Ohio State offers many opportunities for students to explore their research interests through educational programming, fellowships, scholarships, grants, research symposia and participation in research presentations nationwide.

OSU students in biomedical research are trained as multidisciplinary professionals in basic and translational sciences, while working closely with leading research scientists in their chosen fields. As members of the OSU family of medical professionals, OSU biomedical science students are on the forefront of medical research breakthroughs and play a vital role in creating the future of medicine.

A broad range of program opportunities exist for students interested in careers in biomedical research, from early preparation at the undergraduate level to advanced training in a graduate or doctoral program.

**UNDERGRADUATE PROGRAMS**

The **Biomedical Science (BMS)** Major at Ohio State is a highly selective honors major for students who have a strong interest in participating in biomedical research as undergraduates.

This career-building program, which emphasizes problem-solving, verbal and written communication skills and teamwork, prepares students for further study in a medical, PhD or combined MD/PhD program or other graduate-level training in the health sciences.

The BMS major is offered through the **School of Health and Rehabilitation Sciences**, which itself offers a number of research training programs for undergraduate, graduate and postdoctoral students interested in careers in the health sciences. A **PhD degree in Health and Rehabilitation Sciences** prepares healthcare professionals to become leaders, teachers and scholars in their respective fields within the health sciences. For more information about research opportunities offered by the School, visit hrs.osu.edu.

The OSU College of Medicine offers a summer enrichment experience to encourage undergraduates who are underrepresented in medicine and interested in biomedical science to participate in research prior to graduate study. Known as **SUCCESS (Summer Undergraduate Course Creating Excellence in Scientific Study)**, this nine-week summer research enrichment program seeks to enhance and foster diversity in graduate study in the biomedical and biological sciences as reflected in culture, class, race, ethnicity, background, work and life experiences.

**GRADUATE PROGRAMS**

The OSU **Medical Scientist Training Program (MSTP)** provides rigorous training in both clinical medicine and basic research, leading to both the MD and PhD degree. The MSTP has worked closely with the Ohio State College of Medicine and the graduate school leadership to develop a curriculum specifically for MSTP students - the Lead. Serve. Inspire. Inquire. Investigate (or LSI3) curriculum. The LSI3 curriculum incorporates the new medical school curriculum and the curricula of the partnering graduate programs to provide MSTP students with a unique, rewarding, and challenging curriculum.

The College of Medicine’s **Biomedical Sciences Graduate Program** offers an integrative and interdisciplinary approach to a doctoral degree in the biomedical sciences. Coursework and research experiences in basic and translational sciences are designed to provide the proficiencies required for careers in research. Students investigate the causes, biological mechanisms, diagnoses and therapeutic approaches to human diseases and gain a broad perspective of biomedical sciences before focusing in one of a dozen research emphasis areas. They are encouraged to apply their knowledge early in the program as they begin working in laboratories alongside some of OSU’s most distinguished research scientists.

The College of Medicine **Masters of Medical Science Program (MMSP)** offers a flexible research education and training curriculum for clinical postdoctoral physicians-in-training currently enrolled in residency or fellowship training programs at the OSU Wexner Medical Center.
Medical Center. Degree requirements include successful completion of a core curriculum (Research Design, Biostatistics, Research Ethics, Science Communication), as well as electives and seminars which complement the trainee’s mentored research project. Trainees must also deliver a culminating research presentation as part of the Masters Exam requirement.

OSU is one of 23 institutions nationwide to sponsor an HHMI Med into Grad Scholars Program funded by the Howard Hughes Medical Institute (HHMI). Our Program provides additional research training and clinical exposures for pre-candidacy graduate students in the basic sciences and engineering. The program facilitates information sharing between basic scientists and clinicians, and prepares trainees for future partnerships and collaborations with physician scientists.

Ohio State’s DISCOVERY Post-baccalaureate Research Education Program, known as DISCOVERY PREP, provides an intense research experience for recent graduates from underrepresented groups, in preparation for admission and success in a biomedical science doctorate program. Matched with a highly qualified mentor, trainees are provided concentrated professional development to maximize skills and the confidence needed to thrive in a research-intensive biomedical science doctorate program.

Medical Student Research Honor Society
The OSU College of Medicine Landacre Honor Society promotes excellence in medicine by encouraging academic achievement and success in biomedical research. A variety of informational and educational activities are organized annually to allow medical students to explore research opportunities and to facilitate medical student interaction with faculty researchers at Ohio State. The Society also organizes research fairs and conferences, hosts speakers and inducts new members at the annual Landacre Honor Society banquet. Interested students can find out more about the Landacre Honor Society by visiting the website, http://medicine.osu.edu/students/life/organizations/honor_societies/landacre/pages/index.aspx

Funding for Medical Students in Biomedical Research
Trainees in biomedical research at Ohio State enjoy numerous opportunities to learn in laboratories and contribute to studies conducted by some of the nation’s most respected research scientists. Many perform research with the aid of scholarships and fellowships designed to support their research interests while they pursue their medical degree. Extramural fellowships are available from institutions such as the Howard Hughes Medical Institute (HHMI), National Institutes of Health (NIH), Alpha Omega Alpha (AOA), Sarnoff Foundation, the Doris Duke Foundation and many other scientific, specialty and disease-specific foundations. Students are encouraged to find a research mentor and apply to multiple funding sources to maximize funding opportunities.

The OSU College of Medicine, through the Medical Student Research Program, offers many informational and educational activities about physician research training, careers and funding opportunities. The Medical Student Research Program organizes an annual research scholarship competition. Selected awardees are funded by the generosity of philanthropists who established a number of scholarship opportunities, among them the Samuel J. Roessler Memorial Medical Scholarship. For close to 50 years, OSU medical students have had the opportunity to participate in research due to support from the Roessler scholarship. Recipients participate in short- and long-term basic, translational or clinical research opportunities to gain valuable experience under the supervision of an OSU faculty mentor. The College also sponsors the Barnes & Bennett Memorial Scholarships, the Watts Scholarship in Community Research and the Patient-Centered Research Ethics (PCRE) Scholarship, which provide additional research funding for OSU medical students.

Other funding opportunities are available annually through centers within OSU Medical Center, including the Center for Clinical and Translational Science (CCTS) at ccts.osu.edu and CCC-Pelotonia at cancer.osu.edu/go/pelotoniafellowship as well as through national organizations such as the American Heart Association and the American Cancer Society.

More information about research opportunities at Ohio State is available at http://medicine.osu.edu/go/research_opportunities.