

BIOCHEMISTRY AND MICROBIOLOGY

MISSION

To provide academic training and research opportunities for graduate and medical students through basic science and health-related activities dealing with biochemistry and microbiology.

VISION

The Department of Biochemistry and Microbiology will:

- Be recognized locally, regionally, and nationally for excellence in research and scholarly activity;
- Conduct research in basic and health sciences;
- Prepare and deliver innovative educational programs;
- Produce graduate and medical students prepared for scholarly endeavors in scientific and medical communities; and
- Provide service to local, regional, and national science and health related 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 for the public's trust and are accountable for our actions.

Strategic Goals, Critical Success Factors, Objectives, and Strategies

Goal One. Increase faculty and staff numbers, office and research space for medical and graduate courses, research, and other scholarly activities.

Critical Success Factors:

- Increase faculty numbers from present level to six microbiologists, six biochemists, and adequate staff support.
- Increase laboratory space to 800 square feet for each active research faculty.
- Increase research and administrative staff support to level that enables each researcher to initiate a viable research program.
- Obtain salary and benefits for faculty and staff commiserate with peer medical institutions.
- Equalize teaching loads of faculty to be comparable with peer medical institutions.
- Composition of staff and faculty reflects the society in which we live.

Objectives:

Objective 1.1: Reach faculty strength of six microbiologists, six biochemists and adequate staff and research support personnel.

Strategies:

- Increase number of graduate course offerings and research opportunities, which will justify increased staff and faculty numbers.
- Coordinate with Administration to ensure that faculty and staff recruitment is based on competitive salaries, benefits, and start-up funds.

Objective 1.2: Provide individual offices and 800 square feet of laboratory space for each faculty member.

Strategies:

- Work with administration and research faculty to maximize utilization of usable space and resources.
- Provide Administration with appropriate data to justify needs for additional laboratory space.

Goal Two. Development of research and graduate programs.

Critical Success Factors:

- Increase number of faculty with external funding so that Microbiology and Biochemistry sub-disciplines have minimum of two graduate student stipends each.
- Increased space devoted to research and graduate program.
- Stipend support for full-time students comparable to local and regional levels
- All faculty members are members in good standing with OSU Graduate Faculty.
- All faculty members are responsible for teaching a graduate course.
- Every M.S. candidate will attend and present at least once at a state/regional professional meeting.
- Every Ph.D. candidate present at least once at a state/regional meeting and once at a national meeting.

Objectives:

Objective 2.1: Increase numbers of faculty with external funding to a level that supports minimum of two graduate student stipends per sub-discipline.

Strategies:

- Provide release time for faculty to increase research productivity.
- Use contract teaching if necessary to provide faculty release time for research.
- Encourage faculty to write grant proposals providing funding for graduate students.
- Initiate joint research projects with OSU-CHS clinical facility and with other institutions of higher education in the local and regional communities.
- Initiate meetings with clinical and/or other basic science researchers with common interests to explore possible areas of collaboration.
- Provide funding for either on-site or off-site visits with researchers having common interests.

Objective 2.2: Increase overall level of internal and external funding to the department.

Strategies:

- Provide funding for faculty to attend professional meetings and grant writing workshops.
- Encourage faculty to write grant proposals that provide indirect cost funds to the department.
- Use indirect costs and salary savings monies for intramural funding of research.
- Provide new faculty with start-up funds consistent with regional levels and free time to develop research programs.
- Work with Administration and Human Resources for adequate funding.
- Provide appropriate research release time for new and/or productive researchers.

- Facilitate preparation and processing of research applications.
- Facilitate maximum utilization of pre-packaged Internet layouts for grant proposals.
- Provide appropriate training for administrative/technical support for processing grant proposals.
- Reward faculty success with research release time, priority to departmental assets, and financial rewards.
- Provide intramural funding for promising research projects enabling faculty to develop preliminary data.
- Provide faculty with information on current or planned research from appropriate funding agencies.

Objective 2.3: Protect available research time for new faculty by decreasing initial teaching requirements.

Strategies:

- Contract teaching by adjunct faculty until research programs are fully established.

Objective 2.4: Provide funding and opportunities to attend workshops, technical meetings and classes to enhance skills.

- Provide funding, release time and encouragement for staff/faculty to attend local, regional, or national meetings to gain or enhance research/administrative skills.
- Use intramural funds such as indirect costs and salary savings for support of programs.

Objective 2.5: Increase number of peer-reviewed publications in the department.

Strategies:

- Encourage faculty to expedite publication of data.
- Encourage greater utilization of medical student researchers.
- Encourage and nurture synergistic research among different laboratories.
- Facilitate early publication of student research in state, regional, and national media.
- Provide administrative, A-V, graphic arts support, and publishing costs.
- Reward success.

Goal Three. Development of graduate and medical students.

Critical Success Factors:

- Minimum of one full-time graduate student and one part-time medical student in each laboratory
- Minimum of one peer-reviewed publication and one abstract for each full-time student
- Minimum of one abstract for each medical student in each research laboratory

Objectives:

Objective 3.1: Provide funding and opportunities for students to attend local, regional and national meetings.

Strategies:

- Use departmental monies for funding student participation in scientific meetings.
- Seek out and submit proposals to granting agencies supporting student research and travel.

Objective 3.2: Recruit more medical students in research.

Strategies:

- Encourage faculty to actively recruit medical students for part-time or summer research during their respective lecture sequences.
- Prepare and post summaries of faculty research interests and areas of research in locations accessible to medical students.
- Maintain current and up-to-date web site for prospective students.

Objective 3.3: Recruit higher quality of graduate students.

Strategies:

- Develop relationships with heads of basic science departments of state and regional universities.
- Develop recruiting information regarding programs, faculty, and facilities to be posted on web site.

Goal Four. Replace or obtain essential research equipment.

Critical Success Factors:

- Replacement of equipment becomes line item in the budget.
- Research equipment needs of faculty are met with current/state-of-the-art equipment.
- Obsolete and non-functional equipment replaced.

Objectives:

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

Strategies:

- Identify essential research equipment and current status.
- Establish priority of replacement.
- Develop plan and timetable to replace equipment as per priority.

Objective 4.2: Develop plan to establish budget for essential equipment/equipment replacement.

Strategies:

- Ensure proper maintenance is performed on all equipment.
- Develop short-range and long-range plans to replace essential equipment.
- Develop replacement budget consistent with funding and needs.

Objective 4.3: Coordinate with other institutions to share costs on equipment for common needs.

Strategies:

- Maximize use of core facilities whenever feasible.
- Collaborate with local and regional agencies to share equipment costs and obligations.

Objective 4.4: Apply for equipment grants from governmental or private agencies.

Strategies:

- Seek equipment grants from local, regional, and national agencies to include private foundations.

Goal Five. Enhance the image of OSU-CHS and Department of Biochemistry and Microbiology.

Critical Success Factors:

- General public is aware of OSU-CHS and Department of Biochemistry and Microbiology functions and activities
- OSU-CHS and Departmental participation are sought after and expected in local and regional medical/scientific meetings and functions

Objectives:

Objective 5.1: Increase participation of staff/faculty/students in local and regional activities such as science fairs, career days, invited speakers.

Strategies:

- Provide release time and funding for participation in scientific and medically related events.
- Serve as scientific and medically related information resource for local schools and media.
- Provide information to Department of External Affairs on all departmental activities.
- Encourage faculty, staff, and graduate/medical students to participate in local and regional medical scientific and community activities.
- Encourage, reward, provide release time, and finance faculty/staff/students to assume leadership roles in their respective professional organization.

Goal Six. Increase diversity within the department.

Critical Success Factors:

- Development of staff/faculty that reflects state and local population

Objectives:

Objective 6.1: Actively recruit minority staff/faculty/students.

Strategies:

- Work with Human Resources for developing effective strategies to increase greater diversity among staff/faculty.
- Create workplace environment conducive to recruiting and retaining a diverse staff/faculty.
- Staff and faculty to serve as “good-will ambassadors” at institutions that are predominately minorities.