

BYLAWS
AREA OF PATHOBIOLOGY

(ADOPTED APRIL 6, 1992; REVISED DECEMBER 6, 1995, APRIL 12, 1996;
SEPTEMBER 1, 1997; April 11, 2006; September 21, 2022)

The Area Program in Pathobiology is jointly staffed by members of the Doctoral Faculty from the Departments of Veterinary Pathobiology and Veterinary Medicine and Surgery (College of Veterinary Medicine), and Pathology and Anatomical Sciences (School of Medicine), and associated departments of the University of Missouri. The organization provides a mechanism for faculty to develop flexible graduate programs of excellent quality.

I. Organization

A. Criteria for Membership

1. Applicants for membership shall be members of the Doctoral Faculty, as appointed by their respective departments.
2. Active participation in research or graduate teaching related to Molecular Biology, Microbiology, Pathology, Oncology, Toxicology, Epidemiology or Pathobiology is required for membership in the Area of Pathobiology. Applicants to the Area of Pathobiology will be submitted to the Executive Committee for approval. Applicants not approved by the Executive Committee will, upon written request of the applicant, be considered by the full membership. When considered by the full membership, a majority vote of a quorum will be required for acceptance of the applicant into the Area of Pathobiology.
3. Membership in the Area will be terminated if requested by the member or if the member is removed from the Doctoral Faculty.

B. Executive Committee

1. The Executive Committee shall be elected by the Area membership and shall consist of three (3) members. Each member shall be elected for three (3) years with at least one (1) new member being elected each year to establish an overlapping rotation. At least two (2) members of the Executive Committee will be from the Department of Veterinary Pathobiology and/or the Veterinary Medical Diagnostic Laboratory.
2. The Executive Committee shall serve as a nominating committee and shall nominate at least 2 persons for the open position on the Executive Committee each year. Further nominations will be accepted from the membership via an email request. The candidate receiving a majority of the votes will be elected to the Executive Committee.

C. Chairman and Director of Graduate Studies

The Chairman shall rotate yearly among the members of the Executive Committee with the senior member on the Committee assuming the position. The Director of Graduate Studies for the Area of Pathobiology will be appointed by the Chair of the Department of

Veterinary Pathobiology from the graduate faculty in the Department of Veterinary Pathobiology.

II. Meetings

Special meetings may be called as needed by the Executive Committee or by a petition of three (3) members to the Executive Committee. All meetings will be scheduled by the Executive Committee with the membership being informed of the meeting and provided with a copy of the agenda in written or electronic format prior to the meeting. Brief minutes of the meetings will be kept and distributed electronically to the members. The members present at an officially called meeting shall constitute a quorum for conduct of official business.

III. Graduate Program for the Area Ph.D. Degree

A. Prerequisites for Admission to Study in the Area

1. An official transcript verifying that the applicant has earned a baccalaureate, M.S., D.V.M. or M.D. degree equivalent to that granted by MU.
2. For applicants that have not previously earned an M.S., D.V.M. M.D. or equivalent advanced degree, a grade point average of B or better in the last 60 hours of undergraduate education is desirable.
3. Some departments may consider the official results of the GRE or other required tests. Effective Fall semester 2005, the Graduate School no longer requires GRE scores for all graduate students. The applicant should check with their mentor and their respective department of interest to see if GRE scores will be required for admission. The mentor may request to waive the requirement for GRE scores in cases where the applicant has already demonstrated proficiency in graduate coursework and earned an advanced degree, such as M.S., D.V.M. or M.D. However, the Executive Committee may request GRE scores when evaluating applicants who have not yet undertaken graduate coursework or whose academic credentials are marginal (e.g. a GPA below a B average).

B. Application Procedure for Students to the Area Doctoral Program

Prospective students must be recommended in writing to the Graduate Director by the student's advisor, who must be a member of the Area of Pathobiology and the Doctoral Faculty. The recommendation should be supported by transcripts, Graduate Record Examination scores (when required by the Department, mentor or Executive Committee), TOEFL scores for applicants from countries where English is not the native language, letters of reference, a brief biographical summary, a statement by the advisor of the applicant's potential for advanced study and creative research. Copies of the letter of acceptance from the department and a letter or contract from the advisor to the student that outlines conditions of the student's appointment including, but not limited to, commitment of support, duration of support, and any probationary clauses.

C. Acceptance of Students into the Area Doctoral Program

Students meeting the Area Standards as judged by a majority vote of the Executive Committee will be admitted. Students not approved will, upon written request of the

student's advisor, be considered by the full membership. When considered by the full membership, 2/3 favorable vote of a quorum will be required for acceptance of the student. Acceptance by either of the above mechanisms may include probationary status for the student. If probationary, the acceptance must be accompanied by a statement (supplied to the student and the advisor with a copy retained by the Area Director in the student's file) including the reason for the probationary status. Probationary students will be subject to all policies (i.e. degree requirements, dismissal) of these bylaws, with the following additions. Applicants on probation will be reevaluated by the Executive Committee 6 months into their program. At this time, acceptance without probation or an extension of probation will be based on a majority vote of the Executive Committee. The duration of probationary status will be a maximum of one (1) year. Students not accepted after one (1) year of probationary status will be dismissed.

D. Requirements for the Ph.D. Degree

1. The graduate student must meet all requirements for the Ph.D. degree as defined by the current MU Graduate School Bulletin (available online at <https://gradschool.missouri.edu/current-students/doctoral/>).
2. MU requires a minimum of 72 semester hours beyond the baccalaureate degree for the PhD degree. The Graduate School requires a minimum of 15 hours of coursework at the 8000 level (exclusive of research, problems and independent study experiences).
3. Course work for the Ph.D. degree will be determined by the student's Doctoral Advisory Committee. In establishing programs of study, the Advisory Committee should use the guidelines developed by the Area of Pathobiology members (see Appendix 1). It is expected that these guidelines will be implemented with reasonable regard to the background and goals of the students, yet in such a way as to ensure the evolution of high quality graduate programs.
4. **Research for the Ph.D. degree will be directed by Doctoral Faculty members in the Area. If a co-director is assigned, the Doctoral Faculty member will be responsible to the Area of Pathobiology for the quality of the program. The Doctoral Committee should review the proposed research for originality, significance, and good experimental design, and should give appropriate advice. Area of Pathobiology faculty should be invited to the dissertation defense seminar.** The dissertation must be written on a subject approved by the candidate's doctoral program committee, embody the results of original and significant investigation, and be the candidate's own work and not be coauthored. The doctoral student should ask their advisor about specific formatting requirements or citation style. MU Specific formatting guidelines can be found at <https://gradschool.missouri.edu/current-students/thesis-dissertation/thesis-dissertation-guidelines/>. Students and their committees are encouraged to communicate clearly (preferably in writing) what the expectations for the dissertation will be (format, number of chapters, etc), and when the dissertation will be submitted to the committee prior to the defense.

E. Graduate Committees for Students in the Area of Pathobiology

The Doctoral Program Committee shall consist of at least 4 faculty: at least three (3) of which must come from the Department/Interdisciplinary Program in which the student is pursuing a degree (Pathobiology). At least two of the doctoral committee members, including the student's advisor, must be MU doctoral faculty.

F. Dismissal Policy

Students may be dismissed for failure to maintain GPA standards (as outlined in the MU Graduate Catalog and/or established by the mentor in the written employment contract), failure of examination requirements (such as the comprehensive exam), excessive time to degree requirements, and academic dishonesty. In addition, the Department/Area programs may dismiss a graduate student who is deemed as not making satisfactory progress toward their degree program requirements. In the event that a definition of progress is not on file in the department/program, satisfactory progress will be judged on the basis of the general provisions of the Graduate School listed under Doctoral degrees in the Graduate Catalog.

When there is a question as to whether or not satisfactory progress is being made, the director of graduate studies and/or faculty advisor will write to the student and recommend a face-to-face meeting between the student and the faculty advisor. If the faculty advisor and student disagree on issues of progress, the faculty advisor will ask the student to submit a separate letter to the director of graduate studies that identifies the point(s) of disagreement. Copies of both letters will be made available to the student, maintained in the departmental/program file, and forwarded to the Graduate School.

If issues pertaining to satisfactory progress cannot be resolved and persist to a point at which dismissal is being considered, the faculty advisor and the director of graduate studies or department chair will meet to decide on the length of probation that is appropriate to mediate the problem. Following this decision, the student will be notified in writing of the duration of the probationary period, which may vary from 30 days to a full semester. The letter will also include an explicit statement of what must be accomplished and by what date in order for the student to be removed from probation and returned to good standing in the department/program.

If the student does not comply with the conditions of probation, a letter (signed by the director of graduate studies) will be sent to the student with notification of dismissal from the degree program.

In all instances, termination letters (including those referenced above) will inform the student of the right to appeal, first, to the department/program, and second, to the Graduate Faculty Senate. If the student decides to appeal the dismissal, the appeal process will take effect. The process described in the Graduate School handbook will be followed.

If the student does not appeal the department/program's dismissal, the Graduate School will send the student an official notice of dismissal from the program.

G. Graduate Student Evaluations/Rate of Progress

A doctoral student must successfully complete the comprehensive examination within a period of five years beginning with the first semester of enrollment as a PhD student. The comprehensive examination may consist of written and oral sections. It must be completed at least seven months before the final defense of the dissertation. The two sections (oral and written) of the examination must be completed within one month of each other.

In Pathobiology the format of the comprehensive exam is determined by the student's committee. Students and their committees are encouraged to communicate clearly (preferably in writing) what the expectations for the comprehensive exam will be, and when materials to be reviewed by the committee will be submitted prior to the exam. A reasonable rate of progress is considered to be completion of the degree program within 5 years of passing the comprehensive exam. Mentors should meet with their students regularly throughout the year and keep the student informed about his/her progress in the program. Students should also take an active role in monitoring their progress. At a minimum, students should be evaluated annually. Students and mentors are encouraged to contact the Director of Graduate Studies as soon as difficulties become apparent so that problems can be identified, discussed and resolved as quickly as possible. Graduate School requirements for application for degree will be adopted.

H. Residency Requirement

The Area or Pathobiology adopts the residency requirement of the Graduate School. A doctoral student must complete at least two (2) nine-hour semesters or three (3) six-hour semesters in an 18-month period at MU. All courses taken to satisfy the residency requirement must be approved by the student's doctoral program committee.

IV. Changes in the Area Program

The Bylaws and Guidelines for the Area of Pathobiology may be amended by a 2/3 majority vote of a mail or secure web-based ballot sent to all members.

APPENDIX 1

GUIDELINES FOR GRADUATE PROGRAM PLANNING IN THE AREA OF PATHOBIOLOGY

The courses suggested in this guideline have been adopted by the membership of the Area of Pathobiology as a starting point for graduate student program planning. While the courses suggested are suitable for inclusion in most graduate programs, each program should be tailored to the individual student's needs. This specifically is not a list of requirements. Additional courses for each particular program should be proposed by the graduate student and the Advisory Committee. The Advisory Committee is responsible for ensuring that the graduate student obtains adequate training in the various subdisciplines of microbiology, pathology and related fields commensurate with the student's needs and goals.

MU requires a minimum of 72 semester hours beyond the baccalaureate degree for the PhD degree. The Graduate School requires a minimum of 15 hours of coursework at the 8000 level (exclusive of research, problems and independent study experiences).

A. Courses Recommended for Completion Prior to Application for Graduate Study in the Area:

1. Mathematics - one (1) semester of College Algebra or equivalent.
2. Chemistry - ten (10) semester hours (or equivalent) to include courses in Inorganic and Organic Chemistry. Analytical Chemistry is strongly recommended.
3. Biology - ten (10) semester hours or equivalent.
4. Physics - five (5) semester hours or equivalent.

B. Courses Suggested as Part of the Area Graduate Study Program:

1. Statistics - one (1) course.
2. Eighteen to twenty (18-20) additional semester credit hours of 8000 and/or 9000 level courses in pathology, microbiology, immunology, epidemiology, biostatistics, oncology, or other pathobiology-related fields (exclusive of seminar and research).
3. Three (3) semester hours of Advanced Courses in a collateral field outside the Area of Pathobiology Program.

C. Research

Doctoral research problems should be scholarly and original as evaluated by the student's committee.