

Title of Program: Pathogenesis of Osteoarthritis and Small Molecular Drugs

Dept/Center/Lab: [Orthopedic Surgery/Orthopedic Research Biology II](#)

Principal Mentor: [Yubo Sun, PhD](#)
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Alex Kiraly, PhD Postdoctoral
Fellow Orthopedic Biology
Research

Summary Description:

We carry out cellular and animal studies designed to improve our understanding of the pathogenesis of osteoarthritis and develop small molecular drugs for intervention. Active projects include investigation of small molecule drugs for osteoarthritis therapy using animal models and identification of key disease pathways in osteoarthritis.

Expectations and Role of Student

The successful student should have biology or chemistry background and will mainly work on a project to microscopically examine articular cartilage, growth plate cartilage, bone or intervertebral disc of Hartley guinea pigs treated with experimental small molecule drugs. Students will be active participants in original research work, which may lead to an abstract.