

DEPARTMENT OF VETERINARY PATHOBIOLOGY

Mission

The Department of Veterinary Pathobiology educates veterinary and graduate students and veterinarians in the disciplines of veterinary microbiology, parasitology, and pathology as well as conducts directed service, research, and scholarship in these disciplines serving needs in the veterinary profession and the State of Oklahoma.

Vision

The Department of Veterinary Pathobiology will attain national recognition among the top tier of veterinary pathobiology departments.

To accomplish this:

- The Department of Veterinary Pathobiology will enhance excellence in teaching of veterinary students and veterinarians in veterinary pathobiology;
- The Department of Veterinary Pathobiology will develop post-graduate training for veterinarians in veterinary clinical microbiology and clinical parasitology;
- The Department of Veterinary Pathobiology will facilitate faculty career development in assignments of teaching, directed service, and research in veterinary pathobiology; and

Core Values

Excellence – We seek excellence in all our endeavors, and we are committed to continuous improvement.

Intellectual Freedom – We believe in ethical and scholarly questioning in an environment that respects the rights of all to freely pursue knowledge.

Integrity – We are committed to the principles of truth and honesty, and we will be equitable, ethical, and professional.

Service – We believe that serving others is a noble and worthy endeavor.

Diversity – We respect others and value diversity of opinions, freedom of expression, and other ethnic and cultural backgrounds.

Stewardship of Resources – We are dedicated to the efficient and effective use of resources. We accept the responsibility of the public's trust and are accountable for our actions.

Professionalism – We are committed to high ethical standards in the discharge of our faculty responsibilities to our students, trainees, and public.

Scholarship – We are committed to scholarship in teaching, directed service, and research.

Cooperation – We strive for mutual respect and cooperation among departmental disciplines supportive of our academic and personal endeavors.

Unity of purpose – We are committed to our mission and vision and strive together to achieve them.

Goals, Critical Success Factors, Objectives and Strategies

Goal One. The Department of Veterinary Pathobiology will enhance the diagnostics laboratory instruction for veterinary students.

Critical Success Factors:

- Recruitment of faculty for three open positions with primary assignments in teaching for veterinary students and diagnostic service
- Participation and integration of Oklahoma Animal Disease Diagnostic Laboratory and Department of Veterinary Pathobiology faculty in expanded diagnostics teaching for veterinary students
- Centralization and coordination of diagnostics teaching for veterinary students in veterinary clinical microbiology, clinical parasitology, and pathology
- Enhancement of departmental reputation for quality faculty in veterinary microbiology, parasitology, and pathology
- Attaining high pass rates of veterinary students on licensing boards – 100% success on licensing boards by date of graduation

Objectives:

Objective 1.1: Include veterinary clinical microbiology in the core clinical courses.

Strategies:

- Communicate to university administration and Regents the importance of instruction in veterinary clinical microbiology to the practice of veterinary medicine.
- Assign development of a clinical microbiology section as part of the VMED 7933 Diagnostics to the American College of Veterinary Microbiologist board certified faculty.
- Assign American College of Veterinary Microbiologist board certified faculty on a rotating basis for course instruction.

Objective 1.2: Link parasitology diagnostic case material to teaching.

Strategies:

- Exploit and integrate Boren Veterinary Medical Teaching Hospital parasitology case material to enhance the effectiveness of the VMED 7933 Diagnostics for veterinary students.

Objective 1.3: Enhance veterinary student involvement in completion of necropsy cases.

Strategies:

- Develop system to allow veterinary students to interact with final outcome of necropsy cases they saw while during their rotation in VMED 7933 Diagnostics.
- Reduce the number of veterinary students participating in individual necropsy cases and assign these students to participate in other post-gross necropsy evaluation of case materials such as trimming in wet tissues, observation of microscopic evaluation, and generation of the final report.
- Use residents to facilitate these post-gross necropsy evaluation activities, which will also serve to enhance resident experience in teaching.

Objective 1.4: Develop an elective program in veterinary anatomic pathology for veterinary students who may want to pursue residency training in veterinary pathology.

Strategies:

- Develop an advanced anatomic pathology elective rotation including histotechnology, immunohistochemistry, electron microscopy, laboratory animal pathology, avian pathology and off-campus rotations through medical school pathology departments.
- Assign Instructor of Record responsibilities to the anatomic pathology residency coordinator.
- Enroll veterinary students (from Oklahoma State or other veterinary colleges) and clinical interns/residents that must rotate through pathology as a requirement for their program or board examination eligibility.

Objective 1.5: Establish a student chapter of the American College of Veterinary Pathologists.

Strategies:

- Assign the anatomic and clinical pathology residency coordinators to charter a student chapter of the American College of Veterinary Pathologists based upon guidelines developed by the charter organization.

Objective 1.6: Integrate veterinary clinical microbiology, parasitology and pathology into a new Pathobiology Grand Rounds to enhance veterinary student learning.

Strategies:

- Expand the existing pathology Necropsy Rounds into integrated Pathobiology Grand Rounds.
- Develop synergistic interaction of faculty at the case level with student involvement to enhance student perception of problem solving in diagnostics.
- The Instructor of Record for VMED 7933 Diagnostics will assign a case coordinator for each week of Veterinary Pathobiology Grand Rounds.

- Case coordinators will identify cases and distribute information about necropsy results and ancillary testing to faculty.
- Department will provide paid student worker for set-up.
- Individual faculty members responsible in their discipline for Veterinary Pathobiology Grand Rounds will be those assigned to VMED 7933 Diagnostics for the week of origin for cases presented in the Veterinary Pathobiology Grand Rounds.
- Student evaluation of the Veterinary Pathobiology Grand Rounds will use the VMED 7933 Diagnostics evaluation questionnaire.

Goal Two. The Department of Veterinary Pathobiology will intensify post-graduate training for veterinarians in veterinary clinical microbiology, clinical parasitology, and pathology.

Critical Success Factors:

- Recruitment of three new faculty positions with primary assignments in residency post-graduate training of veterinarians and diagnostic service
- Recruitment of five veterinary students per class for post-graduate training in veterinary clinical microbiology, clinical parasitology, or pathology
- Participation and integration of Oklahoma Animal Disease Diagnostic Laboratory and Department of Veterinary Pathobiology faculty in expanded post-graduate training of veterinarians
- Centralization and coordination of post-graduate training for veterinarians in veterinary clinical microbiology, clinical parasitology, and pathology
- Procure state funding for support of five additional trainees positions in post-graduate programs in veterinary clinical microbiology, clinical parasitology, and pathology
- Expansion of external funding for stipends for post-graduate veterinary trainees
- Improve stipends for veterinarians in post-graduate training position to at or above national average
- Enhancement of departmental reputation for quality faculty in veterinary pathobiology disciplines
- Attain 100% success rate of resident trainees on American Colleges of Microbiologists and Pathologists certification examinations
- Develop outcomes parameters to assess the program including graduate degree, board certification, job placement, and career success

Objectives:

Objective 2.1: Enhance post-graduate residency training in veterinary pathology.

Strategies:

- Continue revision of the departmental pathology residency-training program.
- Assign anatomic and clinical pathology residents to participate in diagnostic activities outside their specialty (anatomic or clinical pathology, clinical microbiology, clinical parasitology, electron microscopy, histology, and laboratory animal medicine).
- Develop stronger interactions between anatomic and clinical pathology residency training programs.
- Recruit and assign one additional American College of Veterinary Pathologists boarded pathology faculty to residency training in anatomic and one additional faculty in clinical pathology.
- Procure state funding for one additional resident position in anatomic and for one additional resident position in clinical pathology.

- Renovate an area for resident office/training space (old necropsy room) to enhance interaction between anatomic, clinical pathology, clinical microbiology residents, and post-graduate trainees in clinical parasitology and faculty.
- Assess residency training programs annually including pre-program- quality, quantity and diversity of applicants, intra-program committee review and mock examinations, post-program- American College of Veterinary Pathologists board certification pass rates.

Objective 2.2: Establish post-graduate residency training program in clinical microbiology for veterinarians.

Strategies:

- Advocate to university administration and State Regents for Higher Education the need for a structured post-graduate training program in veterinary clinical microbiology.
- Appoint a committee of Veterinary Pathobiology faculty consisting of American College of Veterinary Microbiologists board certified microbiologists to develop a post-graduate residency training program in veterinary clinical microbiology which will prepare veterinarians for public service careers in microbiology.
- Recruit qualified veterinarians with potential for success from other North American and American Veterinary Medicine Association accredited institutions as well as our own graduates and students from the National Institute of Health Summer research program and the Oklahoma State University professional student population.
- Recruit and assign one additional American College of Veterinary Microbiologists boarded clinical microbiology faculty to residency training in clinical microbiology.
- Procure state funding for two resident positions in veterinary clinical microbiology.
- Assess residency training programs annually including pre-program- quality, quantity and diversity of applicants, intra-program committee review and mock examinations, post-program- American College of Veterinary Microbiologists board certification pass rates.

Objective 2.3: Develop post-graduate training in clinical parasitology for veterinarians leading to the Doctor of Philosophy degree.

Strategies:

- Communicate the need for veterinarians with advanced training in parasitology to university administration and State Regents for Higher Education.
- Recruit veterinarians for post-graduate training in veterinary clinical parasitology leading to the Doctor of Philosophy degree.
- Procure a minimum of one state supported graduate research assistantship for post-graduate training of a veterinarian in veterinary clinical parasitology.
- Provide opportunities for rotations of the post-graduate student through parasitology research laboratories.

- Develop elective courses in parasitology for veterinary students to be taught by the post-graduate student(s) and by faculty.
- Develop plan to organize and expand existing parasite museum and integrate this effort with the training of veterinary parasitologists.
- Develop a journal club for post-graduate veterinarians and veterinary students, and parasitology faculty.

Goal Three. The Department of Veterinary Pathobiology will facilitate flexible career development pathways for faculty.

Critical Success Factors:

- Assign faculty members responsibilities to their areas of developed or developing strength.
- Maintain adequate faculty to allow flexibility in assignment of particular faculty to their areas of strength and interest
- Faculty who teach well and desire to increase their participation in teaching will be assigned and evaluated primarily on the basis of the quality and quantity of their teaching
- Faculty who conduct directed service well and desire to increase their participation in directed service will be assigned and evaluated primarily on the basis of the quality and quantity of their directed service
- Faculty who conduct sponsored research well and desire to increase their participation in sponsored research will be assigned and evaluated primarily on the basis of the quality and quantity of their sponsored research

Objective 3.1: Faculty assignments will reflect a blend of faculty strengths and interests with departmental needs.

Strategies:

- The Department Head in consultation with individual faculty members, and where appropriate, the departmental mentoring committees, will assess the strengths of individual faculty members for accomplishing specific departmental assignments so that these strengths can be best matched with the needs of the Department.
- Changes in primary assignments based on consideration of developed or developing strengths of a particular faculty member will be stated in the “Development and Assignment” section of the Annual Appraisal and Development document.
- More freedom will be sought for Veterinary Pathobiology faculty to participate in Oklahoma Animal Disease Diagnostic Laboratory missions of directed service.
- More freedom will be sought for Oklahoma Animal Disease Diagnostic Laboratory faculty to participate in departmental missions of teaching and research.

Objective 3.2: The Department Head will work with the Director of the Oklahoma Animal Disease Diagnostic Laboratory to better define the roles and responsibilities of both units for assignment and evaluation of Oklahoma Animal Disease Diagnostic Laboratory faculty with 25% tenure track positions in Veterinary Pathobiology for accomplishment of departmental missions.

Strategies:

- Improve cooperation between Veterinary Pathobiology and Oklahoma Animal Disease Diagnostic Laboratory to work for the overall good of the College.

- Develop closer cooperation between the Veterinary Pathobiology Department Head and the Director of Oklahoma Animal Disease Diagnostic Laboratory for assignments of individual faculty to areas of common needs for each unit.

Objective 3.3: The Department will seek to better meet its mission of training post-graduate veterinarians in clinical microbiology, parasitology and pathology by utilizing all aspects of departmental resources including close programmatic development with Oklahoma Animal Disease Diagnostic Laboratory.

Strategies:

- Improve cooperation between Veterinary Pathobiology and Oklahoma Animal Disease Diagnostic Laboratory to work for the overall good of the College.
- Charge a departmental faculty committee to develop and evaluate programs for teaching veterinary students and training post-graduate veterinarians in diagnostics for microbiology, parasitology and pathology.
- Develop closer cooperation of the Veterinary Pathobiology Department Head and the Director of Oklahoma Animal Disease Diagnostic Laboratory in meeting the veterinary student and post-graduate veterinarians educational needs in diagnostics for microbiology, parasitology and pathology.

Goal Four. The Department of Veterinary Pathobiology will enhance career development for faculty with primary teaching and directed service assignments.

Critical Success Factors:

- Maintain ten or more faculty with primary assignments to teaching and directed service missions
- Acceptance by the university administration and the State Regents for Higher Education of the need for training veterinary students and veterinarians in veterinary clinical microbiology, clinical parasitology and pathology to meet increasing societal needs in bio-defense and public health
- Development of competitive salaries for all open faculty positions
- Use mentoring committees, Reappointment Promotion and Tenure document and policies and procedures to effectively develop careers for junior faculty and to avoid overly specialized and focused career pathways
- Improve flexibility for faculty to change between assignments
- Development of funding and policies and procedures to support scholarship in teaching and directed service
- Acceptance of non-traditional and/or non-veterinary publications; e.g. Chronicles of Higher Education, as valid media for scholarship where appropriate
- Use of objective assessments that compare our faculty with faculty with similar assignments at other veterinary institutions
- Develop objective criteria and procedures for selection of external Reappointment Promotion and Tenure reviewers for promotion and tenure
- Availability of finances and replacements to cover assignments in teaching and directed service while individual is on sabbatical leave
- Increase faculty salaries to mean of peer institutions by fiscal year 2006
- Increase the number of clinical research publications in diagnostic journals

Objectives:

Objective 4.1: Facilitate scholarship in teaching and directed service.

Strategies:

- Development funds will be provided for Veterinary Pathobiology faculty with primary assignments to Oklahoma Animal Disease Diagnostic Laboratory.
- Reward accomplishments in scholarship and external funding in teaching, and directed service in Annual Appraisal and Development Evaluations.
- Promote faculty development through off-campus assignments and sabbatical leaves where these activities enhance currency in disciplines and delivery of teaching and directed service.
- As part of Annual Appraisal and Development Evaluation process, faculty within Veterinary Pathobiology, other units of College of Veterinary Medicine, and at other

veterinary medical institutions will be asked to assess the impact of scholarly achievements of faculty in teaching and directed service.

- The Department Head will reinforce the importance of the Mentoring Committees recommendations during his/her Annual Appraisal and Development Evaluation of individual not yet tenured faculty.
- Establish effective pre and post tenure review programs for all faculty.

Goal 5. The Department of Veterinary Pathobiology will enhance career development for faculty with primary research assignments.

Critical Success Factors:

- Reward faculty for establishing successful research programs
- Reward faculty for active participation in national and international scientific organizations
- Reward and support effective graduate education program
- Creation and maintenance of an up-to-date departmental, College of Veterinary Medicine, and Oklahoma State University web pages that reflect individual faculty member's scholarly activities

Objectives:

Objective 5.1: Facilitate career development in research.

Strategies:

- Advocate to university administration for three additional faculty positions with primary research assignments.
- Provide quality laboratory space.
- Encourage participation in scientific organizations and meetings.
- Encourage work assignment off campus for acquisition of new technologies.
- Encourage the formation of research groups, both within Veterinary Pathobiology, other departments at Oklahoma State University, and off campus.
- Provide additional development funds for 1) publication of results; 2) preparation and submission of grant proposals; 3) attendance at scientific meetings.
- Advocate for state funds to maintain faculty salaries to mean of peer institutions.
- Publicize notable research accomplishments by faculty including maintaining a listing of faculty publications (journal articles, reviews, books, book chapters, proceedings and patent filings) on the Veterinary Pathobiology web site.
- Seek a listing of available awards and nominate deserving faculty for research awards (For example: Sigma Xi Young Investigator Award, Sigma Lectureship Award, Oklahoma State University Research Regents Award, Oklahoma State University Regents Professor) and awards provided by scientific organizations.
- Continue the Veterinary Pathobiology Faculty lunch-time seminar series.

Goal Six. The Department of Veterinary Pathobiology will accurately assess excellence in teaching, directed service, and research.

Critical Success Factors:

- Quantifiable parameters to assess instructional effectiveness for use in faculty development
- Reinforcement for faculty achieving excellence in teaching
- Define parameters and outcomes that clearly define expectations for excellence in faculty assignments
- Mentoring of junior faculty for excellence in assignments

Objectives:

Objective 6.1: Develop and implement peer review of teaching for assessing the quality of faculty teaching that does not rely solely on “in course administered” student instructional evaluations.

Strategies:

- Collect student perspective of ongoing courses using exit interviews of veterinary students, results of national board examinations by discipline, and veterinary practitioner surveys.
- Develop peer review of instructors and courses as a method to evaluate teaching.
- Teachers will develop course and teaching portfolios documenting excellence in teaching and instructional outcomes.
- The Department Head will support and encourage development of additional parameters to assess teaching excellence in conjunction with the student evaluations of course and teaching methods.
- The information gathered using these mechanisms will be available for the faculty member and the Department Head for performance evaluation and career development.

Objective 6.2: Accurately assess excellence in directed service in veterinary pathobiology.

Strategies:

- The Department Head and Departmental Reappointment Promotion and Tenure Committee will explore mechanisms for evaluation of the quality and quantity of directed service delivered as a product of faculty assignments.
- An instrument will be developed to assess the quality and quantity of directed service delivered such as a questionnaire surveying the satisfaction of accuracy and timeliness of diagnostic reports to clients.
- The survey information will be available for the faculty member and the Department Head for performance evaluation and career development.

- Diagnosticians will develop diagnostic and case portfolios documenting excellence in diagnosis and case outcomes.

Objective 6.3: Accurately assess excellence in research.

Strategies:

- Establish Veterinary Pathobiology productivity norms and performance expectations for individual faculty members with research assignments.
- Develop baseline data on faculty publications: 1) journal articles, reviews, books, book chapters, proceedings and patent applications; 2) faculty participation in scientific organizations; 3) faculty participation as reviewers and on review panels; 4) invited faculty presentations of papers and posters at scientific meetings; 5) keynote address; 6) performance of graduate students mentored by faculty and career success; 7) faculty participation in scientific organizations and conferences; and 8) faculty awards and special recognition.
- Comparisons based on the database information will be available for the faculty member and the Department Head for performance evaluation and career development.
- Researchers will develop research and project portfolios documenting excellence in research and project outcomes.