VMS - COMPARATIVE BIO SCIENCES, PHD

for the degree of Doctor of Philosophy in Veterinary Medical Science - Comparative Biosciences

dean of the college of veterinary medicine: Peter D. Constable
head of department: Uwe Rudolph
director of graduate studies: Megan Mahoney
assistant director of graduate studies: Juanmahel Davila (https://vetmed.illinois.edu/biosketch/search/?search_type=user&search=davila&skind=10776)
department website: https://www.vetmed.illinois.edu/c (https://www.vetmed.illinois.edu/path/)
department faculty: Comparative Biosciences Faculty (https://vetmed.illinois.edu/directory/?dept=873&type=Faculty)
overview of admissions & requirements: Comparative Biosciences Graduate Program (https://vetmed.illinois.edu/college-organization/comparative-biosciences/graduate-study-training-programs/)
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
email: cbgradprogram@vetmed.illinois.edu (compbioscigradprog@vetmed.illinois.edu)
graduate office: 3519 Veterinary Medicine Basic Sciences Building, 2001 South Lincoln Avenue, Urbana, IL 61802
phone: (217) 333-2506

Graduate Degree Programs in Comparative Biosciences

VMS - Comparative Biosciences, MS (http://catalog.illinois.edu/graduate/veterinary/medical-science-comparative-biosciences-ms/)
VMS - Comparative Biosciences, PhD (p. 1)
Joint Degree Programs: Veterinary Medical Scholars Program
DVM and VMS - Comparative Biosciences, PhD (http://catalog.illinois.edu/graduate/veterinary/joint-degree/dvm-veterinary-medical-scholars/)

Admission

Applicants for graduate study in Comparative Biosciences must have a minimum grade point average of 3.0 (A = 4.0). Grade point averages will be calculated on the last 60 hours of undergraduate studies for those without the D.V.M. degree and on the entire professional curriculum for those with the D.V.M., or equivalent degree. Applicants with a graduate degree or with some graduate coursework will be evaluated on the basis of their graduate work as well as their undergraduate or professional records. Qualifications of students must be approved by the department’s Graduate Studies Committee.

The Graduate Record Examination (GRE) is required and must have been taken within the last five years prior to application.

International applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL). A score of at least 600 on the paper-based test, or 250 on the computer-based test, is required. Those applicants who gain admission on the basis of their academic credentials, but score below 600 on the TOEFL, will be admitted on limited status and required to take the English Placement Test (EPT) upon their arrival. Students are exempt from the TOEFL requirement if they have completed at least two academic years of full-time study at an institution where the language of instruction is English during the five-year period prior to the proposed date of enrollment. Students also need to take the Test of Spoken English (TSE) oral exam and score at least 50.

Joint Degree Programs

Students accepted into the Veterinary Medical Scholars Program (https://vetmed.illinois.edu/education/dvm-students/veterinary-medical-scholars-program/) can complete a D.V.M. and Ph.D. degree.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program.

Faculty Research Interests

Experimental models range from stem cells to rodent models to domestic animals, and human patients. Exciting research is being conducted by CB faculty in the areas of:

- endocrine/reproductive biology
- developmental and stem cell research
- neurobiology
- comparative pharmacology and toxicology
- biochemistry

Training Programs, Centers and Institutes

Our faculty provide graduate instruction in stem cell research, molecular genetics, pharmacology and toxicology. They also participate in interdisciplinary training programs including the NIEHS-funded Environmental Toxicology Training Program (http://vetmed.illinois.edu/cb/nih/tox/), the Interdisciplinary Environmental Toxicology Training Program (https://vetmed.illinois.edu/ietet/), the Reproductive Biology Program (https://vetmed.illinois.edu/peer/), the Neuroscience Program (http://neuroscience.illinois.edu/), the Nutritional Sciences Division (http://www.nutrisci.illinois.edu/), Beckman Institute (http://www.beckman.uiuc.edu/), and the Institute for Genomic Biology (http://www.igb.illinois.edu/).

Financial Aid

A limited number of research and teaching assistantships or fellowship positions are available.

for the degree of Doctor of Philosophy in Veterinary Medical Science - Comparative Biosciences

For additional details and requirements refer to the department’s degree programs information (http://chbe.illinois.edu/graduate-program/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB 590</td>
<td>Seminar (Thesis Defense seminar 1 hour and Prospectus Exam 1 hour)</td>
<td>2</td>
</tr>
<tr>
<td>CB 591</td>
<td>Biosciences Seminar Series (May be repeated for up to 4 hours of credit)</td>
<td>2</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>CB 592</td>
<td>Special Problems (min/max applied toward degree. Limit of 12 credit hours total. This limit includes credits accrued during the MS degree.) 12</td>
<td></td>
</tr>
<tr>
<td>CB 599</td>
<td>Thesis Research (min/max applied toward degree) 0</td>
<td></td>
</tr>
</tbody>
</table>

Students must select ONE of the following courses with the advice of his/her dissertation committee:

- MCB 354 Biochem & Phys Basis of Life
- MCB 401 Cellular Physiology
- MCB 402 Sys & Integrative Physiology
- MCB 410 Developmental Biology, Stem Cells and Regenerative Medicine
- MCB 450 Introductory Biochemistry
- MCB 480 Eukaryotic Cell Signaling
- MCB 501 Advanced Biochemistry

Select one of the following: 1

- PATH 524 Biostatistics
- VCM 572 Clinical Epidemiology
- CPSC 440 Applied Statistical Methods I

Total Hours 64

1 Or approved equivalent course.

**Other Requirements** 1

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other requirements may overlap</td>
<td></td>
</tr>
<tr>
<td>Students may be required to</td>
<td>take additional courses as recommended by Advisory Committee or Department Divisions.</td>
</tr>
<tr>
<td>64 hours (including thesis research)</td>
<td>earned in courses meeting on the Urbana-Champaign campus, on the Chicago campus, or in other locations approved by the Graduate College for graduate credit.</td>
</tr>
<tr>
<td>Teaching experience is required</td>
<td></td>
</tr>
<tr>
<td>Masters Degree Required for Admission to PhD?</td>
<td>No, but Masters-level requirements must be met (32 hours min.)</td>
</tr>
<tr>
<td>Qualifying Exam Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Final Exam/Dissertation Defense</td>
<td>Yes</td>
</tr>
<tr>
<td>Dissertation Deposit Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum GPA:</td>
<td>3.0</td>
</tr>
</tbody>
</table>

1 For additional details and requirements refer to the department’s degree programs information (http://chbe.illinois.edu/graduate-program/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).