PATHOLOGY (PATH)

**Courses**

**PATH 300. Biomedical Research Design. 1 Credit.**
Covers the anatomy of research: what it is made of; and the physiology of research: how it works. Introduces techniques and strategies of research design, implementation, and interpretation. Provides basic tools needed to understand how research in pathology is conducted.

**PATH 307. Molecular Pathology. 3 Credits.**
Covers mechanisms of disease, molecular biology and genetics, diagnostic molecular pathology, as well as principles, tools and applications in research of molecular pathogenesis. Prerequisite: PATH 300.

**PATH 308. Pathology Journal Club. 1 Credit.**
Develops ability to read and present findings communicated in peer-reviewed research articles at the level necessary to formulate and plan independent research. Co-requisites: PATH 300, PATH 303, or Instructor permission.

**PATH 309. Pathology Grand Rounds. 1 Credit.**
Develops ability to prepare and deliver research presentations/Grand Rounds, and to participate in Grand Rounds discussion by critically reading related literature. Builds on the reading skills developed in PATH 308. Prerequisites: PATH 300, PATH 303, PATH 308, or Instructor permission.

**PATH 310. Clinical Molecular Diagnostics. 1 Credit.**
Covers the basic concepts of genomic medicine and its clinical application, procedures and techniques of clinical molecular testing, and management of a clinical molecular laboratory; focuses on diagnostic molecular testing on solid tumors, hematopathology, constitutional disorders, and pharmacogenomics. Prerequisite: PATH 330.

**PATH 325. Genetics for Clinicians. 3 Credits.**
Provides an overview of contemporary human genetics and genomics with application to clinical practice. Prerequisite: Graduate standing. Cross-listed with: GRNS 325.

**PATH 330. Pathology Rotations. 3-9 Credits.**
Laboratory practicum for Pathology Master's students. Engages students in clinical and anatomic pathology laboratory rotations under supervision of attending physicians and senior residents in the University of Vermont Medical Center Pathology Department.

**PATH 391. Master's Thesis Research. 1-18 Credits.**

**PATH 395. Advanced Special Topics. 1-18 Credits.**
Special Topics in Pathology. Prerequisites: Graduate Students, Department Permission Immunology (MMG 223) desirable. Alternate year course with PATH 305.