This is an introduction to the dissecting and compound microscopes, incorporated into a laboratory investigation of histology. While becoming familiar with the use of these tools and with the aid of information describing the function of various tissues and cells, students will relate structure to function as they deduce the identities of a variety of unknown human cell and tissue samples. This exercise will enhance understanding of cell, tissue and organ systems explored in the rat dissection lab.

**Concepts:** making the connection between morphology and function.

**Skills:** proper use of dissecting and compound microscopes; proper handling of prepared microscope slides.