

DEPARTMENT OF PHYSIOLOGICAL SCIENCES

Mission

The Department of Physiological Sciences achieves excellence in teaching, research and service in the disciplines of veterinary morphology, physiology, pharmacology, and toxicology.

Vision

The Department of Physiological Sciences will:

- Provide administrative leadership, facilities, and resources necessary to foster development of all faculty and staff;
- Provide high quality instruction to the professional (DVM) and graduate (MS and PhD) degree programs;
- Develop a national reputation for excellence in at least one field of research; and
- Contribute to the service mission of the College of Veterinary Medicine.

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.

Productivity – We are committed to production of scholarly works appropriate to the teaching, research, and service missions of the Department.

Goals, Critical Success Factors, Objectives, and Strategies

Goal One: Administrative Leadership – Provide an administrative and organizational framework that supports and promotes accomplishment of faculty and staff assignments.

Critical Success Factors:

- Implementation of a plan for optimal assignment of all faculty and staff Full-Time Equivalent positions – 2004
- Policies and procedures relating to personnel issues full reviewed and updated - 2004
- Funding available for each staff member to attend one continuing education activity/year - 2005
- Department head with an exclusive administrative appointment to the Department of at least 50% - 2004
- Faculty professional developmental funds of at least \$1,200/faculty member/year - 2006
- Opportunity for six-month, full salaried sabbatical leave for all tenured faculty - 2006
- Faculty and staff salaries to at least peer veterinary institution average – 2007
- Proportion of female faculty increased to 5/17 - 2006

Objectives:

Objective 1.1: Develop a plan to increase extramural research, state, corporate and/or private endowment funding to help cover needed increases in faculty and staff salaries, benefits, and development funds.

Strategies:

- Support faculty and staff involvement in Departmental and College development initiatives to increase private, state, and federal funding.
- Encourage peer review of research and education grant proposals to increase their success rate.
- Increase budgetary requests on grant applications to achieve salary and professional development success factors for administrative, teaching, and research staff.
- Support development of a College policy to provide annual bonuses to faculty, using salary savings, indirect costs, and other funds transferred into unrestricted (e.g., AE-1-52000) sub accounts.
- Facilitate and support development of multi-investigator research program applications.

Objective 1.2: Improve provision of administrative service to meet the needs of expanding instructional, research, and service activities.

Strategies:

- Request 50% College support for one new administrative staff position and fund the balance of this position using direct budget allocations on extramural grants and contracts.
- Review and, if necessary, update current administrative personnel policies and job descriptions to ensure that departmental needs are met.

Objective 1.3: Optimize the use of Departmental personnel to best achieve the Departmental vision, including education of a diverse professional and graduate student body.

Strategies:

- Review current faculty Full-Time Equivalent assignments to determine adjustments needed to achieve the departmental vision. Investigate further shifts towards exclusive faculty assignments to teaching or research that take into account both the expertise and interests of the faculty member and the mission expectations of the Department.
- Develop a coordinated plan and schedule to provide for faculty sabbatical leaves.
- Appoint the most qualified candidates to open positions, but nationally advertise each new position to maximize identification and recruitment of women and minorities.
- Pending permanent appointment of College administrators, restore an exclusive administrative appointment of at least 50% to the Department Head position.

Goal Two: Instruction – Provide quality instruction in veterinary morphology, physiology, pharmacology, and toxicology that is pertinent to professional and graduate student development.

Critical Success Factors:

- Credit hour/instructional Full-Time Equivalent position ratio of no more than 6 for each of the disciplinary areas represented in the Department (physiology, anatomy, histology, pharmacology, toxicology) – 2006
- Appropriate instructional evaluations employed that are tailored to meet the assessment needs of professional and graduate courses - 2005
- Peer panel review of 2 instructional presentations/faculty every 3 years - 2006
- Formal program implemented for professional development of graduate students and post doctoral fellows to prepare them for possible careers in academia - 2006
- Peer review (external and internal) of each course syllabus for adequate coverage of subject content once every 3 yrs. - 2007
- PhD/MS full-time students assigned to Departmental faculty graduating on average in 4.5 yrs/2.5 years – 2007
- At least two areas of graduate emphasis in the Veterinary Biomedical Sciences graduate program with majority participation by Departmental faculty - 2005

Objectives:

Objective 2.1: Insure that sufficient instructional Full-Time Equivalent positions are available to meet the teaching needs of the Doctor of Veterinary Medicine curriculum.

Strategies:

- Create two new positions with a combined 1.0 Full-Time Equivalent assignment to instruction in physiology and/or pharmacology.
- Continue to assess the need for additional instructional Full-Time Equivalent positions in light of developments in faculty research activities.

Objective 2.2: Determine if current professional courses are meeting needs of students, curriculum objectives, and profession.

Strategies:

- Request that the Curriculum and Effective Instruction Committee review all Departmental professional course syllabi and learning objectives every 3 years.

- Request guidance from the Curriculum and Effective Instruction Committee to identify needed electives and make necessary assignments to meet these needs, consistent with faculty expertise.
- Develop and implement methods of evaluation whereby students can reliably assess design and delivery of course content.
- Develop and implement methods for periodic review of courses by internal and external peers.
- Support allocation of college and university resources to provide quality teaching materials and laboratory teaching assistants for professional courses.
- Organize departmental retreat/workshops to discuss teaching methodologies and resources every 3 years.

Objective 2.3: Develop a high quality, nationally recognized graduate training program.

Strategies:

- Define scope of the Departmental role in development of the Veterinary Biomedical Sciences graduate program.
- In collaboration with other College departments, develop and implement a plan to establish at least two areas of graduate emphasis.
- Develop new graduate courses to meet the current and anticipated needs of biomedical graduate education.
- Increase stipends for graduate students to at least the National Institutes of Health pay levels by increasing personnel budgets on grant applications.
- Implement a College-wide special lecture/seminar series (in addition to the existing graduate student seminar course) that brings in top scientists from off campus and provides an opportunity for Departmental faculty and postdoctoral associates to present their research accomplishments.
- Increase academic admissions requirements for the graduate program.

Goal Three: Research – Further develop a reputation for research excellence, as evidenced by scholarship, successful competition for research and infrastructure funding, and recognition of faculty members by their national and international peers.

Critical Success Factors:

- At least one extramurally funded multi-investigator research program with a national reputation for excellence - 2007
- Publication of 40 refereed publications/year with at least 50% having an impact factor > 1.0 - 2005
- Critical mass of faculty (> 3 research Full-Time Equivalents) in at least 2 research areas - 2006
- Extramural research projects with a total departmental budget of \$2.5 million/yr – 2007
- Collaboration with an industrial partner in commercialization of research - 2004

Objectives:

Objective 3.1: Identify at least two research areas that can achieve the critical mass of faculty to compete nationally for multi-investigator program funding and focus research resources on those areas.

Strategies:

- Assess current Full-Time Equivalent assignments and determine the most effective way to support the primary research focus area with current faculty, staff, and students.
- Identify the next research area that shows promise and develop a plan to secure a critical mass of faculty, staff, and graduate students.
- Explore and select grant application opportunities that may serve as vehicles for multi-investigator program development.

Objective 3.2: Showcase the departmental identity and diversity that has been and will continue to be the hallmark of our research success.

Strategies:

- Encourage service of faculty on national journal and grant review panels, editorial boards, and professional organization committees by recognizing these efforts on annual appraisals.
- Provide professional development funding to support faculty chairing/directing national meetings and symposia.

- Implement a college-wide special lecture/seminar series (in addition to the existing graduate student seminar course) that brings in top scientists from off campus and provides an opportunity for Departmental faculty and postdoctoral associates to present their research accomplishments.

Objective 3.3: Support development of research careers of junior faculty.

Strategies:

- Assign each junior faculty member a mentoring advisor or committee appropriate to their assignment and recognize/reward activity/effort of all participants.
- Assist junior faculty in identifying high-yield extramural funding opportunities.
- Encourage peer review of research and education grant proposals submitted by junior faculty to increase their success rate.

Objective 3.4: Encourage commercialization of research.

Strategies:

- Implement plans to use space in the Venture 1 building of the Oklahoma Technology and Research Park for research involving development of biosensor technology.
- Encourage collaboration and partnerships with private research and development companies, especially those involving University and faculty ownership of intellectual property.

Goal Four: Service – Enhance the service mission of the College through support of academic, diagnostic, and research services pertinent to Departmental disciplines.

Critical Success Factors:

- Commitment of approximately 0.5 faculty Full-Time Equivalents to veterinary clinical service functions – 2006
- Faculty assignment to service of core facilities, but amounting to no more than 0.5 Full-Time Equivalents - 2004
- Active participation on Departmental, College, and University committees – 2004

Objectives:

Objective 4.1: Contribute to the clinical service mission of the College.

Strategies:

- Further develop an equine performance testing service in collaboration with the Department of Veterinary Clinical Sciences.
- Establish a clinical pharmacology service, involving therapeutic drug monitoring and case consultation, in collaboration with the Department of Veterinary Clinical Sciences.
- Provide electrodiagnostic testing services, in collaboration with the Department of Veterinary Clinical Sciences, on an as needed basis.

Objective 4.2: Contribute to the academic and research service of the College.

Strategies:

- Fulfill assigned service functions involving College central administration, safety compliance, oversight of biotechnology resources, and supervision of electron and confocal microscopy facilities.
- Recognize and reward faculty participation on academic committees.