

TCOM RESEARCH STRATEGIES

The Texas College of Osteopathic Medicine regularly conducts strategic planning to maintain and advance its research and scholarly activities. Current planning as outlined in the TCOM procedure for Scholarly Production (effective July 2017) is intended to assure that TCOM and the Health Science Center provide the necessary resources and organization needed to advance knowledge through research and scholarly contributions in the basic biomedical sciences, clinical medicine, and osteopathic principles and practice.

Strategic planning for research and scholarly activity at TCOM is aligned with the broader Health Science Center goals established by SEE 2020 Roadmap relating to learning and discovery. These goals are to increase research expenditures by 5% in 2018, with a target of \$55 million in research expenditures by 2020. To help meet these goals, TCOM has focused its research planning in the following centers or departments:

- Osteopathic Research Center
- Family Medicine
- Geriatrics and Internal Medicine
- Pediatrics

The strategic plans for each unit are briefly outlined below.

Osteopathic Research Center (ORC)

The primary goal of the ORC currently involves expansion of its PRECISION Pain Research Registry to serve as a resource for research and scholarly activity relating to prevention and treatment of chronic low back pain. Its target is to enroll a total of 500 patients in PRECISION by August 31, 2018. This will be accomplished by using current grant funds from the Osteopathic Heritage Foundation, American Osteopathic Association, and Institute for Patient Safety to support research staff and recruitment activities. Additionally, an inter-professional Board of Directors (8 members) is being assembled for PRECISION to help plan the direction of future research activities, including establishment of an affiliated TCOM student service and research organization (tentatively designated as the Precision Medicine Club).

Department of Family Medicine (FM)

This department, which also houses faculty in Osteopathic Manipulative Medicine (OMM), is developing a three-year plan to expand its research resources, infrastructure, and collaborations. An important element of this plan involves promotion of department research activities among TCOM students and community partners. A survey is being developed to administer to department faculty by Spring 2018 to assess research expertise, interests, and initiatives. A key resources within FM is the NorTex Primary Care Research Network. There is ongoing planning to integrate FM and OMM clinical services with a broader program inter-professional program, including clinical research.

Department of Geriatrics and Internal Medicine (GIM)

This department is developing a tactical initiative to increase faculty capacity for research projects and related activities. A needs assessment will be initiated in the current academic year to direct faculty training over the next two years in developing, conducting, and publishing research. An important element of this needs assessment and training effort will be to effectively collaborate with academic,

healthcare, and community partners. In addition to TCOM students, graduate students and staff will be recruited to enhance GIM research activities.

Department of Pediatrics (PED)

This department is developing a tactical initiative to extend its ongoing research environment to TCOM students as a vehicle for learning the research process and developing a scholarly work product. It plans to leverage its off-campus collaborations with Cook Children's Medical Center, John Peter Smith Health Network, and other community partners to create research opportunities in the areas of adult/young adolescent medicine, maternal/women's health, and health disparities. The PED plan involves identifying research mentors from the Health Science Center and partnering community institutions to match to aspiring TCOM student researchers based on areas of mutual interest involving translational, clinical, or community-based research. An important element of the plan is to prepare TCOM students to present their research at meetings and publish the results.

TEXAS COLLEGE OF OSTEOPATHIC MEDICINE
STRATEGY MAP ACTION PLAN
Osteopathic Research Center

GOAL: DIVERSIFICATION AND EXPANSION OF OSTEOPATHIC RESEARCH CENTER ACTIVITIES

TACTICAL INITIATIVE: Establishment and Growth of the PRECISION Pain Research Registry

<p>MARKET ANALYSIS A process that results in factual information that helps you identify opportunities</p>	<p>S-National and international recognition of ORC research relating to spinal manipulation (OMT) and low back pain since 2002; acquisition of over \$25 million grant funding to ORC principal investigators and over \$40 million grant funding to ORC principal investigators or co-investigators; previous designation as the osteopathic “profession-wide” research center.</p> <p>W-Lack of dedicated clinical research space; inability to attract clinical investigators due to lack of research training/interest/time and/or salary-related issues (e.g., NIH “salary cap,” AOA disallowal of payments for research treatment sessions); lack of dedicated basic scientist in the pain field; no M&O or travel funds from state budget for the past three years; institutional indifference in promoting osteopathic research and related accomplishments (i.e., it is not a research priority area).</p> <p>O-Recent scientific and community focus on precision medicine and opioid use and abuse in managing pain creates opportunities for grants and publications; growth of Registry database and affiliated biobank creates research opportunities for faculty, students, and residents.</p> <p>T-Others capitalize on funding opportunities while we continue to experience the weaknesses described above; lack of CLIA-approved genetics laboratory to disseminate actionable research data to patients and health care providers; nimble responses to funding opportunities are hampered by UNTHSC research-related policies, committees, and units that do not provide efficiency for investigators seeking to use cutting edge research design and technologies needed to enroll large numbers of clinical research subjects over months and years of observation (including such issues as online data collection technologies and subject compensation for thousands of research visits).</p>
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ACTIVITIES What actions will you undertake to achieve tactical initiatives and meet identified metrics?	METRICS How will you measure the performance of the activity?	RESPONSIBILITY Who is accountable for the success of the activity?	RESOURCES What additional resources are required?	MILESTONES Begin, end and critical points
Recruitment, enrollment, and compensation of PRECISION Registry patients, and related ORC activities to achieve this goal.	Goal of having at least 500 Registry patients enrolled by August 2018.	Licciardone	Salary: N/A M&O: \$75,000 annually to support recruitment, enrollment, and retention efforts Travel: \$5,000 annually for Registry promotional activities	Begin: October 2017, ~180 patients End: August 2018, 500 patients Critical Points: Feb 2018, 350 patients
Recruitment and retention of inter-professional ORC Board of Directors consisting of faculty from TCOM, GSBS, SPH, SHP, and SCP, as well as three Directors from local academic or health care entities.	Goal of having all eight Directors in place by February 2018.	Licciardone	Salary: Estimated at \$80,000 annually, plus applicable fringe, to support all eight Directors M&O: N/A Travel: N/A	Begin: October 2017, 4 Directors in place End: February 2018, 8 Directors in place Critical Points: December 2017, 6 Directors in place
Establishment of an affiliated student service and research organization at UNTHSC (e.g., Precision Medicine Club).	Goals of recruiting a part-time ORC Coordinator for Student Engagement; having at least 25 students join the club; and provide students with relevant ongoing service and research projects.	TBA-ORC Coordinator for Student Engagement	Salary: Estimated at \$5,000 annually, plus applicable fringe, for Coordinator M&O: \$5,000 annually Travel: \$4,000 annually for student travel to conferences	Begin: November 2017, hiring of Coordinator End: August 2018, completion of goals Critical Points: May 2018, sufficient progress to plan effectively for AY 2018-19

**Estimated Incremental
Annual Budget: \$195,000**

TEXAS COLLEGE OF OSTEOPATHIC MEDICINE
STRATEGY MAP ACTION PLAN - Pediatrics

GOAL: Increase pediatric research experience among future TCOM graduates

TACTICAL INITIATIVE: Create the opportunity and environment for TCOM students to learn the processes of research and to develop a scholarly work product.

<p>MARKET ANALYSIS A process that results in factual information that helps you identify opportunities</p>	<p>S- Growing interest in TCOM students; Continuum of services: Translational, clinical and community; multidisciplinary faculty (DO; MD; PhDs; Dr. PH); Active research programs (Honors, Pediatric Research Program) W- Funding, faculty/clinician time; Infrastructure; Recognition across the community O- On campus and off campus collaborations with institutions (Cook Children’s, JPS , TCU) and Collaboration with community partners; UNTHSC-TCU Medical School T- Dependence on partnering organizations, Resources/Funding; Faculty priorities</p>
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ACTIVITIES	METRICS How will you measure the performance of the activity?	RESPONSIBILITY Who is accountable for the success of the activity?	RESOURCES What current and additional resources are required?	MILESTONES Begin, end and critical points
Identifying strengths and opportunities to establish projects focusing on pediatric, Adult Young Adolescents, maternal/women’s health and health disparities.	# of projects/areas identified # of projects established # of participating faculty # of student participants	Dr. Bowman and Faculty Ms. Zimmerman	Salary: M&O: Travel:	Begin: Continuous End: Critical Points:
Recruiting interested students in research	# of students approaching # of faculty involved	Drs. Bowman, Basha, Ms. Zimmerman	Salary: M&O: Travel:	Begin: Fall, Annually End: Spring, Annually Critical Points: Depending on # of Mentors/Projects
Identify mentors from UNTHSC and partnering institutions and assigning the students- matching mutual interest	# of students participated # of mentors participated # of projects performed	Drs. Bowman and Basha (UNTHSC); Dr. Hamby (Cook Children’s) Ms. Zimmerman	Salary: M&O: Travel:	Begin: Spring, Annually End: Spring, Annually Critical Points: Depending on # of Mentors/Projects

Mentoring students in clinical, community and translational research	# Mentor and student numbers # of projects assigned # of projects completed	Faculty	Salary: M&O: Travel:	Begin: June, Annually End: Summer, Annually Critical Points: Projects completion
Preparing the students to present research at local/regional/national platforms	# of abstracts submitted # of posters presented # of students presented # of faculty associated	Mentors; Drs. Bowman and Basha (UNTHSC); Dr. Hamby (Cook Children's)	Salary: M&O: Travel:	Begin: Fall, Annually End: Summer of following year Critical Points: At least presentation in RAD
Preparing the students to publish research	# of case reports published # of case series published # of articles published	Mentors; Drs. Bowman and Basha (UNTHSC); Dr. Hamby (Cook Children's)	Salary: M&O: Travel:	Begin: Summer, Annually End: Following Summer Critical Points: Publication of each successful project with enough data

TEXAS COLLEGE OF OSTEOPATHIC MEDICINE
STRATEGY MAP ACTION PLAN
Geriatrics/Internal Medicine

GOAL: Increase the number of funded awards and publications.

TACTICAL INITIATIVE: Increase faculty capacity for research projects and faculty research activities

<p>MARKET ANALYSIS A process that results in factual information that helps you identify opportunities</p>	<p>S- high functioning and varied education programs; highly engaged interprofessional faculty; community engagement; strong clinical team W-limited time for faculty development; inconsistent evaluation activities; ongoing space concerns for clinical trials, limited MSTAR student participation; limited staff time to support research activities O-Support for MSTAR and other health profession student participation; outcomes of educational programs and community impact; community collaborations; clinical trials T-Limited external publications of educational programs and success; reduction or discontinuation of funding to educational programs or program partners.</p>
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<p>ACTIVITIES What actions will you undertake to achieve tactical initiatives and meet identified metrics?</p>	<p>METRICS How will you measure the performance of the activity?</p>	<p>RESPONSIBILITY Who is accountable for the success of the activity?</p>	<p>RESOURCES What current and additional resources are required?</p>	<p>MILESTONES Begin, end and critical points</p>
<p>Identify needs and provide faculty training related to developing, conducting and publishing research projects.</p>	<p>Increased number of trainings and mentorships. Faculty attendance and documented professional development activities.</p>	<p>Knebl, Chair/Chief Severance, Director of Research and Educational Programs</p>	<p>Salary: \$9,500 M&O: Travel: \$2,000</p>	<p>Begin: September 2017 End: August 2019 Critical Points:</p>
<p>Collaborate effectively with academic, healthcare and community partners to develop, conduct and publish research.</p>	<p>Increased number of active collaborative research projects, grant submissions, publications and awards. Faculty documented research activities, grant submissions, publications and awards.</p>	<p>Knebl, Chair/Chief Severance, Director of Research and Educational Programs</p>	<p>Salary: \$17,500 M&O: \$1,000 Travel: \$2,000</p>	<p>Begin: September 2017 End: August 2019 Critical Points:</p>
<p>Recruit graduate students and</p>	<p>Increased number of graduate</p>	<p>Knebl, Chair/Chief</p>	<p>Salary: MSTAR</p>	<p>Begin: January 2018</p>

<p>staff to support research and publication activities.</p>	<p>students and new hire involved with research activities.</p>	<p>Severance, Director of Research and Educational Programs</p>	<p>Student Stipends @\$2,500 up to 10 students</p> <p>M&O:</p> <p>Travel: Student travel to present posters \$3,000 - \$5,000</p>	<p>End: August 2019</p> <p>Critical Points:</p>
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**DEPARTMENT OF FAMILY MEDICINE/OSTEOPATHIC MANIPULATIVE MEDICINE
STRATEGY MAP ACTION PLAN**

GOAL: Develop an interprofessional approach for integrative research

TACTICAL INITIATIVE: Develop a three-year plan to expand Family Medicine/Osteopathic Manipulative Medicine research resources and infrastructure and collaborations

<p>MARKET ANALYSIS A process that results in factual information that helps you identify opportunities</p>	<p>S- Diversity and current success of the FM/OMM faculty research areas W- Lack of interest/time for clinical faculty for applied research O- Foster current internal and external research partners T- Lack of funding and time for research</p>
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ACTIVITIES What actions will you undertake to achieve tactical initiatives and meet identified metrics?	METRICS How will you measure the performance of the activity?	RESPONSIBILITY Who is accountable for the success of the activity?	RESOURCES What current and additional resources are required?	MILESTONES Begin, end and critical points
Evaluate Family Medicine/Osteopathic Manipulative Medicine research resources/infrastructure and needs/barriers	Survey completed by department faculty/staff on research resources/expertise and needs/barriers	FM/OMM Faculty/staff	Faculty/staff time FM/OMM chair	Begin: 9/1/17 End: 5/1/18 Critical Points: Identified improvements/barriers and resources/solutions needed
Promote FM/OMM faculty research interests and availability to potential student and community/industry partners to produce collaborative scholarly activity	Presentations/information given to UNTHSC students about FM/OMM research. Student and faculty collaborative projects presented. # of external partnerships.	FM/OMM Faculty/staff	Faculty/staff time; TCOM research elective leaders; Money to print materials and travel to conferences/ meetings	Begin: 9/1/17 End: 8/31/18 Critical Points: Number of presentations/publications with students, UNTHSC faculty, and outside partners.
Document TCOM student research opportunities at UNTHSC; consolidate efforts to recruit student interest.	List of UNTHSC student research programs.	Patterson and Fulda	Faculty Assistant dean of education TCOM Dean	Begin: 8/1/17 End: 12/31/17 Critical Points: Generate consolidated list of activities; number of students recruited.

DEPARTMENT OF FAMILY MEDICINE/OSTEOPATHIC MANIPULATIVE MEDICINE
STRATEGY MAP ACTION PLAN

GOAL: Maximize key resources and increase profitability

TACTICAL INITIATIVE: Focused growth and diversity of our research, clinical and financial portfolio

<p>MARKET ANALYSIS A process that results in factual information that helps you identify opportunities</p>	<p>S- Diversity and current success of the FM/OMM faculty research areas W- Limited research experience and funding history among clinical faculty O- New UNT Health structure T- Barriers to recruitment from clinical populations</p>
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<p>ACTIVITIES What actions will you undertake to achieve tactical initiatives and meet identified metrics?</p>	<p>METRICS How will you measure the performance of the activity?</p>	<p>RESPONSIBILITY Who is accountable for the success of the activity?</p>	<p>RESOURCES What current and additional resources are required?</p>	<p>MILESTONES Begin, end and critical points</p>
<p>Identify non-federal funding sources relevant to FM/OMM and primary care topics</p>	<p>Apply for funding from federal and non-federal organizations, including industry and foundations.</p>	<p>FM/OMM key research faculty</p>	<p>Library staff Grants staff FM/OMM Faculty</p>	<p>Begin:9/1/17 End:8/31/18 Critical Points: Number of grant proposals submitted to non-federal and/or industry sources and number received.</p>
<p>Evaluate the research expertise, and interests of FM/OMM faculty to build successful and fundable teams.</p>	<p>Administer a survey to FM/OMM faculty to determine research expertise, interests, initiatives and team members.</p>	<p>FM/OMM key research personnel and faculty</p>	<p>Research staff FM/OMM faculty FM/OMM chair</p>	<p>Begin: 9/1/17 End:5/1/18 Critical Points: Identified focused areas of research for FM/OMM faculty Development of research teams. Initiation of collaborative research projects.</p>
<p>Expand research-funding portfolio.</p>	<p>Expand partnerships with UNT Health and foster current community and industry relationships.</p>	<p>FM/OMM key research faculty.</p>	<p>UNT Health director FM/OMM chair UNTHSC Foundation Office</p>	<p>Begin: 9/1/17 End: 8/31/18 Critical Points: UNT Health Musculoskeletal program. Number of Inter program (team) projects. NorTex: Number of partnerships</p>