CERTIFIED COURSE IN NEUROSPINAL IMAGING
(For those who want to excel in Neurospinal Imaging)

Location / Department: Dow-Rad, Ojha Campus.

Duration: 6 Months

Timing: 9 AM till 5 PM

Course Fee: Rs. 200,000/= Yearly Tuition Fee (Refundable as per HEC rules)

: Rs. 25,000.00 Admission Fee (Non Refundable)

Number of Candidates: Two

Eligibility Criteria: MBBS (From PMDC recognized institute)
MD, MCPS, FCPS. OR
Four year trained in Diagnostic Radiology

Objectives: After completion of training period, the candidate will be able:

a) To develop an analytical approach in CT and MRI Imaging.
b) To learn Neurospinal Anatomy and relevant physics of CT & MRI.
c) To learn interpretation of MRI and CT Imaging of Neurospinal axis.
d) To learn appropriate reporting pattern.
e) To develop basic concepts of Neurospinal Interventions.

CURRICULUM:
The program offers the opportunity for fellows to perform, consult, conduct, and interpret, under close supervision, procedures in neurospinal axis radiology. The procedures shall include CT, MR imaging, ultrasound of the central nervous system and vessels, myelography and plain film radiography related to the brain, head, neck, and spine. With regard to invasive neurovascular & interventional procedures, fellows will be given a chance to observe a good number of such procedures performed by the vascular & interventional radiology team.

CLINICAL COMPONENT:
Clinical and educational experience in the basic clinical neurosciences, e.g., neurosurgery, neurology, neuropathology, neuro-otolaryngology, and neuro-ophthalmology, and in the basic radiological sciences, e.g., radiation and MR physics, radiation biology, and the pharmacology of
radiographic contrast materials will be reviewed on an ongoing basis. DUHS has strong clinical services in neurological surgery and neurology and makes our neurospinal axis radiology program even stronger. The program in neurospinal axis radiology provides a sufficient volume and variety of patients with neurological, neurosurgical, neuro-ophthalmologic, neuro-otorhinolaryngologic, spinal, and other pertinent disorders so that fellows gain adequate experience in the full gamut of neuroradiologic examinations, procedures, and interpretations. The program provides an adequate volume and variety of noninvasive neuroradiologic examinations, e.g., CT, MR, and plain film studies and invasive procedures, e.g., neuroangiography, myelography, DSA, and therapeutic embolization.

RESEARCH ACTIVITY OF THE FELLOW:

The fellow is required to do at least one original research project leading to a published paper in a peer reviewed journal. The trainee will also have to submit two completed audits and would have to present a scientific paper at any national/international meeting.

- **GENERAL COMPETENCIES**:  
  - The program requires its fellows to obtain competencies in the 6 areas below to the level expected of a new practitioner.
    - a. **Patient Care** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
    - b. **Medical Knowledge** about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.
    - c. **Practice-Based Learning and Improvement** that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.
    - d. **Interpersonal and Communication Skills** that result in effective information exchange and teamwork with patients, their families, and other health professionals.
    - e. **Professionalism**, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
    - f. **Systems-Based Practice**, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.