal, Robin	Total joint replacement, failure analysis, retrieval studies, adverse local tissue reaction	Robin_Pourzal@rush.edu
Ramos-Franco, Josefina	Small molecule therapeutics, intracellular Ca signaling, chondrocytes, osteocytes, inositol trisphosphate receptor, OA pain	Josefina_Ramos-Franco@rush.edu
Rios, Eduardo	Small molecule therapeutics, calcium signaling, skeletal muscle	Eduardo_Rios@rush.edu
Ross, Ryan	Role of mineralization and other bone quality factors that influence skeletal function	Ryan_Ross@rush.edu
Shafikhani, Sasha	Small molecule therapeutics, wound healing, immune dysregulation, articular cartilage	Sasha_Shafikhani@rush.edu
Sumner, D. Rick	Total joint replacement, bone regeneration, bone quality, peri-implant osteolysis, biomarkers, osteoarthritis	Rick_Sumner@rush.edu
Wimmer, Markus	Total joint replacement, tribology, motion analysis, joint biomechanics, articular cartilage mechanobiology	Markus_A_Wimmer@rush.edu

Note: Additional junior faculty at Rush can also serve as a primary mentor as long as there is a co-mentor from the above list. Please inquire.