

# TOWARD EXCELLENCE

**Strategic Plan 2016 – 2026**  
**Oklahoma State University Center for Health Sciences**



OKLAHOMA STATE UNIVERSITY  
**CENTER FOR HEALTH SCIENCES**



*“We will become a destination of choice for health sciences education, clinical care, and research.”*

*— President Kayse Shrum, D.O.*

## EXECUTIVE SUMMARY

As a leading academic health center and a champion of the OSU System's land grant mission, OSU Center for Health Sciences has helped to improve the quality of life in Oklahoma through education, clinical care, and research. With the recent campus expansion and addition of the School of Allied Health to our existing College of Osteopathic Medicine, School of Health Care Administration, School of Biomedical Sciences and School of Forensic Sciences, OSU Center for Health Sciences has ushered in a new era of possibility to further enhance health sciences education, clinical care, and research for the benefit of our state and beyond.

This is a historic time for OSU Center for Health Sciences. Student enrollment is at an all-time high, new and innovative programs have been launched, fundraising has reached remarkable levels, and capital additions and improvements have provided much needed learning and teaching space for our growing community of learners. While we have achieved much success in recent years, we recognize that it is necessary to plan thoughtfully and strategically for the future in order to sustain and accommodate continued growth. In 2016, the faculty, staff and administration at OSU Center for Health Sciences developed our TOWARD EXCELLENCE 10 year strategic plan. Our strategic plan builds on the momentum of the collective achievements of the past 5 years and establishes a roadmap to propel OSU-CHS to become a destination of choice for health sciences education, clinical care, and research.

Toward Excellence outlines the necessary steps that OSU-CHS has taken and will take to create an academic health center that is ready and able to address current and future healthcare and public health challenges facing communities throughout Oklahoma and across our nation. To focus on our vision of excellence, we have identified strategic priorities that fall within four pillars, which are: 1) **Educate**; 2) **Discover**; 3) **Heal**; and 4) **Engage**. While we have a multitude of noteworthy projects and initiatives to support at OSU-CHS, we must prioritize our limited resources and allocate them in areas where we will make the greatest impact while staying faithful to our mission of training primary care physicians, health professionals, forensic practitioners and scientists for rural and underserved Oklahoma.

Every aspect of this strategic plan was formulated with the guiding principles of training tomorrow's healthcare and health-related workforce, of eliminating health disparities in Oklahoma, and of supporting research that enriches and improve the lives of Oklahomans. Our goal is to promote and improve the overall health of Oklahomans. Toward Excellence will enable us to use our resources, human capital and intellectual prowess to create a healthier, safer, and more prosperous Oklahoma.

Sincerely,



Kayse M. Shrum, D.O., FACOP  
President, OSU Center for Health Sciences  
Dean, OSU College of Osteopathic Medicine



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## ACRONYMS AND ABBREVIATIONS

CAME Building – Center for Advanced Medical Education Building  
CENFEX – Center for Fire & Explosives  
CHSI – Center for Health Systems Innovation  
CHW – Community Health Worker  
CIN – Clinically Integrated Network  
CITEHCD – Center for Innovation and Technology-Enabled Healthcare Delivery  
CME – Continuing Medical Education  
CNARH – Center for Native American and Rural Health  
COCA – Commission on Osteopathic College Accreditation  
CRH – Center for Rural Health  
CSMHP – Center for Sports Medicine and Human Performance  
CWR – Center for Wellness and Recovery  
FQHC – Federally Qualified Health Care Center  
FTTL – Forensic Toxicology and Trace Laboratory  
HRSA – Health Resources and Services Administration  
iHEALTH – Innovation Health Institute  
MAT – Master’s in Athletic Training  
MPH – Master’s in Public Health  
OAIMS – Office for American Indians in Medicine and Science  
OMEKO – Osteopathic Medical Education Consortium of Oklahoma  
OMM – Osteopathic Manipulative Medicine  
OSU-ALH – OSU School of Allied Health  
OSU-BMED – OSU School of Biomedical Sciences  
OSU-CHS – Oklahoma State University Center for Health Sciences  
OSU-COM – Oklahoma State University College of Osteopathic Medicine  
OSU-FOR – Oklahoma State University School of Forensic Sciences  
OSU-HCA – OSU School of Health Care Administration  
OSUMC – OSU Medical Center  
PA – Physician Assistant  
POST-BAC – Post-baccalaureate  
PROJECT ECHO – Project Extension for Community Health Outcomes  
RMT – Rural Medical Track  
ROK- NET – Rural Oklahoma Network  
STEM – Science, Technology, Engineering and Math



# MISSION STATEMENT, VISION AND CORE VALUES



## MISSION STATEMENT

Oklahoma State University Center for Health Sciences educates and trains osteopathic physicians, research scientists, and other health care professionals with an emphasis on serving rural and underserved Oklahoma.

## VISION

Oklahoma State University Center for Health Sciences will be recognized for:

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

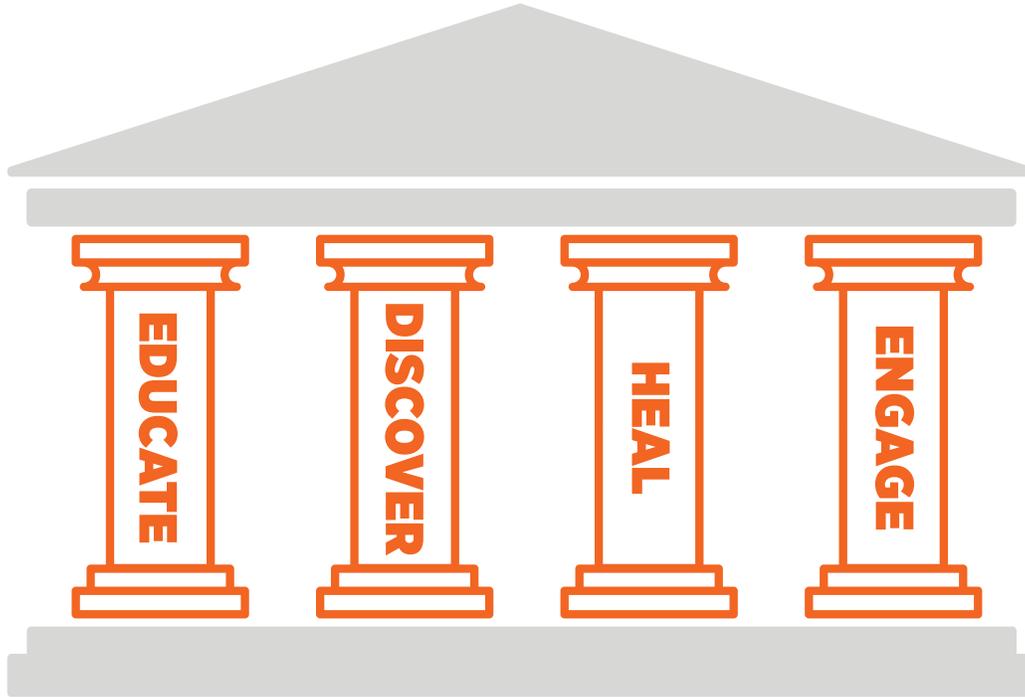
**INTELLECTUAL FREEDOM** – We believe in ethical and scholarly questioning in an environment that respects the rights of all to freely pursue knowledge.

**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.



# STRATEGIC PILLARS 2016 - 2026



## EDUCATE

OSU-CHS is committed to training exceptional primary care physicians, health professionals, forensic science practitioners, and scientists to serve as the next generation of health, healthcare, and scientific leaders for Oklahoma and for the nation.

## DISCOVER

OSU-CHS will leverage on unique academic assets within OSU-CHS and across the OSU System to unlock scholarship potential, promote innovation and encourage multidisciplinary collaborative research.

## HEAL

OSU-CHS is committed to leveraging on our health-related and medical expertise to improve our state's health. We will deliver outstanding patient care and provide leadership and support to law enforcement agencies, public health organizations and hospitals across our state to enhance health in Oklahoma.

## ENGAGE

OSU-CHS will continue to engage with representatives from the business, government, educational, social services and philanthropic sectors to improve health outcomes, to increase health-related educational opportunities, and to support economic growth and development in Oklahoma.



## EXCELLENCE IN EDUCATION

“OSU-CHS is committed to training exceptional primary care physicians, health professionals, forensic science practitioners, and scientists to serve as the next generation of health, healthcare, and scientific leaders for Oklahoma and for the nation.”



STRATEGIC PILLAR  
**EDUCATE**



# EDUCATE: STRATEGIES

## Excellence in Education

OSU Center for Health Sciences represents the future of academic health centers. The graduate and professional programs in the College of Osteopathic Medicine, School of Health Care Administration, School of Allied Health, School of Biomedical Sciences and School of Forensic Sciences offer our students the opportunity to gain meaningful learning experiences to prepare them to lead and to make an impact in the future of health and healthcare in Oklahoma and beyond. At OSU-CHS, our mission is to educate and train osteopathic physicians, research scientists, and other health care professionals with an emphasis on serving rural and underserved Oklahoma. Oklahoma, especially rural areas, depends on health sciences academic programs like ours to produce the healthcare and forensic professionals needed to keep individuals and communities healthy and to meet the state's healthcare workforce needs.

Oklahoma is one of the unhealthiest states in the nation, consistently ranking in the bottom tenth percentile in overall health in United Health Foundation's America's Health Rankings. One of the contributing factors to Oklahoma poor health outcomes is the shortage of primary care physicians and health professionals, especially acute in rural areas of our state. OSU-CHS has been a leader in training primary care physicians and athletic trainers for rural and underserved Oklahoma. From a public health perspective, our forensic science programs have played a critical role in producing forensic investigators, biologists, toxicologists and psychologists needed to help protect people, serve justice and promote better public health in Oklahoma. According to the U.S. Bureau of Labor Statistics, the healthcare sector is projected to have the fastest employment growth rate between 2014 and 2024 at 21%. OSU-CHS is well positioned to capitalize on the growing market demand for physicians and healthcare professionals. The education pillar in our Toward Excellence strategic plan establishes a roadmap that will enable us to continue to meet our mission of training tomorrow's health, healthcare and forensic leaders in an increasingly challenging academic environment.

As a public higher education institution, OSU-CHS faces unprecedented challenges. We must contend with funding cuts, increased public scrutiny, growing competition for students, and disruptive technological changes. We must identify current and future health and healthcare workforce needs and offer high quality, market-relevant academic programs at competitive prices while simultaneously controlling costs. We are confident that the following strategies will enable us to continue to be a leader in health sciences graduate and professional education:

1. Strengthen Existing Academic Programs;
2. Develop New Academic Programs;
3. Grow Student Enrollment;
4. Promote Student Success;
5. Establish Satellite Campuses; and
6. Invest in Teaching and Learning Resources.



## STRATEGY 1: STRENGTHEN EXISTING ACADEMIC PROGRAMS

An OSU-CHS degree commands respect and open doors in Oklahoma and across the nation. Our reputation for education excellence is rooted in the quality of our academic programs. Our College of Osteopathic Medicine (OSU-COM) has consistently garnered national recognition as a leader in the training of primary care physicians. In 2017, U.S. News & World Report ranked OSU-COM #13 out of 125 medical schools in the nation for producing the greatest percentage of residents selecting primary care medicine. Our School of Health Care Administration (OSU-HCA) has notched several significant national accolades. OSU-HCA's Master of Science in Health Care Administration online program was ranked No. 5 by BestColleges.com for its overall academic excellence and was ranked #1 in affordability by Healthcare Administration Degree Programs. OSU-CHS will continue to make the necessary investments to ensure our medical and health care administration programs maintain their national reputation and stature while elevating the national profile of academic programs within our School of Allied Health, School of Forensic Sciences, and School of Biomedical Sciences.



OSU-COM Ranked

**#13**

for producing greatest percentage of graduates going into primary care residencies



OSU-HCA Ranked

**#5**

for overall quality



OSU-HCA Ranked

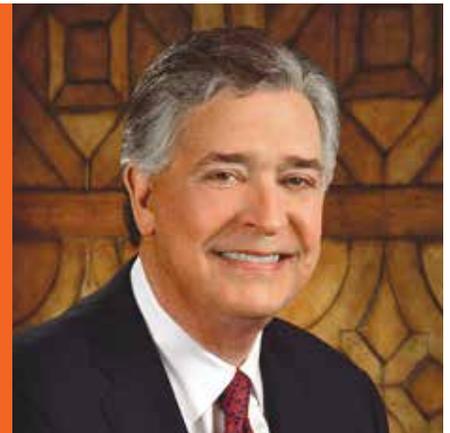
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in affordability.



*“Saint Francis Health System proudly supports the OSU College of Osteopathic Medicine and their commitment to educating and training Oklahoma’s next generation of healthcare providers. We appreciate and share OSU’s focus on meeting and exceeding the current and future healthcare needs of our region.”*

*– Jake Henry Jr., President and CEO, Saint Francis Health System*



OSU-CHS will continue to achieve educational excellence by strengthening existing academic programs. We recognize that educational models should adapt to changing times and new modes of learning. We will adjust our curriculum to maximize educational impact and student outcome. We will also evaluate how best to leverage on emerging learning technologies to deliver courses to meet the educational needs of our students. OSU-CHS will adopt the following strategies to strengthen our existing academic programs.

### **Embed Innovation and Technology in Teaching and Curriculum Development**

The rise of the internet and the emergence of new education technologies have upended the traditional model of teaching where students attend class on campus and learning flows from faculty to students through a one-way exchange of information. Students now prefer active learning over the traditional classroom lecture style where the faculty lectures or leads discussions without engaging or interacting with the students. To compete for prospective students and to ensure excellence in education, OSU-CHS must evaluate and embrace new pedagogical approaches that foster innovation in learning and teaching and improve learning outcomes. OSU-CHS will adopt new and innovative education technology platforms to create a culture that promotes innovation across all academic programs. To secure OSU-CHS’ position as a leader in health sciences education in an increasingly competitive landscape, we must embed innovation into our curriculum and into our instructional culture. OSU-CHS faculty will explore new modes of teaching and will also assess the benefits of incorporating design thinking, technology and educational games into the various academic curriculums.

### **Incorporate New Courses and Tracks**

We will develop new and innovative courses and tracks to bolster existing programs. We will review existing tracks every 5 years to examine effectiveness of the track, to determine whether any curricula adjustments are needed to meet changing student clientele, and to assess their relevance to market demands and societal needs.

Starting in the fall of 2018, our College of Osteopathic Medicine (OSU-COM) will offer Rural Medical Track students the opportunity to participate in rural-focused MakerHealth projects and to take courses in rural health data analytics to better understand healthcare challenges facing rural communities from a population health perspective. OSU-COM will also establish a Global Health Track. A Global Health Track will enhance experiential learning for our medical students and will expose them to international health experiences and cultures in resource-deprived countries.



Research demonstrates that medical students who participate in a global health experience in a low-income country tend to select primary care residencies at a higher rate than their classmates. By establishing a Global Health Track, OSU-COM will continue to encourage and foster student interest in practicing primary care medicine.

We recognize that many of the factors affecting the health of rural communities are rooted outside of the clinical care setting. Social determinants of health such as social, cultural, financial, behavioral and environmental factors play a large role in influencing the health of rural communities. Our School of Allied Health will partner with the OSU Graduate College to offer a Master of Public Health (MPH) degree with a Track for Rural and Underserved Populations. We envision medical students from OSU-COM, graduate students from the OSU Graduate College, and residents and fellows from the Osteopathic Education Consortium of Oklahoma (OMEKO) to enroll in this certificate program. Graduates from the MPH-Rural Track program will be trained to understand and examine the social determinants of health that affect rural communities and to use their knowledge and experience to formulate public health policies to improve the health of rural communities.

Biomedical Sciences (OSU-BMED) will establish new tracks in their master's program by 2020. Tracks under consideration include biomedical analytics and genetic counseling. Both of these tracks will leverage on existing academic assets within the larger OSU System. OSU-CHS will partner with the OSU Center for Health Systems Innovation, the OSU Department of Computer Science, and the Analytics and Data Mining Programs at the OSU Spears School of Business to create the biomedical analytics track. The biomedical analytics track will train future students how to use statistical and biological data to discover and understand changing molecular patterns over time associated with disease progression to improve diagnosis, prognosis and therapies for personalized medicine. OSU-BMED will partner with our forensics faculty to develop a genetic counseling track. We are home to one of the state's leading human identity DNA testing laboratory. We also have faculty conducting cutting edge research in the fields of genomics.

Forensic Sciences (OSU-FOR) will establish a Crime Scene Investigation Track to their existing master of science in forensic sciences by 2020. At present, OSU-FOR offers tracks in death scene investigation, forensic biology/DNA, forensic chemistry, forensic psychology, arson and explosive investigations, forensic science administration, and forensic document examination. A Crime Scene Investigation Track would further complement the buffet of opportunities currently available to students.

Health Care Administration will also offer by fall 2019 a Masters in Science in Global Health, providing students who are interested in gaining leadership and managerial experiences to lead global healthcare organizations.



## **Encourage Interprofessional Learning and Collaboration**

At OSU-CHS, we are highly attuned to the importance and value of interprofessional learning. Our medical, doctoral, master's and certificate students contribute to the academic vibrancy of our campus. We will strengthen the learning and collaboration opportunities between medical and graduate students and residents. Interprofessional collaboration is based on the premise that when providers and patients communicate and consider each other's perspective, they can better address the different factors influencing the health of individuals, families and communities. OSU-CHS promotes interprofessional collaboration to better prepare medical students, residents and allied health professionals for their future careers on healthcare teams. Collaboration and teamwork can be best achieved if students from different professions learn early on to work together in their training. An example of the envisioned interprofessional collaboration can be demonstrated through our plans to create the OSU Center for Sports Medicine and Human Performance (CSMHP). CSMHP will integrate clinical care assets at OSU-CHS that exist with OSU-COM, OSU-ALH and OSU Medical Center, the teaching hospital for OSU-COM. Clinicians from areas such as sports medicine, orthopedic surgery, sports psychiatry, osteopathic manipulative medicine and athletic training will work alongside medical students, residents and athletic training students to improve patient outcomes.

We will also leverage our simulation facilities to encourage interprofessional learning and collaboration. Our hospital simulation instructional teams will design learning scenarios where collaboration and communication amongst clinical team members will be required to achieve better patient outcomes.

## **Adopt Technology-Based Learning**

Technology and the internet are fundamentally transforming higher education. OSU-CHS will assess how best to deliver academic offerings and whether learning technologies should be adopted to improve student learning experience and performance outcomes. We will evaluate current education models and determine the feasibility of incorporating full or hybrid online offerings across all programs. OSU-CHS currently deploys distance and online learning technology in several of our programs. OSU-HCA offers both hybrid and fully online master's degree program. OSU-FOR offers several hybrid programs that combine online learning with face-to-face hands-on and classroom learning that takes place on the OSU-CHS campus and one fully online master's degree program. Third and fourth year OSU-COM medical students on clinical rotations use distance learning to participate in seminars and grand rounds. OSU-CHS will assess whether to increase the number of online programs and courses in response to student demand for high quality learning experiences in a flexible environment. OSU-COM will need to assess the benefit of integrating distance and online learning in the first and second year of the medical school curriculum especially as OSU-COM establishes satellite campuses in other cities and leverages on existing teaching resources on the OSU-CHS campus in Tulsa for course delivery. By 2022, all graduate programs at OSU-CHS will offer full or hybrid online learning opportunities for students in their respective programs.

OSU-CHS will also explore adopting learning technologies such as 3D technology and augmented reality to deliver course content as the demand for active learning continues to trend in higher education. OSU-COM is exploring the possibility of using 3D technology such as an Anatomage Table to allow students and faculty to access anatomical information in new ways. With a fully interactive, multi-touch screen, a student can dissect the body, moving through layers of tissue,



to view the structures inside. Augmented reality learning technology could be a useful tool in creating an engaging learning experience for students. Several leading medical schools in the U.S. have adopted augmented reality learning technology to supplement the teaching of anatomy. With augmented reality, a student can see a representation of a human body in 3D and navigate through the layers of skin, muscle, blood, vessels, and organs to the skeleton below. Augmented reality also allows students to see the organs function in the body and the flow of blood as it pumps through the body. The Anatomage Table and augmented reality human anatomy would allow students to visualize, to interact and to explore the human body in a multidimensional way not currently possible with a human cadaver. Furthermore, students can deepen their understanding of the human anatomy and physiology outside of lab hours, reinforcing what they learned in the lab and in dissection.

Augmented reality technology could have other applications at OSU-CHS beyond the medical school curriculum. For example, the forensics program could use this learning technology to re-create a crime scene investigation or to examine fragments of an exploded device.



## Expand Simulation-Based Learning

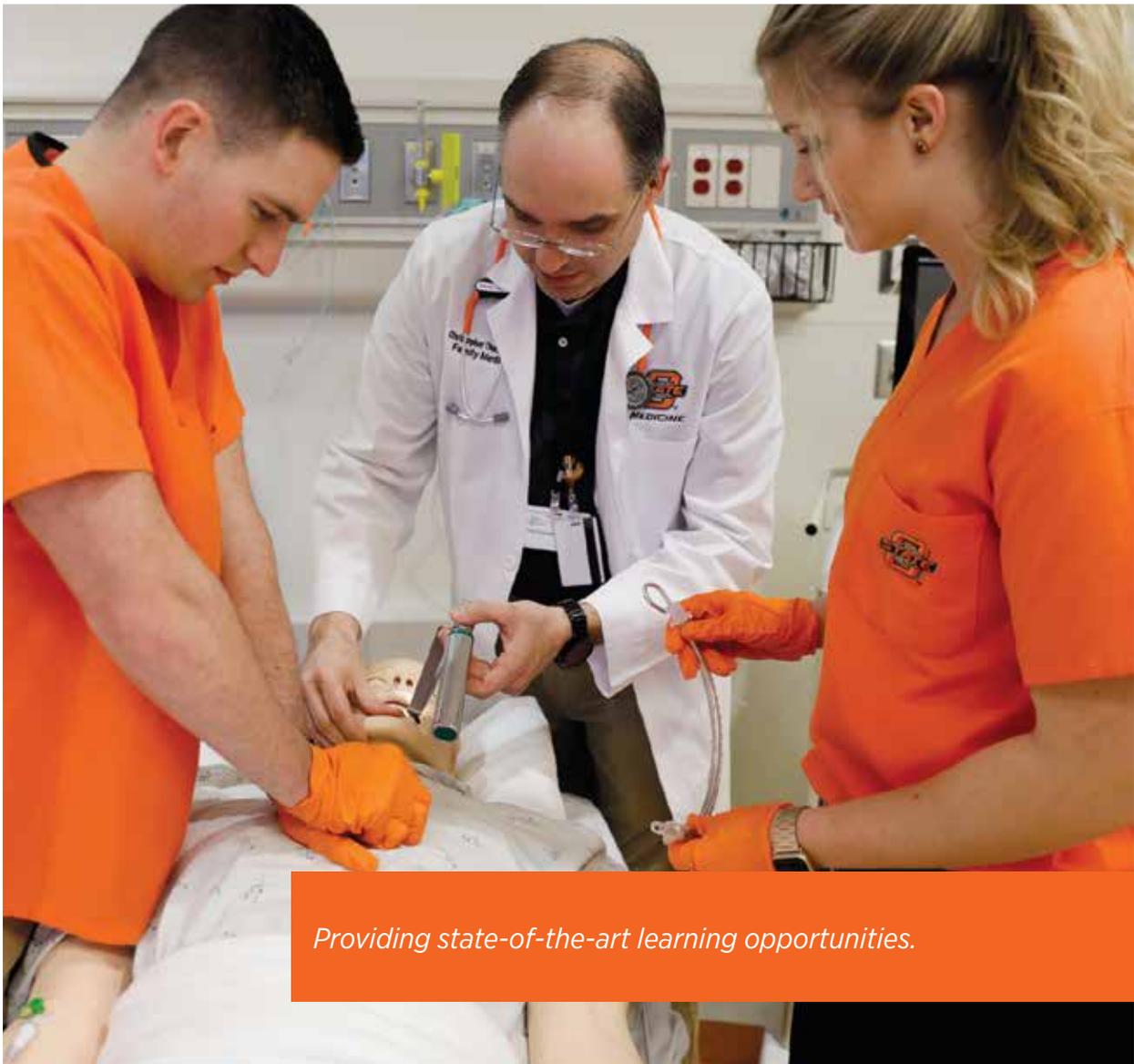
Simulation-based learning currently takes place at OSU-CHS. The hospital simulation center and the clinical skills simulation center in the Tandy Medical Academic Building provide medical students with the opportunity to work on manikins and with standardized patients to hone their clinical skills. The hospital simulation center offers four suites for medical students to test their knowledge and skills: an emergency room suite, an ICU suite, a birthing suite and a surgical suite. The clinical skills simulation center boasts 18 exam rooms where students can work with standardized human patients to enhance their diagnostic and communication skills. Both the hospital simulation center and the clinical skills simulation center are equipped with audio and video recording equipment to tape and review simulation exercises.

Forensic students can also deepen their learning experience by leveraging on simulation-based learning. The Investigative Sciences Research and Teaching Laboratory offers student the opportunity to stage mock crime scenes to test their investigative skills. Performances are recorded and played back to encourage students to learn from their success and oversights. The OSU Explosives Range is situated on 300 acres of land located in a remote area in rural Oklahoma. The OSU Explosives Range offers forensic students an unrivalled opportunity to develop hands-on, practical experience in handling fire and explosives debris and in recreating explosive scenes. OSU-CHS will continue to assess whether further expansion of simulation-based learning is merited to enrich the academic experience for students.

*“Healthcare has changed dramatically because of technology. I commend President Shrum for recognizing the pivotal role that technology can play in the training of physicians and in care delivery. OSU Center for Health Sciences will produce superior doctors for Oklahoma because of the simulation capabilities in the Tandy Medical Academic Building.”*

*– Ted Haynes, President, Blue Cross and Blue Shield of Oklahoma*





*Providing state-of-the-art learning opportunities.*



## **STRATEGY 2: DEVELOP NEW ACADEMIC PROGRAMS**

OSU-CHS has been providing the state of Oklahoma with a stable supply of highly trained physicians, health professionals, forensic science practitioners and scientists. As demand for healthcare and health professionals continue to expand in Oklahoma and across the nation, OSU-CHS is well-positioned to capitalize on the growing need for health and healthcare professionals. We will continue to develop new programs in order to meet health, healthcare, and public health workforce needs in Oklahoma, in the U.S. and overseas.

Leadership at OSU-CHS is cognizant of the financial and instructional resources needed to grow successfully new academic programs. The development of new academic programs must be market sensitive and must be fiscally prudent for OSU-CHS. New academic programs will be established in fields where there is high market demand and where market-based opportunities dovetail with the academic strengths of OSU-CHS. After careful analysis, OSU-CHS has identified the following new academic programs to be rolled out.

### **New Master's Degree Program in Physician Assistant Studies.**

Over the next five years, OSU-CHS will take the necessary steps to establish a Master of Science Degree in Physician Assistant (PA) Studies. According to the U.S. Bureau of Labor Statistics, employment of physician assistants is projected to grow by 30% from 2014 – 2024, adding another 28,700 PA jobs to the economy. Oklahoma would benefit greatly from OSU-CHS offering a PA program in light of the severe shortage of primary care providers in Oklahoma, especially in rural Oklahoma. Furthermore, a Master of Science Degree in Physician Assistant Studies would have minimal financial impact on OSU-CHS' operational costs given that the PA program will leverage off existing faculty, facility and clinical care assets currently utilized by the OSU-COM to train medical students. OSU-CHS anticipates enrolling our inaugural PA class in the fall of 2019.

### **New Joint Degree Program in Business and Health Care Administration.**

Our School of Health Care Administration will partner with the OSU Spears School of Business to offer a joint Master of Business Administration and Master of Health Care Administration degree. The joint MBA/HCA degree is designed to create future leaders of health care organizations who are versed in the financial, operational and regulatory factors affecting the management of health care organizations. Students in the joint MBA/HCA degree program will be able to complete both degrees in a shorter amount of time than if they had completed each degree separately. OSU-HCA and Spears School of Business expects to offer this joint degree program starting in fall of 2020.

### **New Doctoral Degree Programs.**

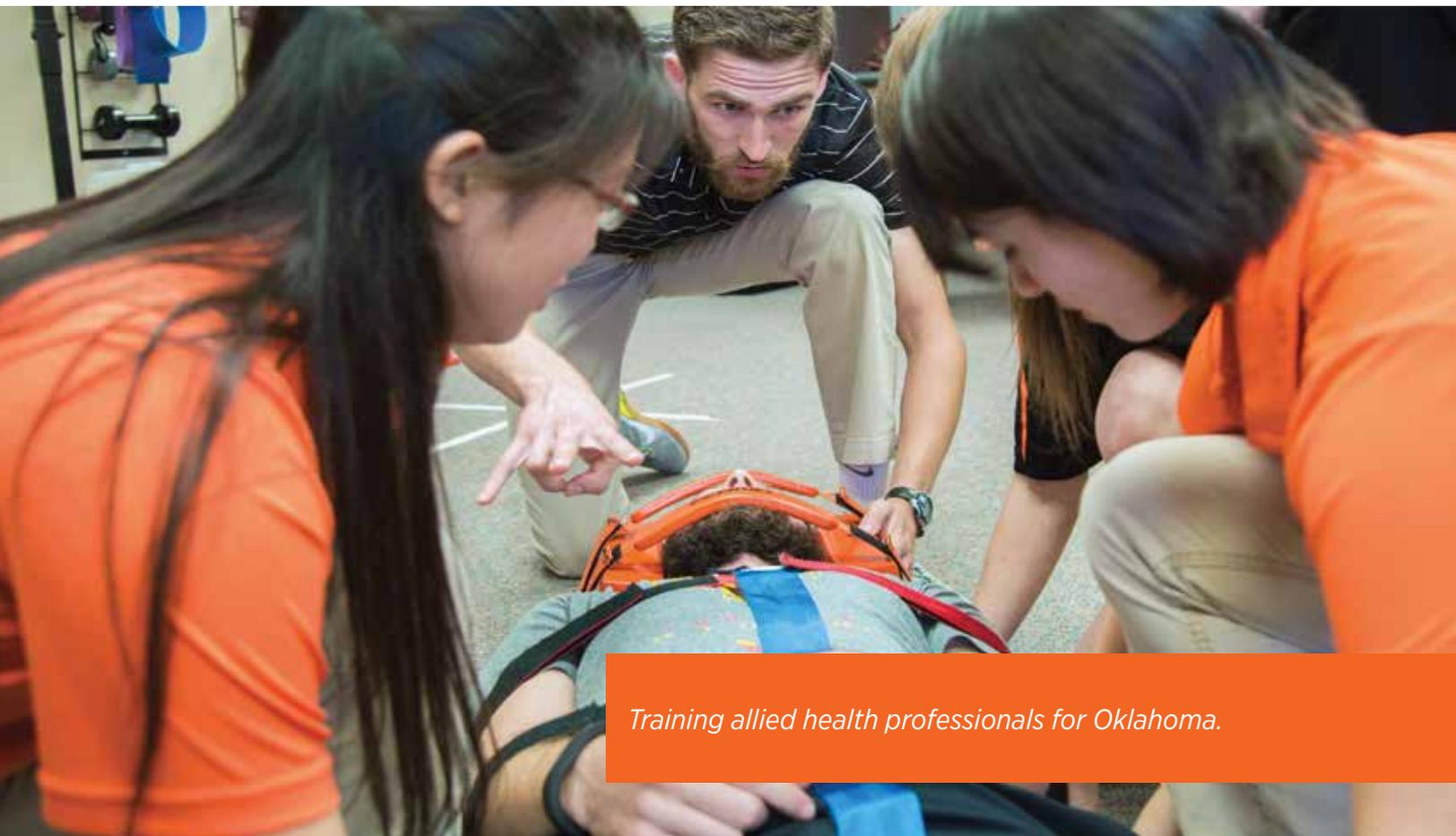
OSU-CHS will develop two doctoral programs as part of our strategic plan. Our School of Forensic Sciences will establish a Doctor of Philosophy Degree in Forensic Science by fall 2018. Our School of Allied Health will develop a Doctor of Philosophy Degree in Athletic Training by 2026.



## **New Graduate Certificate Programs.**

OSU-CHS has identified graduate certificate programs as a strategic enrollment growth area. With state support for higher education declining, certificate programs may provide a new source of revenue. Graduate certificate programs are attractive to people who already hold an academic degree, but who are interested in accessing discrete areas of knowledge that will enable them to advance in their career. Expansion of certificate programs would serve a dual purpose for OSU-CHS. They would provide a new opportunity for revenue growth and simultaneously serve as a strategic recruiting tool for the degree programs at OSU-CHS. Today's certificate students could upgrade to tomorrow's degree students. All graduate certificate programs will be designed to enable a student to transfer their credit hours towards a masters-granting degree program at OSU-CHS. OSU-CHS will establish graduate certificate programs in the following areas:

- Health Care Administration will develop a 12 credit hour health care administration certificate with an anticipated launch date of fall 2018;
- Biomedical Sciences will develop a 22 credit hour post baccalaureate premedical certificate with an anticipated launch date of fall 2018; and
- Allied Health will develop a 12 credit hour orthopedic technician certificate with an anticipated launch date of fall 2019.



*Training allied health professionals for Oklahoma.*



## STRATEGY 3: GROW STUDENT ENROLLMENT

Enrollment growth in the medical and graduate programs is essential for the long-term financial health of OSU-CHS. In order to achieve excellence in education, our academic programs must have a strong financial foundation based on robust enrollment numbers and tuition revenue. Labor statistics forecast strong market demand for graduate degrees and for healthcare-related degrees. The Bureau for Labor Statistics estimates that by 2022, there will be 18.4% more jobs requiring a master's degree than there were in 2012. OSU-CHS will capitalize on the growing demand for professional and advanced training in the fields of healthcare and health sciences.

While a significant number of universities and colleges across the nation have suffered declining enrollment numbers, enrollment growth at OSU-CHS is on an upward trajectory. From fall 2012 to fall 2016, enrollment at OSU-CHS increased from 407 to 904 students, representing an astounding growth rate of 122% during this five year period. As we embark on this strategic plan, we have an ambitious growth plan to raise enrollment numbers from 904 to 1,724 students by 2026, which would equate to a 10 year growth rate of 90%. Projected enrollment growth in each academic unit is outlined in the table below.

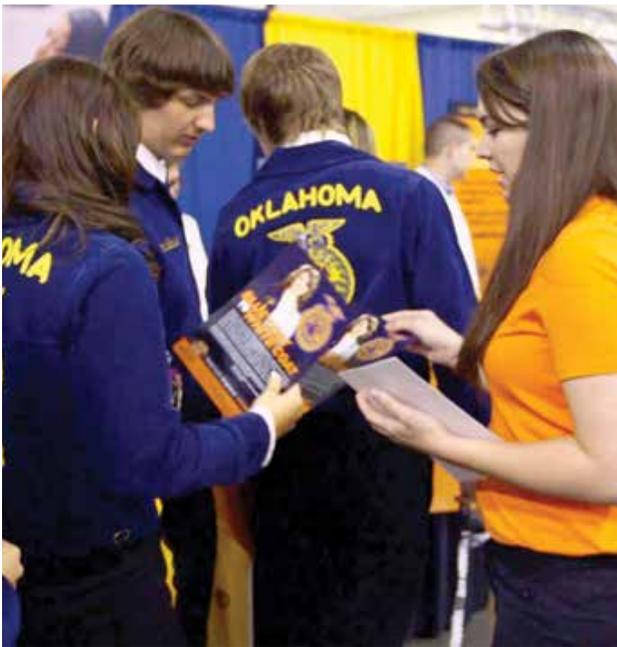
Academic Unit	Fall 2016 Enrollment (headcount)	Projected Growth by 2026 (headcount)	Total Enrollment by 2026 (headcount)	Projected Growth by 2026 (%)
OSU College of Osteopathic Medicine	446	275	721	62%
OSU School of Allied Health	17	53	70	312%
OSU School of Health Care Administration	258	392	650	152%
OSU School of Biomedical Sciences	63	50	113	79%
OSU School of Forensic Sciences	120	50	170	42%
<b>TOTAL</b>	<b>904</b>	<b>820</b>	<b>1724</b>	<b>90%</b>

In order to achieve our ambitious enrollment goal, OSU-CHS must be strategic in recruiting and enrolling new students. Student recruitment is a critical element in the sustainability and success of OSU-CHS. A strong student recruitment program will increase the size, quality and diversity of the applicant pool while also securing the institution's revenue base. Enrollment and recruitment strategies for medical and graduate schools will be designed to best meet the objectives of each academic unit.

### Enrollment and Recruitment Strategies for OSU-COM

Since fall 2012, our College of Osteopathic Medicine (OSU-COM) has welcomed 115 entering medical students each year. OSU-COM is currently working towards securing the necessary internal and accreditation approvals to increase the entering medical school class by 50 students, which would bring the total entering class size from 115 to 165 medical students. If approved, the additional 50 slots will be earmarked for our inaugural class at our envisioned additional educational site in Tahlequah, Oklahoma. OSU-COM is partnering with the Cherokee Nation to establish the additional educational site in Tahlequah.





The mission of OSU-COM is to train primary care physicians for rural and underserved Oklahoma. At a time when rural Oklahoma faces a severe shortage of primary care physicians, carrying out OSU-COM's mission of recruiting and training tomorrow's primary care physicians for rural and underserved Oklahoma is more important than ever. Oklahoma suffers from a severe shortage of primary care physicians, especially in rural areas of the state. In 2016, 75 out of 77 Oklahoma counties were designated as primary care health professional shortage areas by the Health Resources and Services Administration. This primary care physician shortage has contributed to the state's poor health status. From 2006 – 2016, United Health Foundation has ranked Oklahoma's overall health in the bottom 15% in the nation, ranging from 43rd (2006, 2011) to 49th (2007, 2009) in the nation. In 2016, Oklahoma ranked 46th in the nation in overall health according to the United Health Foundation.

OSU-COM receives anywhere from 2,700 to 3,000 applications for medical school each year. The goal of OSU-COM's recruitment and enrollment strategy is not to increase the overall number of applications, but to encourage the right profile of students to apply to medical school – students from Oklahoma who are interested in primary care and rural health. Unlike the graduate schools at OSU-CHS, OSU-COM must adhere to a state-mandated admission policy requiring at least 85% of entering medical school students to be comprised of Oklahoma residents. In order to carry out OSU-COM's rural and primary care mission and to satisfy OSU-COM's 85% in-state class composition requirement, OSU-CHS will implement a targeted recruiting strategy to attract rural and primary care minded students from Oklahoma to select OSU-COM for their medical education. We will amplify our recruiting efforts for OSU-COM by implementing the following recruitment strategies:

**1. Strengthen Alliances with Strategic Educational Partners: Feeder Universities, Tribal Nations, FFA and 4H.** OSU-COM will strengthen our partnerships with our strategic educational partners. We will cultivate relationships with existing feeder universities and establish partnerships with newly identified feeder universities and community colleges. We will assess which undergraduate programs have historically supplied us with the greatest number of incoming medical students and which undergraduate programs have provided us with greatest number of alumni physicians practicing medicine in rural Oklahoma. OSU-COM will bolster our relationships with pre-medical advisors and faculty at the various feeder universities and community colleges. We will also work with tribal nations and agricultural-focused organizations such as the Oklahoma FFA and 4H to increase the visibility of OSU-COM as the medical education destination of choice for tribal and rural students.

**2. Grow our 3+1 Admissions Programs.** The 3+1 Admissions Program was established to offer students interested in practicing primary care medicine in rural Oklahoma an accelerated pathway in becoming a rural primary care physician. 3+1 students earn their undergraduate degree and medical degree in seven instead of eight years. Students in this program forego their senior year in college in order to start medical school at OSU-COM. Credits earned during their first year of medical school transfer back to their undergraduate institution and count towards the completion of their undergraduate degree. Undergraduate students at six universities – Oklahoma State University (College of Arts & Sciences/College of Agricultural Sciences and Natural Resources), East Central University, Southeastern Oklahoma State University, Southwestern Oklahoma State University, Northeastern State University, and University of Central Oklahoma -- are eligible to apply to the 3+1 Program. OSU-COM will continue to grow the 3+1 by



working with pre-medical career advisors to assist us in identifying optimal candidates and by targeting high performing high school students and encouraging them to consider applying to the 3+1 Program.

- 3. Recruit Non-Traditional Students.** OSU-COM currently recruits non-traditional students through the Bridge Program. However, the Bridge Program is earmarked for students who come from disadvantaged or medically underrepresented backgrounds. Students in the Bridge Program also receive automatic admission into OSU-COM contingent on their successful completion of required coursework. Starting in the fall of 2018, the OSU School of Biomedical Sciences will offer a post-baccalaureate pre-medical graduate certificate program (post-bac). The post-bac program will be designed for individuals who are interested in applying to medical school but need to fulfill requisite core science courses or to improve their grades in order to improve their chance of gaining admission into medical school. The overarching goal of the post-bac program is to funnel promising candidates into the OSU-COM applicant pool.
- 4. Bolster Medical Scholarships.** In order to maintain our national status for producing primary care physicians, we must recruit and admit medical students who have a greater propensity to practice primary care medicine and who have a desire to practice in rural Oklahoma. Once they are accepted into our program, we need to assist them financially in order to reduce their medical school-related educational debt; otherwise, they may be tempted to go into a specialty for financial reasons. Since 2013, OSU-CHS has made raising funds for medical scholarships for primary care medicine and rural health a top priority. Prior to 2013, OSU-CHS awarded \$25,000 - \$50,000 each year in medical scholarships. In 2016, OSU-CHS awarded nearly \$600,000 in scholarships to deserving students, most of who were interested in primary care medicine and rural health. However, we understand that medical school is extremely expensive. Over 90% of OSU-COM students demonstrate financial need. OSU-CHS will continue to make securing private philanthropic dollars to support medical scholarships a top priority so that we can recruit the best and the brightest into the fields of primary care medicine and rural health.



**5. Recruit Proactively Early On via High School Pipeline Programs.** OSU-COM has rolled out a number of signature high school pipeline programs to encourage high school students in rural Oklahoma to consider a career in medicine. Our Blue Coat to White Coat Program is a unique collaboration between OSU-COM and the Oklahoma FFA. OSU-COM regularly attends regional and state FFA conferences in Oklahoma to build relationships with high school FFA students and to encourage them to participate in a variety of recruiting events. Operation Orange is our traveling summer medical school camp where OSU-COM faculty, students and staff travel to rural communities to share with rural high school students what it's like to be a medical student at OSU. High school students have the opportunity interact with OSU-COM faculty and students and engage in a number of hands on activities such as intubation, chest compressions and suturing. OSU-CHS recently launched our Dr. Pete's Immersion Camp. Dr. Pete's Immersion Camp allows rural high school participants the opportunity to attend classes and activities on our Tulsa campus and gain a unique campus perspective. OSU-COM will continue to collect and analyze biographical data of high school students who attend pipeline programs. We will identify which high school students are "high interest" candidates and develop a tracking system to monitor their educational trajectory. OSU-COM will proactively recruit promising high school students to consider a career in medicine by forming early and meaningful connections with them.

**6. Implement Targeted Marketing Strategy to Reach Rural Demographics.** OSU-COM will deploy a marketing strategy that specifically targets medical school candidates from rural Oklahoma. OSU-COM will leverage on in-state career fairs, search engine optimization, digital banners, Facebook live interviews, billboards on rural highways, and ad placements in local university papers to generate leads. OSU-COM will also leverage on our new website to showcase our state-of-the-art facilities such as the Tandy Medical Academic Building through virtual tours and to emphasize our family environment through student and faculty video testimonials. Once leads are generated, OSU-COM's dedicated recruitment and admissions team will manage the leads by creating personal touches -- placing phone calls, sending emails, initiating face-to-face visits and hosting group events.

OSU-COM also plans to establish a Master's in Physician Assistant Studies Program by 2019. Projected enrollment will be 75 students by 2026. Given the high demand for a PA degree, we do not anticipate the need to adopt an aggressive student recruitment strategy for our PA program.

### **Enrollment and Recruitment Strategies for Graduate Schools**

OSU-CHS will adopt aggressive enrollment and recruitment strategies for our graduate schools. The graduate schools include: OSU School of Health Care Administration (OSU-HCA), OSU School of Allied Health (OSU-ALH), OSU School of Forensic Sciences (OSU-FOR) and OSU School of Biomedical Sciences (OSU-BMED). 66% of the projected student enrollment growth over the next 10 years will stem from the graduates schools. By 2026, the graduate schools will have more than doubled their student enrollment. In the fall of 2016, student headcount for graduate schools was 458 students. In 2026, OSU-CHS plans to have over 1,000 students enrolled in our graduate doctoral, master's and certificate programs. We will achieve our student enrollment goals for the graduate schools by implementing the following strategies:

**1. Grow New Programs with High Market Demand.** OSU-CHS will grow a number of high demand degree and certificate programs in the graduate schools that will attract new students.

- Allied Health plans to develop a doctoral program in athletic training with projected



enrollment of 15 students and an orthopedic technician certificate program with projected enrollment of 20 students.

- Biomedical Sciences plans to establish a post-baccalaureate premedical certificate program by 2018. Projected enrollment will be 50 students by 2026.
- Health Care Administration plans to develop a health care administration certificate program by 2018 with projected enrollment of 20 students by 2026. OSU-HCA will also offer by fall 2019 a Master’s in Science in Global Health.
- Forensics plans to develop a doctoral program in forensic science by 2018 with projected enrollment of 15 students by 2026.

**2. Expand Online Offerings.** Enrollment at OSU-CHS is expected to benefit greatly by the expansion and increased integration of online learning. Within the past 5 years, online learning has gained popularity and credibility as it provides older, working adults an opportunity to earn a graduate degree or certificate that meets their busy schedule. Online learning allows students to access OSU-CHS programs wherever they live and whenever they want to learn. From 2012 – 2016, enrollment at OSU-CHS grew by a robust rate of 122%. Most of this growth can be attributed to the increased growth in online programs, especially within the OSU School of Health Care Administration. OSU-CHS will continue to expand vigorously our online offerings. Expansion of online learning offerings is critical to our long-term strategy. It provides us the platform to reach more students, to make an OSU-CHS more accessible to students, and to generate revenue especially as state funding continues to wane. Through online learning, OSU-CHS can attract student populations who would otherwise be unable to attend traditional on campus classes due to scheduling or geographical limitations.

**3. Change the Mix of Students.** OSU-CHS has historically focused primarily on in-state recruitment for our graduate schools. We will continue to focus on in-state recruitment. However, out-of-state students and international students represent untapped markets for our graduate schools. Unlike OSU-COM, the graduate schools are not required to adhere to any in-state student composition requirement. Consequently, the graduate schools have the flexibility to go beyond our state borders and recruit out-of-state and international students. Targeting out-of-state and international students will contribute to our long-term financial health as these groups of students generally pay a higher rate of tuition than in-state students.

Projected Geographic Enrollment Mix (%)	OSU-COM	OSU-HCA	OSU-ALH	OSU-FOR	OSU-BMED
In-State	85%	50%	50%	50%	50%
Out-of-State	15%	33%	50%	50%	50%
International	0%	17%	0%	0%	0%

In addition to changing the mix of students from a geographic basis, OSU-CHS will also capitalize on the rise of nontraditional students as consumers of graduate education. The graduate schools will target nontraditional students such as veterans for our forensics program and older working adults for our online and certificate programs.



**4. Centralize Student Recruitment for Graduate Schools.** OSU-CHS will establish an umbrella recruitment office to support all four graduate schools. At present, each graduate school is responsible for student recruitment with no dedicated staff members to oversee the process. By and large, faculty members within the respective graduate school have led the student recruitment efforts. The graduate schools have been able to be successful in student recruitment despite the lack of infrastructure and support. However, as each school ramps up their recruitment goals, OSU-CHS will need to establish more formal, institutional processes to attract degree and certificate students for the graduate schools. OSU-CHS will put into place a dedicated student recruitment team that is responsible for lead generation and lead management for OSU-HCA, OSU-ALH, OSU-FOR and OSU-BMED. A dedicated student recruitment team for the graduate schools could focus on:

- Devising a recruitment strategy to target out-of-state and international students through social media, digital ads, professional journals, and national industry career fairs;
- Developing strategic relationships with feeder universities, federal and state agencies and health care systems and enterprises to recruit potential students;
- Converting certificate students to degree students; and
- Hosting regularly scheduled open houses to showcase all academic programs within the 4 graduate schools.



## STRATEGY 4: PROMOTE STUDENT SUCCESS

Student success underpins the foundation of OSU-CHS' educational mission. It is the success of our students that fuels our passion and commitment to pursue excellence in education. We believe that students succeed when they receive support and guidance in and out of the classroom.

OSU-CHS will promote student success by supporting our students academically, personally and professionally. We will establish a Student Success Center that will house a comprehensive menu of services and programs to facilitate and encourage academic, holistic, and professional growth. The Student Success Center will serve as a hub for programs and services that help students become more effective learners, more engaged members of the OSU-CHS community, more balanced individuals, and more competitive job candidates.

**Academic Growth.** The Student Success Center will provide academic resources that empower students to overcome challenges and to achieve their educational goals. The Student Success Center will support medical and graduate students' academic growth through the provision of academic counseling and academic support services. OSU-COM students will be able to receive remediation services, learn test taking skills and prepare for board and licensing exams. Graduate students will receive coaching to develop graduate-level academic skills such as presentation, research and writing skills. Graduate and medical students can also work with academic advisors to design an academic experience that will complement their future career plans and personal life choices. The Student Success Center will also create an early warning system to identify which students may be in need of extra attention to succeed academically or who may be at risk of not completing their degree or certificate.

**Holistic Growth.** In addition to providing academic support, the Student Success Center will also house a Student Life Office. The Student Life Office is a student-centric, dedicated to creating opportunities for students to become connected to the OSU-CHS community. Through student clubs, activities and events, medical and graduate students will be able to interact and to form interpersonal connections with their fellow classmates, with faculty and with staff. The Office of



Student Life will enable students to enrich their OSU-CHS experience by participating in team building, community building and leadership development activities outside the classroom. OSU-CHS will promote the health and well-being of our students as a foundation for student success. Life as a medical student or a graduate student can be stressful as students balance the task of academic, social, and extracurricular responsibilities. Life as a healthcare professional can be even more stressful. While stress is a fact of life, too much stress can be detrimental to a person's physical, emotional and mental well-being. Therefore, the ability to effectively manage stress is an important lifelong life skill for students to acquire and to apply during their time at OSU-CHS and later on in their career.

OSU-CHS is dedicated to creating a sustainable culture of wellness and to helping students develop mental resiliency by providing them with the tools and activities to cope with stress. OSU-CHS currently provides a Wellness Center where students can take advantage of fitness courses, meditation classes and a variety of lunch and learns that focus on overall wellness. Students also have access to therapy dogs through the Pete's Pet Posse Therapy program. We also have plans to establish a Reboot Center to help students develop stress management skills. The Reboot Center will be an inviting space to relax, re-charge and re-focus. The Reboot Center will provide software platforms with visualizations, games and workshops to build stress management skills as well as individual consultation about managing stress and improving performance. Our objective is to help students manage stress during school and to apply those same life skills to lead a successful career.

**Professional Growth.** At OSU-CHS, we are committed to our students' professional success and to enhancing our students' ability to secure meaningful employment upon completion of their academic studies. We will establish and a Career Services Office to support students by helping them define their career vision and equipping them with the tools and knowledge they need to achieve professional success. Whether they are seeking an internship, residency or permanent employment, the Career Services Office will offer students a variety of tools, workshops, events, and other resources to help them discover the career path best suited to their personal fulfillment. Potential career services to be provided include assisting with crafting resumes and cover letters, creating and executing a search strategy, preparing for interviews, and career coaching. In addition to providing direct student support, the Career Services Office will also be tasked with developing relationships and program that will help our students achieve professional growth. The Career Services Office will:

- Work with prospective employers to encourage them to hire OSU-CHS graduates;
- Develop an industry leader and alumni mentoring program to pair interested students with industry leaders and alumni practicing in their respective fields; and
- Create and maintain a database for internships and alumni networking.



## STRATEGY 5: ESTABLISH SATELLITE CAMPUSES

To address the state's healthcare workforce needs, OSU-CHS will expand our academic footprint in rural Oklahoma and provide increased educational opportunities for Oklahomans to pursue a health-related education. OSU-CHS is partnering the Cherokee Nation to establish an additional educational site in Tahlequah. At present, OSU-CHS is taking the necessary steps to secure approval from the American Osteopathic Association's Commission on Osteopathic College Accreditation (COCA) to increase our medical school class size by 40 additional medical students per entering class. Once COCA approval has been received, OSU-CHS will work with the Cherokee Nation to finalize plans to establish the additional educational site in Tahlequah. Establishing satellite campuses outside of Tulsa and in rural communities similar to the additional educational site in Tahlequah will greatly enable OSU-CHS to carry out effectively our mission of training physicians and healthcare professionals for rural and underserved Oklahoma. This would allow us to create a tripartite model for developing a physician and health professional workforce pipeline for rural Oklahoma based on the following 3 principles:

- 1) Recruit students from rural Oklahoma;
- 2) Educate students in rural Oklahoma; and
- 3) Train students in rural Oklahoma.

Recruiting students from rural Oklahoma and educating and training them in rural Oklahoma would enable OSU-CHS to grow organically a local healthcare workforce for rural Oklahoma. This tripartite model will greatly increase the probability that the graduates from OSU-CHS' satellite campuses will remain in rural Oklahoma upon completion of their academic program. It will also make OSU-CHS graduate and professional academic programs more accessible to rural Oklahomans. In addition to the additional educational site in Tahlequah, OSU-CHS will also assess the feasibility of establishing satellite campuses in other rural cities across Oklahoma.



*“Cherokee Nation is proud of our partnership with OSU Center for Health Sciences. Recruiting primary care physicians to practice within Cherokee Nation’s 14-county jurisdiction remains a constant struggle. We admire and support OSU Center for Health Sciences’ efforts to populate rural Oklahoma with doctors from rural Oklahoma. That mission will bolster our future by creating healthier families and communities in northeast Oklahoma.”*

*– Bill John Baker, Cherokee Nation Former Principal Chief*



## STRATEGY 6: INVEST IN TEACHING AND LEARNING RESOURCES

OSU-CHS will invest in teaching resources to promote excellence in education. As we expand student enrollment, we will expand the size of our faculty to adjust to the growth in student enrollment. We will develop two faculty tracks: a tenure track for faculty who are mandated to perform research and a teaching track for faculty who have no research requirement. We plan to hire approximately 30 additional faculty members and 40 additional support staff. OSU-CHS will also hire post-doctorate fellows, research assistants and graduate assistants to assist with teaching. OSU-CHS will also invest in information technology and facilities infrastructure to support teaching.

**Campus Master Plan.** In 2016, OSU-CHS commissioned the design firm Ayers Saint Gross to create a campus master plan to establish a framework for to guide future campus development. The design firm determined that current facilities on the OSU-CHS campus could not accommodate the current needs of the campus, much less the future needs of OSU-CHS as we seek to increase student enrollment to 1,700 students. Over the next 10 years, OSU-CHS plans to add 2 new buildings to increase teaching, administrative and faculty office space.

**OSU-COM Teaching Infrastructure.** From 2012 – 2016, student enrollment at OSU-CHS more than doubled. Starting in the fall of 2012, each entering medical school class size increased from 88 students to 115 students per class. With the expanded medical school class size, OSU-COM quickly outgrew its teaching space. With the opening of the Tandy Medical Academic Building in fall 2017, OSU-COM's teaching space demands will be met. However, the teaching information technology needs of OSU-COM will likely change if the additional educational site in Tahlequah moves forward. OSU-COM will then need to incorporate robust and reliable distance learning technology into the teaching facilities on our main campus to support student learning at the Tahlequah site.

**Graduate Schools Teaching Infrastructure.** The graduate schools have increased their student enrollment by 1500% since 2012. In the fall of 2012, OSU-CHS had 28 graduate students. By the fall of 2016, combined enrollment in the graduate schools reached 458 students. During this growth period, the graduate schools shared lecture space with OSU-COM. With the relocation of the medical school classes to the Tandy Medical Academic Building, the graduate schools will benefit temporarily from the increased utilization of Dunlap auditorium and 2 classrooms in CAME. However, as student enrollment in the graduate schools is projected to grow from 458 students to 1,028 students by 2026, additional teaching and student laboratory space will be needed. Furthermore, as online learning continues to expand within the graduate schools, OSU-CHS will need to invest in additional classrooms to support distance learning. At present, only one classroom, Room 378 in the Forensics Building, is outfitted with the necessary video-enabled teaching and learning technology to support online classes and webinars. Both OSU-HCA and OSU-FOR offer several online courses and have plans to expand their online offerings.

**Faculty Development.** Faculty are the single greatest resource at OSU-CHS. All faculty need support and opportunities for development in order to achieve professional fulfillment and sustain their vitality. A systemic emphasis on professional development, leadership enhancement and inclusiveness will create a more supportive and developmental environment for faculty to succeed.



Through the Office of Curricular Affairs, Instructional Design, and Academic Technologies, OSU-CHS will continue to offer in-person workshops and online webinars that enable faculty to improve their teaching delivery, stay up-to-date on pedagogical trends, and embrace new and innovative ways of learning and teaching.

**Digital Learning and Resource Center.** OSU-CHS will develop a Digital Learning and Resource Center to facilitate education and learning that are enhanced through online and other digital learning technology. The Digital Learning and Resource Center will house the OSU-CHS Library. We will redesign the school library to meet the interactive, technology-based learning needs of today's students. Space in the library will be configured to support small group, collaborative, team-based learning where medical students and graduate students can work alongside each other to foster interprofessional learning. The Digital Learning and Resource Center will also offer resources to support immersive learning such as the Anatomage Table and augmented reality-based learning.



# **BOLD INNOVATION AND EXCELLENCE IN RESEARCH**

**“OSU-CHS will leverage on unique academic assets within OSU-CHS and across the OSU System to unlock scholarship potential, promote innovation and encourage multidisciplinary collaborative research.”**



STRATEGIC PILLAR

**DISCOVER**

# DISCOVER: STRATEGIES

## Bold Innovation and Excellence in Research

### STRATEGY 1: FOSTER CULTURE OF SCHOLARSHIP EXCELLENCE

OSU-CHS will foster a vibrant research culture that unlocks scholarship potential, promotes innovation, encourages multidisciplinary collaboration and rewards excellence. OSU-CHS will reassess faculty teaching and research requirements by implementing a new faculty teaching workload model to better manage faculty expectations with respect to teaching and research. OSU-CHS will also set forth a performance and reward evaluation system to assess faculty research production.

### STRATEGY 2: INVEST IN PEOPLE

OSU-CHS 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. OSU-CHS will also recruit post-doctoral fellows, research assistants and graduate assistants to support faculty research.

### STRATEGY 3: CREATE RESEARCH CENTERS OF EXCELLENCE

OSU-CHS will create select certain research areas to be designated as a Research Center of Excellence. A Research Center of Excellence designation will be used as a prioritization tool to make strategic investments in terms of hiring new faculty and allocating research space and dollars. OSU-CHS used the following key characteristics to determine which research areas merit a Research Center of Excellence designation:

- Align directly with OSU-CHS' rural and primary care mission;
- Address emerging and pressing health challenges and concerns;
- Provide fertile paths for winning federal and state grants or philanthropic dollars;
- Bring distinction and prominence to the OSU-CHS brand; and
- Promote interdisciplinary and collaboration of multiple basic research and clinical faculty members across a range of academic ranks and disciplines.

Based on the criteria above, Research Centers of Excellence under consideration include:

#### **OSU Center for Wellness and Recovery**

The OSU Center for Wellness and Recovery will be a national center of excellence that promotes addiction and pain related research, clinical care, education and advocacy initiatives and programs. OSU-CHS will recruit national experts in pain and addiction to conduct cutting edge research in neuroscience, addictive psychology, pain management and public policy in Oklahoma. We will also leverage off the research talents of existing biomedical, clinical and forensic science faculty. Potential research endeavors will include understanding brain disorders are influenced by genetics and social determinants applicable to populations within Oklahoma, effectiveness of non-pharmacologic modalities to treat and manage pain, and impact of public policies on mitigating addiction.

#### **OSU Center for Sports Medicine and Human Performance (CSMHP)**

OSU-CHS currently has clinicians in the areas of orthopedic surgery, sports psychiatry and OMM. Allied Health currently has a Master of Athletic Training (MAT) Program. This Center will serve as a treatment center for a wide spectrum of sports related injuries and a research center for groundbreaking injury-recovery research. CSMHP will continue to enhance current partnerships



with elite athletic groups and develop new partnerships to expand its clinical care footprint in Tulsa. This expansion will mature to a state-of-the-art human performance training and research facility.

### **OSU Center for Native American and Rural Health (CNARH)**

The Center for Native American and Rural Health will focus its research on understanding and examining health disparities in rural and tribal populations. CNARH will bring together outstanding clinicians and investigators from OSU-CHS and from the OSU System to:

1. Evaluate the social determinants of health in rural and tribal communities;
2. Evaluate the role of genetics;
3. Address fundamental questions about health and disease among rural and tribal communities; and
4. Propose public policy recommendations and implementations of innovative programs to improve overall health in rural and tribal communities based on its research findings.

### **OSU Center for Innovation and Technology-Enabled Healthcare Delivery (CITEHCD)**

OSU-CHS will establish the Center for Innovation and Technology-Enabled Healthcare Delivery to identify innovative technology and new models of care delivery. As cost of care is rising, coupled with a physician shortage, OSU-CHS is determined to find new technology-enabled ways to deliver care that maximizes outcomes while minimizing costs. The Center will partner with the Center for Health Systems Innovation to analyze big data in order to promote precision medicine and predictive analytics to improve patient outcome. The Center will also partner with Project ECHO to analyze and track results.

### **OSU Center for Osteopathic Medical Education**

Medical education must continually evolve to meet ever-changing developments in the delivery of medical education and healthcare services. At OSU-CHS, we are examining and implementing exciting new initiatives to enhance our osteopathic undergraduate curriculum and to improve learning for our students. At the graduate medical education level, we are creating new opportunities and paradigms for residency training and engagement. It is imperative that OSU-CHS continually and consistently reviews our undergraduate and graduate medical education programs to examine their effectiveness and to determine whether any curricula adjustment are needed to meet changing learning needs. The OSU Center for Osteopathic Medical Education will be at the forefront of osteopathic medical educational research. This Center will:

- Address contemporary and future issues and challenges in medical education;
- Design, track, and evaluate curricular innovations; and
- Assess and recommend policy changes related to medical education curriculum, instructional technology, and medical education ecosystem.

Development of the Research Centers of Excellence will help OSU-CHS focus on research priorities and allocate the appropriate resources to optimize research effectiveness, productivity and efficiency and to encourage innovations that improve health.



## **STRATEGY 4: PROMOTE COLLABORATION**

OSU-CHS will foster a culture of collaboration where OSU-CHS faculty will work on multidisciplinary research. Examples include:

- Health Care Administration faculty collaborating with the Centers for Health Systems Innovation to generate academic publications on coordinated care team processes at hospitals and linkages to clinical outcomes.
- Athletic Training faculty collaborating with orthopedics residents, physicians and osteopathic manipulative medicine faculty to assess the role of athletic trainers in the prevention of common athletic and orthopedic injuries.
- Forensics faculty collaborating with the Centers for Health Systems Innovation and Biomedical faculty to study pharmacogenetics in Native American populations.

Lack of structured communication can be a barrier to faculty's efforts to collaborate with each other and to take advantage of the enormous resources available across the OSU-CHS campus. OSU-CHS will develop a quarterly report summarizing each academic unit's research by faculty will be generated and shared with OSU-CHS faculty, staff and students.

OSU-CHS faculty will also be encouraged to co-author manuscripts based on their collaborative research findings and to publish their research findings in the Oklahoma State Medical Proceedings Online Journal and other open access peer reviewed academic journals.

OSU-CHS will also expand the ROK-Net program to develop rural research. ROK-Net provides an infrastructure for the development of peer learning networks comprised of rural clinicians and providers, OSU researchers and innovators, and community partners. These networks study recurring problems in rural primary care and develop resources and quality improvement initiatives in response to findings. Providers play an instrumental role in shaping research and development efforts to ensure relevance and application to daily practice.

## **STRATEGY 5: LAUNCH INNOVATION HEALTH INSTITUTE (IHEALTH INSTITUTE)**

OSU-CHS will establish the Innovation Health Institute (iHealth Institute) as the umbrella institution to integrate data analytics, bioinformatics, smart technology, virtual medicine, and the Project ECHO knowledge sharing model into one seamless platform. The iHealth Institute will enable OSU-CHS clinicians to embrace a data-driven, technology-enabled, research-based approach to healthcare decision-making and delivery. As a result, healthcare decisions will be made and delivered more efficiently, resulting in better outcomes at lower costs. The iHealth Institute will also house our community-based health education programs.

## **STRATEGY 6: ESTABLISH OSU HEALTH INNOVATION PARK**

OSU-CHS is uniquely positioned to lead the One Health Initiative at OSU System through our Research Centers of Excellence. One Health is a concept that encourages interdisciplinary collaborations to achieve the best health for humans, animals, and the environment. Under the One Health philosophy, the world's most pressing health challenges will be solved only through collaborations amongst physicians, veterinarians, pharmacists, nurses, dentists and other scientific health and environmentally related disciplines. OSU-CHS will lead this collaborative effort within the OSU System.



OSU-CHS will centralize all of OSU health-related assets into one location – the OSU Health Innovation Park. The OSU Health Innovation Park will be the leader in human health, translational medicine and agricultural bioscience research. OSU-CHS will identify partnering businesses, government agencies, individuals and philanthropic leaders to establish the OSU Health Innovation Park. The OSU Health Innovation Park will be a compact, dynamic ecosystem in Tulsa that nurtures health-related innovation, encourages collaboration across a broad spectrum and supports commercialization. The research synergism achieved under the One Health philosophy will advance health care by accelerating biomedical research discoveries, enhancing public health policies, and improving medical education and clinical care.

### **STRATEGY 7: BUILD SUPPORT SYSTEMS**

OSU-CHS will endeavor to strengthen the internal support systems needed to enable the OSU-CHS research community (faculty, post-doctoral researchers, residents, medical students and graduate 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. OSU-CHS will also support faculty and student research endeavors by providing library research support services and expanded availability, accessibility and utilization of electronic databases such as open access journals for mining and analyzing health-related information and outcomes.

### **STRATEGY 8: EXPAND RESEARCH FACILITIES**

For OSU-CHS faculty to achieve excellence in research, they must have access to core research facilities to conduct research. At present, the availability and quality of research space varies from academic units within OSU-CHS. Forensics faculty enjoy an abundance of high quality research space. Many of our biomedical faculty work in substandard research laboratories that are outdated and require repairs. Our athletic training faculty currently lack human clinical space to test out ideas and conduct research. OSU-CHS will renovate the 5th floor of the Forensics Building to support faculty research. Once this space is renovated, biomedical faculty will be relocated from the Barson Building into the Forensics Building. OSU-CHS will develop a metric system that objectively and fairly assesses research performance of faculty across OSU-CHS. These metrics can include total amount of research funding received and scholarship as demonstrated through quantity and quality of publications. Results from the metric system will be used to determine research space allocation for each faculty member to ensure the allocation of research space appropriately reflects faculty research productivity.



## **EXCELLENCE IN PATIENT CARE AND OVERALL HEALTH**

“OSU-CHS is committed to leveraging on our health-related expertise to improve our state’s health. We will deliver outstanding patient care and provide leadership and support to law enforcement agencies, public health organizations and hospitals across our state to enhance health in Oklahoma.”



STRATEGIC PILLAR

**HEAL**

### STRATEGY 1: PROMOTE EXCELLENCE IN CLINICAL CARE

#### Clinical Centers of Excellence

OSU-COM will deliver superior patient care in an academic health center environment. Through our Clinical Centers of Excellence, patients will receive care from multidisciplinary teams utilizing the latest technology and evidence-based approaches to clinical care. This care will be augmented through cutting edge research, virtual care, Project ECHO and service extensions within the various Centers. These Clinical Centers of Excellence will include:

- 1. Center for Wellness & Recovery.** OSU-CHS currently has residency programs in psychiatric medicine, anesthesiology, and a fellowship in osteopathic manipulative medicine (OMM). OSU-CHS also has plans to establish an addiction medicine fellowship by 2019.
  - The Center for Wellness & Recovery will establish an addiction medicine clinic by 2018.
  - The Center for Wellness & Recovery will also host Project ECHO services line in mental health and addiction medicine. These ECHO service lines will help rural providers in Oklahoma deepen their specialty knowledge and familiarity with diagnosing and treating mental health and addiction. They will also become more familiar with alternative treatment options for chronic pain management such as acupuncture, OMM, and relaxation techniques.
  - The Center for Wellness & Recovery will also promote OMM as a non-pharmacologic modality to treat pain and enhance overall health. All OSU-COM medical students and residents are required to be trained in OMM. OSU-CHS currently has an OMM clinic.
  - Our Forensic Toxicology and Trace Laboratory (FTTL) will expand the modalities of drugs of abuse and misuse testing and will develop community and statewide partnerships to monitor appropriate potential drugs of abuse and misuse.
- 2. Center for Sports Medicine and Human Performance (CSMHP).** OSU-CHS currently has a Master of Athletic Training (MAT) Program. The MAT Program compliments existing clinical care assets at OSU-CHS such as sports medicine, orthopedic surgery, and sports psychiatry.
  - CSMHP will launch an ECHO service line to provide education and support to athletic trainers at both colleges and secondary schools in Oklahoma.
  - CSMHP will improve the health and enhance the performance of athletes and active individuals through the provision of cardiac screenings, delivery of timely care, and dissemination of research and education.
  - CSMHP will continue to enhance current partnerships with elite athletic groups and develop new partnerships. CSMHP will continue to expand its clinical care footprint in the Tulsa area. This expansion will mature to a state-of-the-art high performance training and research facility.
- 3. Center for Predictive Medicine and Genomics.** OSU-CHS currently has the Center for Health Systems Innovation (CHSI), the Center for Rural Health (CRH) and the Office for American Indians in Medicine and Science (OAIMS). OSU-CHS will leverage the unique assets housed in each of these areas to identify health conditions or predispositions that affect tribal and rural populations.



- Through the CHSI Cerner database, risk indicators will be discovered to help develop algorithms to be applied to electronic medical records and health applications that can identify early indications of disease or complications of disease.
- CHSI, CRH and OAIMS will work closely with tribal partners in Oklahoma to collaborate on potential early disease identification and personalized medicine programs in these targeted populations.

**Clinically Integrated Provider Network.** OSU-CHS will develop a clinically integrated network (CIN) to deliver the highest quality of care to underserved patients in a cost effective manner. A CIN links physicians, acute care hospitals and services for chronic and post-acute conditions. A CIN will help improve the care experience while lowering the cost for patient.

**Clinical Care and Value-Based Payment Model.** In a rapidly changing healthcare landscape, payment models are shifting away from the traditional fee-for-service model to a value-based reimbursement model that encourages providers to deliver the best care at the lowest cost. The value-based payment model focuses on cost, quality, patient satisfaction and outcome measures. Consequently, OSU-CHS will make the necessary changes and investments to flourish in the alternative payment models set forth by the government and private payors.

**Innovation Health Institute (iHealth).** OSU-CHS will lay the groundwork needed to build a virtual healthcare delivery system called iHealth. The iHealth Institute will promote technology-enabled care delivery. Through the iHealth Institute, OSU-CHS will develop a physician workforce well-versed and well-trained in the most advanced patient care technology. Medical students and residents will have the opportunity to be exposed to virtual monitoring and remote diagnostics tools. Rural patients will also benefit through virtual access of healthcare services regardless of where they live. iHealth will push healthcare services and healthcare knowledge available at OSU-CHS out to rural Oklahoma through the following ways:

**1. Virtual Primary Care Clinics.** OSU-CHS will leverage on technology to extend our clinical reach to rural Oklahoma. We will partner with Oklahoma Cooperative Extension offices located in every county in Oklahoma to place a community healthcare worker and a medical kiosk in each office. Rural patients can easily access healthcare services via the kiosk. The community health worker will be able to assist rural patients with navigating through the myriad of health and social services available to rural patients.

**2. Virtual Care and Monitoring Hospital Services.** OSU-CHS will support primary care physicians in rural Oklahoma through virtual care and monitoring of their patients in rural-based emergency rooms. Many critical access hospitals in rural areas do not have a specialist on staff certified to treat certain acute care patients, such as stroke or head trauma victims. Instead of transferring these patients to larger, urban-based hospitals, critical care hospitals can rely on OSU-CHS to provide virtual specialty care, thereby avoiding unnecessary transport costs. OSU-CHS will also utilize remote monitoring devices to track a patient's recovery, adherence to medication and vital signs.



**3. OSU-CHS Project ECHO.** OSU-CHS will continue to invest in building out a host of Project ECHO service lines. In November 2016, we launched our first ECHO clinic, a psychiatry ECHO clinic, to meet the growing demand for mental health services in Oklahoma. In January 2017, we will launch a childhood obesity medicine ECHO clinic. We have plans to launch a Viral Disorders ECHO clinic and an Addiction Medicine ECHO clinic by the end of 2017. Additional ECHO service lines will be added as healthcare assessments are made. The Project ECHO knowledge sharing model enables OSU-CHS clinicians to mentor primary care providers in remotes areas on how best to provide specialty care to their patients. While OSU-CHS physicians are not providing direct patient care via the Project ECHO model, they are ensuring that rural patients will receive exceptional specialty care from providers mentored by OSU-CHS clinicians.



*Sharing knowledge and improving access to specialty care services through Project ECHO.*



*“We are delighted to have the opportunity to support OSU Center for Health Sciences’ work to transform care delivery in rural Oklahoma. Project ECHO will provide Oklahoma families with much needed access to mental health and addiction services. We applaud the leadership of President Shrum and her willingness to solve some of our most pressing healthcare challenges through innovation and technology.”*

*— Judy Kishner, President, The Anne and Henry Zarrow Foundation*

## **STRATEGY 2: STRENGTHEN AND EXPAND STUDENT AND RESIDENCY TRAINING**

OSU-CHS will continue to promote exceptional patient care through supervised patient care provided by our residents and medical students. We will work towards achieving ACGME initial accreditation for our all residency programs and will collaborate with health systems, hospital partners and the State of Oklahoma to ensure graduate medical education is meeting the physician workforce needs of Oklahoma. We will also continue to develop partnerships with health systems, hospitals, and clinics to establish a plethora of clinical rotation opportunities for our medical students. In addition to supporting our existing residency programs, OSU-CHS will also explore the feasibility of expanding fellowship opportunities in the areas of forensic psychiatry, child and adolescent psychiatry, and addiction medicine. Starting in the summer of 2018, OSU-CHS will start our residency and fellowship programs with the Chickasaw Nation.

## **STRATEGY 3: CULTIVATE STRATEGIC PARTNERSHIPS**

OSU-CHS will cultivate strategic partnerships with health systems, federally qualified health centers (FQHCs), state and federal agencies, and tribal nations to create mutually beneficial relationships towards a shared goal – improving the overall health of Oklahoma. Special emphasis will be placed on strengthening our partnership with state healthcare agencies and tribal nations including the Cherokee Nation, the Choctaw Nation of Oklahoma, the Chickasaw Nation and the Creek Nation.

**State Healthcare Agencies.** OSU-CHS will cultivate strong relationships with critical state healthcare agencies such as the Oklahoma Health Care Authority, Oklahoma State Department of Health, Oklahoma Department of Mental Health and Substance Abuse Services, and Tobacco Settlement Endowment Trust. These state agencies provide significant public funding for many of OSU-COM’s patient care, clinical teaching and residency programs.

**Local, State and Federal Law Enforcement Agencies.** OSU-CHS will cultivate relationships with local, state and federal law enforcement agencies such as the Tulsa Police Department, Oklahoma State Bureau of Investigation, and Bureau of Alcohol, Tobacco, Firearms and Explosives. OSU-FOR



provides critical firearms and explosives training that enables law enforcement officers to maintain their certification and acquire new skill sets to carry out their job of ensuring public safety.

**Tribal Nations.** Our partnerships with tribal nations will be instrumental in helping us improve the health outcomes of rural Oklahomans. The majority of tribal nations are located in rural areas and their communities experience significant disparities in health status especially with addressing chronic diseases such as diabetes and cardiovascular diseases. OSU-CHS will work closely with our tribal partners to ensure that their tribal health systems will have access to 1) our human capital (medical students, residents and physicians) and 2) our resources such as our hospital simulation center and clinical expertise. Helping tribal communities lead healthier lives will be critical to furthering our goal of improving the health outcomes of rural Oklahomans. Our Office for American Indians in Medicine and Science will continue to work with tribal nations to build a sustainable American Indian physician workforce pipeline.

**Health Systems, Community Hospitals, FQHCs and Private Practices.** OSU-CHS will strengthen our relationships with our healthcare partners. Our medical students complete clinical rotations and residency programs through hospitals, private rural clinics and federally qualified healthcare centers (FQHCs). In addition to hosting and employing our medical students, many of these healthcare partners have been participating in Project ECHO clinics. As we roll out virtual medicine clinics and virtual monitoring services, many of these healthcare partnerships will most likely become consumers of such services.

## STRATEGY 4: PROVIDE EXPERTISE AND TRAINING PROGRAMS

OSU-CHS will provide expertise and offer training programs to healthcare and law enforcement professionals so that they can procure the necessary certification needed to render healthcare services and to uphold law and order.

**Community Health Workers.** OSU-CHS will develop on-the-job training for community health workers (CHWs) who will be placed in county cooperative extension offices. CHWs are public health workers who serve as the liaison between health/social services and the community to facilitate access to services. They serve as a powerful force for promoting healthy behaviors and coordinating care and services.

**Continuing Professional Education.** At present, the Office of Continuing Medical Education only provides continuing education units to osteopathic physicians. As OSU-CHS grows our allied health programs and engages allied health professionals in our Project ECHO clinics, the Office of Continuing Medical Education will need to broaden their offerings to extend beyond osteopathic physicians and include allied health professionals such as nurses, nurse practitioners and athletic trainers.

**Law Enforcement Training.** Through our training program, our School of Forensic Sciences strengthens the culture of preparedness of local, state and federal agencies and their employees to respond unexpected events. OSU-FOR has resources and facilities that are unmatched by any other forensic sciences program in the nation. The CENFEX explosives range offer law enforcement officers cutting edge training and simulation exercises to better prepare them to respond to emergencies and to keep our communities healthy and safe.



**Athletic Training Services for Rural Oklahoma.** Our Master's in Athletic Training (MAT) Program will establish a mobile unit to deliver healthcare services to rural Oklahoma. The MAT mobile unit will offer health screenings for sports participation, injury recovery services and concussion testing to rural and tribal communities. In addition, the athletic trainers will educate rural Oklahomans on injury prevention and performance enhancement exercises. The MAT program also has plans to establish an outpatient clinic in the Tulsa area and to expand clinical rotation sites to provide athletic training services to rural-based school districts. Our MAT faculty will also work towards establishing a CAATE-accredited residency program for our MAT Program by 2026.



*Our School of Forensic Sciences strengthens the culture of preparedness.*



## **PARTNERS IN EDUCATION, HEALTH AND SERVICE**

“OSU-CHS will continue to engage with representatives from the business, government, educational, social services and philanthropic sectors to improve health outcomes, to increase health-related educational opportunities, and to support economic growth and development in Oklahoma.”



STRATEGIC PILLAR

**ENGAGE**



### STRATEGY 1: ENHANCE BRAND EQUITY THROUGH MARKETING AND COMMUNICATIONS

**Above & Beyond Branding Campaign.** OSU-CHS will launch an overarching Above & Beyond branding campaign to raise the awareness of our exceptional academic programs, our cutting edge research and our excellent clinic system in key urban and rural markets. Targeted audiences include:

- Regents
- Legislators and Government Officials
- Donors
- Existing and Prospective Students
- Existing and Prospective Patients
- Educational Partners
- Tribal Leaders
- Hospitals and Health Systems
- OSU and OSU-CHS Alumni
- Greater Community at Large

The Above & Beyond Campaign will include a mix of multi-media platforms such as TV ads, print ads, digital banners and billboards, all of which will convey a singular message – OSU-CHS will go above and beyond for Oklahoma, for our students and for our patients.

**Website Redesign.** OSU-CHS will embark on a yearlong project starting in the fall of 2017 to rebuild, revamp and refresh our website. Our website continues to serve as an important marketing tool. It should be our ultimate brand statement. However, in its current state, it is an ineffective marketing tool. Information on the OSU-CHS website is hard to find, navigation is not user friendly, content is outdated and the look and feel of the current OSU-CHS website represents an institution of a decade ago, not the vibrant, growing institution that we are today. As OSU-CHS continues to ramp up our recruitment of out-of-state and international students, we will need to develop a website that features user-friendly layouts and highlights content through visuals such as video testimonials and engaging photos that encourage students to apply. We will also need to incorporate search engine optimization and social media marketing strategies to direct users to our website and encourage them to apply to our academic programs or become a patient.

**Signature Community Events.** OSU-CHS will create a series of signature community events to showcase our academic and clinical assets and strengths. On the academic side, we will host biannual open houses where interested students can learn about the academic programs available at OSU-CHS. We will host health summits where we will partner with community partners, state agencies and local legislators to host health summits in rural communities throughout Oklahoma or on our campus.



**Customized Communications.** OSU-CHS will develop a communications calendar to ensure that OSU-CHS communicates on a regular basis with our alumni, donors, legislators, government officials, existing patients, and regents. OSU-CHS is fortunate to benefit from a strong network of partners and a wide range of constituent groups, whose support is critical in fueling our growing success. By engaging these groups through customized and regularly scheduled communications materials, OSU-CHS will make each constituent group feel valued and special.

**Earned, Social and Digital Media.** OSU-CHS will also engage a wider audience by feeding feel good, human interest stories to media outlets and on social media to demonstrate how OSU-CHS is making a difference in the lives of Oklahomans. OSU-CHS will develop relationships with news media outlets in rural Oklahoma to encourage them to cover OSU-CHS originated news, stories and programs. OSU-CHS will continue to leverage on social media platforms such as Facebook Live to reach a broader audience in a more engaging and meaningful way. We have had great success in using Facebook Live to position our clinicians and faculty as leaders and experts in their respective fields. We will experiment with using Facebook Live to recruit students for enrollment in our academic programs.

## STRATEGY 2: EXPAND EDUCATIONAL OUTREACH

**K-12 Educators.** OSU-CHS will engage with K-12 STEM educators located throughout the state to build knowledge partnerships with OSU-CHS where OSU-CHS will identify experiential STEM learning opportunities to inject into the educator's STEM curriculum. Our graduate students will continue to partner with Eugene Field Elementary School to encourage interest in science. We will also explore partnering with other colleges and units within the OSU System to establish a STEM ECHO Education clinics and to launch a STEM bus initiative to support rural-based science and math educators in Oklahoma.

**Tribal Nations.** The Office for American Indians in Medicine and Science (OAIMS) will continue to develop programs to expose American Indians to the wonders of medicine and science and ultimately to recruit them to enroll in academic programs at OSU-CHS. We will continue to offer programs such as Native Explorers, Native Oklahoma Science Teaching and Research Students, and Native Medical Immersion Camp and devise new Native-centric educational programs.

**High School Students.** OSU-CHS also needs to engage with high school students located in rural Oklahoma in creative ways to encourage them to consider medical school and to mentor them through the remainder of their high school career and undergraduate period. OSU-CHS will continue to grow high school pipeline programs such as Blue Coat to White Coat, Operation Orange, Dr. Pete's Immersion Camp, and Oklahoma Science Teaching and Research Students.

## STRATEGY 3: SHARE OSU-CHS ASSETS

OSU-CHS will share our assets such as the hospital simulation center at the A.R. and Marylouise Tandy Academic Building with the greater Tulsa community, local and state law enforcement/first responder agencies, and charitable healthcare service agencies. The simulation center houses an emergency room with ambulance bay, birthing suite, intensive care unit, operating room, and outpatient clinics. We will offer such groups usage of the simulation center for training purposes at



a significantly reduced cost. We will also identify other OSU-CHS assets that may be of interest to our community partners.

#### **STRATEGY 4: FORTIFY ALUMNI OUTREACH**

OSU-CHS will fortify our Office of Alumni Relations to engage OSU-COM, OSU-HCA, OSU-FOR, OSU-ALH and OSU-FOR alumni. We will work with each academic school to create a digital quarterly alumni newsletter to highlight institutional, alumni, faculty and student achievements. We will expand our definition of alumni to include not only degreed alumni, but also alumni who have graduated from our certificate program and from our residency programs. We will also develop a system for tracking our alumni for fundraising and networking purposes and identify ways to engage alumni in meaningful interactions such as participating in a mentoring program, serving on a panel discussion, volunteering in an OSU-CHS sponsored event or program, or helping with student internship and job placement. We will mobilize our alumni to serve as brand ambassadors to assist us with increasing the visibility of OSU-CHS at the local, state and national level.

#### **STRATEGY 5: PROMOTE COMMUNITY SERVICE**

OSU-CHS will also engage in the community around us through community service.

We will encourage faculty, staff, and students to engage in community service through volunteerism. OSU-CHS faculty and staff have the opportunity to volunteer through our volunteer program, Cowboys Care. Employees may receive compensated time off to volunteer at a host of non-profits located throughout. We will also develop a large scale volunteer project where the bulk of OSU-CHS faculty, staff and students will commit a Saturday to providing health services to an underserved population in Tulsa or a nearby community with the goal of garnering media coverage and creating goodwill in our community.



# APPENDICES



## **APPENDIX A**

# **Shaping the Future of Health and Healthcare in Oklahoma**

Oklahoma State University  
College of Osteopathic Medicine  
Strategic Plan 2016 – 2016



# OSU-COM MISSION AND STRATEGIC PILLARS

## MISSION

Oklahoma State University College of Osteopathic Medicine (OSU-COM) educates osteopathic primary care physicians with an emphasis on serving rural and underserved Oklahoma.

## STRATEGIC PILLAR: EDUCATE

### Excellence in Education

OSU-COM is committed to training outstanding osteopathic physicians to serve as the next generation of healthcare leaders for rural and underserved Oklahoma. We will amplify our recruiting efforts, strengthen and expand our academic programs, and grow our residency programs to provide our medical students exceptional training opportunities.

### STRATEGY 1: NATIONAL LEADER IN PRODUCING PRIMARY CARE PHYSICIANS

OSU-COM is a leader in the training of primary care physicians. In 2016, U.S. News & World Report ranked OSU-COM #12 in the nation for producing primary care physicians. We remain committed to our mission of training primary care physicians for rural and underserved Oklahoma.

In order to maintain our national status for producing primary care physicians, we must admit through the admissions process medical students who have a greater propensity to practice primary care medicine and who have a desire to practice in rural Oklahoma. Once they are admitted into our program, we must assist them financially in order to reduce their medical school-related educational debt; otherwise, they may be tempted financially to pursue a specialty.

### STRATEGY 2: MEDICAL SCHOOL APPLICATION POOL

OSU-COM will continue to grow the size and quality of our medical school application pool from Oklahoma, through innovative high school and undergraduate recruiting programs and through educational programs that promote academic preparedness for medical school. We will aggressively target prospective medical school candidates from rural and tribal communities.

**High School Recruiting.** OSU-COM will continue to invest in rural high school pipeline programs such as Operation Orange and Blue Coat to White Coat. Operation Orange is our summer traveling day long medical camp that reaches out to rural high school students. Blue Coat to White Coat is our partnership program with the Oklahoma FFA. We are developing a residential summer camp for rural high school students and are examining the feasibility of deploying a mobile educational science van to travel throughout rural Oklahoma.

**Undergraduate Recruiting.** OSU-COM will continue to target prospective undergraduate students to consider a career in medicine. OSU-COM has established Early Assurance Programs with Oklahoma State University, University of Central Oklahoma and Oral Roberts University. Students in the Early Assurance Programs receive contingent admission into OSU-COM provided they meet academic and MCAT standards for the Early Assurance Program, complete their undergraduate degree, and receive satisfactory scores on the qualitative portion of the admissions process. In 2012, OSU-COM implemented the Early Admissions Programs which enables talented undergraduate students from Oklahoma State University, University of Central Oklahoma, East Central University, Southeastern Oklahoma State University, Southwestern Oklahoma State University, and Northeastern State University who are interested in practicing primary care medicine in rural



Oklahoma to gain admission into OSU-COM at the end of their sophomore year of college and to complete their undergraduate degree in three years instead of four. The Early Admissions Program shortens the undergraduate and medical school educational journey from 8 years to 7 years.

**Post-Baccalaureate Program.** OSU-COM recognizes that many prospective students in Oklahoma are interested in pursuing a career in medicine but lack the basic science foundation to gain admission into medical school. They may have lacked the maturity to perform well in their undergraduate science courses or may discover their interest in science after completing their undergraduate degree. To develop a new pool of qualified applicants, OSU-COM will launch a post-baccalaureate pre-medicine program starting in the fall of 2019 to provide prospective students with the opportunity to prepare academically for admission into medical school.

**Bridge Program.** The Bridge Program was established in 2009 and enables high potential students who come from disadvantaged or medically underrepresented backgrounds to be admitted to OSU-COM and to take on reduced course load for a year and half. Students admitted to the Bridge Program will complete a five year medical curriculum, instead of the traditional four year curriculum. OSU-COM will continue to invest in this highly successful program.

**Oklahoma City Office.** In January 2017, OSU-COM established a satellite administrative office in Oklahoma City. The Oklahoma City Office will enable OSU-COM to develop relationships with high schools and post-secondary institutions located in the western half of Oklahoma to increase medical school interest from this geographic area.

### STRATEGY 3: MEDICAL SCHOOL CURRICULUM

**Rural Medical Track.** OSU-COM will grow and enhance the Rural Medical Track (RMT) which was established in 2012. Since its inception, the majority of students enrolled in the RMT have chosen rural-based primary care residency, suggesting that the strategy of recruiting medical students from rural communities combined with immersing them in a rural-focused curriculum successfully creates a sustainable rural primary care physician workforce pipeline. Starting in the fall of 2018, OSU-COM will offer RMT students the opportunity to participate in rural-focused MakerHealth projects and to take courses in rural health data analytics. OSU-COM will partner with the OSU Spears School of Business and the OSU Center for Health Systems Innovation to deliver the Maker Health experience to RMT students. Through the OSU-CHS Master of Public Health Track, a partnership between OSU-CHS and the OSU Graduate College, RMT students and the OSU Graduate College, OSU-COM will be able to offer RMT students learning opportunities in rural health data analytics. Both of these enhancements in the RMT curriculum will encourage students to apply innovative thinking and data analytics to address and solve today's and tomorrow's healthcare challenges facing rural communities in Oklahoma.

**Global Health Track.** OSU-COM will build on our existing international medical externships to establish a Global Health Track. A Global Health Track will enhance experiential learning for our medical students and will expose them to international health experiences and cultures in resource-deprived countries. Research demonstrates that medical students who participate in a global health experience in a low-income country tend to select primary care residencies at a higher rate than their classmates. By establishing a Global Health Track, OSU-COM will continue to encourage and foster student interest in practicing primary care medicine.

**Adoption of Technology.** OSU-COM will continue to assess new ways of learning and whether to adopt emerging technological advances in medical education such as virtual training, e-learning, and simulation-based learning into the osteopathic medical curriculum. OSU-COM will also incorporate MakerHealth into the osteopathic medical curriculum to encourage medical students to



embrace design thinking as a way to unleash innovation and creation to solve problems. OSU-COM plans to increase student involvement with the current IM3ED Course. The purpose of this course is to encourage innovation in medical education, engineering, entrepreneurship and design.

**Clinical Training.** OSU-COM is committed to providing our medical students with realistic and outstanding clinical education that will equip them with the necessary clinical and communication skills needed to provide safe, high-quality, patient-centered care. Our clinical training involves both 1) direct patient care experiences through clinical rotations; and 2) simulated patient care exercises to be offered in our new simulation training center located in the A.R. and Marylouise Tandy Medical Academic Building.

**Clinical Rotations.** Clinical rotations allow OSU-COM students to apply knowledge from the classroom to real life medical situations. During rotations, students shadow physicians and residents, have access to patients, and gain valuable hands-on experience. Students work with physicians and residents to solve complex medical dilemmas, thereby enabling students to develop skills in accurate patient-based problem-solving. OSU-COM has a robust roster of clinical rotations. However, to diversify the geographical locations of our clinical rotations to include rural areas and tribal communities in Western and Southwestern Oklahoma, we have established a satellite office in Oklahoma City. Our Oklahoma City Office will be responsible for recruiting and establishing new clinical rotation sites to ensure a statewide footprint in clinical education.

**Simulation Training.** Starting in the fall of 2017, OSU-COM will boast a world class simulation training center comprised of a hospital simulation center and of a standardized patient simulation center. The hospital simulation center will include a fully operational emergency room, operating room, intensive care unit, birthing suite and ambulance bay, enabling students to practice procedures and skills commonly utilized in hospitals. Students will be able to use programmable manikins to manage virtually any kind of medical situation and to learn to work as part of a coordinated response care team. The standardized patient simulation center will consist of 18 exam rooms. Medical students will have ample opportunities to work with human actors who will portray various patient scenarios. Both the hospital simulation center and the standardized patient simulation center will be equipped with state-of-the-art audio and video recording technology to capture and play back each simulation exercise so that students can receive feedback.

#### **STRATEGY 4: LEARNING RESOURCE DEVELOPMENT**

OSU-COM will renovate and redesign the medical school library to meet the interactive, technology-based learning needs of today's students. Space in the medical school library will be reconfigured to support small group, team-based learning. OSU-COM will continue to develop medical simulation training curriculum to prepare students to work within an interdisciplinary, coordinated care team and to equip them with technical clinical skills to handle any scenario.

#### **STRATEGY 5: PHYSICIAN WELLNESS DEVELOPMENT**

Life as a medical student can be stressful as students balance the task of academic, social, and extracurricular responsibilities. Life as a practicing physician can be even more stressful. While stress is a fact of life, too much stress can be detrimental to a person's physical, emotional and mental well-being. Therefore, the ability to effectively manage stress is an important lifelong life skill for medical students to acquire and to apply during medical school, residency and career. OSU-COM is dedicated to creating a sustainable culture of wellness and to helping medical students develop mental resiliency by providing them with the tools and activities to cope with stress. The OSU-COM Wellness Center currently offers fitness courses, meditation classes and a variety of lunch and learns that focus on overall wellness. We also have plans to establish a Reboot Center in the



Tandy Medical Academic Building to help students develop stress management skills. The Reboot Center will be an inviting space to relax, re-charge and re-focus. The Reboot Center will provide software platforms with visualizations, games and workshops to build stress management skills as well as individual consultation about managing stress and improving performance. Our objective is to help students manage stress during medical school and to apply those same life skills to prevent future physician burnout.

### **STRATEGY 6: ADDITIONAL EDUCATIONAL SITE IN RURAL OKLAHOMA**

To address Oklahoma's shortage of primary care physicians in rural areas, OSU-COM will expand our academic footprint in rural Oklahoma by establishing an additional educational site in Tahlequah, Oklahoma in partnership with the Cherokee Nation. OSU-COM will work towards securing approval from the Commission on Osteopathic College Accreditation to increase our medical school size. The increase in medical school class size will enable us to create the OSU School of Rural Medicine at the Cherokee Nation, which will be the nation's first medical school program affiliated with an American Indian tribe. Once accredited, we envision the additional educational site in Tahlequah to train up to 40 medical students each year.

### **STRATEGY 7: UNIFIED ACCREDITATION SYSTEM FOR GRADUATE MEDICAL EDUCATION**

OSU-COM will continue to work towards achieving initial accreditation status by June 30, 2020, for our graduate medical education programs under the standards set forth by the Accreditation Council for Graduate Medical Education (ACGME). Several of our residency programs in rural Oklahoma currently take place in small community hospitals, not academic health centers. ACGME standards set minimum requirements for faculty numbers and compensation. ACGME also requires a dedicated program coordinator for each residency, and strict ratios of residents to faculty. Once initial accreditation is received, OSU-COM will work towards achieving continued accreditation status for our residency programs.



## **STRATEGIC PILLAR: DISCOVER**

### **Bold Innovation and Multidisciplinary Collaboration**

OSU-COM will leverage on unique academic assets within OSU Center for Health Sciences and across the OSU System to unlock scholarship potential, promote innovation and encourage multidisciplinary collaborative research.

#### **STRATEGY 1: CULTURE OF SCHOLARSHIP EXCELLENCE**

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

#### **STRATEGY 2: INVESTMENT IN PEOPLE**

OSU-COM will invest in people by: retaining clinical 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.

#### **STRATEGY 3: CENTERS OF EXCELLENCE**

Development of the various Centers of Excellence will help OSU-COM focus on clinical and research priorities and allocate the appropriate resources to optimize effectiveness, productivity and efficiency and encourage innovations that improve human health and healthcare delivery. Centers of Excellence under consideration include:

- Cardiovascular
- Genomics
- Infectious Diseases
- Neuroscience
- Osteopathic Manipulative Medicine
- Preventative Medicine and Wellness
- Predictive Medicine and Data Analytics
- Precision Medicine
- Project ECHO
- Rural Health
- Sports Medicine

#### **STRATEGY 4: INNOVATION HEALTH INSTITUTE (IHEALTH INSTITUTE)**

OSU-COM will be an integral part of the Innovation Health Institute (iHealth Institute). The iHealth Institute will serve as the umbrella institution to integrate data analytics, bioinformatics, smart technology, virtual medicine, and the Project ECHO knowledge sharing model to support healthcare decisions and to deliver care more efficiently and more extensively throughout rural Oklahoma. The iHealth Institute will house the Center for Health Systems Innovation which has access to over 63 million unique patient visits. This dataset will be leveraged by the iHealth Institute to be a leader in predictive medicine, preventive medicine and population health management for rural Oklahoma. In partnership with the Oklahoma Cooperative Extension Service, the iHealth Institute will develop virtual care delivery models and community-based health education models to create an extensive network of convenient and available access points for rural healthcare.



## **STRATEGY 5: ONE HEALTH INITIATIVE**

The One Health concept is a worldwide initiative to foster interdisciplinary collaborations and communications in all aspects of health care for humans, animals and the environment. OSU-COM will lead the One Health Initiative at OSU with respect to human health and biomedical research. One Health will bring together multi-disciplinary assets uniquely found at OSU Center for Health Systems and across the OSU System to improve the health and health outcomes of rural Oklahomans.

## **STRATEGY 6: SUPPORT SYSTEMS**

OSU-COM will endeavor to strengthen the internal support systems needed to enable the OSU-COM research community (faculty, 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.

## **STRATEGY 7: COLLABORATION**

OSU-COM will expand the ROK-Net program to develop rural research. ROK-Net provides an infrastructure for the development of peer learning networks comprised of rural clinicians, OSU researchers and innovators, and community partners. These networks study recurring problems in rural primary care and develop resources and quality improvement initiatives in response to findings. Physicians play an instrumental role in shaping clinical research and development efforts to ensure relevance and application to daily practice.



## STRATEGIC PILLAR: HEAL

### Exceptional Patient Care

OSU-COM is committed to delivering exceptional patient care through our talented team of physicians. We will continue to deliver in person care via our teaching hospital and clinic system. We will also leverage on technology to expand our health care delivery network to remote areas of rural Oklahoma and to create increased healthcare delivery capacity in rural Oklahoma through knowledge sharing.

### STRATEGY 1: CLINICAL CARE AND VALUE-BASED PAYMENT MODEL

In a rapidly changing healthcare landscape, payment models are shifting away from the traditional fee-for-service model to a value-based reimbursement model that encourages providers to deliver the best care at the lowest cost. The value-based payment model focuses on cost, quality, patient satisfaction and outcome measures. Consequently, OSU-COM will make the necessary changes and investments to flourish in the alternative payment models set forth by the government and private payors.

### STRATEGY 2: CLINICAL CENTERS OF EXCELLENCE

OSU-COM will deliver superior patient care in an academic health center environment. Through our Clinical Centers of Excellence, patients will receive care from multidisciplinary teams utilizing the latest technology and evidence-based approaches to clinical care. This care will be augmented through cutting edge research, virtual care, ECHO and service extensions within the Center. These Centers of Excellence will include:

- 1) **Center for Sports Medicine (CSM).** OSU-CHS currently has a Master of Athletic Training (MAT) Program with 25 students enrolled. The MAT Program compliments existing clinical care assets at OSU-COM such as sports medicine, orthopedic surgery, and sports psychiatry.
  - CSM will launch an ECHO service line to provide education and support to athletic trainers at both colleges and secondary schools in Oklahoma.
  - CSM will improve the health of athletes and active individuals through the provision of cardiac screenings, delivery of timely care, and dissemination of research and education.
  - CSM will continue to enhance current partnerships with elite athletic groups and develop new partnerships. CSM will continue to expand its clinical care footprint in Tulsa and beyond. This expansion will mature to a state-of-the-art high performance training and research facility.
- 2) **Center for Addiction Medicine and Pain Management (CAMPM).** OSU-COM currently has residency programs in psychiatric medicine, anesthesiology, and a fellowship in osteopathic manipulative medicine (OMM). OSU-CHS also has a Forensic Toxicology and Trace Laboratory (FTTL) in the School of Forensic Sciences.
  - CAMPM operates ECHO services line in both mental health and addiction medicine. These ECHO service lines helps rural providers in Oklahoma deepen their specialty knowledge and familiarity with diagnosing and treating mental health and addiction.
  - OMM is a non-pharmacologic modality to treat pain and enhance overall health. All OSU-COM medical students and residents are required to be trained in OMM.



- The FTTL will expand the modalities of drugs of abuse testing and will develop community and statewide partnerships to monitor appropriate potential drugs of abuse.
- 3) **Predictive Medicine and Genomics.** OSU-CHS currently has the Center for Health System Innovation (CHSI) and the Human Identity Testing Laboratory (HITL) in the School of Forensic Sciences.
- Through the CHSI Cerner database, risk indicators will be discovered to help develop algorithms to be applied to electronic medical records and health applications that can identify early indications of disease or complications of disease.
  - The HITL will allow the personalization of medical therapy through the application of pharmacogenomics.
  - CHSI and HITL will work closely with tribal partners in Oklahoma and the Office for the Advancement of American Indians in Medicine and Science (OAAIMS) at OSU-CHS to collaborate on potential early disease identification and personalized medicine programs in these targeted populations.

### STRATEGY 3: INNOVATION HEALTH INSTITUTE (IHEALTH) HEALTHCARE DELIVERY

**Virtual Primary Care Clinics.** OSU-COM will leverage on technology to extend our clinical reach to rural Oklahoma. We will partner with Oklahoma Cooperative Extension offices located in every county in Oklahoma to place a community healthcare worker and a medical kiosk in each office. Rural patients can easily access healthcare services via the kiosk. The community health worker will be able to assist rural patients with navigating through the myriad of health and social services which may be available to rural patients.

**Virtual Care and Monitoring Hospital Services.** OSU-COM will support primary care physicians in rural Oklahoma through virtual care and monitoring of their patients in rural-based emergency rooms. Many critical access hospitals in rural Oklahoma do not have a specialist on staff certified to treat certain acute care patients, such as stroke or head trauma victims. Instead of transferring these patients to larger, urban-based hospitals, crucial care hospitals can rely on OSU-COM to provide virtual specialty care, thereby avoiding unnecessary transport costs. OSU-COM will also utilize remote monitoring devices to track a patient's recovery, adherence to medication and vital signs.

**OSU Medicine Project ECHO.** OSU-COM will continue to invest in building out a host of OSU Medicine Project ECHO service lines. In November 2016, we launched our first ECHO clinic, a psychiatry TeleECHO clinic, to meet the growing demand for mental health services in Oklahoma. In January 2017, we launched an obesity medicine TeleECHO clinic and a HIV/AIDS/Hepatitis C TeleECHO clinic. The Project ECHO knowledge sharing model enables OSU-COM clinicians to mentor primary care providers in remotes areas on how best to specialty care to their patients. While OSU-COM physicians are not providing direct patient care via the Project ECHO model, they are ensuring that rural patients will receive exceptional specialty care from providers mentored by OSU-COM clinicians.



#### **STRATEGY 4: TRIBAL PARTNERSHIPS**

Our partnerships with tribal nations will be instrumental in helping us improve the health outcomes of rural Oklahomans. The majority of tribal nations are located in rural areas and their communities experience significant disparities in health status especially with addressing chronic diseases such as diabetes and cardiovascular diseases. OSU-COM will work closely with our tribal partners to ensure that their tribal health systems will have access to 1) our human capital (medical students, residents and physicians) and 2) our resources such as our simulation center and Centers of Excellence. Helping tribal communities lead healthier lives will be critical to furthering our goal of improving the health outcomes of rural Oklahomans. Our Office for the Advancement of American Indians in Medicine and Science will continue to work with tribal nations to build a sustainable American Indian physician workforce pipeline.

#### **STRATEGY 5: GRADUATE MEDICAL EDUCATION**

OSU-COM will continue to promote exceptional patient care through the supervised patient care provided by our residents. We will work towards achieving ACGME initial accreditation for our all residency programs and will collaborate with health systems, hospital partners and the State of Oklahoma to ensure graduate medical education is meeting the physician workforce needs of Oklahoma.

#### **STRATEGY 6: CLINICALLY INTEGRATED PROVIDER NETWORK**

OSU-COM will develop a clinically integrated network (CIN) to deliver the highest quality of care to underserved patients in a cost effective manner. A CIN links physicians, acute care hospitals and services for chronic and post-acute conditions. A CIN will help improve the care experience while lowering the cost for patient.



## **STRATEGIC PILLAR: ENGAGE**

### **Exceptional Patient Care**

The time has come for OSU-COM as an institution and as a community of health leaders to tell our inspirational and compelling story to larger audiences. A critical part of our strategic plan is to tell our story to the world and to engage a diverse audience in the process. OSU-COM has been making a difference in lives of rural Oklahomans for over 40 years. We continue to train medical graduates who embrace our mission of caring for rural and underserved Oklahoma. We continue to have the majority of each graduating medical school class answer the call to practice primary care medicine. We continue to produce research that shows the health and economic disparities between rural and urban populations in Oklahoma. We continue to fight for funding to establish residency programs in rural communities where the healthcare need is the greatest. We will continue to care deeply about our rural and urban neighbors who have trouble accessing quality care because they reside in an underserved area of our state and city.

### **STRATEGY 1: BRANDING CAMPAIGN**

OSU-COM will engage various communities located throughout Oklahoma by launching an overarching branding campaign to raise the awareness of our exceptional academic programs, our cutting edge clinical research and our excellent clinic system in key urban and rural markets. Targeted audiences include:

- OSU-COM Alumni
- Educational Partners
- Legislators
- Prospective medical students
- Prospective patients
- Prospective community health workers
- Regents
- Donors
- Tribal leaders
- Hospitals and Health Systems

### **STRATEGY 2: CUSTOMIZED MESSAGING TO CONSTITUENT GROUPS**

OSU-COM will engage alumni, legislators, prospective medical students, prospective patients, regents and donors through customized messaging from OSU-COM. OSU-COM is fortunate to benefit from a strong network of partners and a wide range of constituent groups, whose support is critical in fueling our growing success. By engaging these groups through customized communications materials, OSU-COM will make each constituent group feel valued and special.

### **STRATEGY 3: EARNED AND SOCIAL MEDIA**

OSU-COM will also engage a wider audience by feeding feel good, human interest stories to media outlets to demonstrate how OSU-COM is making a difference in the lives of Oklahomans. OSU-COM will continue to enhance social media offerings to reach a broader group of consumers.



## STRATEGY 4: COMMUNITY SERVICE

OSU-COM will also engage in the community around us through community service. We will encourage faculty, staff, and students to engage in community service through volunteerism. OSU-COM faculty and staff have the opportunity to volunteer through our volunteer program, Cowboys Care. Employees may receive compensated time off to volunteer at a host of non-profits located throughout. We will also develop a large scale volunteer project where the bulk of OSU-COM faculty, staff and students will commit a Saturday to providing health services to an underserved population in Tulsa or a nearby community with the goal of garnering media coverage and creating goodwill in our community.

## STRATEGY 5: STRATEGIC PARTNERS

OSU-COM will engage strategic partners such as health systems, hospital partners, business and industry leaders, local and state officials, clinical education partners, community leaders, and social agencies to create mutually beneficial relationships. Special emphasis will be placed on strengthening our partnership with tribal nations including the Cherokee Nation, the Choctaw Nation, and the Chickasaw Nation.

## STRATEGY 6: EDUCATIONAL OUTREACH

**Community Health Workers.** OSU-COM will engage community health workers and volunteers via our county cooperative extension offices to encourage them to learn about certain diseases and disease process in order to share their knowledge with others in their community.

**K-12 Educators.** OSU-COM will also engage K-12 STEM educators located throughout the state to build knowledge partnerships with OSU-COM where OSU-COM will identify experiential STEM learning opportunities to inject into the educator's STEM curriculum. The Office for the Advancement of American Indians in Medicine and Science (OAAIMS) will continue to develop programs to recruit and train American Indians in medicine and science.

**High School Students.** OSU-COM also needs to engage with high school students located in rural Oklahoma in creative ways to encourage them to consider medical school and to mentor them through the remainder of their high school career and undergraduate period.

**Physicians and Allied Healthcare Professionals.** OSU-COM will need to engage with osteopathic physicians and allied health professionals to offer continuing education opportunities to them.

## STRATEGY 7: SHARING OF OSU-COM ASSETS

OSU-COM will engage the greater Tulsa community and nearby law enforcement, first responder agencies, and charitable healthcare service agencies by sharing our assets with them such as the hospital simulation center at the A.R. and Marylouise Tandy Academic Building on campus. The simulation center houses an emergency room with ambulance bay, birthing suite, intensive care unit, operating room, and outpatient clinics. We will offer certain groups free or at reduced cost usage of the simulation center for training purposes. We will also identify other OSU-COM assets that may of interest to our community partners.



## **APPENDIX B**

# **Shaping the Future of Health and Healthcare in Oklahoma through Excellence in Biomedical and Clinical Research**

Oklahoma State University  
College of Osteopathic Medicine  
Research Strategic Plan 2016 – 2026



# OSU-COM RESEARCH STRATEGIC GOALS

## STRATEGIC GOALS

Research activities and endeavors at OSU-COM will uphold and promote the values, philosophy and practice of osteopathic medicine.

- 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.

## STRATEGIC GOAL: 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-doctorates, 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 health care 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

### **EVALUATION CRITERIA**

- 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)



## STRATEGIC GOAL: 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

### EVALUATION CRITERIA

- 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



## **STRATEGIC GOAL: INNOVATION**

**OSU-COM will unify existing and future Centers of Excellence under the osteopathic approach to research. These Centers of Excellence will promote and drive multidisciplinary, osteopathically-focused research and innovation within OSU-COM and across the OSU System. Development of the Centers of Excellence will help OSU-COM focus on osteopathic 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:

- OMM
- 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

## **EVALUATION CRITERIA**

- 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



## STRATEGIC GOAL: 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

### EVALUATION CRITERIA

- 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 faculty with an interest in education, public health and osteopathic-focused 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

## 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, 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





EDUCATE // DISCOVER // HEAL // ENGAGE

