

BASIC SCIENCES AND GRADUATE STUDIES

Mission

Basic Sciences and Graduate Studies provides medical, graduate, and continuing education; conducts research and other scholarly activity; and performs local, regional, and national service.

Vision

Basic Sciences and Graduate Studies will:

- Conduct original basic and health-related research;
- Provide innovative education programs;
- Produce scholarly graduates; and
- Perform dedicated service to community and professional organizations.

Core Values

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

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.

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

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. Achieve national recognition for educational programs.

Critical Success Factors:

- Maintain above average scores for basic sciences courses on appropriate professional boards – 95% pass rate.
- Increase the quantity and quality of graduate students enrolled in the biomedical and forensic sciences programs – 9.0 MCAT; 1200 GRE.
- Enhance public awareness of faculty expertise – 25% increase in community involvement.

Objectives:

Objective 1.1: Improve the focus of the biomedical and forensic sciences programs.

Strategies:

- Evaluate the graduate curricula.
- Identify areas of strength.
- Strengthen areas of weakness.

Objective 1.2: Improve the focus of the basic sciences courses.

Strategies:

- Evaluate the medical curriculum.
- Identify areas that need development or consolidation.
- Strengthen areas of weakness.

Objective 1.3: Provide incentives for faculty involvement in national and public forums.

Strategies:

- Underwrite the cost of one meeting per faculty member per year.
- Recognize faculty involvement in professional organizations.
- Recognize faculty involvement in community organizations.

Objective 1.4: Increase the number of basic sciences faculty.

Strategies:

- During the proposed five-year period, increase the number of faculty by 15, from the current 24 to 39.

- Each of the six disciplines will have six faculty except for anatomy/cell biology, which will have nine.
- Provide adequate salary, research start-up funds, and laboratory space for each new faculty member.
- Provide funding for paid adjunct faculty in each basic sciences department.
- Work with Administration to develop a plan for endowed professorships in basic sciences teaching.

Goal Two. Provide qualified graduates to meet the needs of the professional community.

Critical Success Factors:

- Evaluate graduate employment success – 100% employed within six months
- Determine the number of graduate students taking postdoctoral positions – 50% postdocs
- Produce graduate students who are actively recruited by employers – 25% recruited

Objectives:

Objective 2.1: Enhance the academic environment at the Center for Health Sciences.

Strategies:

- Have two biomedical sciences, one forensic sciences, and two journal club seminars per month.
- Provide travel funds and honoraria for external seminar speakers, two in biomedical sciences and one in forensic sciences per semester.
- Make available mentor training for faculty advisors.

Objective 2.2: Generate competitive packages for recruiting graduate students.

Strategies:

- Provide stipend support and tuition waivers for all full-time Ph.D. students.
- Provide stipends and tuition waivers for two D.O./Ph.D. students per year for the seven-year dual degree program.
- Aggressively advertise the biomedical and forensic sciences graduate programs.

Objective 2.3: Increase graduate student activity within basic sciences.

Strategies:

- Have graduate students present one seminar or journal club per year.
- Require Ph.D. candidates to present their research at a national or regional meeting.
- Have M.S. students present their research at a regional or state meeting.
- Require Ph.D. candidates give at least one lecture in a medical or graduate course.

Objective 2.4: Evaluate the programs based on the successes and strengths of recent graduates.

Strategies:

- Identify positions taken by recent graduates.
- Determine the percentage of graduates taking postdoctoral appointments.
- Assess teaching versus research positions taken by recent graduates.

- Survey graduates for strengths and weaknesses of their graduate programs.

Objective 2.5: Modify the programs based on input from potential employers.

Strategies:

- Survey employers for strengths and weaknesses of recent graduates.
- Survey employers to assess specific needs.
- Modify programs based on needs.

Goal Three. Enhance the reputation for excellence in research.

Critical Success Factors:

- Increase the percentage of Basic Sciences faculty with extramural funding – 50% funded.
- Improve facilities and infrastructure to support desired level of research – 800 sq. ft. per faculty member.
- Implement an intramural grant program – \$30 - \$50K fund.
- Increase the number of research faculty in Basic Sciences – total of 41 faculty in five departments in five years.
- Increase the number of publications – average one per faculty member per year.

Objectives:

Objective 3.1: Increase the number of research collaborations involving Basic Sciences.

Strategies:

- Through seminars and discussions, identify areas of potential collaboration.
- Provide seed money for new collaborations.
- Provide technical support for collaborative studies.
- Encourage collaborative publications.

Objective 3.2: Establish scholarly activity with clinical colleagues.

Strategies:

- Arrange meetings to discuss potential research collaborations.
- Enable more clinical faculty to become graduate faculty.
- Involve clinical faculty in dual degree programs and in graduate courses.
- Encourage the recruitment of clinical research faculty.

Objective 3.3: Establish Centers of Excellence.

Strategies:

- Identify areas of research excellence.
- Develop a plan to obtain funding for areas of excellence.
- Identify a director for each area of excellence.
- Provide an administrative salary stipend for each center leader.
- Work with Administration to develop a plan for endowed research professorships and chairs in basic sciences.

Objective 3.4: Promote faculty activity in local, regional and national organizations.

Strategies:

- Provide funds for each faculty member to annually attend and present at a research meeting.
- Give recognition and service credit for committee activity and leadership involvement in scientific organizations.

Goal Four. Develop facilities and infrastructure for research and education.

Critical Success Factors:

- Renovate first floor teaching laboratory and Dunlap Auditorium into research space – year one and three, respectively.
- Provide seed money for faculty and graduate student research – \$4 - \$7K grants.
- Provide stipend support for graduate students - \$20K per Ph.D. student for 12 students by year five.
- Cooperate with agencies and other institutions to provide training opportunities for students – 25% increase in opportunities.
- Expand quality core facilities and equipment to assure state of the art research and training facilities – 50% increase in space and equipment by year three.

Objectives:

Objective 4.1: Develop a plan to replace obsolete equipment and equipment exceeding life expectancies.

Strategies:

- Identify shared equipment.
- Implement long-term strategy to repair, maintain, and replace essential equipment.
- Develop plan for acquisition of new equipment.

Objective 4.2: Establish a budget for essential equipment and equipment replacement.

Strategies:

- Determine the cost of equipment maintenance and replacement.
- Prioritize the Division equipment needs.
- Develop a long-term budget for equipment.

Objective 4.3: Apply for equipment and facilities grants from government and private agencies.

Strategies:

- Seek foundation and federal funding for essential equipment.
- Have collaborative research groups seek equipment funding.
- Obtain recurring funds for equipment maintenance.

Objective 4.4: Develop relationships with City, County, State, and Federal agencies to provide training for students.

Strategies:

- Establish working relationships with the Medical Examiner's Office and the City-County Health Department.
- Identify State and Federal agencies that could provide training experiences for graduate students.

Objective 4.5: Promote faculty development programs.

Strategies:

- Make available mentor training for faculty advisors.
- Take advantage of CHS, OSU-Tulsa, and OSU-Stillwater faculty development seminars on teaching, research, and administration.

Goal Five. Facilitate strategic collaboration in the scientific community for economic development.

Critical Success Factors:

- Collaborate with colleagues in the Tulsa area in the development of biomedical and forensic research – 25% increase in adjunct faculty appointments by year three.
- Identify five individuals to attend community forums on biomedical research and technology – 10% of faculty involved in biotechnology research.

Objectives:

Objective 5.1: Develop a team of research faculty to represent the Center for Health Sciences on Tulsa economic development task forces.

Strategies:

- Explore the potential for biotechnology research in the Tulsa area.
- Strengthen faculty interaction with local and regional academic institutions.

Objective 5.2: Be active participants in the Tulsa Consortium for Biomedical Research.

Strategies:

- Have CHS representation at all Consortium public meetings.
- Be involved in setting Consortium priorities and goals.

Goal Six. Perform local, regional, and national service/outreach.

Critical Success Factors:

- Increase faculty, staff, and student participation in educational outreach – 25% increase.
- Increase faculty, staff, and student involvement in community organizations – 25% increase.
- Promote faculty expertise – 25% increase in community involvement.

Objectives:

Objective 6.1: Support State educational organizations such as the Oklahoma Academy of Science.

Strategies:

- Increase faculty and student membership in such societies.
- Increase faculty and student participation at annual meetings.
- Increase faculty involvement in society leadership.

Objective 6.2: Increase faculty involvement in regional and national organizations.

Strategies:

- Encourage membership on society committees.
- Encourage faculty to seek leadership roles in society activities.
- Work with Administration to promote the recognition and utilization of faculty expertise.

Goal Seven. Increase diversity among personnel.

Critical Success Factors:

- Increase diversity among faculty – 25% increase.
- Increase diversity among staff – 25% increase.
- Increase diversity among students – 25% increase.

Objectives:

Objective 7.1: Have a greater diversity among faculty and staff.

Strategies:

- Emphasize the hiring of women and minority faculty and staff.
- Work with Human Resources to develop strategies for recruiting more women and minorities.

Objective 7.2: Recruit more minority and disadvantaged graduate students.

Strategies:

- Support faculty efforts in recruiting minority and disadvantaged graduate students.
- Make Native Americans a focus for graduate student recruitment.
- Work with the Office of Student Affairs in developing recruiting strategies for minority and disadvantaged graduate students.