

ANATOMY AND CELL BIOLOGY

Mission

The Department of Anatomy and Cell Biology discovers, develops, and promotes biomedical knowledge involving cell biology and the anatomical sciences of gross anatomy, developmental anatomy, histology, and neuroanatomy.

Vision

The Department of Anatomy and Cell Biology will be recognized locally, regionally, and nationally for its excellence in research and scholarly activity, innovative educational programs for medical and graduate education, and the quality of medical students and scientists trained in its programs.

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.

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

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

Diversity - We respect others and value diversity of opinion, 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.

Strategic Goals, Critical Success Factors, Objectives, and Strategies

Goal One. Human Resources. Recruit, retain, and develop an outstanding, diverse faculty and staff for medical and graduate courses and research.

Critical Success Factors:

- Recruit and retain three outstanding faculty to achieve our needs in medical and graduate lecture courses and laboratory courses in gross anatomy, histology, and neuroanatomy.
- Year 1-2 – First faculty member hired.
- Year 3-4 – Second faculty member hired .
- Year 4-5 – Third faculty member hired.
- Emphasize hiring of women and minority faculty.
- Secure salary and benefits comparable with peer medical institutions.
- Secure teaching loads in core medical courses as compared with other OSU-CHS departments and peer medical institutions.

Objectives:

Objective 1.1: Salary and benefits for faculty that are on par with peer medical institutions.

Strategies:

- Provide administration with salary and benefits data comparing with peer medical institutions.
- Negotiate with administration on implementation of salary and benefit adjustments.

Objective 1.2: Faculty teaching loads in core medical courses in line with peer medical institutions and OSU-CHS departments.

Strategies:

- Increase number of faculty in department.
- Increase use of computer-based tutorials.
- Increase the use of graduate and/or upper level medical students in courses.

Objective 1.3: Research space and facilities that are on par with peer medical institutions.

Strategies:

- Provide administration with data about research space needed per faculty member.
- Utilize present space to its full capacity.
- Share space with other departments with similar research and same use equipment.

Objective 1.4: Teaching space and equipment that are on par with peer medical institutions.

Strategies:

- Provide administration with data regarding peer medical institution teaching facilities and equipment.
- Provide administration with justification and plans for a multipurpose teaching laboratory that could be shared by other departments.
- Provide administration with justification and plans for a gross anatomy laboratory.
- Provide administration with information regarding current teaching equipment and technology.

Objective 1.5: Recruit and retain the most qualified technical and clerical staff available for open positions.

Strategies:

- Work with Human Resources for a competitive salary structure.
- Provide administration with data regarding our technical and clerical needs.
- Provide a minimum of one development opportunity for each technical and clerical staff per year.
- Utilize the services available at the TCC/Tulsa VoTech Center and the Center for Instructional Technology at OSU-Tulsa.
- Provide opportunities to attend scientific meetings.

Goal Two. Educational Excellence in Academic Programs. Provide outstanding scientists and osteopathic physicians for the professional communities.

Critical Success Factors:

- Increase stipend support for all full-time graduate students.
- Every PhD candidate to attend and present at ≥ 1 national/regional professional meeting.
- Every MS candidate to attend and present at ≥ 1 state/regional professional meeting.
- Provide mentor training for faculty advisors.
- Monitor professional development of graduate students.
- Every PhD candidate have ≥ 1 primary authorship paper accepted in a peer-reviewed journal.
- Demonstrate proficiency in teaching as measured on course/faculty evaluations of a minimum score of three.
- Every year ≥ 1 departmental medical student awarded AOOA student research fellowship.
- Develop at least one new course for the medical curriculum over the next five years.
- Develop at least one new course for the biomedical sciences curriculum over the next year.
- Offer electives for continuing education.

Objectives:

Objective 2.1: Recruitment and retention of outstanding medical and graduate students.

Strategies:

- Work with the Biomedical Sciences Graduate Committee and the Office of Basic Sciences to recruit the best-qualified biomedical graduate students.
- Work with the Office of Basic Sciences to increase graduate student support.
- Recommend to the Office of Student Affairs and OSU premed groups the appropriate anatomical preparatory courses for applicants to the College of Osteopathic Medicine.
- Respond quickly to graduate student and D.O./Ph.D. applications that are interested in the anatomy sub disciplines.
- Involve faculty in recruitment opportunities for medical and graduate students.

Objective 2.2: Develop and monitor curricula that stimulate excellence and prepare students for professional careers.

Strategies:

- Review anatomy curricula and compare and correlate with other departments.
- Dialogue with clinicians about necessary basic knowledge needed in the clinical setting.

- Continue collaboration with other departments and/or disciplines in order to deliver more contemporary courses that will enhance the learning experience of medical and graduate students.
- Continue dialogue with other disciplines to develop a neuroscience course that includes neuroanatomy, neurophysiology, and components of neuropharmacology and psychology.
- Develop a cell and molecular biology course for medical students.
- Develop an anatomical clinical imaging course to integrate the anatomy sub disciplines.
- Provide cadaver dissection experiences to all qualified students.
- Maintain communication with professional organizations regarding the use of developmental and educational tools.
- Provide faculty peer evaluations throughout the courses.

Objective 2.3: Monitor medical student progress through personal interaction in the classroom, laboratory, and mentor situations.

Strategies:

- Continue courses that provide personal interaction with faculty and teaching assistants.
- Faculty will serve as mentors for groups of medical students.

Objective 2.4: Provide opportunity for student professional development through teaching and research experiences.

Strategies:

- Graduate students are required to assist in one departmental laboratory course.
- Ph.D. students are required to lecture in at least one course.

Objective 2.5: Increase the participation of graduate and medical research students in communicating the results of scientific research to the scientific community and the general public in local, state, regional, and national competitions and conferences.

Strategies:

- Ph.D. candidates must present an oral or poster presentation of their graduate work at a national/regional meeting.
- M.S. candidates must present an oral or poster presentation of their graduate work at a regional/state meeting.
- Obtain and provide funding for travel to professional meetings.
- Present in house seminars to faculty and peers.

Goal Three. Leveraging Resources. Make the best and most productive use of physical and financial resources to develop and maintain state of the art teaching and research facilities for the medical, graduate, and specialized programs.

Critical Success Factors:

- Increase in the departmental research budget directed to graduate student research support
- Increase in the departmental operations budget directed to the day to day operation of the department and maintenance of facilities
- Increase in the departmental research budget directed to funding faculty research
- Develop institutional support to establish a multipurpose teaching laboratory for histology, neuroanatomy/neurobiology, medical imaging course(s), and other disciplines
- Develop institutional support to establish a cadaver-based multimedia gross/developmental anatomy laboratory
- Develop institutional support and establish a imaging core facility
- Develop institutional support and establish a central histopathology laboratory
- Support improvement of a animal use facility that meets AALAS and AAALAC approval

Objectives:

Objective 3.1: Prepare and submit an annual financial budget management plan based on fiscal history and needs of the department in the areas of teaching and research.

Strategies:

- Budget preparation with individual faculty needs and graduate students considered.
- Assess budget needs for course and facility support.

Objective 3.2: Establish a department and interdepartmental equipment plan to assess current equipment status and determine short term and long-term equipment needs.

Strategies:

- Begin sharing equipment list between departments.
- Develop a long-term strategy for repair, maintenance, and replacement of essential equipment.
- Develop a long-term strategy for acquisition of essential new equipment.

Objective 3.3: Establish strategy for obtaining a multipurpose laboratory, core imaging facility, a central histopathology laboratory, and an animal use facility.

Strategies:

- Utilize development funds, shared grant funds, and equipment grants.

- Evaluate shared projects or projects utilizing the current anatomy and cell biology facilities, such as the histology preparatory area on the 4th floor.
- Evaluate unique opportunities for a core imaging facility in the forensics department.

Objective 3.4: Establish the Jarolim/Overack/Taylor Memorial Anatomical Sciences Laboratory.

Strategies:

- Utilize strong support from the alumni.
- Update with current OSHA requirements, updated and modern equipment, and anatomical educational aids.
- Continue to stress the importance of the department's Body Donor Program.
- Emphasize the importance of the laboratory in cadaver dissection, exploration of the human body, and the osteopathic medical curriculum.

Goal Four. Research and Scholarly Activity. Enhance the atmosphere for research and scholarly activity.

Critical Success Factors:

- Increase the faculty number by 50% over the next five years to approach student: faculty ratio of other anatomy-related departments
- Increase in research space to an average of 1200 square feet per faculty member
- More than two publications per year average for faculty
- Increase research-dedicated technical support to three full time positions

Objectives:

Objective 4.1: Provide assistance to faculty in their pursuit of research, scholarly, and creative activities.

Strategies:

- Work with administration on providing adequate startup funding for faculty research/scholarly activity.
- Work with administration on providing adequate intramural funding for faculty research/scholarly activity.
- Balance percentages of work effort to provide best faculty performance.
- Annually evaluate research productivity with respect to teaching and service demands.
- Acquire technicians dedicated to assisting faculty research efforts.
- Establish new faculty mentoring program focusing on grant writing and obtaining extramural funding.

Objective 4.2: Develop collaborative departmental and interdepartmental research interactions.

Strategies:

- Utilize common interests and technological skills of departmental faculty, staff, and those of OSU and OSU-Tulsa.
- Develop a Center for Neuroscience.
- Develop a Center for Diabetes Research.
- Participate in Tulsa area biomedical research consortium.
- Participate in Sam Noble Natural History Museum research activities.
- Continue research collaboration with OSU-Vet Med.

Objective 4.3: Encourage faculty research/scholarly activity sabbaticals, short courses, or scientist exchange.

Strategies:

- Provide financial support for at least one additional meeting per year per faculty member to a meeting of interest.
- Provide teaching support while faculty are on leave.

Goal Five. Image/Pride/Recognition. Project an image that will promote pride and positive recognition for the Department of Anatomy and Cell Biology, the Division of Basic Sciences, and the OSU Center for Health Sciences.

Critical Success Factors:

- Report and publicize grants, scholarships, patents, and awards presented to faculty, staff, and students
- All faculty and students will participate in state, regional, national, or international professional society meetings at least every 2 years
- All faculty, staff, and students will participate in public education and charitable programs as appropriate
- All faculty, staff, and students will participate in University, College, and Departmental Committees as appropriate

Objectives:

Objective 5.1: Encourage faculty, graduate students, and medical students to become members and active participants in state, regional, and national societies of interest.

Strategies:

- Provide travel support for students to attend scientific meetings.

Objective 5.2: Encourage and recognize participation and professional service to editorial boards and community organizations.

Strategies:

- Provide staff support for outside professional activity (ex. Editorial boards, grant reviews, meeting organization, etc.).
- Utilize faculty effort reports for faculty involvement.

Objective 5.3: Provide information for a dynamic departmental website.

Strategy:

- Dialogue with Internet services regarding a timely organization and update of material on the website.

Objective 5.4: Create a mechanism for nominating students, staff, and faculty to be considered for professional recognition within appropriate professional and honorary societies.

Strategies

- Work with faculty, staff, and organization guidelines

Objective 5.5: Create a mechanism for reporting departmental member activities and achievements to professional society newsletters and other outlets that are accessed by the public.

Strategies:

- Work with Department of External Affairs.

Objective 5.6: Continue the individualized learning and personal concern long associated with the department.

Strategies:

- Maintain laboratory classes for personal student-faculty interaction.
- Increase faculty number to improve personal, professional, individual interaction with students, especially in larger medical student classes.

Goal Six. Outreach/Service/Development. Enhance the quality of life of Oklahomans by contributing to their human, economic, and cultural development.

Critical Success Factors:

- Increase in faculty, staff, and student participation in educational outreach efforts provided by the department and through local and state professional societies
- Increase in faculty, staff, and student participation in community presentations
- Support a recruiting mechanism for Native Americans

Objectives:

Objective 6.1: Continue support of state societies such as the Oklahoma Microscopy Society in providing educational outreach.

Strategies:

- Increase department membership in state societies.
- Support new state efforts and those already in place.

Objective 6.2: Provide community seminars such as those organized through the Oklahoma Center for Neuroscience.

Strategies

- Provide staff support and faculty release time as necessary.

Objective 6.3: Provide health-related anatomical presentations to groups visiting the OSU-CHS campus.

Strategies:

- Work with Office of External Affairs and Office of Student Affairs.

Objective 6.4: Utilize faculty to develop recruiting efforts for Native Americans.

Strategies:

- Provide for release time as necessary.
- Support faculty efforts in recruiting Native Americans.
- Work with the Office of Student Affairs in developing a recruiting strategy for Native Americans.