# Postdoctoral Fellow – Gene Therapy in Inflammatory Arthritis

Department of Medicine/Rheumatology and Horae Gene Therapy Center,

## University of Massachusetts Medical School

## Responsibilities:

## 1. Inflammation, Bone Biology, and Gene Therapy

- Design and carry out experiments to explore how our novel regulators in immune cells and/or bone cells control inflammation-associated skeletal diseases such as rheumatoid arthritis and ankylosing spondylitis.
- Design and carry out experiments to understand how dysregulation of these regulators contributes to the pathogenesis of inflammation-associated skeletal diseases.
- Design and carry out experiments to develop potential gene therapy for the treatment of inflammation-associated skeletal diseases using recombinant adeno-associated virus (rAAV).

#### 2. Others

- Oversee technician and students working on related projects.
- Prepare oral presentations for program/department research in progress meetings, submit abstracts for poster and oral presentations at national/international meetings.
- Write up research results for publication.

## **Requirements:**

PhD in Immunology, Bone Biology, Cell Biology, Molecular Biology or related discipline.

Working knowledge of either immunology or bone biology or both if possible.

Hands-on laboratory experience in relevant methodologies, trouble-shooting technical problems, and data analysis skills are required;

Experience in the following techniques preferred: multicolor flow cytometry, preparation of lymphoid/myeloid cells, isolation and cell culture of lymphocyte/myeloid populations, DNA/RNA purification and quantification, qPCR, immunoblotting, enzyme-based immunoassays, histology for bone and/or soft tissues, and immunohistochemistry/immunofluorescent/confocal microscopy, database comparisons.

Outstanding organizational and time management skills, as well as the ability to communicate in English and work both independently and as part of a team in a fast-paced environment.

### **University of Massachusetts Medical Center:**

Find out more about the UMMS research community at http://www.umassmed.edu/research-home/

The position includes opportunities for project and career development, interaction with a diverse, talented and collegial immunology community at UMMS.

UMass Medical Center is an equal opportunity employer.

## To apply for this position:

Send your CV and the contact information for three references to jaehyuck.shim@umassmed.edu