The Department of Molecular and Integrative Physiology approaches physiology on many levels, ranging from analysis of integrated body functions of the intact organism to study of the organ at molecular and cellular levels. The student is expected to become competent in examining such diverse physiological problems as analyzing the multiple adjustments to exercise in laboratory animals or humans or analyzing factors influencing the transport of molecules across cell boundaries. Students are encouraged to think in physiological terms, that is, in terms of cause and effect as determined by basic physical and chemical laws.

**PHYS 910. Advanced Topics. 1-10 Hours.**
Special studies designed and arranged on an individual basis to allow a student to pursue a particular subject through reading, special laboratory work, and conferences with a senior staff member. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. IND.

**PHYS 911. Research. 4 Hours.**
Original laboratory investigation conducted under the supervision of a senior staff member. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. LAB.

**PHYS 912. Fundamentals of Biomedical Imaging. 2-4 Hours.**
This is a multidisciplinary course designed to introduce 2nd, 3rd, and 4th year medical students to the fundamentals of existing imaging modalities for anatomy, structure and functioning biomedical sciences. The course will also be offered to Junior and Senior level undergraduate students as well as graduate students from other interdisciplinary areas including engineering, science, biology and biomedicine. Students must be in good academic standing. LEC.