IMMUNOLOGY, PHD

Recognizing the need to create an environment where researchers could be adequately trained in the multifaceted aspects of immunobiology, Penn became the first medical school to establish a separate degree-granting PhD program in Immunology. The faculty of the Immunology Graduate Group (IGG) are drawn from across the University of Pennsylvania and the University of Pennsylvania Health System, encompassing a broad spectrum of research interests; the IGG has also established a partnership with the National Institutes of Health in Bethesda, MD. The partnership brings to the IGG the extraordinary resources and scientific expertise present at the NIH, one of the largest and most renowned biomedical research centers in the world. Students have the opportunity to interact with NIH faculty in a variety of ways, including conducting a lab rotation or thesis work at the NIH.

At present, there are approximately 110 faculty members in Penn's Immunology Graduate Group, encompassing a broad spectrum of research studies. Faculty research includes studies on the development and regulation of the immune system, host-pathogen interactions, the fundamental molecular and cellular biology of the immune system, structural studies of immunologically relevant molecules and translational immunology. Research results are being utilized in both experimental models and clinical trials attempting to fight diseases.

For more information: https://www.med.upenn.edu/immun/

View the University’s Academic Requirements for PhD Degrees (http://catalog.upenn.edu/pennbook/academic-rules-phd/).

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Course Units</th>
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<tbody>
<tr>
<td>BIOM 555</td>
<td>Regulation of the Genome</td>
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<td>BIOM 600</td>
<td>Cell Biology</td>
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<td>IMUN 506</td>
<td>Immune Mechanisms</td>
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<td>BIOM 610</td>
<td>Data Analysis for Life Sciences</td>
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<td>IMUN 507</td>
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<td>IMUN 601</td>
<td>Molecular Immunology</td>
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<td>IMUN 607</td>
<td>Grant Writing</td>
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<td>Select one elective (optional)</td>
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Research

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<tr>
<td>IMUN 699</td>
<td>Laboratory Rotation</td>
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<td>IMUN 995</td>
<td>Dissertation</td>
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1 Or other statistics course with approval of the Graduate Group.

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2021 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.