

Shaping the Future of Health and Health Care in Oklahoma through Excellence in Biomedical and Clinical Research

OKLAHOMA STATE UNIVERSITY COLLEGE OF OSTEOPATHIC MEDICINE RESEARCH STRATEGIC PLAN, 2016 - 2026





(OSU-COM) educates osteopathic primary care physicians with an emphasis on serving rural and underserved Oklahoma."

VISION

Oklahoma State University College of Osteopathic Medicine will be recognized for:

- Fulfilling the health care needs rural and underserved Oklahoma;
- Producing graduates who are dedicated, effective, and compassionate community leaders;
- Providing excellent care and health-related community service;
- Being a leader and innovator in education;
- Being the medical school of choice

CORE VALUES

EXCELLENCE - We seek excellence in all our endeavors, aspire to new heights, and are committed to continuous improvement.

INTEGRITY - We are committed to the principles of truth and honesty, and we constantly strive to be fair, equitable, impartial 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 our resources. We accept the responsibility of the public's trust and are accountable for our actions.



RESEARCH STRATEGIC GOALS AND PRIORITIES



- 1. **Foster a vibrant, innovative research CULTURE** that unlocks scholarship potential, promotes innovation, encourages collaboration and rewards excellence in research.
- 2. **Invest in PEOPLE** by retaining research-prolific faculty, recruiting new faculty in emerging areas of research, growing post-doctoral programs, establishing physician-scientist recruitment programs and promoting diversity and inclusion.
- 3. **OSU-COM will** unify existing and future Centers of Excellence under the umbrella of the **INNOVATION HEALTH INSTITUTE** (iHealth Institute). The mandate of the iHealth Institute is to promote and drive multidisciplinary research and innovation within OSU-COM and across the OSU System.
- 4. **Strengthen the SUPPORT SYSTEMS** needed to enable the OSU-COM research community (faculty, post-doctoral researchers, residents and medical students) to obtain the resources and training needed to develop research concepts, to seek internal and external funding, to execute research plans, to track outcomes, to manage grants and to win recognition.



CULTURE

OSU-COM will foster a vibrant research culture that: unlocks scholarship potential, promotes innovation, encourages collaboration and rewards excellence.

STRATEGIES

- Elevate the status and importance of research by identifying, recognizing and supporting junior and senior faculty who are engaged in innovative research and promoting a culture of research
- Develop new metrics for research productivity, collaboration, and mentoring to be incorporated in faculty evaluation and promotion process
- Establish research compatible work expectations to enable faculty to balance teaching, clinical, service and research responsibilities
- Establish research compatible academic expectations to enable medical students to balance learning and research responsibilities
- Develop and implement a mentoring system for senior faculty to work closely with junior faculty, post-doctoral researchers, residents, and medical students to encourage scholarly development
- Create research teams comprised of students, residents and faculty
- Establish programs to incentivize educational-based research
- Establish the President's Faculty Award for Integrative Research and Innovation to recognize leading researchers across the OSU System whose research promotes collaboration across multiple academic disciplines that affect human health, biomedical discovery and healthcare delivery
- Establish an internal award process to provide seed funding through a competitive internal grant process to promising early stage research
- Establish a competitive internal award process to provide bridge funding for breakthrough, NIH/NSF competitive research
- Establish a competitive internal award to provide funding for student-led research
- Develop an open access, peer-reviewed, pubmed indexed OSU-COM based quarterly journal

- Quantify the average of articles published per OSU-COM researcher
- Quantify the number of citations of OSU-COM originated research per researcher in peer review journals
- Quantify the number of medical students participating in collaborative research and/or conducting independent research
- Quantify the number of on campus OSU-COM sponsored research conferences
- Quantify the number of invitations received by OSU-COM faculty to present at nationally recognized conferences
- Quantify faculty service in leadership positions (e.g. positions on editorial boards; elected officers of national societies; members of NIH study sections)



PEOPLE

OSU-COM will invest in people by: retaining research-prolific faculty, recruiting new faculty in emerging areas of research, growing post-doctoral programs, establishing physician-scientist recruitment programs and promoting diversity and inclusion.

STRATEGIES

Faculty

- Refine promotion and tenure guidelines to reinforce research productivity
- Hire highly qualified researchers to develop research capacity
- Develop career pathways that enable highly productive researchers
- Engage department chairs to hold faculty accountable for research productivity
- Empower department chairs to establish balanced clinical, teaching and service loads to promote research productivity
- Encourage and incentivize faculty participation in sponsored research
- Promote diversity and inclusion in the hiring of new faculty

Post-Doctoral Researchers

Recruit highly qualified post-doctoral researchers

Medical Students and Residents

- Develop recruitment programs to attract medical students with an interest in becoming physician-scientists
- Encourage an atmosphere that fosters student/resident research
- Enhance participation in dual degree programs, such as the DO/MS and DO/PhD
- Develop research programs that incorporate faculty mentors for student/resident research teams
- Utilize multi-disciplinary teams to broaden student and resident exposure
- Expand "Research Day" to showcase student/resident achievement in research
- Collaborate with the state osteopathic association to showcase student/resident research in a statewide osteopathic research symposium and regional conferences
- Promote diversity and inclusion in the recruitment of research-oriented medical students and residents

- Enumerate new faculty researchers hired
- Assess the percentage of OSU-COM faculty engaged in sponsored research activities
- Quantify the amount of funding for post-doctoral researchers
- Quantify the number of students and residents participating in research projects
- Quantify the number of grants that include student and/or resident participation
- Quantify the number of student research teams and their faculty mentors
- Quantify the number of students and/or residents participating in "Research Day"
- Quantify the number of students participating in a statewide osteopathic research symposium and regional/national conferences



INNOVATION

OSU-COM will unify existing and future Centers of Excellence under the umbrella of the Innovation Health Institute (iHealth Institute). The mandate of the iHealth Institute is to promote and drive multidisciplinary research and innovation within OSU-COM and across the OSU System. Development of the various Centers of Excellence will help OSU-COM focus on research priorities and allocate the appropriate resources to optimize research effectiveness, productivity and efficiency and to encourage innovations that improve human health and healthcare delivery.

Centers of Excellence under consideration include:

- MMO
- Rural Health
- Preventive Medicine and Wellness
- Project ECHO
- Data Analytics and Predictive Medicine
- Sports Medicine
- Neuroscience
- Cardiovascular
- Infectious Diseases
- Precision Medicine

STRATEGIES

- Direct expansion of faculty lines to support the Centers' needs
- Accelerate growth in areas of research excellence
- Strengthen OSU-COM's position and stature when seeking state, federal and private funding to support holistic, multidisciplinary approach to improving health outcomes
- Formalize partnerships between colleges across the OSU System to strengthen faculty and research collaboration
- Formalize partnerships with external partners, e.g. Saint Francis Health System, to strengthen clinical research
- Increase communication and collaboration with Stillwater's Vice President of Research through a designated research liaison
- Explore public health initiatives to encourage cross-college collaborations
- Utilize technology and data to foster research collaborations

- Quantify the number of Centers of Excellence
- Quantify the number of collaborative research projects across colleges, schools and departments
- Quantify the number of faculty participating in Centers of Excellence
- Quantify the number of research projects addressing public health issues
- Quantify the number of research initiatives generated through the utilization of data mining
- Quantify the number of research initiatives created or managed through the Centers
- Assess the amount of aggregate iHealth Institute funding secured (TSET/federal/ private)
- Assess the economic and health impact of iHealth Institute in Oklahoma



SUPPORT SYSTEMS

OSU-COM will endeavor to strengthen the internal support systems needed to enable the OSU-COM research community (faculty, post-doctoral researchers, residents and medical students) to obtain the resources and training needed to develop research concepts, to seek internal and external funding, to execute research plans, to track outcomes, to manage grants and to win recognition.

STRATEGIES

- Provide a "one stop shop" hub to the research community (faculty, post-doctorates, residents and medical students) to assist them in seeking internal and external funding, in polishing their external presentations, in tracking research outcomes, in managing grants, and in garnering visibility and publicity for their research
- Offer workshops to help interested researchers understand the process of seeking external funding and develop the grant writing skills needed to create a competitive grant application
- Develop a research portal where the research community can view potential internal and external funding opportunities, view pending grant submissions, access a library of successful grant submissions, and request marketing and communications support
- Create the necessary infrastructure to research new models of teaching and learning to incorporate developments and advancements in science, technology and healthcare delivery
- Identify opportunities to present at state, regional, national and international conferences or symposia
- Increase research space by renovating existing space or building new research space
- Enhance availability of library resources to promote interdisciplinary initiatives
- Develop performance-based incentive systems for research productivity and publication
- Marketing and Communications will designate a representative to work closely with faculty and others in the research community to help identify publicity opportunities such as "State" university magazine and will track the number of times OSU-COM researchers are featured or quoted
- Marketing and Communications will develop a monthly research focused newsletter for internal and external distribution

- Quantify the number of invitations OSU-COM researchers receive to present at nationally and internationally recognized conferences and symposia
- Quantify designated research space
- Quantify grant applications submitted
- Quantify the number of grant applications funded
- Quantify the aggregate amount of research dollars obtained
- Assess the number of faculty who are principal or co-investigators on active grants
- Quantify sponsored extramural funding for OSU-COM research initiatives
- Quantify non-traditional funding sources for OSU-COM research initiatives (including private sources)
- Quantify the number of participants in the University Provost's interdisciplinary challenge grants competition







OUTCOMES AND MEASUREMENTS



2016-2026 Research Strategic Plan: Outcomes and Measurements

- 1) OSU-COM will foster a vibrant research culture that: unlocks scholarship potential, promotes innovation, encourages collaboration and rewards excellence.
- ✓ Private funding for endowed research programs will have reached \$10 million. This will include the identification and development of prospective donors to support endowed research in biomedical, clinical and medical/social sciences.
- Extramural funding will have reached \$5 million annually. This will include funding from federal, state and private sources for the support of research in all OSU-COM programs.
- ✓ Non-traditional funding sources for research in OSU-COM programs will have exceeded \$5 million cumulatively. This will include sources of funding not traditionally sought after, such as agencies and entities that have not historically funded clinical or biomedical sciences.
- 2) OSU-COM will invest in people by: retaining research-prolific faculty, recruiting new faculty in emerging areas of research, growing post-doctoral programs, establishing physician-scientist recruitment programs and promoting diversity and inclusion.
- Recruit and hire five faculty with an interest in education, public health and osteopathicfocused research.
- ✓ Seventy-five percent (75%) of OSU-COM faculty will be engaged or participating in sponsored research. This will include participation as principal or co-investigators as well as mentors to other researchers.
- ✓ Peer reviewed publications by clinical faculty will increase by 50%.
- ✓ Funding from all sources to fund post-doctoral researchers will have reached \$750,000.
- ✓ Increase intramural interdisciplinary research awards to \$250,000 per year.
- 3) OSU-COM will unify existing and future Centers of Excellence under the umbrella of the Innovation Health Institute (iHealth Institute). The mandate of the iHealth Institute is to promote and drive multidisciplinary research and innovation within OSU-COM and across the OSU System.
- ✓ Identify private gifts from foundations and supporters to endow research Centers of Excellence with the goal of \$10 million over the 10 year strategic plan period.
- Endow and fund the Innovative Health Institute (iHealth) to the \$50 million level.
- Recruit and hire 15 research faculty to support the Innovative Health Institute and Centers of Excellence over the 10 year strategic plan period.
- ✓ Purchase or lease 100,000 square feet of space to house new Centers of Excellence in clinical and biomedical sciences.
- 4) OSU-COM will endeavor to strengthen the internal support systems needed to enable the OSU-COM research community (faculty, post-doctoral researchers, residents and medical students) to obtain the resources and training needed to develop research concepts, to seek internal and external funding, to execute research plans, to track outcomes, to manage grants and to win recognition.
- Research facilities to support biomedical science investigative initiatives will be expanded to achieve an average of 800 square feet per active researcher.
- Expand research facilities to support sponsored research faculty and identify \$5 million in funding needed to complete the 5th Floor of the Research Building.



Leadership and Research Strategic Planning Committee at OSU-COM

OSU-COM Leadership

Kayse M. Shrum, D.O.

Dean

Johnny Stephens, Pharm.D.

Senior Vice President and Chief Operating Officer

William Pettit, D.O.

Senior Associate Dean of Academic Affairs

Eric Polak, M.B.A.

Vice President of Administration and Finance

Bruce Benjamin, Ph.D.

Associate Dean, Biomedical Sciences

Robin Dyer, D.O.

Associate Dean, Academic Affairs

OSU-COM Research Strategic Planning Committee Members

Johnny Stephens, Pharm.D.

Senior Vice President and Chief Operating Officer Chair, Research Strategic Planning Committee

Jason Beaman, D.O., M.S.

Chair, Department of Psychiatry and Behavioral Sciences Clinical Assistant Professor of Psychiatry and Behavioral Sciences Director, Psychiatry TeleECHO Clinic

Bruce Benjamin, Ph.D.

Associate Dean, Biomedical Sciences Associate Professor of Physiology

Kathleen Curtis, Ph.D.

Associate Professor of Pharmacology/Physiology

Randall Davis, Ph.D.

Associate Professor of Pharmacology Director of Biomedical Medical Sciences Graduate Program

Robin Dyer, D.O.

Associate Dean, Academic Affairs Chair, Department of Osteopathic Manipulation Medicine Professor of Osteopathic Manipulation Medicine

Jim Hess, Ed.D.

Chair and Director, OSU School of Healthcare Administration Professor of Family Medicine

Joseph Johnson, D.O.

Chair, Department of Obstetrics and Gynecology Clinical Associate Professor of Obstetrics and Gynecology Medical Director, Project ECHO

William Paiva, Ph.D., M.B.A.

Executive Director, Center for Health Systems Innovation

Eric Polak, M.B.A.

Vice President of Administration and Finance

Christopher Thurman, D.O.

Chair, Department of Family Medicine Professor of Family Medicine

Matthew Vassar, Ph.D.

Clinical Assistant Professor of Psychiatry and Behavioral Sciences

Jarrad Wagner, Ph.D.

Professor of Forensic Sciences Director, Forensic Toxicology and Trace Laboratory President, Faculty Senate

Anne Weil, Ph.D.

Associate Professor of Anatomy and Cell Biology

The Oklahoma State University Center for Health Sciences prohibits discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, national origin or ethnicity.





Oklahoma State University College of Osteopathic Medicine 1111 West 17th Street Tulsa, OK 74107-1898 918-562-1972

www.healthsciences.okstate.edu