

ANNUAL REPORT
Division of Medical Biochemistry
Department of Medicine - Jewish General Hospital
January 1, 2013 - December 31, 2013

SUMMARY

The Jewish General Hospital Diagnostic Laboratory has been selected to do supra-regional tests by the Quebec Government. It is a designated centre for two other major hospital laboratories in the Montreal Region and is experienced in working with diagnostic companies doing beta site testing of new analytical instruments and software.

1. Research and publications:

The Division of Medical Biochemistry has been active in research. Dr. MacNamara's current interest in proteomics research to be translated into diagnostic application has resulted into securing funding from Genome Canada, Genome BC and Genome Quebec as part of a trans-Canadian research group. This will involve the implementation, optimization and testing of new protein assays in a clinical laboratory setting at the Jewish General Hospital with clinical evaluations.

The research studies carried out by divisional staff have resulted in two noteworthy publications in 2013:

Grunbaum A, Holcroft CA, Heilpern D, Gladman S, Burstein B, Menard M, Al-Abbad J, Cassoff J, MacNamara E, Gordon PH, Szilagyi A. Dynamics of Vitamin D in Patients with Mild or Inactive Inflammatory Bowel Disease and Their Families. *Nutrition Journal*, 12(145): 1-11 (2013): This study showed that in patients with mild or inactive inflammatory bowel disease 25[OH] vitamin D levels are less than ideal, however, they are similar to controls. The results also suggest that patient family dynamics may be different in IBD units from that in control family units. However, these dynamics do not pose additional risks for development of IBD.

-Wang Y, Liu XJ, Robitaille L, Eintracht S, MacNamara, E., Hoffer LJ. Effects of vitamin C and vitamin D administration on mood and distress in acutely hospitalized patients. *Am J Clin Nutr* 98:705-711(2013): Vitamin C and D deficiency are highly prevalent in acutely hospitalized patients and have been linked to mood disturbance and cognitive dysfunction. The objective of the study was to determine whether supplementation with vitamin C or D improves mood state or reduces psychological distress in these patients. The study showed that short-term therapy with vitamin C significantly improves mood and reduces psychological distress in acutely hospitalized patients, however, no conclusion was possible regarding the effects of vitamin D supplementation because the dose and duration of therapy were insufficient to raise 25(OH)D concentrations into the normal range.

2. Teaching and learning (undergraduate and graduate):

MacNamara, Elizabeth, M.D., FRCPS(C)

Undergraduate, McGill University
IIM Teaching

May 13, 2013 - May 31, 2013 - (3 week period)

Medical Student Elective (4 week period)

Medical Biochemistry Observerships - 2-4 MD's, 2-4 months/year

Attendance at Medical Grand Rounds 4 times a month for 10 months/year

Attendance at the Association des médecins biochimistes du Québec/Canadian Association of Clinical Biochemists Annual Congress

Lecture at monthly inter-hospital visio-conferences for the Medical Biochemistry Network Program

Lectures given:

64th Annual Refresher Course for Family Physicians, Hilton Bonaventure Hotel, Montreal
The Misuse of Tumour Markers and Other Tests: What This Really Means to You, the Patient and the Health Care System

International Forum on Health Symposium, Palais du Congrès, Montreal: Business/Institution Partnerships to Foster Change and Improve Performance

Salon Business Intelligence, Palais du Congrès, Montreal: Un tableau de bord médical en temps-réel à moindre coût (CoreLab Now)

Colloque sur les Soins de Santé Personnalisés, Hôtel Château Laurier Québec: Clinical Implementation and Outcomes Evaluation of Blood Based Biomarkers for COPD Management

Gansu Provincial Clinical Laboratory Quality Management Conference, Lanzhou, Gansu, China: Laboratory Management: The Science and the Art

The Mother and Children's Hospital, Lanzhou, Gansu, China: Diagnostic medicine, its role in patient care

University of Lanzhou 2nd Hospital, Lanzhou, Gansu, China: Modern Laboratory Management

Herzl Family Medicine Continuing Medical Education Lecture, Jewish General Hospital, Montreal: Useless Laboratory Tests

Medical Grand Rounds - Jewish General Hospital, Montreal, Quebec: Useless Laboratory Tests: A Tale of Waste, Suffering and Confusion

Eintracht, Shaun, M.D., FRCPS(C)

Postgraduate, McGill University

Resident Supervision/One-on-One Teaching

McGill Medical Biochemistry Residents (12 month period)

Residents' Teaching

Journal Club (Ad hoc basis)

Lectures Given:

Lecture at monthly inter hospital visio-conferences for the Medical Biochemistry Network Program

3. Involvement in the community:

Dr. MacNamara participated in refresher courses for family physicians and lectured at the International Forum on Health, Salon Business Intelligence and Colloque sur les soins de santé personnalisés.

As part of the collaboration between the Jewish General Hospital laboratory and the Ministry of Health, Gansu, China, Dr. MacNamara lectured extensively in China on laboratory management and diagnostic medicine.

4. Partnerships:

Dr. MacNamara is Chair of the RUIS Sub-Committee on Laboratory Medicine dealing with the integration of services and the university and hospital responses to the OptiLab proposals of the Government and the Montreal Agence. She participates in the Programme Réseau (the Quebec network program) visio-conferences, for teaching the McGill Medical Biochemistry Residents and works with the École de technologie supérieure, in preparation for the Salon Business Intelligence presentation at the Palais du Congrès.

5. Milestones: No changes in staffing occurred in 2013.

6. Honours, awards, and prizes:

Dr. MacNamara received the Jewish General Hospital award for “Excellence in Management” for her outstanding job performance, superior leadership skills and great efficiency in directing her department in the fall of 2013.

7. Fundraising:

Dr. MacNamara continues to be very active in fundraising to enhance the smooth running of the Diagnostic Medicine Department, for example, the purchase of new, more efficient laboratory equipment, ergonomic furniture for the staff, etc.

SECTION I - DIVISION STATUS UPDATE

1. Mission and Objectives of the Division

Mission Statement

-To provide medical laboratory services consistent with the needs of the health care team and their patients in a professional and caring manner.

-To initiate and collaborate in research activities directed towards the improved understanding of disease, its diagnosis and monitoring.

-To ensure the optimal use of the laboratory service.

-To encourage and develop all staff to attain their true potential and to develop a milieu which promotes teamwork.

2. A nominative list of academic staff, their academic rank

Dr. Elizabeth MacNamara, Chief, Department of Diagnostic Medicine, Associate Professor, McGill University (active)

Dr. Shaun Eintracht, Medical Biochemist, Assistant Professor, McGill University (active)

SECTION II - GRANTS, PUBLICATIONS AND SERVICE OUTSIDE OF MCGILL

1. Grants and awards received:

Grant awarded from Genome Canada/Genome B-C

Project Title: Clinical implementation and Outcomes Evaluation of Blood-based Biomarkers for COPD Management (Total: \$7,200,000 JGH: \$1,516,575)

2. Scholarly works published in the 2013 calendar year:

-Grunbaum A, Holcroft CA, Heilpern D, Gladman S, Burstein B, Menard M, Al-Abbad J, Cassoff J, MacNamara E, Gordon PH, Szilagyi A. Dynamics of Vitamin D in Patients with Mild or Inactive Inflammatory Bowel Disease and Their Families. Nutrition Journal, 12(145): 1-11 (2013)

-Wang Y, Liu XJ, Robitaille L, Eintracht S, MacNamara, E., Hoffer LJ. Effects of vitamin C and vitamin D administration on mood and distress in acutely hospitalized patients. Am J Clin Nutr 98:705-711(2013)

Respectfully submitted,

Elizabeth MacNamara, MD
Chief, Division of Medical Biochemistry