BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. 
Follow this format for each person.  **DO NOT EXCEED FOUR PAGES.**

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregizer, Steven Karl</td>
<td>Postdoctoral Research Fellow Trainee</td>
</tr>
</tbody>
</table>

**eRA COMMONS USER NAME (credential, e.g., agency login)**
pregizers

**EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)**

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE</th>
<th>MM/YY</th>
<th>FIELD OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Master's College (Newhall, CA)</td>
<td>B.S.</td>
<td>05/02</td>
<td>Biological sciences</td>
</tr>
<tr>
<td>University of Southern California (Los Angeles)</td>
<td>Ph.D.</td>
<td>08/08</td>
<td>Molecular biology</td>
</tr>
<tr>
<td>Vanderbilt University (Nashville, TN)</td>
<td>Postdoctoral</td>
<td>n/a</td>
<td>Molecular biology</td>
</tr>
</tbody>
</table>

**A. Personal Statement**

The goal of the proposed research is to ascertain the role of endogenous Bmp2 expressed by chondrocytes. Specifically, we plan to remove Bmp2 from hypertrophic and articular chondrocytes using Cre-Lox technology and to identify the consequences for development and maintenance of the skeletal tissues. As a postdoctoral researcher, I bear primary responsibility for carrying out the proposed work. I have been thoroughly trained as a molecular biologist, first as a graduate student in the lab of Dr. Baruch Frenkel at the University of Southern California and now as a postdoc in Dr. Mortlock's lab at Vanderbilt University. In both labs, my research projects focused on the molecular biology of the skeleton, with a particular emphasis on gene regulation in osteoblasts and chondrocytes. In Dr. Mortlock's lab, I made the discovery that Bmp2 is expressed robustly in hypertrophic chondrocytes during postnatal development, as well as in adult articular chondrocytes. The current application builds logically on my previous work and takes advantage of skills I have acquired during my training. It also takes advantage of skills possessed by others with whom I have developed close professional relationships during my time at Vanderbilt. This includes Dr. Florent Elefteriou and Dr. Matt Stewart, who provide expertise in pathology of bone and cartilage, respectively. In summary, I have the motivation, expertise, and collaborative network necessary to carry out the proposed work successfully.

**B. Positions and Honors**

**Positions and Employment**

1998-2002 Research Assistant, Department of Biological Sciences, The Master’s College, Newhall, CA

**Professional Memberships**

2010- Member, American Society for Bone and Mineral Research

**Honors**

1999 Freshman chemistry award, The Master’s College, Newhall, CA
2002 B.S. awarded with highest honors, The Master’s College, Newhall, CA
2002 Outstanding graduate in the biological sciences, The Master’s College, Newhall, CA
C. Selected Peer-reviewed Publications


D. Research Support

Ongoing Research Support

F32 AR057649-03 Pregizer (PI) 08/12/2010 - 08/11/2013
NIH/NIAMS
Identification of the Bmp2 Chondrocyte Enhancer
The goal of this project is to map sequences that mediate Bmp2 expression in mouse chondrocytes. This will be accomplished by generating and testing a series of BAC- and plasmid-based reporter constructs in transgenic assays. Additionally, these constructs will be used to validate a chondrocyte culture model that can be used to further dissect the mechanisms of Bmp2 regulation in this cell type.
Role: PI