

## DIRECTOR'S NOTES

A multidisciplinary group of clinical and basic research faculty are in the process of accelerated strategy planning for a comprehensive bone, joint and pain program for the UAB Highlands' campus. This planning process should be completed by mid-March. The program vision is to provide an outstanding comprehensive program of discovery and clinical care in musculoskeletal health.

The CMBD received a priority score of 130 for its competing continuation NIH T32 Institutional Training Grant submitted in May 2006. This grant, entitled Comprehensive Training Grant in Bone Biology and Disease, supports three predoctoral and three postdoctoral trainees. Following is a quote from the summary statement: "The program design is very strong and the structure is well conceived. Other strengths of the application include a well balanced training faculty in both the basic and clinical sciences, and outstanding leadership of the program director". We are awaiting a funding decision from NIH.

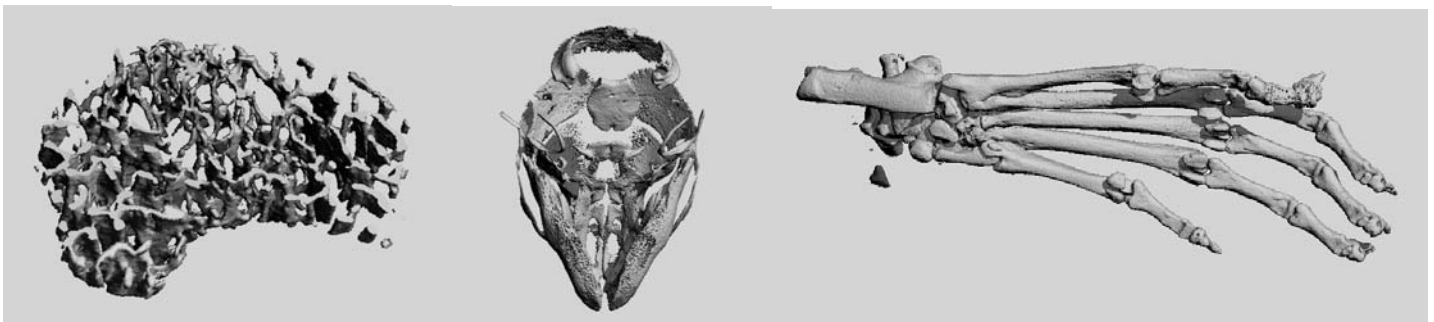
On June 29, 2007 the CMBD will host a Mini Symposium on Translational Research in Bone Disease. Please mark this date on your calendar. Two outstanding experts will participate: Dr. Thomas A. Einhorn, Professor and Chair, Department of Orthopaedic Surgery, Boston University School of Medicine, and Dr. William V. Giannobile, Najjar Professor of Dentistry and Director, Michigan Center for Oral Health Research. Also scheduled to participate are two of the three funded CMBD NIH RCC pilot and feasibility investigators: Dr. Majd Zayzafoon (Project Title: NFAT Negatively Regulates Osteoblast Differentiation and Bone Formation) and Dr. Shawn R. Gilbert (Project Title: Role of Hypoxia in Bone Formation). A complete program will be included in the April 2007 CMBD Newsletter.

Discussed below is an overview of the new high resolution MicroCT (Scanco) in the Small Animal Phenotyping Core provided by its Director, Timothy R. Nagy, PhD. This core is partially funded by the CMBD's NIH Research Core Center grant entitled UAB Core Center for Basic Skeletal Research.

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## MICRO-COMPUTED TOMOGRAPHY

The Small Animal Phenotyping Core is pleased to offer services related to imaging of isolated bones. With the use of our new Scanco 40 microcomputed tomography instrument ( $\mu$ CT; Scanco Medical, Bassersdorf Switzerland), we have the capability of imaging bones with widths up to 36 mm and 80 mm in length. Six  $\mu$ m resolution is possible in bones of less than 12 mm in width (mouse and rat long bones) scanned at high resolution. Information on trabecular bone (bone volume, density, trabecular number, separation, density and thickness) and cortical bone (bone volume, density, cortical thickness and moments of inertia) are available from the scans. Additionally, bones can be sent to the core in formalin or other preservatives so that histomorphometry can be conducted after the imaging is completed. For more information on the system and services offered, please contact Dr. Tim Nagy at 4-4088.



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