CANCER BIOLOGY, PH.D.

The graduate program in cancer biology offers a course of study and research leading to the Ph.D. degree. Although a master’s degree is offered under special circumstances, students are not admitted for a master’s degree.

The Cancer Biology Graduate Program was established at the McArdle Laboratory for Cancer Research in 1940 as the first graduate program in the United States to offer a degree in basic cancer research. The program now includes more than 50 faculty trainers from multiple departments including Oncology, Medicine, Human Oncology, Cell and Regenerative Biology, Medical Microbiology and Immunology, and others. This interdepartmental structure offers students remarkably diverse training opportunities that span the entire breadth of cancer biology research from haploid or diploid genetics, viral and chemical carcinogenesis, eukaryotic cell and molecular biology, virology, molecular toxicology, and whole-animal carcinogenesis. Through the graduate curriculum, students are introduced to the body of knowledge that has been derived directly from experiments on the induction, properties, and therapy of cancer, and receive the necessary background to conduct independent research.

Curriculum requirements are designed to be flexible, providing a maximal opportunity for specialization within this multidisciplinary field. Students learn through core and elective courses; by participation in seminars, conferences, and journal clubs related to their specific areas of expertise; and most important, from their research advisors. This interdepartmental structure offers students remarkably diverse training opportunities that span the entire breadth of cancer biology research from haploid or diploid genetics, viral and chemical carcinogenesis, eukaryotic cell and molecular biology, virology, molecular toxicology, and whole-animal carcinogenesis. Through the graduate curriculum, students are introduced to the body of knowledge that has been derived directly from experiments on the induction, properties, and therapy of cancer, and receive the necessary background to conduct independent research.

CREDITS PER TERM ALLOWED
15 credits

PROGRAM-SPECIFIC COURSES REQUIRED

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ONCOLOGY 703</td>
<td>Carcinogenesis and Tumor Cell Biology</td>
<td>3</td>
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<tr>
<td>ONCOLOGY 675</td>
<td>Readings in Cancer Biology</td>
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<tr>
<td>ONCOLOGY 675</td>
<td>Statistical Problems in Genetics and Molecular Biology</td>
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<td>ONCOLOGY 675</td>
<td>Problems in Cancer Research</td>
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<td>ONCOLOGY 675</td>
<td>Appropriate Conduct in Science</td>
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<td>ONCOLOGY 675</td>
<td>Seminar</td>
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DOCTORAL MINOR/BREADTH REQUIREMENTS

Minor—not required. Students who wish to complete a minor have the option to do so.

Breadth Requirements—all doctoral students must complete at least three elective courses outside of the required core curriculum. If a
student chooses to complete a minor, the minor coursework may fulfill the elective requirements.

Students are expected to consult with their advisor/committee concerning minor/breadth requirements by the end of their first year.

OVERALL GRADUATE GPA REQUIREMENT

3.00 GPA required

OTHER GRADE REQUIREMENTS

Students must earn a B or above in the following courses, otherwise the course must be repeated: ONCOLOGY 703 Carcinogenesis and Tumor Cell Biology and ONCOLOGY 675 Advanced or Special Topics in Cancer Research

PROBATION POLICY

A semester GPA below 3.0 or an incomplete grade (I) will result in the student being placed on academic probation. If a semester GPA of 3.0 is not attained or the Incomplete grade is not cleared during the subsequent semester of full- time enrollment, the student may be dismissed from the program or allowed to continue for 1 additional semester based on advisor appeal to the Graduate School.

ADVISOR / COMMITTEE

All students are required to have an advisor. Students must create a certification committee (advisor plus four additional faculty members) by the end of their first year. After passing their preliminary examination, students are required to conduct a progress report meeting with their certification committee each year. Failure to do so may result in a hold being placed on the student's registration.

ASSESSMENTS AND EXAMINATIONS

All doctoral students must pass an oral preliminary examination. All requirements for a doctoral degree, except for the dissertation, must be completed at this time.

Six months before the final oral defense, all doctoral students must present a semifinal dissertation proposal to their committee for approval.

All doctoral students must pass a final oral defense of their doctoral dissertation and subsequently deposit the dissertation in the Graduate School.

TIME CONSTRAINTS

All doctoral students must pass their preliminary examination by the end of their second year (August 31). Under special circumstances, a one-semester extension may be granted when justified in writing by the student and advisor.

A candidate for a doctoral degree who fails to take the final oral examination and deposit the dissertation within five years after passing the preliminary examination may be required to take another preliminary examination and to be admitted to candidacy a second time.

Doctoral degree students who have been absent for ten or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

LANGUAGE REQUIREMENTS

No language requirements.