DESCRIPTION OF THE ADULT NEUROLOGY RESIDENCY TRAINING PROGRAM AT UNIVERSITY OF MANITOBA

CURRICULUM:
Training in Adult Neurology at the University of Manitoba is a 5-year program with entry at the PGY-1 level. This program has full approval of the Royal College of Physicians and Surgeons of Canada. During years of training residents are exposed to increasingly graduated responsibilities appropriate for the level of training.

PGY-1 (Junior):
Exposure to Neurology during the first two blocks (each block is four weeks) of the PGY-1 year introduces the resident to fellow residents and staff, as well as the goals and objectives of their “home base” program. During Neurology rotation residents are responsible for inpatients, consult service and hyperacute stroke protocol. The resident establishes basic skills in neurological history taking and examination. An introduction to neurological problem solving, investigation and management is also acquired although it is recognized that at this stage the resident usually needs considerable guidance and in majority of instances does not initiate major clinical decisions independently. At this year resident will also have exposed to a third block of neurology, four blocks of Internal Medicine, two blocks of Psychiatry, one block of Rheumatology, one block of Hematology or Endocrinology, and one block of Cardiology.

PGY-2 (Junior):
During this PGY-2 year, the resident will have exposure to three blocks of Adult Neurology. At this point, the resident has completed their basic clinical training and internal medicine subspecialty rotations, has acquired confidence in diagnosing, investigating and managing major medical problems, and is ready for a more in-depth approach to neurological problems and practice. During this year, the resident will have exposure to two blocks of Neurosurgery, and Intensive Care Unit, and one block of the Emergency Room, Neuroradiology, Physical Medicine and Rehabilitation, Infectious disease, and Research/Scholar activities.

PGY-3 (Senior):
During this year the resident will have exposure to five blocks of Neurology, three blocks of Pediatric Neurology, two blocks of Neuropathology, and one block of Neuroradiology and one block of Community neurology clinic.

PGY-4 (Senior):
During this year, the resident will have exposure to three blocks of EEG/Epilepsy, three blocks of EMG/Neuromuscular diseases and six blocks of elective rotations. Residents choose their elective rotations in consultation with the Program Director and the neurology postgraduate committee. Many residents choose an additional three blocks of EEG/Epilepsy and/or three blocks of EMG/Neuromuscular in order to be qualified to take EEG and EMG examinations.

PGY-5 (Senior):
At this point, the resident should function very close to a consultant level. During this year, the resident will have exposure to seven blocks of Neurology and five blocks of outpatient clinics. In the last two months of their neurology service they assume a “junior attending” role and will manage acute stroke protocols, respond to outside phone calls and manage inpatient cases under supervision of attending. By the end of the fifth year, the resident should, at minimum, have achieved a level of competence in bedside skills and patient management that would enable him/her to successfully pass the Royal College examination in Neurology. This phase of training represents an important opportunity to consolidate clinical skills and integrate knowledge acquired during the previous Adult Neurology rotations, subspecialty rotations, and basic science seminars.

OVERALL GOALS AND OBJECTIVES OF THE PROGRAM:
The main goal of the program is to train skilled neurologists and to foster an interest in academic pursuits and lifelong learning. The mission of the Neurology Program is to provide an environment which will
assist residents to become competent, caring, and ethical physicians with the ability to think critically.

**Medical expert:**
The Neurology resident will become an expert in managing and treating the broad range of neurological disorders they will encounter in the practice of Neurology.

**Communicator:**
The neurology resident learns communication skills required to transmit information about diagnosis, investigations and management to patients, their families and referring physicians and other health care professionals. They also gain expertise in conference presentations.

**Collaborator:**
The Neurology resident learns how to interact with other medical professionals, medical support personnel and community agencies to promote timely diagnosis, investigation and effective management of neurological conditions.

**Leader:**
The Neurology resident learns methods by which health care services provide a broad range of patient care services and methods by which physicians must lead and co-operate within the health care system in order to utilize those services effectively and appropriately. The Neurology resident develops an understanding of the limitations of available resources and effective time management skills, both for themselves and for other health care professionals by utilizing effective means of prioritizing tasks.

**Health Advocate:**
The Neurology resident will practice principles of disease prevention where applicable to certain categories of neurological disease and will learn the responsibility that neurologists have to other health care professionals and services with respect to disease prevention strategies. The neurology resident learns to identify the important determinants of health in patients with neurological disorders in a heterogeneous diversified population. As well, the resident learns to contribute effectively to improved health of patients through education, treatment, and health promotion, and to recognize and respond to those issues where advocacy is appropriate.

**Scholar:**
The Neurology resident is stimulated to learn more about neurological diseases and their management. The Neurology resident learns how to conduct personal learning projects and to participate in joint research efforts, related to disease diagnosis, investigation and management. All residents must complete a research project during their neurology training. Resident travel to conferences is financially supported for residents whose abstracts are accepted, as is junior membership in the American Academy of Neurology.

**Professional:**
The Neurology resident learns and practices the full range of professional, ethical, and moral standards required of a neurologist.

**RESIDENT SELECTION CRITERIA:**
The Neurology Postgraduate Committee will consider following as important selection criteria:

- Academic achievement.
- Communication and interpersonal skills.
- Reference letters.
- Interest in neurology demonstrated by elective and research experience in neurology and related fields.
INTERVIEW:
After review of all candidate applications by Program Director, short-listed candidates will be invited for in-person interviews. Phone and video conferencing interviews are not available. Each applicant is interviewed by multiple members of Neurology Postgraduate Committee (other staff will join if needed based on the total number of interviews) at the Health Sciences Centre. Meeting with neurology residents, lunch, and a tour of the facility are also arranged.

TEACHING SITES:
The Adult Neurology rotations take place at the Health Sciences Centre (http://www.hsc.mb.ca) and St. Boniface General Hospital (http://www.sbgm.mb.ca) and include the care of patients admitted under the Neurology service, as well as care of patients seen in consultation and in out-patient clinics. Outpatient neurology clinic rotations will happen at Health Sciences Centre, St. Boniface Hospital, Victoria Hospital, Grace Hospital, and Deer Lodge.

ADULT NEUROLOGY POSTGRADUATE COMMITTEE:
Name Major Site Affiliation Major Function(s)
Reza Vosoughi HSC Program Director and Committee Chair
Alan Jackson HSC Section Head, HSC representative
Brian Schmidt HSC Research mentor
Ed Leung Children’s Hospital Pediatric neurology representative
Andrew Borys SBH St. Boniface Hospital and movement disorder clinic representative
Michael Cossoy HSC Committee member
Anish Kunango, Chief Resident
Carly Scramstad HSC Resident representative

FORMAL ACADEMIC ACTIVITIES:
• Academic half day is held on Friday mornings and includes
  o Resident case presentation by neurology or neurosurgery residents (08:00-09:00)
  o Didactic Presentation by faculty members or guest speakers (09:00–10:00)
  o Attending presentation on topics of curriculum of academic half day (10:10-11:25)
  o Neuropathology, Neuroradiology, EEG/Epilepsy rounds, EMG/neurodiagnostic rounds, and resident rounds (11:45-13:00)
• Walk (bedside) Rounds 08:00 – 09:00 weekly (Wednesday)
• Noon Rounds at 12:00 – 13:00 weekly (Thursday): Focused on residents presenting cases and plans for investigation, differential diagnosis and management.
• Movement Disorders Rounds 09:00 – 10:00 monthly (Tuesday)
• Journal Clubs (2/3) and Quality Assurance/Improvement rounds (1/3) at 17:30 – 18:30 (1st Tuesday of the month)
  o Neuroradiology rounds: six session per year (Thursday afternoon)

EVALUATION:
Attending staff provide feedback after each patient is presented. Areas of weakness are pointed out in a constructive manner and methods of improvement are discussed. In some instances allied health care colleagues, patients or their families may serve as a source of information on the performance of the resident. The end-of-rotation in-training evaluation report (ITER) incorporates feedback from all attending staff in contact with the resident. The ITER addresses items outlined in the objectives. The Program Director reviews the ITER with the resident in his regular individual meetings with resident (2-3/year). Formal feedback is provided by the staff members on the quality of the resident’s participation in presentations or discussions at various Neurology Rounds, Journal Clubs, QI/QA rounds, etc.
For PGY2-5 residents, annual in-training examinations set by the American Academy of Neurology must be taken (the program covers the costs). In addition, mock Royal College practice written and oral examinations are administered frequently every year to PGY1-5 residents. Feedback and recommendations are provided in regular Program Director meetings. Residents are also evaluated annually with 360 evaluations by allied health care professionals whom they collaborated.

Residents will write CanMEDS reflections annually and they will be reviewed and approved by Program Director. PGY-5 residents will undergo at least one Structured Assessment of Clinical Evaluation Report (STACER) to assess their overall competence. At the completion of the program, a final ITER (FITER) is prepared and forwarded to the Royal College as a requirement for examination eligibility.

February 17, 2016