

OKLAHOMA STATE UNIVERSITY CENTER FOR HEALTH SCIENCES

Prescription for a Healthy Future

2019 IMPACT REPORT



FROM THE PRESIDENT

"We pride ourselves on recruiting talented, service-oriented medical students who have a desire to make a difference in the lives of others. In four short years, we transform our medical students into compassionate, patient-centered physicians. This transformation takes place not only in the classroom, but also in hospitals and community clinics all across Oklahoma."



Oklahoma State University College of Osteopathic Medicine graduated 105 doctors this year, 42 of whom are from rural communities in Oklahoma. And about 17 percent of our graduates matched with residency training programs in rural Oklahoma.

That means the mission of OSU-COM is generating momentum. We take pride in training osteopathic primary care physicians with an emphasis on serving rural and underserved Oklahoma. Physicians who are recruited from rural communities and complete their residencies in rural areas are more likely to stay in those communities and practice medicine.

It's my pleasure to introduce you to the new osteopathic physicians who will train in residency programs across the state (pages 30–33). These residency programs are critical to our efforts to recruit and train physicians from rural Oklahoma and ultimately to return them to their rural communities.

We appreciate your unwavering support of these programs that are making a positive impact on the health outcomes of rural Oklahomans.

I'm happy to share this impact report with you. It outlines a few of the milestones we've reached this past year in our mission of training primary care doctors, research scientists and other health professionals to care for citizens of our state.

I am deeply grateful for your commitment to, and support of, OSU Medicine.

With appreciation,

kyseNstrum, D

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



RECRUITING THE NEXT GENERATION OF RURAL PHYSICIANS

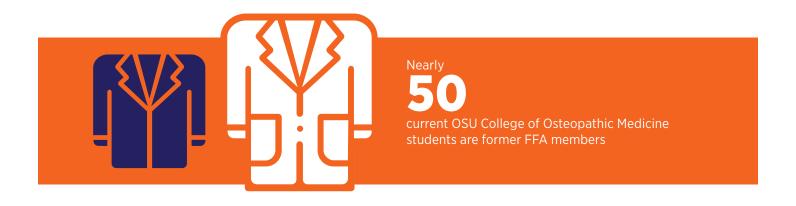
Filling the Physician Pipeline

The average age of a physician practicing in rural Oklahoma is 60, and while strides have been made to expand medical residency programs in our state, more needs to be done to create a sustainable physician pipeline.

The Blue Coat to White Coat program, a partnership with Oklahoma FFA, identifies students enrolled in agriculture education as potential medical school students who would become doctors eager to return to their roots and practice medicine in rural Oklahoma. It includes a statewide mentoring program that matches current Blue Coat to White Coat medical students with a high school student interested in becoming a physician.

And each year, OSU College of Osteopathic Medicine awards five high school FFA students with scholarships worth \$7,500 to help them pursue a pre-med and then medical school education.

This year OSU-COM is celebrating its third class of matriculating students from the Blue to White Coat program.





RECRUITING THE NEXT GENERATION OF RURAL PHYSICIANS

Filling the Physician Pipeline

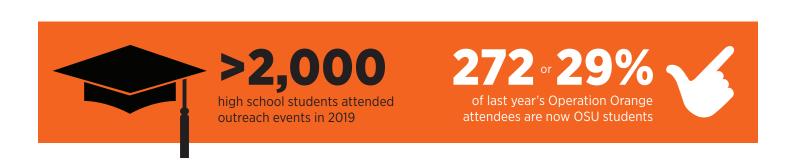
Every summer, high school students are invited to spend a day in the life of a medical student at Operation Orange.

This free, one day mini medical camp meets rural high school students where they are in towns and communities across Oklahoma including Durant, Enid, Lawton, Stillwater, Tahlequah and Ada, which was added in 2019 in partnership with the Chickasaw Nation. Nearly 1,000 high school students attended one of the six Operation Orange camps offered across the state.

Other supporters of Operation Orange are the Cherokee Nation, Choctaw Nation of Oklahoma, Comanche County Memorial Hospital, Northwest Oklahoma Osteopathic Foundation, Oklahoma State Medical Association, OSU Center for Health Sciences Alumni Association, Stillwater Medical Center and Stride Bank.

In 2019, OSU-CHS hosted the first Pre-Health Round Up, an event designed to allow high school students to explore the numerous health career possibilities open to them. Pre-Health Round Up is a day filled with individually selected workshops geared toward career areas, academic preparation assistance, and parent information.

In addition to these major events, the High School Outreach team also visits high schools and career tech centers across the state visiting and cultivating connections with more than 1,000 students every year.





TRAINING THE NEXT GENERATION OF RURAL PHYSICIANS

Investment in Residency Programs

OSU College of Osteopathic Medicine continues to strengthen its residency programs through important partnerships and invaluable legislative support.

OSU Center for Health Sciences currently sponsors 20 residency spots; seven in rural communities and 13 in Tulsa; as well as three subspecialty fellowships, also in Tulsa. Additionally, the Osteopathic Medical Education Consortium of Oklahoma, staffed by the OSU-CHS Office of Accreditation Council of Graduate Medical Education (ACGME), sponsors seven Health Resources and Services Administration funded Teaching Health Center residencies with four in Tulsa and three in rural communities. Altogether the university sponsors 30 post graduate residency/fellowship programs. In total, OSU-CHS sponsors 30 medical residency programs in Oklahoma with 400 resident physicians filling those residency programs through partnerships with hospitals and clinics across the state.

Residency positions are in a variety of areas including Family Medicine, Internal Medicine, Pediatrics, Obstetrics/Gynecology, General Surgery, Emergency Medicine, Anesthesiology, Otolaryngology, Orthopedic Surgery, Psychiatry, Cardiology, Medical Oncology, Gastroenterology, Radiology, Interventional Cardiology and Osteopathic Manipulative Medicine.

Unique within our residency system are sponsored family medicine programs in tribal nation medical facilities, Choctaw Nation Medical Center in Talihina, Oklahoma, Chickasaw Nation Medical Center in Ada, Oklahoma, and the W.W. Hastings Cherokee Nation Hospital in Tahlequah, Oklahoma

The ACGME continues to identify new and potential residency training opportunities across the state. With the mission of training primary care physicians to serve rural and underserved Oklahomans, OSU-CHS continues to work with rural hospitals to identify opportunities for future training programs.

OSU-COM MATCH PERCENTAGES
BY SPECIALTY

25% Family Medicine

19% Emergency Medicine 19%
Internal Medicine

10% Pediatrics **7%**Surgery



TRANSFORMATIONAL WORK

National Center for Wellness & Recovery Works to Solve the Opioid Crisis

The initiative to establish the National Center for Wellness and Recovery (NCWR) began in 2013 at the OSU Center for Health Sciences to address the profound issues surrounding opioid addiction. NCWR focuses its resources and efforts in the areas of treatment, training/education, research and public advocacy.

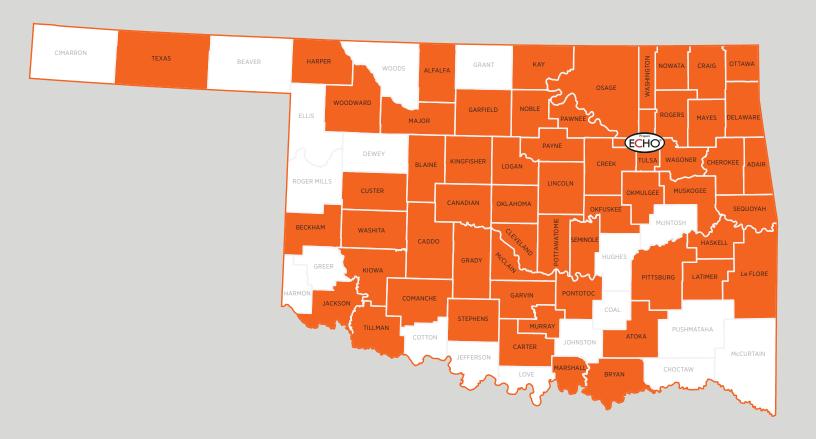
NCWR provides medication assisted treatment (MAT) training to both practicing primary care and emergency room physicians, as well as physicians-in-training. MAT is an evidence-based, highly effective treatment that combines medication with counseling and behavioral therapies to provide a whole-patient approach to addiction treatment. Practicing primary care and emergency room physicians receive MAT training via NCWR's virtual training platform. This virtual training platform can be utilized to extend training to physicians in other states to significantly increase the number of primary care and emergency room physicians treating patients suffering from addiction.

This training is not limited to those fields though; it is available for any physician wanting to learn more or become MAT waivered including addiction psychiatrists. Under the Drug Addiction Treatment Act of 2000, physicians are required to complete specialized training to qualify for a federal waiver to dispense or prescribe approved medication intended for addiction treatment. NCWR also provides MAT training to all OSU second-year resident physicians with the result of substantially increasing the number of MAT-trained physicians.

NCWR also provides the medication needed for effective opioid addition treatment to physicians and clinics for patients who are uninsured or cannot afford the co-pay for the medication. The medication for this critically important aspect of the treatment program is currently primarily provided by Purdue Pharma.

Partnering with community mental health centers and federally qualified health centers across the state enables NCWR to bring addiction treatment wherever it's needed. Additionally, in remote areas where access to addiction treatment is scarce, patient encounters are implemented via OSU-CHS's telemedicine platform, connecting OSU physicians to patients in order to deliver desperately needed treatment.

NCWR is also involved in a number of research initiatives to assist in the long-term mitigation of the opioid addiction problem. These research initiatives focus on the biomedical, pharmacogenomics and socioeconomic aspects of pain and the disease of addiction.



Oklahoma counties served by OSU Center for Health Sciences Project ECHO

TRANSFORMATIONAL WORK

Bringing Knowledge to Rural Physicians

Project ECHO (Extension for Community Health Care Outcomes) is a collaborative model of medical education and care management that empowers clinicians in rural and underserved communities to provide specialty care to more people right where they live.

Three years ago, OSU Center for Health Sciences started the state's first Project ECHO program. In those few short years the program has expanded to 10 health care lines across a number of focus areas including pediatrics, psychiatry, substance abuse disorders, infectious disease, behavioral/mental health, HIV, Hepatitis C, and nutrition and metabolic diseases.

Project ECHO utilizes videoconferencing technology so health care providers in rural or underserved areas can consult with a team of specialists on patient cases. It not only allows primary care physicians, nurses and other clinicians to provide much needed specialty care to patients, but it also saves those patients time and money.

Project ECHO continues to expand and grow in Oklahoma with OSU-CHS' Project ECHO opening lines with the Oklahoma State Department of Education and with the Cooperative Council of Oklahoma School Administration to improve education outcomes throughout the state.

More than 600 ECHO clinics have been held with 4,700 health care participants impacting the lives of approximately 47,000 patients since OSU-CHS launched its Project ECHO program.

This means a savings of nearly \$56 million in health care costs to Oklahomans.

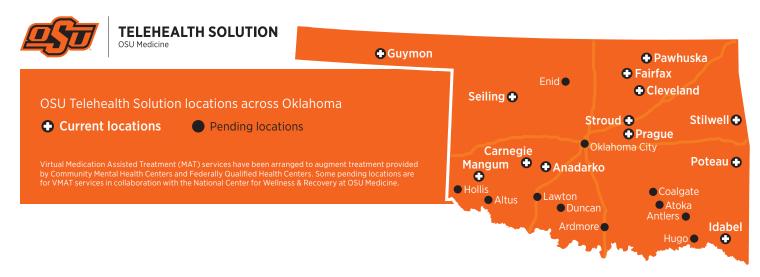
TRANSFORMATIONAL WORK

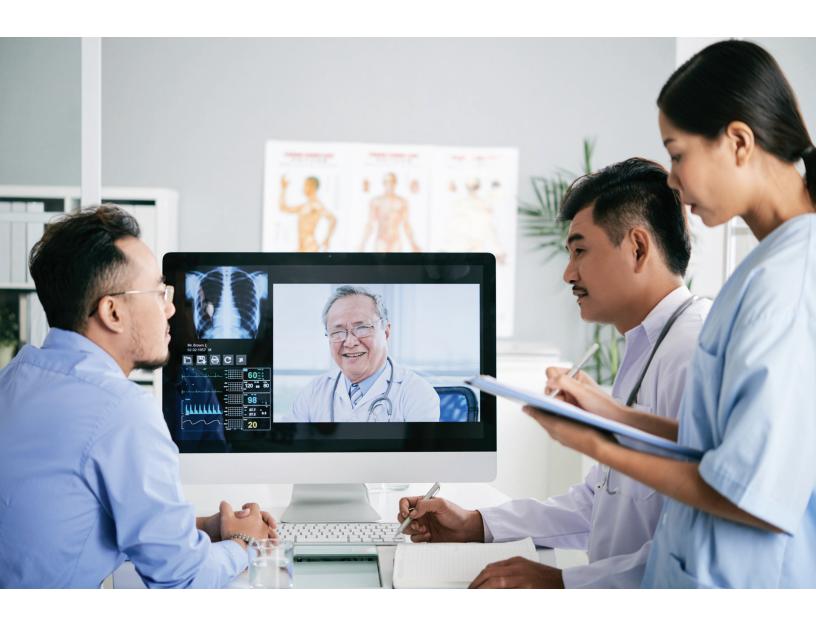
Bringing Care to Rural Patients

OSU has a long history of organizing and providing telemedicine throughout Oklahoma. As a health care delivery institution and state leader in the areas of primary care and rural health, our focus is to serve the health needs of communities across the state.

Almost 60 percent of Oklahoma's population live in a Health Professional Shortage Area. Through OSU TeleHealth Solution, physicians provide local support to rural or underserved communities with the help of advanced clinical technology.

OSU TeleHealth Solution physicians communicate on a live screen with the patient, care team, other physicians and family members while performing assessments of the patients' condition through proven and innovative telehealth equipment. We offer on-demand services and specialties including hospitalist, nocturnist, cardiology, psychiatry, neurology, stroke, emergency medicine, HIV and virtual visits.





TRANSFORMATIONAL EDUCATION

Top-Rated Graduate Programs at OSU Center for Health Sciences

The students and faculty in OSU Center for Health Sciences' graduate programs continue to be recognized nationally not only for their research work across a spectrum of topics, but also for the excellence of the programs themselves.

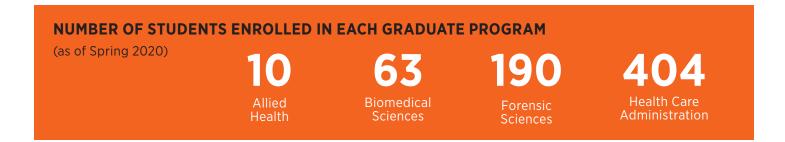
OSU-CHS offers degrees in Allied Health, Biomedical Sciences, Forensic Sciences and Health Care Administration, which was ranked in the Top 5 Online Master's Healthcare Administration degree programs and was named Best in the Midwest by Intelligent.com.

Students can also earn a Graduate Certificate in Global Health from the School of Health Care Administration.

A Graduate Certificate in Medical Sciences is a one-year post-baccalaureate program intended to prepare students to become better qualified applicants to medical schools.

The new Physician Assistant program will begin its admissions process in fall 2020 with its first 25 students anticipated to begin classes in July 2021, pending accreditation.

Dedicated faculty engage students through small class sizes, hands-on research and real-world experiences. While it varies by program, OSU Center for Health Sciences offer on-campus, online and hybrid courses to best serve the needs of students.







TRANSFORMATIONAL EDUCATION

New Physician Assistant Program Launches 2021

The new OSU Center for Health Sciences Physician Assistant program aims to recruit, educate and mentor a diverse group of students to increase competent and compassionate health care with an emphasis on increasing access to health care in rural and underserved areas.

The vision is to educate physician assistants to become highly skilled clinicians who make a positive impact on their patients as well as their surrounding community.

Physician assistants, or PAs, are medical providers who diagnose illnesses, develop and manage treatment plans, prescribe medications and often serve as a patient's principal health care professional. PAs practice in every state and in every medical setting and specialty, improving health care access.

The program will also prioritize fostering collaborative relationships between OSU-CHS' athletic training students, medical students and physician assistant students early on in their career development so they can provide professional, flexible, team-based health care.

The OSU-CHS Physician Assistant program will begin its admissions process in fall 2020 with its first 25 students anticipated to begin classes in July 2021. It will be a 28-month program with 13 months of didactic training and 15 months of clinical training.

From the American Academy of Physician Assistants

- 140,000 PAs in the U.S.
- 400 million patient interactions a year
- 250 PA programs in the U.S.

PAs practice in every setting

- Outpatient office or clinic
- Hospital
- Urgent care center
- Other

COMMUNITY & STATE IMPACT

OSU College of Osteopathic Medicine at the Cherokee Nation

In November 2019, OSU Center for Health Sciences and the Cherokee Nation commemorated a milestone in the construction of the new OSU College of Osteopathic Medicine at the Cherokee Nation with a Topping Out Ceremony in Tahleguah.

OSU administrators, faculty and staff; Cherokee Nation leadership; construction crew members; current OSU-COM students; and the first admitted students to the new medical school site were invited to sign the final steel beam before it was placed and the frame of the 84,000 square-foot building was complete.

The new medical school building will feature both a neuroanatomy and gross anatomy laboratory, clinical skills training laboratory, clinical examination rooms, lecture halls, virtual reality room, faculty, student, administration offices and a state of the art simulation center with medical-surgery, pediatrics, emergency medicine and obstetrics/gynecology training manikins and equipment. The medical school has accepted its inaugural class of 50 students and will open in the fall of 2020.

OSU-COM at the Cherokee Nation is the first tribally affiliated medical school in the United States that will train and educate medical students in Tahlequah with the goal of recruiting rural students to learn, train and finally practice in rural Oklahoma.

VITAL STATS OF THE NEW OSU COLLEGE OF OSTEOPATHIC MEDICINE AT THE CHEROKEE NATION

- 84,000 square feet
- First medical school class will have up to 50 students, targeting a total of 200 medical students when fully operational
- 16 full-time faculty, five part-time faculty and numerous adjunct faculty
- The first class will graduate in May 2024





RESEARCH & INNOVATION

Advancing Research

Researchers at OSU Center for Health Sciences are on the leading edge of the development and enhancement of knowledge in various fields of study including medicine, biomedical sciences, forensic sciences and vertebrae paleontology.

Research is an integral part of the mission of OSU-CHS, and the OSU main campus named opioid addiction research one of its four new Tier 1 Research Initiatives in 2019.

Faculty and staff work with students on providing hands-on research experience and mentorship in an innovative learning environment. More than \$28,473,000 in grant funds were awarded to OSU-CHS research teams in FY 18-19.

Several OSU Center for Health Sciences' faculty and students also garnered professional accolades and national media attention for their research efforts.

The Center for Integrative Research on Childhood Adversity (CIRCA) explores the biological, cognitive and socioemotional effects of Adverse Childhood Experiences (ACEs) through interdisciplinary research and intervention development. Oklahoma has the highest prevalence of ACEs in the U.S., and CIRCA is the country's first center focused on understanding the effects of childhood adversity on health, development and economic consequences.

OSU-CHS also operates several other research centers including the Center for Indigenous Health Research and Policy (CIHRP); and the Center for Health Systems Innovation (CHSI).

In early 2020, OSU Center for Health Sciences launched its new Office of Medical Student Research. It was created for OSU medical students to develop investigation skills through the pursuit of new discoveries under the direction of a faculty research mentor.



GROWTH & EXPANSION

Construction of North Building

In spring of 2020, OSU Center for Health Sciences will break ground on a facility that will house a new state-of-the-art Medical Examiners' Office in Tulsa. The construction is being funded through a partnership with the State of Oklahoma. The mixed-use building will also house academic and administrative spaces.

The first two floors will be occupied by the Medical Examiner Office with a dedicated driveway along with the OSU-CHS anatomy and neuro anatomy labs, office space, collaborative meeting spaces and a 1,900 square foot classroom for our graduate programs.

The Center for Rural Health and Center for Health Systems Innovation will be located on the third floor as well as office spaces for information technology, the Physician Assistant program and Health Care Administration faculty, and more than 60 study carrels for graduate students.

The Office of Research, Provost's Office and President's office, along with other administrative offices, will be located on the fourth floor.

Medical Examiner's Office

- 5 lab areas Anthropology, Autopsy, Decomp, High Profile and Radiology
- Evidence vaults
- 13 offices
- Library/Conference room

OSU-CHS

- 3 lab spaces Anatomy, Neuro-anatomy, HIT Training
- 2 classrooms
- Graduate Study Room
- 114 offices
- 23 conferences
- 9 storage areas

GROWTH & EXPANSION

Opening of Legacy Plaza

Thanks to a generous gift from The Anne & Henry Zarrow Foundation, OSU Center for Health Sciences will be one of two permanent residents in Tulsa's Legacy Plaza. The west tower is the largest in the three-building complex on Tulsa's East 31st Street.

The Anne & Henry Zarrow Foundation purchased the property in 2015 and has been developing the space for area nonprofits, which, through similar gifts, own their spaces. OSU Center for Health Sciences was gifted six floors, and the space will be dedicated to addressing mental health and substance abuse challenges in Oklahoma through clinical services, outreach and research.

OSU-CHS's Department of Psychiatry and Behavioral Sciences; the National Center for Wellness & Recovery; the Center for Integrative Research on Childhood Adversity; the Center for Indigenous Health Research and Policy; and Project ECHO will all be located at Legacy Plaza, which is currently undergoing renovations with a scheduled move-in date of June 2020.

The Anne & Henry Zarrow Foundation also gifted Family & Children's Services with eight floors of the west tower of Legacy Plaza, which will enable the nonprofit to expand its mental health and substance abuse services.

The gift of the west tower floors to OSU-CHS and F&CS completes the occupancy of Legacy Plaza, the new home to five other nonprofit partner organizations— Assistance League of Tulsa; CAP Tulsa; LIFE Senior Services; Mental Health Association Oklahoma and Oklahoma Center for Nonprofits.





Life Changing.





GLOBAL IMPACT ON RURAL HEALTH

Bringing Care to Those Around the World

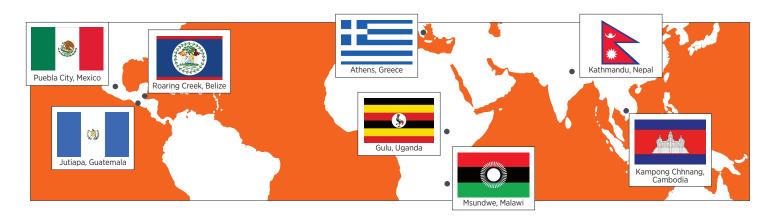
OSU Center for Health Sciences offers a Global Health Track for a Minor in Global Health that emphasizes health issues, determinates, and solutions that go beyond national borders.

The primary goals of the OSU College of Osteopathic Medicine Global Health Track are to provide quality health care to those living in rural and impoverished communities while providing medical students the opportunity to enhance their history, physical exam and diagnostic skills under the supervision of licensed health care professionals.

Medical students gain experience working in a country that has different medical, economic, environmental and cultural factors that influence quality of care, which will in turn foster a more global perspective on health care systems and improve communication skills necessary to deliver culturally sensitive health care.

Research demonstrates that 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.

Global Health Track locations include Belize, Cambodia, Greece, Guatemala, Malawi, Mexico, Nepal and Uganda.



OKLAHOMA 2019 RESIDENCY MATCHES

Ada

Dylan Davis Smith

Chickasaw Nation Medical Center Family Medicine

Alexander Risenhoover

Chickasaw Nation Medical Center Family Medicine

Durant

Lindsey L. French

AllianceHealth Durant Family Medicine

John Micah H. Powers

AllianceHealth Durant Family Medicine

Lawton

Chelsey M. Beathard

Comanche County Memorial Hospital Emergency Medicine

Christopher C. Benson

Comanche County Memorial Hospital Emergency Medicine

Matthew T. Sims

Comanche County Memorial Hospital Emergency Medicine

McAlester

Brooks Ashworth Smallwood

McAlester Regional Memorial Hospital Family Medicine

Norman

Jordan M. Jones

Norman Regional Health System Emergency Medicine

Mark Cameron Sauerwald

Norman Regional Health System Emergency Medicine

Greg Schubert

Griffin Memorial Hospital Psychiatry

Oklahoma City

Keithen B. Cast

INTEGRIS Health Emergency Medicine

Grant R. Detten

St. Anthony Hospital Orthopedic Surgery

Melissa Gupton

INTEGRIS Southwest Medical Center Emergency Medicine

Savannah L. Gustad

OU College of Medicine
Internal Medicine

Mahmood H. Khattab

OU College of Medicine Internal Medicine

Shelby Massey

St. Anthony Hospital Family Medicine

Dillon P. Pryor

INTEGRIS Southwest Medical Center Emergency Medicine

Richard Scott Roberts

St. Anthony Hospital Family Medicine

Jenna R. Sahli

OU College of Medicine Pediatrics

Matthew Ray Whittaker

INTEGRIS Health Emergency Medicine

Tahlequah

Kate A. Allen

Tahlequah Medical Group Internal Medicine

Lyndsey Daggs

Northeastern Health System Family Medicine

David Ryan Markes

Northeastern Health System Family Medicine

Cyriece N. Oliver

Tahlequah Medical Group Internal Medicine

Brie C. Proctor

Northeastern Health System Family Medicine

Perry J. Proctor

Northeastern Health System Family Medicine

Tulsa

Mohamad S. Al-Rifai

OSU Medicine
Internal Medicine

Baylee Arreola

OSU Medicine Pediatrics

Madison B. Beckman

OU College of Medicine Family Medicine

Lauren Bessette

OU College of Medicine Internal Medicine

Jacob T. Blasdel

OU College of Medicine Internal Medicine

Brandon Kenneth Carr

OSU Medicine Psychiatry

Lauren R. Davis

OSU Medicine Radiology

Shannon Marie Delaney

OU College of Medicine Pediatrics

Alexander J. Demand

OSU Medicine Family Medicine

Levi-Jon D. Duethman

OSU Medicine Emergency Medicine

Xuyen M. Ha

OSU Medicine Family Medicine

Macey Hale

OU College of Medicine Pediatrics

Mallory Hall

OU College of Medicine Internal Medicine

OKLAHOMA 2019 RESIDENCY MATCHES

Caleb Daniel Hurst

OU College of Medicine Internal Medicine

Matthew J. Kepford

OSU Medicine General Surgery

Heather A. Konsure

OMECO Teaching Health Center/ OSU Medical Center Obstetrics and Gynecology

Kelsey LeMay

OU College of Medicine Obstetrics and Gynecology

Kaelyn H. Lu

OSU Medicine Psychiatry

Chelsea Leigh McDonald

OU College of Medicine Family Medicine

David A. Meehan

OU College of Medicine Internal Medicine

Katie L. Mettler

OSU Medicine General Surgery

Eric Monsebais

OSU Medicine Psychiatry

Aubrie Morgan Northcutt

OU College of Medicine Pediatrics

Kenneth Daniel Ostmo

OSU Medicine Internal Medicine

Kiran S. Paul

OU College of Medicine Family Medicine

Jonathan M. Peaster

OSU Medicine Emergency Medicine

Matthew Thomas Priest

OSU Medicine Family Medicine

Alex M. Riggs

OSU Medicine Emergency Medicine

Kaitlin Sauser

In His Image Family Medicine Family Medicine

Raymee E. Schelkoph

OU College of Medicine Pediatrics

Jared T. Scott

OSU Medical Center Orthopedic Surgery

Ekaterina V. Shapiro

OSU Medicine Internal Medicine

Kailey Madison Shuler

OMECO Teaching Health Center/ OSU Medical Center Pediatrics

Jessica M. Sorelle

OMECO Teaching Health Center Obstetrics and Gynecology

Corey D. Spence

OSU Medicine Psychiatry

Derek Srouji

OSU Medicine Internal Medicine

Landon D. Stallings

OSU Medical Center Orthopedic Surgery

Sarah T. Tran

OU College of Medicine Psychiatry

Victoria Vaughn

OSU Medicine Emergency Medicine

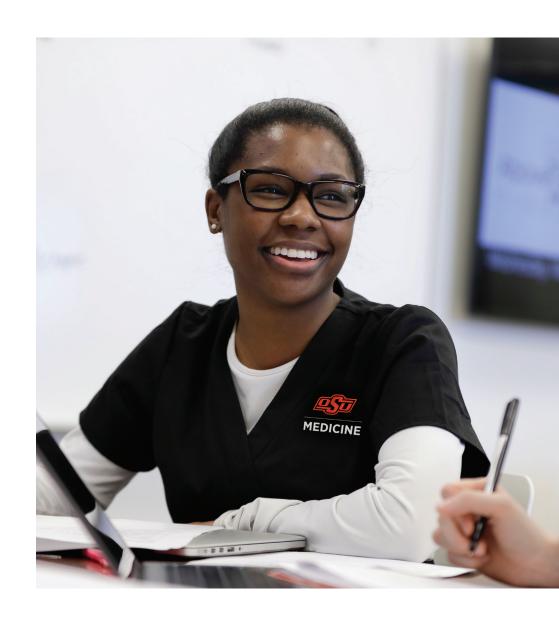
Taylor A. Warta

OU College of Medicine Psychiatry

Jeffery D. Young

OSU Medicine Anesthesiology

34 Out of State Matches





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