MERCK FOUNDATION CAPACITY ADVANCEMENT PROGRAM

Postgraduate Diploma in Neurosurgery

The Postgraduate Diploma in Neurosurgery aims to equip healthcare professionals who want to specialise in Neurosurgery and develop both theoretical knowledge and research skills. Neurosurgery is a competitive and demanding speciality, requiring a wide knowledge of anatomy, neurology and physiology, in addition to critical appraisal and research skills.

This program specifically focuses on the following topics:

- Assessment and management of brain and spine trauma
- Neuro-oncology
- Cerebrospinal fluid disorders and Paediatrics
- Neuro-vascular disorders
- The spine and spinal cord
- Assessment and management of complications in neurosurgery

Postgraduate Diploma in Neurosurgery, University from UK	
Duration	1 - Year online learning platform

Merck Foundation @merckfoundation Merck Foundation
www.merck-foundation.com

Eligibility:

- Bachelor's degree in Medicine and Surgery (Primary Medical Qualification) (e.g.: MBBS or MBChB)
- Candidates working within a public sector clinical setting (Preferably)
- Recommendation from the Ministry of Health or Office of The First Lady
  (For Asian Countries- Recommendation letter from The Ministry of Health or Vice Chancellor/Dean/Rector of the Medical University or President of respective Society or Medical Association)
- Proof of English language proficiency (details provded below)
- Accessibility to stable Internet connection

Course Structure

The online course lasts one calendar year and is a part time distance learning course. It consists of 6 modules per year, each of 6 weeks duration.

Module 1 – Assessment and management of brain and spine trauma

- Investigation, diagnosis and management of brain and spine trauma, including critical appraisal of the evidence-base and neurosurgical approaches appropriate for CNS trauma.
  Assessment of head injury, Primary and secondary brain injury, Management of intracranial pressure, Natural history of severe head injury, Principles of spinal injury and Principles of neurorehabilitation.

Module 2 – Neuro-oncology

- A fundamental approach and to understand the assessment of patients with suspected mass lesions and gain an understanding of the range of central nervous system neoplasia, the presentation and outcome. Basics and investigations, Tumour presentations, High grade glioma, Low grade glioma, Extrinsic lesions, and Pituitary tumours.

Module 3 – Cerebrospinal fluid disorders and Paediatrics

- An essential approach to the understanding of CSF physiology and pathological processes causing raised intracranial pressure in both adults and children and also develops understanding of deep conditions in paediatric neurosurgery, including the assessment of the acutely unwell child and imaging.

Module 4- Neuro-vascular disorders

- A systematic approach to the assessment and management of patients with vascular disorders of the CNS, this module covers the core conditions in vascular neurosurgery, including aneurysmal brain haemorrhage, ischaemic and haemorrhagic stroke and explores the evidence base for interventions.

Module 5- The spine and spinal cord

- This module covers the aspects of spinal degenerative conditions, how they present and appropriate investigations.
  Spinal anatomy and imaging, Spinal trauma and instability, Spinal tumours, Degenerative lumbar spine, Degenerative spine – cervical and thoracic and Spinal infection and vascular abnormalities.

Module 6 - Assessment and management of complications in neurosurgery

- This module covers the range of medical emergencies associated with neurosurgical diseases. Students will review common neurosurgical emergencies and review the evidence base for interventions.



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Assessment

Assessments are done using clinical scenarios to enhance problem-solving, critical analysis and evidence-based care. Each of the 6 modules has the same assessment format. Due to the online nature of the course, students are expected to login and participate in the course regularly throughout the module.

- Academic Forum - 40%
- Reflective Journal - 10%
- Module Assignments - 20%
- Case-Based Examination - 30%

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- Proof of English language proficiency
  - o Proficiency in the English language is essential to completing courses. If English is NOT your first language, proof of competency during the application process is to be submitted.
  - o An IELTS overall score of 6.5 (with a minimum of 6.0 for each band) or an equivalent qualification is required as proof of English Language Proficiency.
- Accessibility to stable Internet connection

Applicants should submit copies of the following with their application:

- A copy of your updated CV including your address and date of birth.
- Copy of qualification certificates.
- English language qualification.
- Personal statement.
- Recommendation from the Ministry of Health or Office of The First Lady
  (For Asian Countries – Recommendation letter from The Ministry of Health or Vice Chancellor/ Dean/Rector of the Medical University or President of respective Society or Medical Association)
- Income proof (one month Salary/Pay slip or Salary Statement or 3 months bank statement)