**FOM 2212 NEUROLOCOMOTOR 5 Weeks**

Course description:

The neurolocomotor course brings together all the information learned about all the other parts of the body to help the student appreciate the importance of coordinating a system to achieve a given output which in this case is locomotion. The course looks at locomotion at various levels starting with basic movements, the various pathways, development, to really complex events like running.

On coming into the course the student will be required to have completed the anatomical dissection of all the other parts of the human body so that they can focus on the dissection of the brain. Knowledge gained from the previous first and second year courses will be of importance to gaining an appreciation of the functioning of the brain as a master coordinating center for the human body.

The student will go through a series of tutorials, group discussions, assignments and tests that will guide their learning. Dissection will be the core practical activity for the course supplementing the information gained in the tutorials and other learning opportunities offered by clinical exposure and the group assignments.

Using locomotion as an example, the student at the end of the course will have gained an understanding of how the human body functions as a well coordinated system. This knowledge will be of use in the subsequent clerkships and later practice in relation to conditions affecting the central nervous system.

Course Objectives

Anatomy**:**

1. To describe the anatomy and development of the upper and lower limbs regions

2. To describe the anatomy and development of the Central Nervous System (CNS)

3. To describe the radiological anatomy of the upper and lower limbs

Physiology/Biochemistry:

1. To explain the physiological and Biochemical basis of functions of the nervous system

2. To describe the physiology and biochemistry of bones, muscles and connective tissues and their role in body movement

3. To explain the techniques used in studying the nervous and musco-skeletal systems and describe their normal findings

Behavioral objectives

1. To develop an appreciation of the functioning of the brain, spinal cord and other organs as specialized parts of a coordinated and integrated system.

Skills objectives

1. Enhance the students ability to work in teams in both electronic and face to face interactions

Expected outcomes

Knowledge:

The course must produce a health worker who has essential knowledge necessary for medical practice, including knowledge of:

• Biomedical sciences as a foundation for clinical medicine in relation to the nervous system

• Psychological, social, environmental, spiritual and cultural factors that contribute to illness and disease of individuals, families and communities for patients with diseases affecting the central nervous system.

• Principles of health promotion and disease prevention in relation to the nervous system

• A clinical reasoning process that leads to problem solving of conditions affecting the central nervous system and locomotion

• Pathophysiology of common problems encountered in medical practice of the central nervous system or locomotion

• How to make a comprehensive assessment and management plan based on illness and disease of the central nervous system or locomotion

Skills:

The course must produce health workers who have essential communications skills that are required for medical practice, including the following:

! Language skills

! Computer skills

! Interviewing skills

! Writing skills

! Team work

Attitudinal /Behaviour outcomes

The course must produce a health worker who has an appropriate attitude for medical practice that includes:

• Commitment to the person rather than disease or special technique

• Awareness of the subjective aspects of medicine, that is, sensitivity to feelings, thoughts, concerns and expectations of patients and also awareness of own values, attitudes and feelings especially with regards to disease of the central nervous system

• Positive approach towards primary health care and community-based education and service

• Understanding the doctors’ responsibilities towards his colleagues and other members of the health care team

Course outline:

• Anatomy: Embryology, Histology, and Gross anatomy of the nervous system, upper and lower limbs

• Physiology and Biochemistry of the upper and lower limbs, and functioning of the Nervous system (locomotion, effect of lesions, memory, and the role of the higher centers)

• Investigative Procedures of the upper and lower limbs of the nervous system

Course duration: 5 weeks

Delivery methods:

Tutorials, Self directed learning sessions, clinical exposure, small group discussions, online class assignments, Online discussion topics, Dissections

Methods of assessment

1. Weekly tutorial assessment

2. Four (4) weekly online MCQ tests

3. Two group assignments

4. End of course progressive exam

5. Summative exam (written, steeple chase, oral exam)

6. Student project

Requirements: 5 weeks, 75 CU Resources

1. The dissection room

2. Online material made available in the online component of the course

3. Specialization units and ward like the Neuro ward, ENT, ophthalmology and psychiatric wards

4. Images of the brain, spinal cord, head and neck regions from the radiology department

5. Student visits to the Accident and emergency wards

6. Physiology lab for practicals

7. Clinical exposure

8. Other resources like the library, internet access in the college computer labs and hot spots

Teaching staff

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| --- | --- | --- | --- |
| No | Teacher | Qualification | Employer |
| 1 | Tugumisirize J | Phd | MUK |
| 2 | Munabi Ian | Msc, MHPE | MUK |
| 3 | H.E. Ebuk Moses | MSc | MUK |
| 4 | Kirowa Haruna | Msc | MUk |
| 5 | Ntulume Davies | Msc | MUK |
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| 8 | Prof Sam Luboga | Msc Phd | Muk |