

DIRECTOR'S NOTES

In May 2001, the UAB Center for Metabolic Bone Disease (CMBD) resubmitted a training grant to NIH entitled Comprehensive Training Grant in Bone Biology and Disease in which three predoctoral and three postdoctoral slots per year are requested. The excellence and innovation demonstrated by the research programs in bone biology and disease at UAB, together with the unique interdisciplinary resources, provide a truly outstanding training environment. We are optimistic about obtaining funding for this training program. The recently funded NIH Research Core Center, entitled UAB Core Center for Musculoskeletal Disorders, is active (funding began on May 1, 2001) with the three cores and three pilot and feasibility studies gearing up to further the research in bone biology and disease.

In addition, the CMBD has secured space in the new Interdisciplinary Research Building due for completion in 2004 that will bring together key faculty of the CMBD, the Implant Technology Program, the Center for Cell Adhesion and Matrix Research and the High Resolution Imaging Core Facility in a shared environment.

Two well-known physicians will be visiting the CMBD and participating in our CMBD Visiting Expert/Speaker Program in the next two months. They are: **Joseph M. Lane, MD**, Professor and Chief, Metabolic Bone Disease Service, Hospital for Special Surgery, New York, NY and **Ernesto Canalis, MD**, Professor, Department of Research, St. Francis Hospital Medical Center, Hartford, CT.

- **Joseph M. Lane, MD** • August 23, 2001 • 4:30-5:30 pm in WP Conf. Center • Title: To be announced
- **Ernesto Canalis, MD** • September 6, 2001 • 4:30-5:30 pm in WP Conf. Center • Title: To be announced

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BONE IMAGING SERVICES

The Division of Physiology and Metabolism (Department of Nutrition Sciences) and the Clinical Nutrition Research Center (CNRC) would like to inform investigators at UAB of the resources that we have available for determining body composition (fat and lean) and bone mineral density (areal and volumetric) in animal models. The instruments available include a computed tomography scanner (Stratec/Norland XCT SA+ pQCT), two "mouse" DXA's (GE-Lunar PIXIMUS and Norland pDEXA SABRE), and a clinical DXA capable of measuring animals ranging in size from rats to humans (GE-Lunar Prodigy).

Our laboratory has been instrumental in validating the use of these instruments for small animal research. We were the first to validate the GE-Lunar PIXImus DXA for measuring bone mineral and body composition in mice (*Obesity Research*, 8:392-398; 2000) and for bone mineral in intact and excised hindlimbs from rats (*J. Bone Mineral Research*, in press; 2001). A preliminary validation study for measuring bone content and body composition of intact rats using the GE-Lunar Prodigy DXA has yielded excellent results (*Obesity Research*, in press; 2001). Both of these instruments allow for rapid measurements (< 5 min) and can be performed on anesthetized animals.

Our most recent acquisition is the computed tomography scanner, which can be used with small animals (or excised bones) less than 90mm in diameter. The instrument is capable of measuring volumetric bone mineral density of both cortical and trabecular bone. In addition, we have used the instrument to measure percent body fat in mice, and are developing methods based on attenuation values for measuring relative fat content of specific organs.

All of these instruments are readily available to investigators within and outside of the UAB research community. Support from the CNRC subsidizes costs for investigators conducting research sponsored by a federal research grant, and for certain other categories of research. Use of the instruments is not contingent upon CNRC membership. If you are interested in learning more about these resources, please contact Dr. Tim Nagy (tnagy@uab.edu).

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