

DIRECTOR'S NOTES

The Center for Metabolic Bone Disease (CMBD) continues to be active on many fronts. The CMBD has submitted highly competitive grant proposals to NIH, establishing itself among the leading metabolic bone programs nationally. We are very optimistic about obtaining Research Core Center funding from the NIH (priority score 151) and encouraged, but less optimistic, regarding funding for our first-time submission of a training grant entitled Comprehensive Training Grant in Bone Biology and Disease. It received a score of 181 and will likely have to be resubmitted. I personally would like to thank the many hardworking and dedicated members of the CMBD who have made these grant submissions possible. Since its inception, the CMBD membership has grown to include 75 faculty and continues to accept new members. For membership information, please contact me at the address below.

Dr. Sarah Morgan and I attended and spoke at the 2nd Annual Alabama Department of Public Health Osteoporosis Task Force meeting. Also, Dr. Morgan and Ms. Beth Kitchin have spearheaded the formation of the Community Advisory Committee that has now met twice. We are pleased to announce the establishment of a philanthropic fund associated with the CMBD entitled UAB Osteoporosis Fund for Excellence.

The HSF/GEF has played an important role in the development of the CMBD. Most recently, it provided funds to set up a bone histopathology laboratory described below.

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BONE HISTOPATHOLOGY CORE FACILITY

A centralized bone histopathology core laboratory has been established under funding from the HSF/GEF. Processing bone tissue requires highly specialized techniques, which require unique equipment and technical expertise. Although full computerized histomorphometric services are not yet available, the laboratory is now beginning to offer customized services on a limited basis. Initially, all services to members of the CMBD will be free with a modest charge for non-center members. A table outlining the four major methods available for processing bone samples with their advantages and disadvantages is provided below.

Major Advantages & Disadvantages of Various Techniques for Bone Sectioning

Section	Major Advantages	Major Disadvantages
Decalcified	<ul style="list-style-type: none"> ▪ Simplicity of handling ▪ Many tissue antigens can be preserved, particularly when EDTA method is used 	<ul style="list-style-type: none"> ▪ Loss of antigenicity ▪ Slow EDTA decalcification procedure (3-14 days)
Frozen	<ul style="list-style-type: none"> ▪ Preservation of certain antigens that may be altered by fixatives and/or decalcification procedure 	<ul style="list-style-type: none"> ▪ Need fresh tissue that must be processed immediately ▪ Freezing artifact
Ground	<ul style="list-style-type: none"> ▪ For study of interface of bone and metal implant ▪ Tetracycline-labeling study 	<ul style="list-style-type: none"> ▪ Thicker sections ▪ Time consuming (4-6 wks) ▪ Expensive (\$200/section) ▪ Not suitable for routine staining
Plastic	<ul style="list-style-type: none"> ▪ Avoid decalcification ▪ Preservation of morphologic details 	<ul style="list-style-type: none"> ▪ Not suitable for staining studies ▪ Not for metal implant

Up-to-date information regarding services provided by this core and ordering information can be found on the CMBD website (<http://www.path.uab.edu/cmbd/home.html>). To obtain personalized consultation call the Core Director, Kang-Jey Ho, M.D., Ph.D., a board certified pathologist, at 933-8101 Ext. 6464.

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