**SKELETAL BIOLOGY**

**NATIONAL INSTITUTE OF DENTAL AND CRANIOFACIAL RESEARCH**

**POSITION DESCRIPTION:**

We are looking for a dynamic post-doctoral fellow (recent graduate or up to two years post-graduate experience) to lead our studies on the use of skeletal stem cells and differentiated induced pluripotent stem cells to regenerate stable cartilage.

The Robey lab (the Skeletal Biology Section) at the NIDCR/NIH is interested in studying the biology of skeletal stem cells, the role that they play in skeletal diseases and disorders, and how they can be used in tissue engineering. The laboratory is conducting pre-clinical studies with high translational impact. We have recently identified a scaffold that promotes the formation of stable cartilage by bone marrow stromal cells, a subset of which are skeletal stem cells. Furthermore, we have devised methods to differentiate human pluripotent stem cells into osteogenic and chondrogenic cells. Lastly, we have developed several animal models for studying the in vivo regeneration of bone and cartilage using different cell populations. Future studies will focus on further characterization of cells that form bone and cartilage, determination of the mechanisms of cell fate choices and differentiation, and optimization of ways to utilize these cells for skeletal tissue regeneration

The NIDCR has several core facilities, including the Veterinary Research Core, Combined Technical Research Core, Imaging Core, Gene Targeting Core and the Genomics and Computational Biology Core to assist in these studies. The postdoctoral scientist will utilize the cores to study the cells and animal models to define mechanisms operating during cartilage regeneration.

**Qualifications:**

A background in cell biology is required. Experience in animal handling techniques would be beneficial.

**To Apply:**

Please submit a single PDF including your CV, bibliography, statement of research interests (not to exceed one page), and the names of three references to:

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