Notes From the Director

Welcome to the October issue of our CMBD quarterly newsletter. We have a lot of exciting projects and updates currently happening, and I'd like to briefly discuss a few of them with you. First, the CMBD enjoyed a very strong presence at this year's Annual Meeting of the American Society for Bone and Mineral Research (ASBMR), which was held in Minneapolis, MN, from October 12-16. Several UAB faculty, fellows, and students received awards at this year's program, and the CMBD would like to congratulate each of them for representing our University in such an important conference. Dr. Nicole Wright, from the Department of Epidemiology, was one of the seven recipients of this year's MARC Program travel awards to attend the conference; Paul Daft, from the Department of Pathology, and Dr. Huifeng Yun, from the Department of Health Care Organization & Policy, were both winners of the 2012 ASBMR President's Poster Competition; and finally, Mengrui Wu, from the Department of Pathology, received the 2012 ASBMR President's Award, which is given to the highest ranking abstract submitted by a student.

The recently organized "Diabetes, Obesity, and the Skeleton" collaborative focus group met for the first time on October 4th to discuss the possibility of establishing a group project that would utilize the expansive resources available at UAB and culminate in a joint grant submission, possibly to a Program Project opportunity. To work towards this goal, the focus group decided to hold a bi-monthly working luncheon which will include project presentations by two laboratories of the participating focus group faculty. Dr. Krista Casazza volunteered to lead the organization of the bi-monthly meetings, which will be held in SHEL 817. The first working luncheon presentations will be held at noon on December 13, 2012. Scientists from Drs. Barbara Gower's and Greg Clines' research laboratories will be presenting in the initial meeting. Please contact Ginny Duke at ginnyd@uab.edu if you would like to take part in this initiative.

I am pleased to announce that the CMBD will host a Symposium entitled "Osteoporosis: Biology & Targeting" on May 9th-10th, 2013, at the Edge of Chaos on campus. The symposium will be geared towards clinicians and basic
scientists at the Center, and will be designed to focus on the science and biology/genetics of bone disease and its clinical management. We are currently working to finalize the guest speaker list and will begin advertising for this exciting event very soon.

Finally, the CMBD recently launched a new website, and we would greatly appreciate if you would browse the new site and let us know of any comments or suggestions you may have, as this is an ongoing project and will be updated regularly. Please email Ginny Duke (ginnyd@uab.edu) with any suggestions you may have.

Best Regards,
Majd Zayzafoon, MD, PhD

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**CMBD Project Spotlight:**

*Pelvic Floor Symptoms and Bone Mineral Density in Women Undergoing Osteoporosis Evaluation*

The multidisciplinary research team of Holly E. Richter, MD, PhD, Sarah Morgan, MD, RD, CCD, Jonathan Gleason, MD, Jeff Szychowski PhD, Patricia S. Goode MD, and Kathryn L Burgio Ph.D. have completed a project exploring the relationship of pelvic floor symptoms and bone mineral density, funded by the UAB Protective Life Clinical Initiatives grant mechanism. Pelvic floor symptoms, including urinary and fecal incontinence and pelvic organ prolapse as well as osteoporosis are prevalent conditions in postmenopausal women. Because collagen and extracellular matrix remodeling are important factors in the development of both pelvic floor symptoms and osteoporosis, they explored the association between the two conditions.

Pelvic floor symptom questionnaires were mailed to women who had also had dual-energy x-ray absorptiometry (DXA) scans at the Kirklin Clinic. Multivariable logistic regression models controlling for age, race, body mass index, and COPD were performed comparing symptoms in women with osteoporosis and osteopenia at any site to women with normal BMD.

Although a robust dose-response relationship was not seen in women with decreased bone mineral density as compared to women with normal BMD in women undergoing osteoporosis evaluation, controlling for other confounding variables, those women with osteopenia were at increased risk of fecal incontinence, but not urinary incontinence. Osteoporotic women with the lowest T-scores had higher risk of moderate/large volume urinary incontinence. The research team hopes to use the preliminary data to evaluate a larger cohort of women with
the addition of characterization of bone turn-over and other connective tissue biomarkers and mechanisms linking low BMD and pelvic floor symptoms.

The paper resulting from this project is currently under review for publication.

Pilot & Feasibility Grant Award Announcements

Of the eleven excellent and very diverse applications we received in response to our Pilot & Feasibility RFA released this summer, three project's scores were exceptional. Congratulations to the following recipients of this award:

Joseph Pressey, MD
Associate Professor of Pediatrics
"Pilot Trial of Tamoxifen and Bevacizumab Combination Therapy for Osteosarcoma"
Co-Supported by the Division of Hematology & Oncology, Department of Pediatrics

Sasanka Ramanadham, PhD
Associate Professor of Cell, Developmental and Integrative Biology
"iPLA2Beta -Derived Lipid Signals and Bone Integrity"
Co-Supported by the Comprehensive Diabetes Center, the Department of Cell, Developmental, and Integrative Biology, and the Comprehensive Arthritis, Musculoskeletal and Autoimmunity Center

Lalita Shevde-Samant, PhD
Associate Professor of Pathology
"Reprogramming of Hedgehog Activity of Breast Cancer Cells in Bone"
Co-Supported by the Comprehensive Cancer Center and the Department of Pathology

Upcoming CMBD Special Seminar Guest Dr. Sarah Dallas

On November 16th, 2012, the CMBD will host a special seminar featuring Sarah L. Dallas, PhD, Associate Professor at the University of Missouri, Kansas City. The title of Dr. Dallas' talk will be "Cell and Extracellular Matrix Dynamics in Skeletal Tissues."

A graduate of the Royal Veterinary College at the University of London, England, Dr. Dallas is an experienced bone cell biologist with twenty years of experience in the field. She has directed NIH funded
research in her own laboratory for the last fourteen years with a research focus on bone extracellular matrix and osteocyte biology. The current research in Dr. Dallas' laboratory involves live imaging of cell and extracellular matrix dynamics in bone cells, and their work has revealed the dynamic nature of assembly of bone ECM proteins and the dynamic nature of bone cells, including osteocytes. Additionally, Dr. Dallas serves on the Editorial Board of the Journal of Bone and Mineral Research and is a permanent member of the Skeletal Biology Development and Disease (SBDD) study section at NIH.

2012-13 Journal Club and Seminar Series Schedule

The new format of the CMBD Journal Club and Seminar Series this fall has been a success thus far. Meetings are now the 1st/3rd Friday of every month at noon and have been well attended. Also, I am pleased to announce that the CMBD has joined up with the Rheumatology Journal Club to hold four shared meetings this academic year. These four meetings will be held in SHEL 105 and the dates and presenters can be found in the 2012-13 schedule.

If you are interested in presenting an article or giving a talk about your research please contact Ginny Duke at ginnyd@uab.edu or 205-934-6666.

Please contact Ginny Duke at ginnyd@uab.edu or 205-934-6666 with any news or topic suggestions you would like to see in future CMBD Newsletter editions.