



Professional Enrichment Course

University of Pittsburgh School of Medicine

Office of Medical Education

PEC Registrar – Denise Downs d downs@pitt.edu

Neuroanatomy Applied – Stroke by Stroke

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| Enrollment Period: | Spring 2023 |
| Course Dates: | Iteration 1 (PE210) Mondays: March 27, April 3, 10, 17 (1-4PM) Iteration 2 (PE211) Tuesdays: March 28, April 4, 11, 18 (1-4PM) |
| Student Max: | 6 Students Per Group (cannot mix days/dates) |
| Class Year: | MS1 |
| Course Director: | Cynthia Kenmuir MD PhD FSVIN kenmuircl@upmc.edu cell: 330-277-6783 |
| Course Administrator: | Jill Sheon sheonkj@upmc.edu ; 412-692-2083 |
| Location: | Virtual |
| Registration: | Via Amp Up during PEC enrollment period |
| Course 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. |
| Objectives: | <ol style="list-style-type: none">1. Students will learn how to localize strokes based on presenting symptoms and exam2. Students will be able to identify the stroke on imaging, name the location and arterial territory3. Students will understand causes of stroke and acute and chronic management of stroke patients |
| Pre-Requisites: | None |
| Requirements: | Attendance at all four sessions. All 4 sessions will be delivered in a virtual and interactive format. |

Location: Virtual small group didactic sessions weeks 1-2; Virtual patient rounding/interviewing including acute codes and surgical procedure weeks 3-4

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

Session 1– Review cerebrovascular anatomy and clinical presentations of common stroke syndromes. She will review of how to diagnose and manage stroke patients. We will present illustrative cases with neuroimaging.

Session 2 – 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 Present acute stroke case presentations in a virtual interactive format. Participating students will be expected to assist with interviewing the patient/family and faculty 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 Lead students though additional live-style patient presentations (similar to week 3) including acute imaging for additional neurovascular diseases.