For visiting neurosurgeons
You are cordially welcome to the Department of Neurosurgery at the Helsinki University Central Hospital!

The population of Finland in 2011 is around 5,400,000 people. There are five university hospitals with neurosurgical departments in Finland, and each neurosurgical department gets referrals mainly from neurologists. The public step-wise (Health Centers - District Hospitals – Central Hospitals – University Hospitals) health care system, in which every Finn is insured, guarantees that all citizens get equal treatment in Finland. Private practice is mainly outpatient visits and low volumes of spine surgery.

The Helsinki University Central Hospital (HUCH) with its 22,000 employees (of which around 2,000 are doctors) and many hospital buildings is scattered over several different areas; the main campus area is located 1,5 km to the north from the Töölö Hospital where the Department of Neurosurgery resides. In addition to orthopedic (traumas), plastic and hand surgery. All these departments will move to the main campus area in 2018.

Helsinki Neurosurgery

Helsinki Neurosurgery (Est. 1932) is one the most active neurosurgical units in the world, with around 3200 annual operations performed by 16 staff neurosurgeons and 7 residents. Up to 40% of the operations are emergencies. All neurosurgical fields are covered: 600 brain tumors, 1000 spine cases, 600 head injuries, 100 functional etc. Helsinki Neurosurgery is the reference center for 1.8 million people (catchment area; population responsibility). Therefore, there is no selection bias in our scientific series as we have to take care of all patients of our catchment area.

Helsinki Neurosurgery is especially proud of it’s cerebrovascular surgery with more than 350 cases a year. In every year, 300 microsurgical operations are performed for cerebral aneurysms (60% unruptured). We also treat some aneurysms (5-10%) by endovascular means. During the years Dr. Juha Hemesniemi, Professor and Chairman, has performed some 12,000 microsurgical operations, including more than 4000 cerebral aneurysms (skin-to-skin record 25 minutes for an unruptured MCA aneurysm) and 500 cerebral AVMs. The institutional experience exceeds 9000 cerebral aneurysms and AVMs, of which we have large institutional databases. Some of the patients are coming from other parts of Finland and Europe, and we serve as a referral center for difficult cerebrovascular diseases. Helsinki Neurosurgery is also one of the centers with the possibility to perform non-occlusive high-flow bypasses using the ELANA® technique. We are also used to train foreign neurosurgeons, and we have around 150-200 foreign neurosurgeons visiting the department every year. The staff neurosurgeons have visited numerous international neurosurgical centers, and most of them have PhD degrees on basic or clinical research. Most of the staff neurosurgeons have attained a neurosurgical subspecialty, too. Please, see: www.hus.fi/neurosurgery.

Helsinki Neurosurgery (staff around 250 altogether) has two wards (ward 6 and 7) with 50 beds and a 16-bed intensive care unit. We have four ORs with 32 nurses and six anesthesiologists dedicated only for neurosurgery. We have almost 6000 out-patient visits annually, and all operated patients come to a follow-up examination postoperatively in 2 to 4 months. The average stay at the ward is less than 5 days for all patients; patients undergoing spinal procedures are typically discharged on the first postoperative day. Naturally, the main goal is quality in patient care but with cost-effectiveness in mind.
**Comments by previous guests:**

*Effectiveness and quality of care*

Prof M Gazi Yasargil: ‘Go-go surgery’
Prof Ossama Al-Mefty: ‘Good-good surgery’
Prof Nicolas de Tribolet: ‘Quiet effectiveness’;

**Some strengths of the Department**

Everybody in the OR and wards is very well aware of their position and role, and everyone does their job without delays, but also without unnecessary fuss. In addition, the small hospital building (short distance between ER, ICU, CT, OR), dedicated and highly trained neurosurgical nurses, and experienced neuroanesthesiologists make things run smoothly.

- In general, patients are well-educated, too; there are no illiterate people in Finland
- The Department belongs to an extremely wide network of clinical and basic research centers
- The staff is familiar with several languages and is also used to frequent visitors

We believe that national and international collaboration is extremely important for neurosurgeons; everybody becomes blind to his/her own practice in time. We enjoy having visitors, and we have experienced that the learning process is bilateral. We love to get feedback to improve our ways of doing things – we encourage you to give ideas and criticism in a constructive way! Since our doors are open for all visitors, everybody can evaluate whether our results correspond to published ones.

- Huge number of cases increases the skills of the whole staff making them very experienced

**Some weaknesses:**

- Shortage of space (BUT remember, neurosurgeons do the operations together with a dedicated staff; not the ‘walls’).
- HUCH is wide-spread (e.g. Department of Neurology is in a different building).

**When visiting the OR (and the Department), please notice the following important things that we want you to appreciate:**

- Please introduce yourself to the personnel on arrival; you will be given a name-tag.
- Please do not bring your mobile phone in to the OR; if you have urgent matters, you can follow the operation on the screen outside the OR.
- Please do not enter the OR during preparations. Nurses need space and quiet while preparing the patient and instruments. You may enter same time with the operating surgeon.
- Do not run around in the OR or back and forth during the operations.
- Please keep your voice down during the operations; we like to listen to the radio/CDs but speaking loud may disturb the neurosurgeons at work.
• Photographing is allowed (without flash), excluding the patient’s faces and name/other identification (id n:o) on the monitors.
• Read our books and look at videos/DVDs but you are not allowed to take them out of the OR.
• We have lockers for valuables for visitors for daily use; do not take the key with you when you leave the hospital (you will also find lab coats and white scrubs in the locker).
• Do not keep the lab coat (doctor’s coat) on while in the OR.
• In general, visitors are welcome to the OR also during nights and weekends. If one wants to use some technical device (microscope, videos etc.), ask the staff for assistance.
• Our instructions for hand disinfection to scrub will be given by the scrub nurses.
• The neurosurgeon shaves only minimally the hair, disinfects the wound before marking it and then the scrub nurse drapes the patient. Positioning of the patient is one of the most important parts of the operation and is performed by the operating neurosurgeon and a technician.
• Please ask questions only after emergent situations have calmed down – we enjoy discussions of the approaches and surgeries afterwards, not during the surgery.
• Radiology meeting is held every week day at 8:30 AM at the X-ray Department (ward rounds every week day 7:45-8:30 for the staff).
• We have a scientific meeting (Grand Rounds) every Friday 8:00-9:00 and you are welcome (often the slides are in English).
• You may look at your emails wireless in your own laptop in the OR conference room.
• Please note that the OR conference room is occasionally occupied for lecturing and OR product marketing (typically at noon – 3 PM (12-15) on Tuesdays or Wednesdays).
• There is possibility for coffee and tea making in the OR conference room with coffee and tea makers and supplies. Please, bring your own coffee and tea. There is also a refrigerator to store your snacks.
• When visiting for a shorter period, do not ask the fellows, nurses or anybody else to run errands for you (taking copies etc.).
• Sexual harassment is against the law in Finland, and nurses are advised to inform higher authorities if such action is noticed.

We are sure that you will see a huge number of cases during your visit and learn new things that may change your thinking for the rest of your career.

“Helsinki Microneurosurgery – basics and tricks” (p.340) will be given to visitors on arrival.

WELCOME!

Juha Hemesniemi MD PhD
Professor and Chairman

Mika Niemelä MD PhD
Associate Professor, Vice-Chairman