## Pathology

**Chair**
- Nitin J. Karandikar

**Director, Clinical Functions**
- Roseanne Meyer

**Graduate degree:** M.S. in pathology  
**Faculty:** [https://medicine.uiowa.edu/pathology/people](https://medicine.uiowa.edu/pathology/people)  
**Website:** [https://medicine.uiowa.edu/pathology/](https://medicine.uiowa.edu/pathology/)

### Courses

#### Pathology Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH:4151</td>
<td>MLS Program Registration</td>
<td>0</td>
<td>Requirements: admission to Medical Laboratory Science Program.</td>
</tr>
<tr>
<td>PATH:5260</td>
<td>Translational Histopathology</td>
<td>3</td>
<td>Didactic sessions on human comparative histology, molecular and cellular pathology, and animal model applications; laboratory sessions on microscopy, histology, histotechnology, and immunohistochemistry, with group discussions of model papers; experience in scientific writing and oral presentation skills; for students who plan to investigate experimental models of human disease.</td>
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<tr>
<td>PATH:5270</td>
<td>Pathogenesis of Major Human Diseases</td>
<td>3</td>
<td>Critical analysis of pathogenesis models in a series of major human diseases; clinical presentation, analysis of cellular and molecular events leading to the disease, discussion of key papers. Offered spring semesters of even years. Same as IGPI:5270, MMED:5270.</td>
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<tr>
<td>PATH:5461</td>
<td>Introduction to Morphology in Research</td>
<td>1</td>
<td>Introduction to the histologic examination of organs and tissues utilizing human and/or animal examples; organ identification, comparative morphology, use of histologic techniques (e.g., stains).</td>
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<tr>
<td>PATH:6220</td>
<td>Seminar in Pathology</td>
<td>1</td>
<td>Current research and literature. Requirements: pathology graduate standing.</td>
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<tr>
<td>PATH:7001</td>
<td>Molecular and Cellular Biology of Cancer</td>
<td>3</td>
<td>Fundamental aspects of oncology at the cellular and molecular levels; mechanisms of cancer initiation and progression, oncogene action, DNA damage and repair, carcinogenesis by radiation, chemicals, viruses; tumor immunology, anticancer therapies. Offered fall semesters. Requirements: strong basic science background. Same as FRRB:7001.</td>
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<tr>
<td>PATH:7211</td>
<td>Research in Pathology</td>
<td>arr.</td>
<td>Basic aspects of pathology or clinical patient material; emphasis on experimental design, methods, literature review, obtaining formal answers to specific questions. Requirements: M.D. enrollment or graduate standing.</td>
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<tr>
<td>PATH:8007</td>
<td>Medical Student Fellowships in Pathology (Externships)</td>
<td>0</td>
<td>First-hand experience in autopsy, surgical and clinical pathology, teaching, and research to further understanding of disease mechanisms, normal and pathologic anatomy, laboratory use.</td>
</tr>
</tbody>
</table>

**PATH:8008 Warner Fellowship in Experimental Pathology**  
0 s.h.  
One-year, full-time membership in established research laboratory in the Department of Pathology or collaborating laboratory. Requirements: M.D. enrollment.

**PATH:8133 Introduction to Human Pathology for Graduate Students**  
3-4 s.h.  
Human disease; basic disease processes, organ-related and multisystem diseases; case analysis. Offered fall semesters.

**PATH:8301 Laboratory Medicine in Clinical Practice**  
arr.  
Issues in appropriate use of clinical laboratory and pathology resources in the primary care setting; case-based approach. Requirements: third- or fourth-year M.D. enrollment.

**PATH:8401 Autopsy Pathology Clerkship**  
arr.

**PATH:8402 Hematopathology Clerkship**  
arr.

**PATH:8403 Surgical Pathology Clerkship**  
arr.

**PATH:8404 Transfusion Medicine**  
arr.

**PATH:8405 Clinical Microbiology**  
2,4 s.h.  
Students rotate through bacteriology, molecular microbiology, mycology, mycobacteriology, and virology while participating in clinical and technical activities.

**PATH:8497 Research in Pathology**  
arr.  
Medical research, clinical or laboratory projects; individual study with department approval.

**PATH:8498 Pathology On Campus**  
arr.

**PATH:8499 Pathology Off Campus**  
arr.