

Resident Orientation Package
Revised Jan, 2007

Welcome to the neurology service. We realize that neurology can be an intimidating subject for some, but we hope that at the end of your rotation you will feel more comfortable obtaining a neurological history and performing the neurological exam. As well, we hope that we can help you develop a better understanding of neurological diseases, investigations, and treatments, especially as they relate to your subspecialty. Off service residents rotating through neurology may have different objectives, and we will try our best to help you complete your educational goals.

Residents rotating through neurology will spend either their entire time at UH on the Neurology CTU service or less commonly, will divide their time between UH and SS/Victoria Hospital. The UH rotation consists of being a member of the CTU (Clinical Teaching Unit) which cares for inpatient neurology patients. It also involves inpatient consults at UH and covering the UH-ER. The SS/Vic rotation includes reviewing patients in the daily Urgent Neurology clinic (currently at SSC but soon to move to VH), inpatient consults at South Street, Victoria hospital and occasionally St Joe's, as well as covering consults in Victoria ER.

The composition of a resident's rotation will depend on their home program's requirements as well as our ability to accommodate residents at each site. In general, UH has an unlimited capacity to accept residents, and SS/Victoria is best suited for 2 residents (including neurology residents). Chief residents at the UH and SSC/VH sites will be responsible for making the call schedules and coordinating the rotations of residents on both the inpatient and urgent neurology services. We attempt to have off service residents with rotations of 2 months (including holidays) divide their time between the inpatient service at UH and the Urgent Neurology/SSC/Victoria consult service. The time spent on each service will be decided upon jointly by the chief residents at UH and SSC.

Resident room – A7-028 at UH

Please meet here for orientation at 0800 on the first weekday of your rotation if you are starting on the Neurology CTU. The room has keycode access, but several people know the combination so please don't leave valuables inside. The room also has 2 computers with internet access, a white board for teaching, and a fold away cot for long call nights.

Some people to know:

- a. Nicole Farrell – neuroscience program secretary, phone # 33696
- b. Breeda O'Farrell – neurology nurse practitioner, responsible for patients with chronic and stable problems waiting placement and patients not admitted to the teaching service. She is always willing to help with discharge planning (pgr #13054) and is a valuable resource.
- c. Dr. Shannon Venance: pager 13347– CTU coordinator at UH; available for questions, concerns and as a resource. **You are responsible for arranging your exit interview (call Carole, admin assistant at x 33337 to set up) to receive your final summative rotation evaluation.**

- d. Dr. Chris Watling – neurology program director (office x58586)
- e. Dr. Chris Hyson - site director for SS/VH (office x33404)
- f. Drs Mike Strong and Steve Lownie – CNS department co-chairs

Neurology Rotation Structure:

While on the **UH rotation**, you will be part of the neurology CTU team. The team is led by the senior neurology resident and usually consists of a junior neurology resident, off-service resident(s), medical students, Breeda O’Farrell (neurology nurse practitioner), and the neurology consultant. The CTU neurologist “on service” at UH typically covers the team for 2 week intervals, starting on Mondays and is the “admitting” neurologist for patients during their weeks of service. The UH team is responsible for caring for neurology inpatients (ranging from 8-25 patients), performing consults on inpatients, and covering the UH ER which includes acute stroke coverage.

Most days start at 8am and may begin with an hour teaching session or education rounds followed by team rounds on the in-patients. In the afternoon, the senior resident will divide up consults, admissions, and investigation follow-up. The “on-service” neurologist generally meets the team at 2:30 for review of the in-patients and new consults. At 4:00 the team meets in neuroradiology for review of recent films (if you get “lost” from the team, please page the senior or another team member to find out where the larger group is). Unless you are on call, the residents usually head home shortly after 5pm. Breeda typically follows the long-term chronic patients, leaving the care of acute and ill patients to the residents. All patients on the CTU will be admitted under and managed by the “on-service” consultant. Therefore, on Monday mornings with a new CTU consultant coming on service, CTU patients must be transferred to the new consultant’s care with a written order. Any patients admitted at night under the cross-city “on-call” neurologist will also need to be transferred the following morning to the care of the CTU “on-service” consultant.

While at UH, you will be able to benefit from the multiple formal teaching rounds, as well as informal teaching from the senior resident and the “on-service” CTU and “on-call” night-time neurologists. If you have any topics of special interest that you would like covered, please inform your senior resident. The weekly teaching schedule is available on the CNS homepage (www.uwo.ca/cns) and updated regularly. Attendance at formal teaching sessions on Tuesday – Friday is **mandatory** for neurology residents. It is expected, that where possible off-service residents will attend formal teaching rounds. During the Neurology Academic Half-day, the off-service residents will be responsible for the ward and any ER consults. The junior neurology residents will forward their pagers to their off-service colleagues while the ward senior will hand over to the CTU attending. (While at SS/Vic, Tuesday sessions are mandatory for Neurology residents). Here’s a rough guide of the teaching schedule:

Day	Time	Rounds	Location
Monday	every second Monday at 11:30am	cerebrovascular rounds	Radiology
Tuesday	8-10am	Grand rounds	Usually Aud A
	10:30 – 12:30	neurology resident half day	Aud D

Wednesday	8-9am	Neuroradiology	7N conference room (A7-221)
	12-1pm (first Wed of the month)	Neuromuscular	7N conference room (A7-221)
	12-1pm (all other Wed)	Stroke	7N conference room (A7-221)
Thursday	8-9am on 2 nd and 4 th Thursday of the month	Movement Disorders	10 th floor conference room (A10-312)
Friday	8-9am	Epilepsy	7N conference room

For more information about the UH rotation, contact the senior neurology resident on service or please see the CTU guidelines (a copy is posted in the residents room).

While on **rotations at SS/Vic**, most of your time will be spent at the Urgent Neurology clinic. The Urgent Clinic is currently located on the 3rd floor of South Street Hospital for the moment (a move to VH is planned), in the wing between the two sets of elevators (signs well marked in the hospital) and clinic starts at 8:30am every day except Tuesdays and Thursdays it starts at 1:30pm and 9:00am respectively. The goal of the Urgent clinic is to see patients referred from the ER or family MDs with a possible neurological problem and should be seen by a neurologist within 1-2weeks of referral. Residents assigned to the clinic, will be responsible for taking a History and Physical on each patient, reviewing with the consultant in the clinic, ordering appropriate investigations and then dictating a consultation note on the patient. After the clinic finishes (generally around 1pm; exception afternoon clinic on Tuesdays), the afternoon is spent completing any inpatient or ER consults obtained at SS or Victoria Hospital. There are occasional consults at St Joe's, most often on the weekend as this site is covered by the SS/VH team. It is expected that the neurology consultant at SS/VH will observe each resident perform one neurological exam during their rotation. Please take responsibility for this and ask your attending to observe you.

Call

Call schedules are drafted according to PAIRO guidelines by the senior neurology resident at each site. Call on Neurology is **home-call**. However, since call on the inpatient neurology service at UH can be busy, every effort will be made to ensure that call on this service does not exceed 1:4. Call at the SS/Vic should not exceed 1:3. Weekend call is to be divided **as equally as possible** among residents on service, and generally involves 2 weekends per month.

Every effort will be made to follow PAIRO guidelines for "Home-Call by Noon". Specifically, these guidelines state that residents are allowed to leave at noon on their post call day *only if* their call required them to remain in the hospital for 4 consecutive hours including at least one hour after midnight or if the resident is called back into the hospital after midnight. Otherwise, residents are expected to remain on service in the hospital on post call days.

Call responsibilities vary according to site. At UH, call involves coverage of the neurology inpatients, emergent in patient consults (ie on Medicine or ICU), direct

admissions to neurology, and coverage of consults to the ER. In addition, residents are expected to assess all stroke patients in the ER including those for possible tPA. However, junior neurology residents (PGY-1 and PGY-2) and all off-service residents will assess acute stroke patients for consideration of tPA *with* the stroke fellow or the “on-call” neurologist.

On average, call will consist of 1 or 2 admissions through emerg and an emerg consult where the patient can be sent home. You will review the consults (either on the phone or in person) with the “on-call” neurologist” who is responsible for acute neurology for the city, covering both academic sites. In the vast majority of call experiences, the residents have time to return home for at least part of the night. In exceptional circumstances, a resident may elect to sleep/nap at the hospital while on call. A fold up cot is available in the residents’ room for these purposes. During weekend call, both the on-call and post-call residents meet at a predetermined time (usually 9am), and round on all ward patients. After all patients have notes, the post call resident goes home and the on call resident follows up on investigations or any pending consults. The “on-call” neurologist will usually arrange a time with the residents to review any new admissions.

At SS/VH, call consists of being available for inpatient and ER consults at SS/ Victoria hospital and St Joe’s, excluding pediatric consults. On average, call usually consists of less than one consult an evening. On weekend call, the post-call resident is expected to give handover to the on-call resident or consultant (as there may not be a resident covering) over the phone. There are no formal rounds on patients, unless there is an ill patient who should be seen regularly.

While on call, junior neurology and off-service residents are expected to discuss all ER patients and in-patient consults with the neurologist on call. The neurologist may elect to manage the patient over the phone or may elect to review the patient in person. If you are feeling uncomfortable about managing the patient on your own, **ask the consultant to come in**. If questions arise about management of neurology inpatients, page the “on call” neurologist. Remember that you also have available your medicine colleagues for consultation once you have assessed the patient yourself. You **MUST** contact the “on-call” neurologist immediately if there is a significant change in a patient’s health (ie transfer to ICU, sudden change in neurological status or unexpected death). Also, if a patient who is usually followed by one of our consultant neurologists is admitted, please inform their regular neurologist of the admission in the morning.

You **ARE NOT** responsible for taking outside calls from patients or other physicians while on call at either site. Usually these call are blocked by switchboard. If a call gets through, please inform the caller that you are not permitted to take outside calls and ask them to re-contact the hospital switchboard and ask for the neurology consultant on call. Please ensure that appropriate contact is made and that the caller is not left without options.

Acute stroke patients who are eligible for tPA at Victoria Hospital in the majority of cases will be transferred to UH. However, if called about an acute stroke and possible tPA, immediately call your senior resident (during the day) or the “on call” neurologist

(at night), who will assess the patient. It is not the responsibility of junior neurology residents (PGY-1/2) and off-service residents to assess for appropriateness for tPA. However, when on call after hours, you will be expected to see the patient in the ER with your consultant. The VH stroke coverage is evolving and you will be updated accordingly.

Expectations of Residents on Neurology Rotations

All residents are expected to be punctual and ready to begin daily activities at 8am at UH and 8:30 am at SS/VH. Attendance at teaching sessions at their respective sites is mandatory. Admission Hx and Physicals are expected to be hand written (point form is acceptable) and include complete history, exam (includes systemic AND neurologic exam), impression with a differential, problem list, and plan. Daily chart notes are expected to be written on each neurology CTU patient (allowing a reader unfamiliar with the patient to follow the hospital course easily) and include:

- Brief description of patient
- Subjective statements
- Physical exam including vitals (not VSS)
- Investigation results
- Assessment including Problem list
- Plan (including d/c planning)

Residents are expected to follow-up regularly with their in-patient consults, write notes if any change in status, and document investigation results. It is the resident responsibility to inform the senior resident of any significant results.

In order to derive the maximum benefit from each patient encounter, you should be reading around all of your cases. Your senior resident or attending should be able to help direct your reading if needed. Please ask.

Evaluations:

Online evaluations will be completed by staff neurologists who have had contact with the residents with input from the senior neurology resident. Evaluations will then be collated and will be discussed in person by Dr. Shannon Venance. At least one neurologic examination should be observed during the rotation. At the midway point of the rotation, please inform the staff neurologist or Dr. Venance if you haven't yet had an observed physical examination.

Please be pro-active and assume responsibility for formative and summative evaluations to ensure they are timely, relevant and constructive: It will be your responsibility to:

- **Find time with each attending** at the end of his or her 2 week service period to discuss your performance during the rotation. Be persistent. Call Dr. Venance if you have problems in obtaining timely feedback. Off-service residents with unique departmental forms must provide an evaluation form to each consultant and to Dr. Venance.
- **Schedule an exit interview** (10-15 mins) to obtain a summative Rotation Evaluation at the end of your completed CTU rotation – it is the residents'

responsibility to contact Carole Sutherland x33337 to meet with Dr. Venance (room C7131).

- **Constructive feedback** about your CTU experience is always welcome and can be discussed at anytime, including at the time of your exit interview. If preferable, you may leave an anonymous sealed envelope under C7131 office door marked Attn: Dr. SL Venance.

Educational Objectives

At the end of the neurology rotation, off-service residents will be expected to:

1. Perform a thorough neurological examination including mental status, cranial nerves, motor exam, reflexes, sensation, coordination and gait.
 - a. Have developed a useful, screening neurologic exam and understand the importance of each component for localization.
2. Be able to clearly document a neurologic history and physical examination.
3. Have an understanding of basic neuroanatomy relevant to the localization of common neurological diseases.
4. Be able to have an initial approach to the following neurological emergencies:
 - a. Acute stroke
 - b. Sudden, severe headache
 - c. Increased ICP
 - d. Status epilepticus
 - e. Coma
 - f. Spinal cord compression
 - g. Bacterial meningitis and HSV encephalitis
5. Be able to have an approach to the following common neurological problems:
 - a. TIA/Stroke – work-up of etiology and secondary prevention
 - b. Seizure – investigations and management
 - c. Weakness (identification of patterns of weakness)
 - d. Delirium
 - e. Tremor
 - f. Vertigo
 - g. Ataxia
 - h. Headache
6. Be able to perform a lumbar puncture and be familiar with normal and abnormal CSF findings.
 - a. For your reference, the following NEJM weblink has a very nice teaching video of the LP procedure; readily accessible through Western Libraries proxy server.
 - i. <http://content.nejm.org/cgi/content/short/355/13/e12>
7. Be able to interpret a CT head and describe abnormalities to a neurology consultant over the phone.

Useful Web Sites:

www.uwo.ca/cns CNS department homepage, includes information about department, teaching schedule, etc.

www.uwo.ca/cns/resident Neurology resident home page, has education topics and great links to neurology web sites

Neuromuscular information -

<http://www.neuro.wustl.edu/neuromuscular/>

Stroke trial information -

<http://www.strokecenter.org/trials/>

Baylor neurology case of the month – a case based interactive website

http://www.bcm.edu/neurology/challeng/case_current.html

Useful Reading

Any basic neuro anatomy textbook

On Call Neurology – by R. Marshall and S.Mayer, 2001. Very useful. You'll be a star if you know everything in this small \$47.95 book.

Manual of Neurologic Therapeutics – by Samuels with Lippincott Williams and Wilkins