

University of Pittsburgh

School of Medicine Course Dates: PLEASE SELECT ONLY ONE OF THE LISTED OFFERINGS WHEN REGISTERTING

# Neuroanatomy Applied—Stroke by Stroke Professional Enrichment Course Spring 2021

April 5, 12, 19, 26 Mondays, 1:00-4:00 PM

April 6, 13, 20, 27 Tuesdays, 1:00-4:00 PM

April 8, 15, 22, 29 Thursdays, 1:00-4:00PM

April 9, 16, 23, 30 Fridays, 1:00-4:00 PM

MS1

Maximum Students:

Class Year:

Course Directors:

Cynthia Kenmuir, MD, PhD Neurology Stroke Attending <u>kenmuircl@upmc.edu—814-889-3930</u>

Contact Information:

Renee Craig craigr2@upmc.edu 412-647-7654—332 Scaife Hall

**Registration:** 

Denise Downs, Office of Medical Education ddowns@medschool.pitt.edu

3 Students Per Group (cannot mix days/dates)

## Description:

Stroke is a leading cause of morbidity and mortality in the US. It is the most frequent reason patients are admitted to the inpatient Neurology service. The quick assessment and management of patients presenting with stroke is essential for optimal outcome. Evaluation of stroke patients begins with a quick decision as to which part of the brain is involved and which artery has caused this stroke. This helps to determine the possible cause of the stroke. Stroke Neurology is a direct and emergent application of neuroanatomy knowledge to guide the immediate evaluation and treatment of patients presenting with stroke. This mini elective will introduce how brain neuroanatomy is applied to the diagnosis and acute management of patients with stroke. This mini elective is being run during the neuro-science course to illustrate direct clinical application of neuroscience.

#### Course Objectives:

- 1. Students will learn how to localize strokes based on presenting symptoms and exam
- 2. Students will be able to identify the stroke on imaging, name the location and arterial territory
- 3. Students will understand causes of stroke and acute and chronic management of stroke patients

#### Requirements:

Attendance at all four sessions. All 4 sessions will be delivered in a virtual and interactive format.

<u>Pre-Requisites:</u> None

Office of Medical Education

www.omed.pitt.edu

412.648.8714

### COURSE OUTLINE Neuroanatomy Applied—Stroke by Stroke

# **Course Directors:**

Cynthia Kenmuir, MD PhD

# **Participating Faculty:**

Laurie Knepper, MD—Neurology knepperle@upmc.edu 412-647-9494

Cynthia Kenmuir, MD PhD —Stroke Attending kenmuircl@upmc.edu 412-648-8914

Mausamin Hathidara MD hathidaramy@upmc.edu

#### Location:

#### UPMC Stroke Institute—PUH 4th Floor 4th Floor Stroke Conference Room Texts:

Grays Clinical Neuroanatomy\*, Mancall, Elliot, editor, Chapter 6 – Vascular Supply of the Brain and Spinal Cord \*Available online at HSLS

## Session 1-

Dr. Kenmuir will review cerebrovascular anatomy and clinical presentations of common stroke syndromes. She will review of how to diagnose and manage stroke patients. Dr. Kenmuir will present illustrative cases with neuroimaging.

#### Session 2 –

Dr. Hathidara will review head and neck imaging including CT head, CT angiogram, CT perfusion, MRI brain, MRA brain, MRA neck with focus on relevant neuroanatomical identification and cerebrovasculature"

#### Session 3

Dr. Kenmuir will present acute stroke case presentations in a virtual interactive format. Participating students will be expected to assist with interviewing the patient/family and Dr Kenmuir will lead them through the expecting management including administration of IV thrombolytics and imaging that will be read together in real time. At least one case will be followed through to acute endovascular therapy reviewing live saved fluroscopic images of a thrombectomy procedure as though students were present for acute stroke code presenting to the emergency department. Follow-up imaging and clinical course will also be reviewed with students.

#### Session 4

Dr. Hathidara will lead students though additional live-style patient presentations (similar to week 3) including acute imaging for additional neurovascular diseases.