

# **Section 10:**

## **Program Objectives, Goals, and Supervision of Fellows in Neuropathology**

## SECTION 10: PROGRAM OBJECTIVES, GOALS, AND SUPERVISION OF FELLOWS IN NEUROPATHOLOGY

### Overview

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**Mission Statement**

The mission statement of our subspecialty pathology training program is to train outstanding subspecialty pathologists and to provide them with the necessary tools and experience to pursue a scientific approach to the practice of anatomic pathology that will not only enhance their professional lives but will also advance the field of Neuropathology as a whole.

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**Policies**

The fellows in Neuropathology are subject to the same Policies as applies to the residents in the general pathology residents discussed in Section 1. Specific policies on Duty Hours, Stress and Fatigue and Moonlighting follow.

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**Duty Hours**

The fellow in Neuropathology must comply with the ACGME Duty Hours.

- The Neuropathology Fellow do not take in-house call, and do not cover After Hours, Weekend or Holiday call. As such, the limit to on-call every third day does not apply.
  - The Neuropathology Fellow work Monday through Friday, and do not come in on weekends for patient care activity. Therefore, Neuropathology Fellows have more than one day free of all hospital duties (day and evening, pager off) in seven days, averaged over 28 days.
  - If the Neuropathology Fellow moonlight at LAC+USC Medical Center or USC University Hospital, the time spent moonlighting count towards the 80-hour weekly limit.
  - In a typical workweek, Neuropathology Fellow should not exceed the 80-work hour limit, set by the ACGME. Fellows are responsible for tracking their own work hours on the Verinform system.
  - In a typical workday, there is no need for a Neuropathology Fellow to work a 24-hour shift. Fellows should be able to complete all of their clinical responsibilities between 8:00 a.m. and 5:00 p.m.
  - Fellows must not stay later than 10:00 p.m. in order to have 10 hours off between shifts, as required by the ACGME.
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**Stress and Fatigue**

Neuropathology Fellows must attend the SAFER CD-ROM session at the beginning of their training, and document their attendance by completing the post-test and signing in on the attendance sheet. Neuropathology Faculty must also have documentation of attending the SAFER CD-ROM session at some point.

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## SECTION 10: PROGRAM OBJECTIVES, GOALS, AND SUPERVISION OF FELLOWS IN NEUROPATHOLOGY

### Overview, Continued

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**Moonlighting Activities**

The ACGME and the County of Los Angeles Moonlighting, and Department of Pathology and Laboratory Medicine policies are listed in Section 1. Neuropathology Fellows are subject to these policies. The Neuropathology Fellowship Training Program, its faculty nor the Department of Pathology and Laboratory Medicine do not require moonlighting activity by its fellows. Neuropathology Fellows must understand that their education is the first priority, and moonlighting activity must not interfere with their education. Neuropathology Fellows must have the approval of the Program Director prior to engaging in moonlighting activity.

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**On Call Activities**

The fellows in Neuropathology do not take after-hours call. On-call activities during business hours are discussed in Section 2.

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**Educational Activities**

The fellows in Neuropathology are encouraged to participate in most of the same educational activities as the general pathology residents, which are listed in Section 3.

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**Definition of “direct” and “indirect” supervision**

The faculty are responsible for the supervision of all activities of the fellows. This supervision can be “direct” or “indirect”.

- Under “direct supervision” the fellow signs out cases at the microscope with the teaching faculty and the fellow performs grossing in biopsies and routine surgical specimens and performs autopsies in the presence of the supervising teaching faculty.
  - Neuropathology Fellows are always under “direct supervision” throughout their entire training.
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## Overview, Continued

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## Neuropathology Fellowship

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**Definition**

Neuropathology is the practice of pathology concerned with the study and diagnosis of human diseases involving the central nervous system, peripheral nervous system and neuromuscular disorders.

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**Description and Duration**

The training program in Neuropathology Fellowship is two years, and is the only fellowship training program recognized by the ACGME with a two year curriculum. The Neuropathology Fellowship Training Program at the LAC+USC Medical Center is fully accredited by the ACGME.

The description of the fellowship is discussed below, under “Educational Goals, Objectives of Program”

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**Teaching Staff**

- ⇒ Carol A. Miller, M.D., Chief of Neuropathology, Program Director
  - ⇒ Valerie Askanas, M.D., Ph.D., Attending Staff, Neurology and Neuropathology
  - ⇒ Roscoe Atkinson, M.D., Attending Staff, Neuropathology, USC University Hospital
  - ⇒ Margaret Burnett, M.D., Ph.D., Attending Staff, Neurology and Neuropathology
  - ⇒ Deborah L. Commins, M.D., Ph.D., Attending Staff, Neuropathology, USC University Hospital
  - ⇒ W. King Engel, M.D., Attending Staff, Neurology and Neuropathology
  - ⇒ Stephanie Erlich, M.D., Attending Staff, Los Angeles County Coroner’s Office
  - ⇒ Floyd Gilles, M.D., Attending Staff, Neuropathology and Neurology, Children’s Hospital of Los Angeles
  - ⇒ David R. Hinton, M.D., Attending Staff, Neuropathology, USC University Hospital
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## Neuropathology Fellowship, Continued

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### Educational Goals, Objectives of Program

The fellow experience in morphologic neuropathology integrates laboratory methodology and gross and microscopic morphologic observation and assessment. Under supervision by staff, the fellow is given responsibility for the evaluation of neuropathology frozen sections, surgical neuropathology, pediatric neuropathology, neurocytology, autopsy neuropathology, forensic neuropathology and muscle biopsies. Fellows are required to participate in the Retzius Neuroanatomy Competition held each April.

The fellows are also expected to review the immunohistochemical stains, cytogenetic studies and molecular biologic studies on their cases and incorporate information from these areas into their interpretive reports. At the end of the fellowship training, the fellow will demonstrate mastery at the level of a new practitioner on the following:

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### Evaluation Tools

- **Quarterly Performance Evaluation**
  - **Case Log**
  - **360 Global Evaluation**
  - **Portfolio**
  - **Patient Survey Questionnaire**
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## Autopsy Neuropathology

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### Patient Care

#### Evaluation: Quarterly Performance Evaluation – by Faculty

- Evaluate data provided with a specimen received in autopsy pathology to ensure that the specimen is properly identified.
  - Instruct clinicians regarding the use of routine and rush specimens in the department.
  - Removes:
    - Adult CNS at autopsy (2)
    - Fetal CNS at autopsy (2)
  - Fellow demonstrates consistent review of history and pulls slides for review when appropriate.
  - Fellow recognizes limitations of history or clinical diagnosis provided, and takes initiative to contact the clinical housestaff and/or attendings for additional history.
  - Consistently has acceptable turnaround time on specimens 30 days post-accession.
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## Neuropathology Fellowship, Continued

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### Patient Care, Continued

- Orientations, correct appropriate blocks sampled
- Gross photographs suitable for presentation.
- Use the microscope effectively. Demonstrates proper care of microscope.
- Knows appropriate stains.
- Clinical pathologic correlation: Provides correlation with correct diagnosis.
- Supervise medical students during their rotation.
- Review study cases with medical students.

### Case Documentation: Case Log

Accrual of cases signed out, intraoperative consultations and frozen sections are documented on an individual fellow case log. It is the responsibility of the fellow to make certain that their case log is kept up to date. Although Neuropathology Fellows (PGY5 or PGY6) do not keep their case log on the ACGME WebADS, it is strongly advised that Neuropathology Fellows to maintain a personal case log, which they may be asked to produce, for the purpose of credentialing at a future place of employment, or for ACGME accreditation of the Neuropathology Fellowship Training Program.

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### Medical Knowledge

### Evaluation: Quarterly Performance Evaluation – by Faculty, Portfolio

By the end of the neuropathology fellowship training program the fellow should have mastered at the level of a new practitioner the following:

- Completes core reading curriculum by end of first quarter, year 1.
  - Recognize gross characteristics of common lesions encountered regularly in Neuropathology; competent gross diagnosis.
  - To assure sufficient expertise in neuroanatomy, fellows are required to participate in the Retzius Neuroanatomy Competition held each April.
  - Recognize microscopic characteristics of common lesions encountered regularly in Neuropathology; competent microscopic diagnosis.
  - Takes tests at end of the first rotation, and in the 4<sup>th</sup> quarter of each year of training period: Passing score is 70%
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## Neuropathology Fellowship, Continued

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### Practice-Based Learning and Improvement

#### Evaluation: Quarterly Performance Evaluation – by Faculty, Portfolio

By the end of the neuropathology fellowship training program the fellow should have mastered at the level of a new practitioner the following:

- Fellow evaluates their gross reports for diagnostic and typographical errors and assessing for suboptimal slide quality.
  - Fellow are given results of their concordance with staff diagnosis and are expected to use these studies to direct their studying and improve their diagnostic acumen.
  - Fellow demonstrates the skills needed to engage in life-long learning to improve their practice of Neuropathology
  - Fellow demonstrates self-analysis to identify strengths and deficiencies.
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### Interpersonal and Communication Skills

#### Evaluation: Quarterly Performance Evaluation – by Faculty, Portfolio

By the end of the neuropathology fellowship training program the fellow should have mastered at the level of a new practitioner the following:

- The fellow demonstrates the ability to communicate clear and accurate information about patients to clinicians over the telephone, in a “drop-in visit” or in a CPC-type conference.
  - The fellow demonstrates the ability to consistently communicate clearly information to the attending staff, and residents.
  - The fellow demonstrates that he/she understands information and supervision from the attending staff.
    - The fellow asks appropriate questions for clarification.
    - The fellow does not need to be told on repeated occasions the same information.
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## Neuropathology Fellowship, Continued

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### Professionalism

#### **Evaluation: Quarterly Performance Evaluation – by Faculty, 360° Global Evaluation - by Autopsy technician**

- Follows advice: accepts criticism positively
  - Relates well to other health professionals, technical, lab assistants and clerical staff
  - The fellow demonstrates initiative and independence to do their duties with diligence. The fellow volunteers to take on additional work without being asked.
  - The fellow demonstrates that they are responsible in completing tasks on time. When given extra responsibilities, they consistently complete the project without constant reminders.
  - The fellow demonstrates consistently that they conduct their patient care activities with high ethical standards. The fellow accepts additional responsibilities without complaint or protest. The fellow does not deliberately displace their patient care responsibilities on their colleagues or attendings.
  - Work efficiency: acceptable turn-around time.
  - Clinical conference: confident presentation, well organized, appropriate use of visual aids and literature review
  - Professional knowledge: Seeks knowledge and information.
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### Systems-Based Practice

#### **Evaluation: Quarterly Performance Evaluation – by Faculty**

- Fellow demonstrates an understanding of how Neuropathology diagnoses affect health care decisions for patients and the health care system.
  - Fellow demonstrates a knowledge of types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
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## Neuropathology Fellowship, Continued

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### Surgical Pathology Neuropathology

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#### Patient Care

#### Evaluation: Quarterly Performance Evaluation – by Faculty

- Evaluate provided data in a specimen received in surgical pathology to ensure that the specimen is properly identified
- Instruct clinicians regarding the use of routine and rush specimens in the department, and know the method of handling rush specimens
- Consistently pulls original frozen sections for all cases that have frozen sections; checks worksheet for inclusion of original frozen section diagnosis.
- Fellow demonstrates consistent review of history; pulls slides for review when appropriate.
- Fellow recognizes limitations of history or preoperative diagnosis provided, and takes initiative to contact the clinical housestaff and/or attendings for additional history.
- Consistently has acceptable turnaround time on specimens (uncomplicated, biopsies 48 hrs, complicated, special stains 48 to 72 hrs)
- Consistently uses current version of WHO Cancer Staging Forms
- Follows protocol with Interdepartmental Consultations
- Follows protocol for amendment/addendum to diagnosis
- Demonstrates proper care of microscope
- Supervise medical students during their rotation
- Review study cases with medical students

#### Medical Knowledge

#### Evaluation: Quarterly Performance Evaluation – by Faculty

- Recognize gross characteristics of common lesions encountered regularly in Neuropathology; competent gross diagnosis
- Recognize microscopic characteristics of common lesions encountered regularly in Neuropathology; competent microscopic diagnosis
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## Neuropathology Fellowship, Continued

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### Practice-Based Learning and Improvement

By the end of the Neuropathology Fellowship Training Program the fellow should have mastered at the level of a new practitioner goals and objectives for the following:

- Fellow evaluates their gross reports for diagnostic and typographical errors and assessing for suboptimal slide quality
  - Fellow are given results of their concordance with staff diagnosis and are expected to use these studies to direct their studying and improve their diagnostic acumen.
  - Fellow demonstrates the skills needed to engage in life-long learning to improve their practice of Surgical Pathology
  - Fellow demonstrates self-analysis to identify strengths and deficiencies.
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### Interpersonal and Communication Skills

#### Evaluation: Quarterly Evaluation

By the end of the Surgical Pathology Fellowship Training Program the fellow should have mastered at the level of a new practitioner goals and objectives for the following:

- The fellow demonstrates the ability to communicate clear and accurate information about patients to clinicians over the telephone, in a “drop-in visit” or in a CPC-type conference, or for frozen section results.
- The fellow demonstrates the ability to consistently communicate clearly information to the attending staff, and Chief Resident.
- The fellow demonstrates that he/she understands information and supervision from the attending staff and Chief Resident.
  - The fellow asks appropriate questions for clarification.

The fellow does not need to be told on repeated occasions the same information.

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### Professionalism

#### Evaluation: Quarterly Performance Evaluation – by Faculty

- Follows advice: accepts criticism positively
  - Relates well to other health professionals, technical, lab assistants and clerical staff
  - The fellow demonstrates initiative and independence to do their duties with diligence. The fellow volunteers to take on additional work without be asked.
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## Neuropathology Fellowship, Continued

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### Professionalism, continued

- The fellow demonstrates that they are responsible in completing tasks on time. When given extra responsibilities, they consistently complete the project without constant reminders.
  - The fellow demonstrates consistently that they conduct their patient care activities with high ethical standards. The fellow accepts additional responsibilities without complaint or protest. The fellow does not deliberately displace their patient care responsibilities on their colleagues or attendings.
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### Systems-Based Practice

#### Evaluation: Quarterly Evaluation

- Fellow demonstrates an understanding of how Neuropathology diagnoses affect health care decisions for patients and the health care system.
  - Fellow demonstrates knowledge of types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
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## Neurocytopathology

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### Patient Care

#### Evaluation: Quarterly Performance Evaluation – by Faculty

- Pre-test at the beginning of the rotation
  - Glass Slide Study Sets CNS and Kodachromes: Representative glass slide study sets reviewed
  - Recognition of Normal CNS Cytologic Morphology: Able to recognize normal cytology of the central nervous system
  - Screening of CNS Cytology Cases: #Non-Gyn \_\_\_\_ #FNA (paraspinal) \_\_\_\_ #CSF \_\_\_\_
  - Number of Cases Signed Out with Staff: #CSF \_\_\_\_ #FNA \_\_\_\_
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## Neuropathology Fellowship, Continued

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**Patient Care,**  
continued

- Supervised Observation of Cytopreparation: Cell blocks, cytopins, thin preps
  - Teaching Conferences (1 hour) twice a Week: Attended
  - Post-Test: Taken during the last week: passing score is 70%
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**Medical Knowledge**

Professional knowledge: Seeks knowledge and information.

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**Practice-Based Learning and Improvement**

See “Practice-Based Learning and Improvement” on page 10 – 10.

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**Interpersonal and Communication Skills**

See “Interpersonal and Communication Skills” on page 10 – 10.

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**Professionalism**

See “Professionalism” on page 10 – 10.

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**Systems-Based Practice**

See “Systems-Based Practice” on page 10 – 11.

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**360° Global Evaluation**

360° Global Evaluations that are used for general residents in the neuropathology rotation are given to the Neuropathology Fellow.

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