

## **Saint Michael's Hospital Rheumatology - Metabolic Bone Disease/Osteoporosis Ambulatory Experience 2004/2005**



**Supervisor:** Dr. Laurence Rubin

**Collaborative Staff:** Drs. Robert Josse, Tim Murray, Sophie Jamal, Maria Kraw (Division of Endocrinology, Saint Michael's Hospital)

**Where:** Metabolic Bone Disease/Osteoporosis Ambulatory Clinic, 61 Queen Street, 7<sup>th</sup> Floor  
*Centre for Diabetes and Osteoporosis*

When: Monday AM (8-12noon) with seminar/discussion group (lunch provided 12-1pm)

### **Number and types of patients:**

There will be a mix of new (approximately 2-5) and follow-up patients (5-10) per clinic. The patients represent the spectrum of primary as well as secondary metabolic bone disease/osteoporosis. Saint Michael's Hospital is a large tertiary care institution with active programs in transplantation, bowel disease, autoimmune rheumatic and other disorders. Drs. Josse, Murray and Jamal are recognized experts in metabolic bone disease, and will provide a unique resource for trainees.

### **Overall Rotation Objective:**

Under the direct supervision of Dr. Laurence Rubin, this rotation is intended to provide a comprehensive, evidenced-based approach to the assessment, investigation and management of patients with metabolic bone disease/osteoporosis. As in the past, one to one teaching will be the norm, and the trainee will have the opportunity to explore relevant clinical issues in a formal and informal manner. Additional opportunities exist for research/elective rotations in clinical and basic research, including lab-based programs involving associate staff (see below).

In particular, this specific site and rotation will provide the rheumatology fellow with a wide exposure to a variety of metabolic bone diseases. While osteoporosis on a primary and secondary (drug induced, secondary to inflammatory disorders) will make up a large portion of the patients seen, there will be a spectrum of other conditions assessed, including genetic metabolic bone disease, acquired osteodystrophy, and disorders of calcium mineral metabolism.

A seminar/discussion group will follow (lunch provided) each session. SMH radiology (Dowdell, Pearce) and Orthopedic (Bogoch) staff participate, and a regular radiology session is planned to review the imaging components relevant to Metabolic Bone disease such as Hyperparathyroidism, Paget's, osteodystrophy, fracture, and novel imaging technologies.

### **Specific Aims:**

1. Develop appropriate skills in focused history and physical exam of patients with metabolic bone disease/osteoporosis.
2. Interpretation of laboratory results and indications for additional studies, including those related specifically to calcium mineral metabolism, metabolic bone disease.
3. Interpretation of bone densitometry results and ability to communicate this data effectively to patients. Saint Michael's has a state of the art Lunar expert system. Drs. Rubin, Josse, Murray and Jamal all participate in BMD interpretation.
4. Evidence-based management of metabolic bone disease/osteoporosis.
5. Awareness of the role and contribution of allied health professionals and other community resources in the management of such patients.

Trainees will have the opportunity to explore research projects including case reports, case series reviews and laboratory experience (metabolic genetic studies), the latter if time and elective rotations permit.

Collaborators:

Dr. David Cole – Molecular genetic and biochemical studies in MBD (Banting Institute, UHN)

Dr. Reinhold Vieth – Vitamin D biochemistry and metabolism (MSH)

The trainee will also gain expertise in the assessment of bone densitometry (DEXA) results, and determination of appropriate intervals for follow-up investigations.

An evidence-based approach is the underpinning of therapeutic decisions, but the trainee will gain insight into novel/experimental regimens as well.