# **Skeletal Biology & Regeneration**

Area of Concentration

**UCONN** Health

**Biomedical Sciences PhD** 

### What you should know about our program

- An area of concentration within the Biomedical Sciences PhD Program
- Explores the cellular, molecular and genetic processes related to skeletal development, skeletal diseases, injuries and their regeneration
- A highly multi-disciplinary program that includes over 25 research labs at UCONN
- A vibrant educational environment that includes scientific symposia, seminar series, social events, and opportunities for outreach

## Research Areas

**Stem Cells** 

**Cartilage and Bone Differentiation** 

Osteoporosis

**Bone Remodeling** 

**Bone Fracture Repair** 

**Biomaterials** 

**Scaffold Design** 

**Osteoarthritis** 

**Biomechanics** 

**Aging** 

**Limb and Craniofacial Development** 

Oral Infection and Biofilms

Osteosarcoma and Endocrine Tumors

**Drug and Stem Cell Delivery** 

Rare Skeletal Diseases

## To Learn More About Our Program Please Visit:

Program Website: https://bit.ly/35zCanA Introductory Video: https://bit.ly/3gcPxlb

#### Program

#### Welcome

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On behalf of the faculty representing the **Skeletal Biology & Regeneration Program**, we would like to welcome you to the UCONN Health Open House.

It's a very exciting time to be in the field of skeletal biology and tissue regeneration. Scientific breakthroughs in a variety of disciplines such as, stem cell biology, genomics, imaging, and tissue engineering have truly revolutionized our understanding of the human skeleton.

A common misconception of visiting students regarding our program is the belief that a background in skeletal biology is needed for entering our program. In reality, we view students educated and trained outside our immediate field as a strength.

Laboratories in *Skeletal Biology and Regeneration* work in human, mouse and zebra fish systems; study transcriptional, post-transcriptional and epigenetic mechanisms regulating gene expression; utilize mouse and iPSC models of human diseases; use novel biomaterials to facilitate drug delivery and defect repair.

All students interested in the Skeletal Biology and Regeneration Area of Concentration must first be accepted into the Biomedical Science PhD graduate program. Once accepted, you will rotate through various laboratories. to help you decide on a lab and thesis advisor for your PhD work.

The link for the application is:

http://grad.uchc.edu/prospective/programs/phd\_biosci/apply.html

Please contact us if you have any questions about our program. We look forward to meeting you!

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