

NEUROPATHOLOGY GOALS AND OBJECTIVES

1. To give Medical Students and Residents a basic understanding of the practice of surgical and autopsy neuropathology as well as exposure to neuromuscular and ophthalmic pathology.
2. To give Fellows in-depth understanding and technical expertise in clinical and investigative neuropathology and laboratory management.

Medical student, Resident and Fellow education on the Neuropathology Service is multifaceted, consisting of participation in patient care, didactic sessions, intraoperative consult participation, gross examination of patient samples, self-instruction with study sets, and participation in conferences. Depending on interest and career goals, trainees are given opportunities to prepare posters for national conferences or manuscripts.

Clinical service

All trainees that rotate in the Neuropathology Division serve as full participants on the clinical service. They will attend all intra-operative consultations and all daily sign outs. The goals are for the trainees to learn first-hand the practice of neuropathology and to learn the content of neuropathology by actively participating in the care of patients.

Study sets

A common mode of instruction is for trainees to review study set cases. Currently, over 500 cases with clinical descriptions and slides are available in the Neuropathology Division covering all of the topics noted above.

Conferences

The goals of these conferences are to broaden the exposure of trainees to a range of neuropathology, provide in-depth instruction in selected areas of neuropathology, and to give the trainees experience in teaching others.

The weekly microscopic quality assurance conference reviews recent cases (Tuesday at 8:30 AM) where trainees (clinical fellows) will be expected to present their diagnoses. Trainees also will participate in all autopsy conferences: Children's Hospital and the University Hospital. The conference at Children's Hospital may also include a microscopic review of recent surgical neuropathology cases. Other conferences that are required include a quarterly neuropathology journal club which will be presented by the clinical fellow, an autopsy case review (to be presented by the research fellow), a research in progress seminar for the ADRC, and a clinical-pathologic correlation conference focusing on neurodegenerative disease.

Teaching

While on the service it is expected that trainees will teach each other, especially residents from different departments. Moreover, it is expected that as the year progresses, the Fellow will adopt a progressively larger role in the instruction of other trainees. The Division of

Neuropathology participates in courses in the medical school and in other departments in the medical center throughout the year. The Fellows will often participate in these courses.

Evaluations

Evaluations are prepared through MedHub by attendings with contact with the trainees and then compiled by the training program/clerkship director from comments solicited from members of the Division of Neuropathology. Medical student and Resident evaluations are completed after the end of each rotation. Evaluations for Fellows are completed every 6 months at which time they will be sent a letter from the Director. In addition, the training program director personally discusses performance with the fellows formally every 6 months as well as informally every month.

Graduated responsibility

Trainees assume graduated responsibility as they progress in proficiency. This is judged by each of the Neuropathology attendings separately. Initially, faculty and trainees work up cases simultaneously. As trainees' knowledge and abilities grow they will begin to work up cases semi-independently, but still in close collaboration with the attendings. An attending always is present during intra-operative consultations and autopsy evaluations. The neuropathology fellow and/or the NP attending of the week are present during gross examination of cases.

Additional training

All trainees are welcome to spend additional time on the Neuropathology Service to broaden their experience and to study selected topics in greater depth. Also, several members of the Neuropathology Division run active research laboratories that all are open to all trainees and fellows who wish to pursue research in neuropathology.

ACGME Competencies

Professionalism

Fellows must demonstrate a commitment to professionalism and an adherence to ethical principles.

Patient Care and Procedural Skills

Fellows must be able to provide patient care that is patient- and family-centered, compassionate, equitable, appropriate, and effective for the treatment of health problems and the promotion of health.

Fellows must demonstrate competence in evaluating a comprehensive body of pathological lesions of the central nervous system, peripheral nervous system, neuromuscular systems, and eye.

Fellows must be able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice.

Each fellow must perform at least 150 brain necropsies that include examination of

the nervous system, including forensic and pediatric cases; these cases may be shared by a fellow and a resident, and by no more than two fellows.

Each fellow must examine at least 300 neurosurgical specimens (including consultations) from the brain, spinal cord, pituitary gland, and eyes, to include neoplastic, degenerative, infectious, and immune disorders of significance in the treatment and management of pediatric and adult patients.

Each fellow must participate in at least 50 intra-operative neurosurgical consultations.

Fellows must demonstrate competence in morphologic assessment of diseases of muscle and peripheral nerves and the eye.

Medical Knowledge

Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, including scientific inquiry, as well as the application of this knowledge to patient care.

Fellows must demonstrate competence in their knowledge of established and evolving biomedical, clinical, and cognate sciences, and the application of this knowledge to neuropathology.

Practice-based Learning and Improvement

Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

Interpersonal and Communication Skills

Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Systems-based Practice

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, including the structural and social determinants of health, as well as the ability to call effectively on other resources to provide optimal health care.