

## **Histology and Microscopic Preparations of Tissues and Cells Teaching Laboratory (317):**

This laboratory is located on the third floor of the department building and contains several microscopes, a microtome, a paraffin embedding machine, a centrifuge for preparing tissues in liquid samples, a cryostat, and workspace for the required experiments. The lab has a capacity of 20 students per practical session.



This laboratory includes the practical teaching of the following subjects:

**1-Histology:** This course involves microscopic examination of various tissue types, such as epithelial tissues, proper connective tissues, vascular tissues, bone and cartilage tissues, muscle tissues, and nervous tissues. The course also includes microscopic study of organ tissues, such as skin, esophagus, stomach, duodenum, colon, kidney, urinary bladder, heart, arteries and veins, and ovary. Additionally, it covers the study of cells, tissues, and organs as they appear under microscopes, requiring an understanding of structural organization and the ability to identify them under microscopes.

**2-Microscopic Preparations of Tissues and Cells:** This course aims to train students on the basics of tissue technique and the preparation of permanent tissue samples for microscopy. This includes washing, dehydration, clearing, embedding, sectioning and mounting tissues, staining tissues, covering sections, and microscopic imaging of various tissues.

