

Request for Input on Needs in Musculoskeletal Development Research for NIAMS/NIH

Dear Colleague,

I write to ask if you could help me out with this request. I have been asked by Dr. Steve Katz, director of NIAMS, to canvas my colleagues regarding their thoughts on the current opportunities and needs in musculoskeletal research, specifically in the area of developmental biology. This includes development of all of the tissues and cell types of the skeleton (bone, cartilage, tendon, ligament, disc etc.). In addition to regulation of the growth plate, limb patterning, and regeneration, it would also include aspects of tissue engineering and regenerative medicine since how cells differentiate into specific cell types is a main theme in developmental biology.

This information will be used to plan the future directions of NIAMS so any thoughts on big picture questions would be helpful. The musculoskeletal biology and diseases program at NIAMS focuses on understanding the fundamental biology of tissues that constitute the musculoskeletal system, and on translating and applying this knowledge to a variety of diseases and conditions. In the end the goal is to improve diagnosis and treatment of skeletal disorders as well as repair damage to otherwise healthy tissue. What will help us reach this goal? For example, what type of collaborations would move basic knowledge in skeletal development to application, what type of resource centers are needed, what programs that are in place now do you think are important and what programs would be useful in the future. What gaps and opportunities do you see in basic research on skeletal development and translating this research?

I think this is a good opportunity to have our thoughts and concerns heard and increase awareness of the importance of understanding developmental biology. I would like to canvass as many groups as possible to get a good consensus about what people are thinking.

In any case I will need the information by **October 31, 2008** so that I have time to read over everything and write up a summary. Interested parties can respond to me directly at rserra@uab.edu

Thank you,

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