
Medical Scientist Training Program



THE OHIO STATE
UNIVERSITY
COLLEGE OF MEDICINE

“ I invite you to explore the opportunities to pursue a rewarding physician-scientist career with The Ohio State University Medical Scientist Training Program (MSTP). One key aspect of scientific inquiry is curiosity and we hope you are curious about our program. I am curious about your journey, the people who have influenced your path and what scientific areas in medicine excite you.

You will find that our research mentors have an amazing breadth of expertise, work in collaborative teams and are dedicated to developing your skills and overall confidence. We all want you to succeed in your professional endeavors. Ohio State students are friendly, supportive of one another and passionate about solving medical challenges through research. Congratulations on your decision to pursue this bold career path, and we hope to welcome you to the Ohio State MSTP community! ”

– Ginny Bumgardner, MD, PhD
Program Director, Medical Scientist Training Program
and Department of Surgery Research Training Program

MSTP highlights

- Lead.Serve.Inspire. curriculum, specifically designed for MSTP students
- Generous stipend and a tuition and fee waiver*
- Strong program camaraderie
- MSTP roundtable – first- and second-year student experience with physician-scientists
- MSTP seminar – weekly seminar designed specifically for physician-scientist trainees
- MSTP annual retreats (summer)

* Includes general and instructional fees only

Welcome from MSTP leadership

As leaders of the Medical Scientist Training Program (MSTP), we're excited to engage with students interested in careers as physician-scientists. The Ohio State University College of Medicine's MSTP offers rigorous, integrated research and clinical training. Admission is highly selective for students committed to academic careers with a strong research focus. While challenging, the program provides exceptional opportunities to learn from internationally recognized clinicians and scientists.



Ginny Bumgardner,
MD, PhD
Program Director



Rama Mallampalli, MD
Program Director



Lapo Alinari, MD, PhD
Program Associate
Director



Kymberly Gowdy,
PhD, MS
Program Associate
Director



Tamar Gur, MD, PhD
Program Associate
Director



Sakima Smith, MD
Program Associate
Director



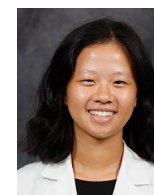
Ashley Bertran, MLHR
Administrative
Program Director



Morgan McKibbins
Program Coordinator



Morgan Tudor
Program Coordinator



Amy Zhang
MSTP Entering
Class of 2023



Josh Nguyen
MSTP Entering
Class of 2024

Recruitment Chairs

Research opportunities and the medical center

The Ohio State University Wexner Medical Center's research enterprise encompasses more than 45 research centers and institutes as well as 20 core research laboratories that serve health sciences investigators across campus.

The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James) has been designated as an NCI Comprehensive Cancer Center since 1976. Also, it is one of only a few centers funded by the NCI to conduct both phase I and phase II clinical trials on novel anticancer agents provided by the NCI. The Comprehensive Cancer Center contains five highly interactive and collaborative cancer research programs: Cancer Control, Leukemia Research, Cancer Biology, Molecular Carcinogenesis and Chemoprevention and Translational Therapeutics. More than 420 scientists from 11 of the 15 colleges at Ohio State are funded members of one of these research programs. Altogether, Ohio State's cancer program comprises some 1,700 researchers.

As part of the OSUCCC – James, the **Pelotonia Institute for Immuno-Oncology (PIIO)** is a comprehensive bench-to-bedside research initiative focused on harnessing the body's immune system to fight cancer at all levels – from prevention to treatment and survivorship. The overall ambition of the PIIO is to be a leader in driving immuno-oncology breakthroughs.

The Ohio State **Institute for Behavioral Medicine Research** brings together experts in the fields of immunology, virology, psychiatry, psychology, endocrinology, molecular biology, behavior, oncology and the neurosciences to translate mind-body discoveries into life-changing treatments.

The **Dorothy M. Davis Heart and Lung Research Institute** is one of the nation's only facilities devoted entirely to research of diseases affecting the heart, lungs and blood vessels. Nearby is the **Biomedical Research Tower**, the single largest facility ever built for research at Ohio State, which presents exciting research opportunities for students in areas like cancer, neuroscience, infectious diseases, behavioral sciences, pediatric disorders, imaging platforms and biomedical informatics.

“The MSTP at the Ohio State Wexner Medical Center is designed to prepare our students to fulfill their role on their journey toward success as biomedical investigators, scholars, clinicians and academic leaders capable of making significant contributions to medicine and society.”

– Rama Mallampalli, MD
Program Director, Medical Scientist Training Program
Chair of the Department of Internal Medicine



The OSUCCC – James.

PhD program options

Students in the MSTP must select a graduate program for their PhD training. Currently, the MSTP partners with three core graduate programs and a number of affiliate graduate programs across campus. If you are interested in an Ohio State graduate program that is not listed below, contact the MSTP office.

MSTP Core Programs

Biomedical Sciences Graduate Program
Neuroscience Graduate Program
Biomedical Engineering Graduate Program

MSTP Affiliate Programs

Biophysics
Health and Rehabilitation Sciences
I2GP (Immunology and Immunotherapeutics)
Public Health

Medical curriculum

At the center of the Ohio State College of Medicine's Lead.Serve.Inspire. (LSI) curriculum are clinical experiences that will help students apply foundational science concepts to patient care. The key aspects of the LSI curriculum framework include:

- A usual time frame of four years to complete the three-part curriculum (3½ years for MSTP students)
- Fully integrated basic science and clinical science studies
- An early, longitudinal, practice-based clinical service that allows students to apply classroom knowledge to real patients, beginning 12 weeks into the curriculum
- Self-directed learning, with multiple assessment methods to provide individualized learning by standardized outcomes
- Faculty coaching to support strong clinical skills
- Project work that requires critical thinking and synthesis
- Clinical problem-solving in a team-based environment



MSTP Director, Dr. Ginny Bumgardner, speaking at the 2026 Second Look.

Where research meets practice

The Ohio State University research scientists are at the forefront of translating basic science into clinical applications. Diverse disciplines coming together to solve our most challenging health care problems is the hallmark of scientific and biomedical research at The Ohio State Wexner Medical Center.

Ranked among the best hospitals in the nation, the Wexner Medical Center is a comprehensive medical facility with a three-part mission of research, teaching and patient care. Its facilities include the Ohio State College of Medicine, seven hospitals, two freestanding research institutes and a network of more than a dozen community-based primary and specialty care facilities throughout central Ohio.

Activities:

- Ohio State Wexner Medical Center Trainee Research Day
- MSTP Annual Networking Night (summer)
- MSTP Annual Retreat (summer)
- MSTP Roundtable
- MSTP Seminar Course
- Annual National MD/PhD Student Meeting
- American Physician Scientists Association National Meeting
- PhD Milestone Celebration
- M4 Graduation Celebration
- M4 Sendoff



MSTP faculty and students at the 2026 PhD Milestone Event.

Medical school programming

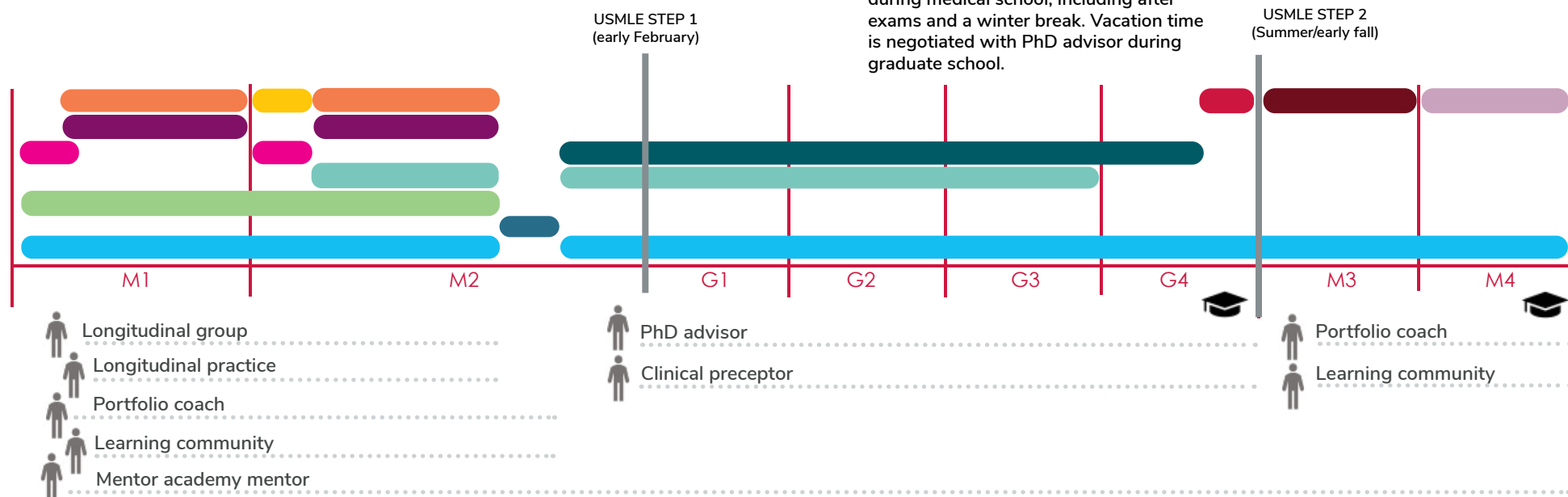
- LSI Part One – Organ System Blocks Foundations 1 and 2, Bone and Muscle, Cardio/Pulm, Endo/Repro, Neuro and GI/Renal
- Host Defense Block MSTP students complete during summer.
- Anatomy Lab Occurs longitudinally within system blocks. MSTP students are not grouped together.
- USMLE Step 1 Dedicated Prep 8+ weeks for Step 1 Prep
- Medical School Refresher Returning to clinics two weeks of Internal Medicine service with residents and nurses.
- LSI Part 2 – Clerkships Required clinical rotations, broken down into “rings” – See LSI for more details.
- LSI Part 3 – Electives Elective rotations and experiences, Step 2 exams, residency application cycle

Graduate school programming

- Grad School Coursework Course and hours requirement are graduate program-dependent. See program handbooks for more details: Biomedical Sciences Graduate Program Neuroscience Graduate Program Biomedical Engineering
- PhD Training Dissertation work under student-selected PhD advisor and committee members. After candidacy exam, which occurs 12-18 months after joining the lab, committees are expected to meet at least annually. Time Off and Vacations Short and long breaks occur frequently during medical school, including after exams and a winter break. Vacation time is negotiated with PhD advisor during graduate school.

MSTP programming

- Summer Rotations Two or more 2- to 4-week rotations in labs of your choice (with MSTP leadership approval).
- MSTP Seminar Weekly MSTP seminar
- MSTP Roundtable Monthly meeting with physician-scientist faculty
- MSTP Retreat and Social Gatherings Program-wide retreats every July
- Annual events include a summer potluck, a holiday party and a sendoff for M4 students in the spring.



Longitudinal Group (LG) – Physician faculty small-group leader meets weekly to practice clinical skills and discuss issues pertinent to delivering excellent patient care. MSTP cohort is grouped together.

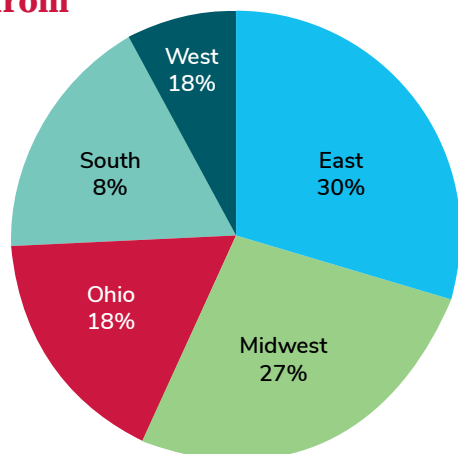
Longitudinal Practice (LP) – Students Individually attend a clinical practice biweekly and interview patients and perform physical exams under the mentorship of a physician 12 weeks after medical school starts.

Portfolio Coach – Résumé coach who encourages self-reflection. Meetings occur after each block. Portfolios are evaluated at the end of medical school and are helpful during residency application (new coach is assigned during M3/M4).

Learning Community (LC) – Physician faculty members meet with small groups of students (12) to discuss broad issues the group is interested in, such as healthcare politics, global health and choosing a specialty. MSTP students are not typically in the same group. Meetings occur once during each block (new group assigned during M3/M4).

Clinical Preceptor(s) – Self-selected physician(s) whom MSTP students are required to complete a longitudinal practice with during PhD training, giving students time to explore specialties and maintain clinical skills.

Where we're from

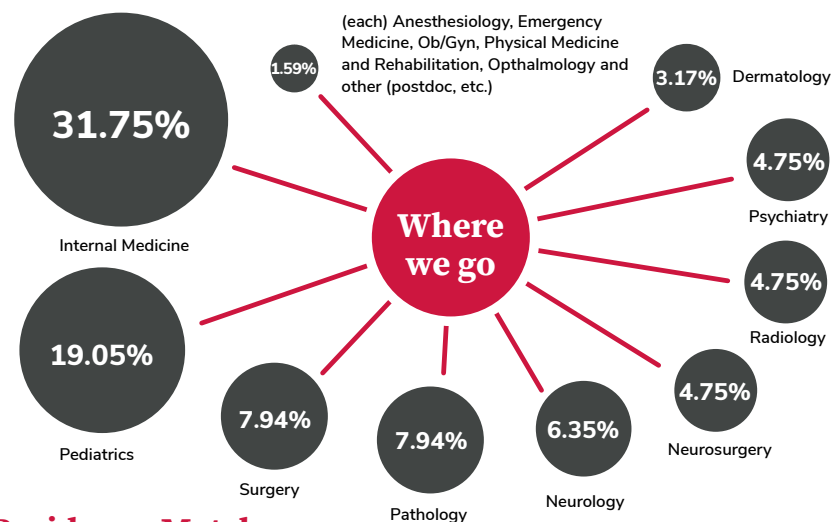


“Our MSTP is distinguished by several key features. One of my favorites is our commitment to holistic review in our admissions process. Each applicant is more than a stack of papers or a list of numbers, and we delve into each aspect of an applicant. Our interview process includes two of our students and faculty interviews of each applicant. This reflects our commitment to not only uncovering and elevating all the different aspects of our applicant, but also providing a voice and input from our current students into our holistic process.

Another key element of our program is how responsive we are to student feedback – I can think of several initiatives over the past few years that were student-led and resulted in substantial improvement to our program. Indeed, our students are, to me, what makes our program special.”

– Tamar Gur, MD, PhD
MSTP Associate Director

Medical Scientist Training Program



Residency Matches

2026

Pediatrics/PSTP	The University of Chicago Training Program
Psychiatry-Research	University of Pittsburgh Medical Center Western Psychiatric Hospital
Internal Medicine/ PSTP	University of Texas Southwestern Medical Center
Internal Medicine/ Pediatrics	UTHealth Houston
Internal Medicine	The Ohio State University
Internal Medicine	Penn State-Hershey
Cardiothoracic Surgery	University of Maryland
Pediatrics/PSTP	University of California, San Francisco
Internal Medicine	University of Louisville
Pediatrics- Research Track	Nationwide Children's Hospital

2025

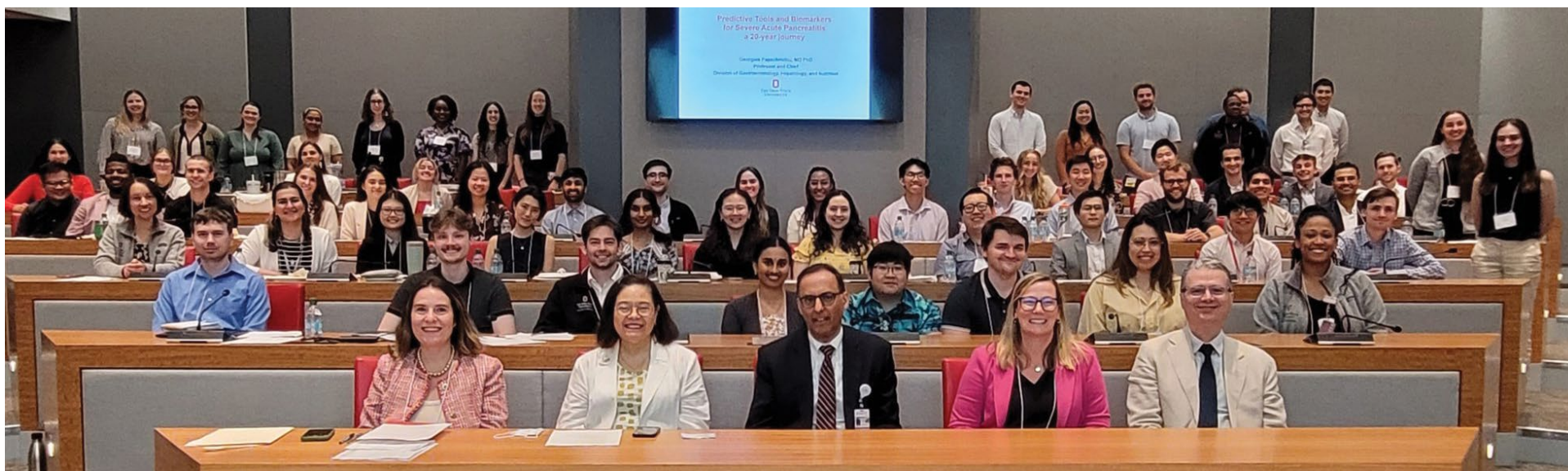
Pediatric Neurology	University of Washington
IM/PSTP	The Washington University
IM/Cardiology PSTP	Vanderbilt University
Child Neurology	Northwestern/ Lurie
Pathology/PSTP	The Washington University
Surgery	University of Minnesota
IM/PSTP	University of Pennsylvania
Ophthalmology	University of Louisville
Nuclear Medicine	Emory University

2024

Neurology	University of California, San Francisco
Neurosurgery	University of Southern California
PSTP IM	The Ohio State University
Anesthesiology	The Ohio State University
Peds	Nationwide Children's Hospital
Anesthesiology	University of Arizona
Psychiatry (Research Track)	University of Colorado Anschutz Medical Campus
Preliminary Year	University of California San Francisco

2023

Pediatrics PSTP	Duke University
Interventional Radiology	University of Virginia
Pediatrics PSTP	Cincinnati Children's Hospital Medical Center
Pediatrics (Research Track)	Indiana University
Pediatrician-Scientist Program (PSP)	Baylor University College of Medicine
Radiation Oncology	MD Anderson Cancer Center
Postdoctoral Research Position	University of Colorado Anschutz Medical Campus
Internal Medicine PSTP	Washington University St. Louis



“ The Ohio State MSTP strives to connect its students to a variety of physician-scientists throughout the entire length of the program. This is evident in the discussions when a student is choosing a PhD lab and in the clinical preceptorship MSTP students must participate in during their graduate school years. Additionally, when in doubt, students can always reach out to Ohio State MSTP leadership and leadership is always happy to provide guidance! ”

– Ilse Hernandez-Aguirre, MD, PhD,
MSTP Alumna, Class of 2026

“ The personal interactions and connections you get to make with the directors and administration of the program is phenomenal. They all diligently work to make sure that we as students are taken care of. In situations where I needed help and aid during a taxing personal situation, I knew I could turn to the leadership and that they would support me. ”

– Michael Ruesch, PhD

“ The Ohio State MSTP has a supportive and close-knit student body. During every transition in the program, I've been immensely grateful to senior students for their guidance. We have inter-cohort mentorship programs, peer tutoring, and a wealth of shared study resources. We also support each other beyond academics, and I feel fortunate to be part of such a wonderful and fun cohort. Given the rigorous nature of an MSTP, fostering this sense of community is essential to staying motivated and well. ”

– Gayathri Dileepan

“ Here at Ohio State, I have a tremendous amount of access to different research faculty and their techniques that I couldn't have imagined before. When designing experiments, I am able to consider the use of unlimited techniques, which builds my scientific toolbox as a future physician-scientist because I am inspired to read up on those procedures and expand my knowledge base. The clinicians here are incredible. I have access to many specialties and so many clinicians are an email away from shadowing or working in clinic with. I am so lucky and happy to be here. ”

– Kyleigh Rodgers, PhD

“ The Ohio State MSTP has provided me the opportunity to expand my networking both within and outside of Ohio State. This is especially true for conferences. The Ohio State MSTP has been incredibly supportive of me when I attended both recruiting and scientific conferences in the past. We are also encouraged to attend the annual American Physician Scientists Association Conference. ”

– Giancarlo Valiente, MD, PhD, MSTP Alumnus, Class of 2021

Sustaining and growing the physician-scientist pipeline

At The Ohio State University College of Medicine, we are committed to strengthening the physician-scientist pipeline to retain and increase the number of physician-researchers working in the United States.

Ohio State's Physician-Scientist Education and Training Program encompasses several programs that are designed to develop and train early-career physician-scientists, with the intent to:

- Provide early, intensive training to physicians interested in incorporating medical research into their careers.
- Promote collaboration and build supportive environments within the physician scientific community, where they can ask hard questions and pursue difficult problems.
- Connect and engage trainees with faculty mentorship at Ohio State.

Our programs span a long pipeline of physician-scientist training and development, from undergraduate and doctoral-level programs, to residency and fellowship, and to early career faculty and beyond. Our programs include the ASPIRE Medical Research Program, the Medical Scientist Training Program (MSTP), the Medical Student Research Program (MDSR), the Physician-Scientist Development Program (PSDP), the Master of Medical Science Program (MMSP) and the Physician Scientist Scholars Program (PSSP).

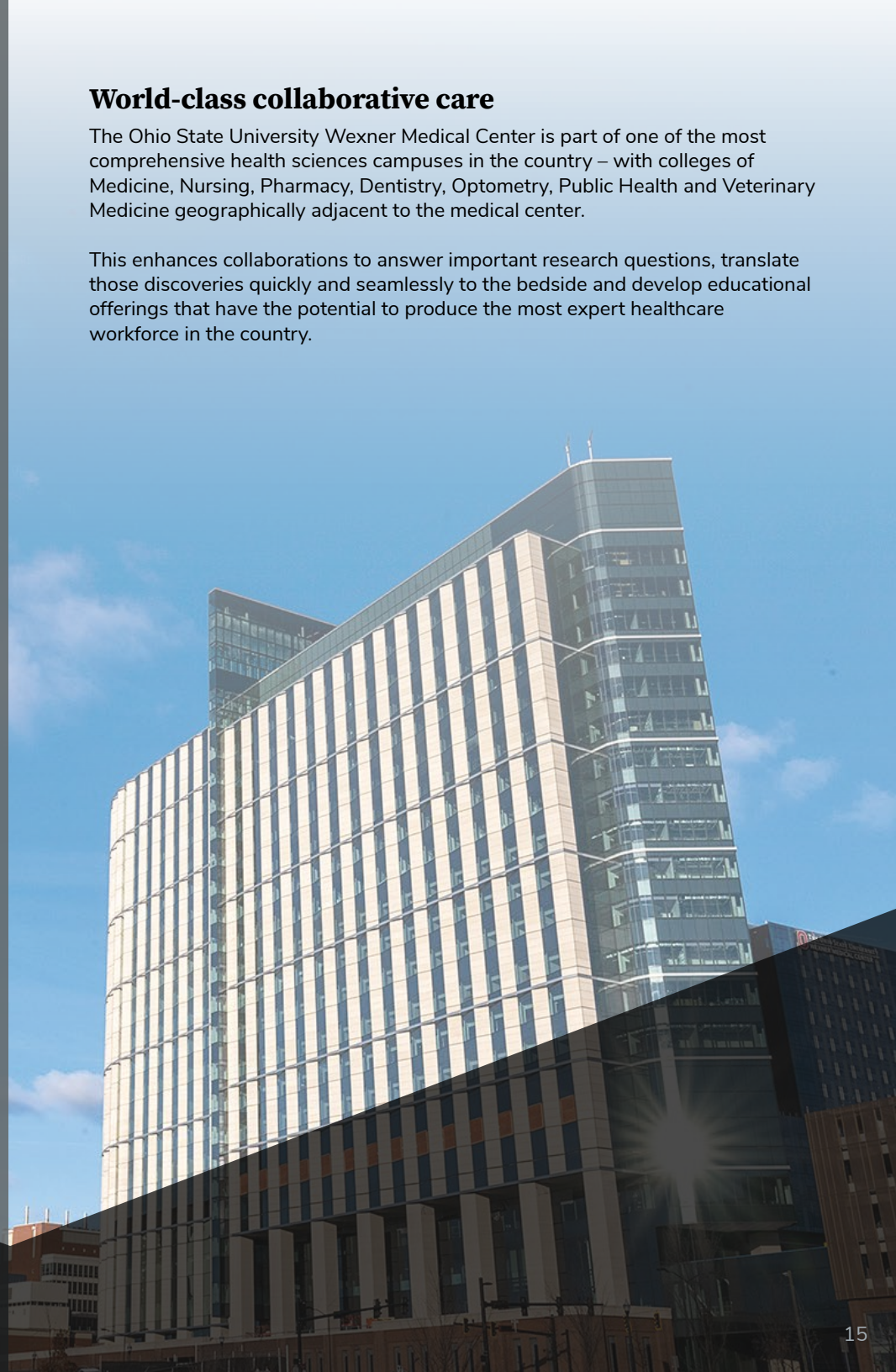
For more information, see: medicine.osu.edu/PSET



World-class collaborative care

The Ohio State University Wexner Medical Center is part of one of the most comprehensive health sciences campuses in the country – with colleges of Medicine, Nursing, Pharmacy, Dentistry, Optometry, Public Health and Veterinary Medicine geographically adjacent to the medical center.

This enhances collaborations to answer important research questions, translate those discoveries quickly and seamlessly to the bedside and develop educational offerings that have the potential to produce the most expert healthcare workforce in the country.





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