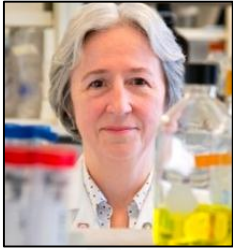




**Faculty of Dentistry, McGill University**  
2016 Faculty of Dentistry Advanced Research Seminar and Workshop

**“The Osteocyte Cells of Bone – The Gatekeepers of Our Skeleton”**



**Dr. Lynda Bonewald**

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Director, School of Dentistry –  
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**Dr. Leanne Ward**

Associate Professor of Pediatrics  
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**Brief summary:** In the adult skeleton, the major bone cell type is the osteocyte. This abundant cell type is dispersed throughout the skeleton, where it is embedded deep within the mineralized extracellular matrix of bone. While seemingly isolated and entrapped within mineralized bone, these cells are in fact highly dynamic and interconnected by a rich network of dendritic cell processes ramifying through the bone. Osteocytes and their cell processes encased in mineralized bone form a mechanosensory and signaling network that not only transfers key maintenance information to bone surfaces about the material status and integrity of the internal bone structure, but also is able to mobilize important mineral ions like calcium and phosphorus for other purposes from deep within the skeleton. This bone workshop brings together three experts on basic and clinical bone biology, who will describe osteocyte cell function in health and disease, and how this cell functions to build and maintain the biomechanical properties required of bone.

**Thursday April 14, 9-12 noon, followed by a light lunch**  
**Rm. 1090, Trottier Building, 3630 University Street,**  
**McGill University, Montreal, Quebec**

**Moderator:** Dr. Richard Hovey, PhD, Associate Professor,  
Oral Health and Society, Faculty of Dentistry, McGill University

All are welcome

Host: Dr. René St-Arnaud at ([rst-arnaud@shriners.mcgill.ca](mailto:rst-arnaud@shriners.mcgill.ca))