



College of Osteopathic Medicine
SAM HOUSTON STATE UNIVERSITY

Element 8.1: Research and Scholarly Activity Strategic Plan

- **8.1-1 Supporting Documentation**
 - SHSU-COM Research and Scholarly Activity Strategic Plan – [link](#)

SHSU-COM Research and Scholarly Activity Strategic Plan

Sam Houston State University (SHSU) has a long-standing commitment to address workforce needs in Texas. Recognizing the shortage of physicians in rural communities, the College of Osteopathic Medicine (COM) is dedicated to developing primary care physicians to serve the rural and underserved areas of east Texas and beyond.

At SHSU-COM, research and scholarly activity are integral to achieving academic and clinical excellence. These activities are the foundation for evidence-based practice and are integrated in all four years of our curriculum. To create a culture of excellence in both academic and clinical practice, and to meet the needs of the communities we serve, SHSU-COM has developed a Research Mission. This mission aims to transform healthcare in east Texas through impactful discoveries that span from bench to bedside, while also prioritizing medical education that optimizes the student experience.

Our Research and Scholarly Activity Strategic Plan comprises four goals and the strategies to achieve our Research Mission. These efforts align with the overarching mission of the SHSU College of Osteopathic Medicine, which is to positively impact healthcare in the region through the development of physicians committed to osteopathic principles and the continuous evolution of knowledge through research and scholarly contributions. These goals are:

1. **Invest in our Faculty and Staff: Creating a Culture of Excellence**
2. **Invest In Students: Promote Student Success and Access**
3. **Infrastructure: Elevate Reputation and Visibility**
4. **Innovation in OMM: Expand and Elevate Service**

Goal 1. Invest in our Faculty and Staff: Creating a Culture of Excellence:

The recruitment and retention of mission-focused faculty and staff with diverse skills are critical for a successful research program at SHSU-COM. To promote a culture of support and success for our faculty and staff, we offer professional development opportunities, encourage multidisciplinary collaboration, and identify funding opportunities for all individuals at all levels of education and experience.

Strategy 1.1: Enhance Faculty and Staff Development and Research Support

Objective: To facilitate and support faculty and staff development and research activities by providing relevant training, funding opportunities, and resources.

Tactics:

- Offer regular workshops, webinars, guest speakers, and symposiums on topics relevant to research and scholarly activity.
- Provide support to identify funding opportunities, career development, and grant writing support through the Office of Research and Sponsored Programs ORSP (Office of Research and Sponsored Programs) (Office of Research and Sponsored Programs).
- Conduct comprehensive research surveys to identify the needs and success of research support services and utilize the data for development topics specific to the needs of the College of Osteopathic Medicine.

- Expand opportunities such as the Colleagues and Collaborations initiative to community partners to provide additional resources and collaborators.
- Maintain a technical laboratory staff that supports and sustains research by aiding in equipment maintenance, sample preparation, and data analysis.

Measurement:

- The number of faculty and staff participating in workshops, webinars, and symposiums.
- The number of grant applications submitted.
- Feedback from faculty and staff on the usefulness and effectiveness of training and development programs.
- The number of collaborative research projects initiated as a result of opportunities such as the Colleagues and Collaborations initiative.
- Feedback from faculty and staff on the quality of technical laboratory support and services provided.

Strategy 1.2: *Encourage a culture of mentorship to support faculty and staff development and increase research success.*

Objective: To establish a supportive culture of mentorship within the College of Osteopathic Medicine that enhances faculty and staff development and increases research success by providing opportunities for collaboration, feedback, and professional growth.

Tactics:

- Establish an internal review committee for grant proposals to provide feedback on the quality, structure, methodology, and communication of the concepts.
- Incentivize collaborative research strategies that maximize the potential for successful funding.
- Develop a formal program for mentorship of junior faculty and staff.
- Host regular collaborative seminars with local, regional, and national colleagues.
- Promote participation of COM faculty and staff in collaborative events outside of COM.

Measurement:

- The internal review committee feedback effectiveness through the number of grant proposals that receive funding.
- The collaborative research success through the number of extramural grants obtained through collaboration (i.e., multiple-PI grants).
- Effectiveness of the formal mentorship program through the percentage of junior faculty who successfully obtain funding for their research projects.
- The collaborative seminar attendance through the number of attendees and post-event feedback surveys.

Strategy 1.3: *Provide support for seed funding, pilot projects, and mission-targeted and bridging grants to advance research and scholarly activities.*

Objective: Increase the number and success rate of grant applications and awards.

Tactics:

- Provide support and guidance on writing and submitting intramural grant applications.
- Monitor the central research themes and equipment requirements requested in seed grant funding to ensure that we provide adequate support.
- Maintain common equipment and research supplies to support research.
- Track the success of the Faculty Intramural Grant Program through independent indicators of research advancement, such as publications and extramural grant applications/scores and awards.
- Maintain a level of intramural grant funding to an extent that allows faculty to increase the number of extramural grant applications and awards resulting from intramural grant funding.

Measurement:

- The number of grant applications and awards originating from seed funding.
- An increase in the success rate of grant applications.
- An increase in the number of publications resulting from intramural grant funding.

Strategy 1.4: *Incentivize research to increase faculty engagement in research and scholarly activity.*

Objective: Increase faculty engagement in research and scholarly activity

Tactics:

- Share indirect costs from extramural grants with individual researchers.
- Align protected FTE (Full Time Equivalent) distributed for faculty to engage in research/scholarly activity with actual time invested.

Measurement:

- Measure the amount of indirect costs shared with individual PIs (Principal Investigator).
- Faculty perception of incentives and their impact on research engagement.
- The success of faculty in securing extramural grants and awards.

Goal 2. Invest In Students: Promote Student Success and Access

We are investing in the future generation of clinician-scientists by teaching our students the fundamentals of scientific inquiry, offering chances to join existing research projects, encouraging them to develop original ideas, and supporting the dissemination and promotion of their work.

Strategy 2.1: *Incorporate training, expectations, and support for student research to promote the acquisition of high-quality data and evidence-based practice.*

Objective: To provide students with the necessary training, mentorship, and resources to conduct research and complete a scholarly project.

Tactics:

- Develop an integrated longitudinal research curriculum that reinforces student-led ideas and provides training on research methodology, data analysis, and evidence-based practice.

- Establish a mentorship program that pairs students with faculty members who have experience in research and can provide guidance and support throughout the research process.
- Provide resources and support for students to conduct research, including access to equipment and funding opportunities.

Measurement:

- Student performance on research and evidence-based medicine content on standardized exams.
- The number of students who participate in COM supported research and mentorship programs.
- The number of novel student-initiated projects.
- The completion rate of scholarly projects by students.
- An evaluation of the quality of research conducted by students.

Strategy 2.2: *Promote exposure to research through participation in existing research projects.*

Objective: To increase student participation in existing research projects and measure the impact of the Medical Summer Scholars Program on scholarship outcomes.

Tactics:

- Assess the impact of our Medical Summer Scholars Program on medical or independent scholarship outcomes (publications, presentations at national conferences).
- Maintain a current library of research opportunities within the University and our community.
- Develop extramural training grant applications to apply for external funding to support student research training opportunities.

Measurement:

- Survey results of the alignment of supported summer projects with our Research Mission
- Number of students participating in existing research projects.
- Number of student publications and presentations at national conferences.
- Success rate of extramural training grant applications.

Strategy 2.3: *Facilitate development of new clinician-scientists through opportunities for student-led research projects to promote scholarly activity in areas of basic science, clinical, medical education, and osteopathic manipulative medicine.*

Objective: Increase opportunities for students to engage in research and develop as clinician scientists.

Tactics:

- Provide sustained core funding for student-led research.
- Ensure the continuation of a faculty mentorship program to support student-led initiatives.
- Promote the annual Student Research Day as a venue for sharing research and scholarship accomplishments.
- Continue to develop opportunities for clerkship research elective.

Measurement:

- Number of student-led research projects initiated and completed.
- Number of student publications and presentations resulting from research projects.
- Participation and engagement in Student Research Day.
- Participation and engagement in clerkship research elective.

Strategy 2.4: Promote dissemination of scientific ideas.

Objective: To support students' participation in regional, national, and international conferences and facilitate the dissemination of scientific ideas.

Tactics:

- Allocate sufficient funding for the Student Travel Award Program to cover travel expenses for selected students attending national conferences.
- Develop a selection process for students to apply for the travel award.
- Provide abstract and manuscript writing workshops to facilitate the completion of manuscripts based on student research involvement.

Measurement:

- Number of students who received the travel award and attended national conferences.
- Number of publications and presentations resulting from the Student Travel Award Program.
- Feedback from students on the effectiveness of the manuscript writing workshop.

Goal 3. Infrastructure: Elevate Reputation and Visibility

Investing in infrastructure is crucial for the success of any Research Program. At the College of Osteopathic Medicine, we are committed to fostering a culture of scientific inquiry by providing a robust research infrastructure that meets the needs of our faculty, staff, students, and service community.

Strategy 3.1: *Recruit, develop, and retain research talent that builds on our existing strengths and expands our expertise.*

Objective: To enhance the research capacity of the organization through the acquisition, development, and retention of high-quality research talent.

Tactics:

- Develop faculty incentive program to retain top-performing research talent.
- Provide ongoing professional development opportunities to build and expand the skills and expertise of research faculty and staff.
- Foster a culture of collaboration and innovation to encourage the exchange of ideas and knowledge.
- Provide core equipment, supplies and space relevant to research needs.

Measurement:

- Monitor faculty and staff needs through regular surveys and feedback mechanisms.
- Measure the impact of research talent on the organization's research productivity and outcomes, such as grant funding, publications, and awards.

Strategy 3.2: *Provide laboratory personnel, training, space, and equipment required to meet the faculty, staff, and student research needs.*

Objective: To ensure that the College of Osteopathic Medicine provides adequate laboratory support to facilitate research activities.

Tactics:

- Assess current laboratory personnel, space, and equipment to identify areas where additional personnel, space, or equipment may be needed to support current and potential research activities.
- Hire and train additional laboratory personnel as necessary.
- Maintain existing laboratory equipment, and upgrade as necessary.
- Provide a current record of the location and availability of shared equipment and supplies.
- Develop and implement laboratory safety protocols and procedures.
- Monitor laboratory use and ensure efficient allocation of resources.

Measurement:

- Number of laboratory personnel hired and trained.
- Upgrades made to existing laboratory equipment.
- The number of laboratory safety protocols and procedures developed and implemented.
- Increase in research activity facilitated by laboratory support.

Strategy 3.3: *Expand the administrative personnel and support to meet the growing research needs of a developing COM.*

Objective: To provide adequate administrative personnel and support to meet the increasing research needs of the College of Osteopathic Medicine.

Tactics:

- Conduct regular assessments of the administrative personnel and support identifying areas that require expansion.
- Provide ongoing training and professional development opportunities to the administrative personnel to enhance their skills and knowledge.
- Continuously evaluate the effectiveness of the administrative personnel and support in meeting the growing research needs of the COM.

Measurement:

- Number of new administrative personnel hired, trained, and developed to support the research needs of the COM.
- Feedback from faculty and staff on the quality of administrative support for research activities.

Strategy 3.4: *Develop meaningful community partnerships to impact the COM's research on its service community.*

Objective: To establish collaborative relationships with community partners to enhance the impact of research on the service community.

Tactics:

- Collaborate with the University Shared Services in developing community partnerships.
- Conduct surveys with community partners to evaluate research interests, ongoing research projects, and potential shareable resources (equipment) and services.
- Organize quarterly meetings with interested community partners to facilitate interaction and collaboration.
- Maintain documentation of intramural and extramural grants with community partners.

Measurement:

- Number of community partnerships established and sustained over time.
- Feedback from community partners regarding the effectiveness and impact of the partnership.
- Number of joint research projects or initiatives with community partners.
- Number and amount of intramural and extramural grants with community partners.

Goal 4. Innovation in OMM: Expand and Elevate Service

At The heart of our curriculum and mission are the four tenets of Osteopathic Medicine; therefore, we promote and facilitate the creation of innovative teaching methods and the incorporation of evidence-based osteopathic practices into the scientific literature.

Strategy 4.1: *Introduce, support, and reinforce the teaching and implementation of research methodology across all four years to position students to excel in evidence-based osteopathic medical practice.*

Objective: To equip students with the knowledge and skills necessary to excel in evidence-based osteopathic medical practice.

Tactics:

- Incorporate research methodology into all osteopathic manual manipulation (OMM) courses (Research driven curricula).
- Provide faculty development and support for incorporating research methodology into their teaching.
- Facilitate the review of the current OMM literature and the opportunity to contribute to the body of evidence-based practice.

Measurement:

- Monitor the incorporation of research methodology into all courses.

- Student performance on the research and evidence-based medicine content of standardized exams

Strategy 4.2: *Foster and promote research and/or scholarly activity that includes or incorporates osteopathic manipulative medicine (OMM) and osteopathic principles and practice (OPP).*

Objective: To increase research and scholarly activity focused on osteopathic medicine principles, techniques, and education.

Tactics:

- Develop and implement OMM-focused research seminars and workshops for faculty and students.
- Incorporate OMM and OPP research projects into the curriculum.
- Allocate funding for research projects that include or incorporate OMM and OPP.
- Collaborate with SHSU colleges, community partners, and other universities to conduct research evaluating the science and impact of OMM and OPP in patient care.

Measurement:

- The number of research studies that include or incorporate OMM and OPP.
- Funding awarded for research projects that include or incorporate OMM and OPP.
- The Number of collaborative research studies conducted with other institutions that integrate OMM and OPP.
- The number of research articles submitted to peer-reviewed journals that include or incorporate OMM and OPP.