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MD/PhD PROGRAM GUIDE

TRAINING THE NEXT GENERATION OF PHYSICIAN-SCIENTISTS

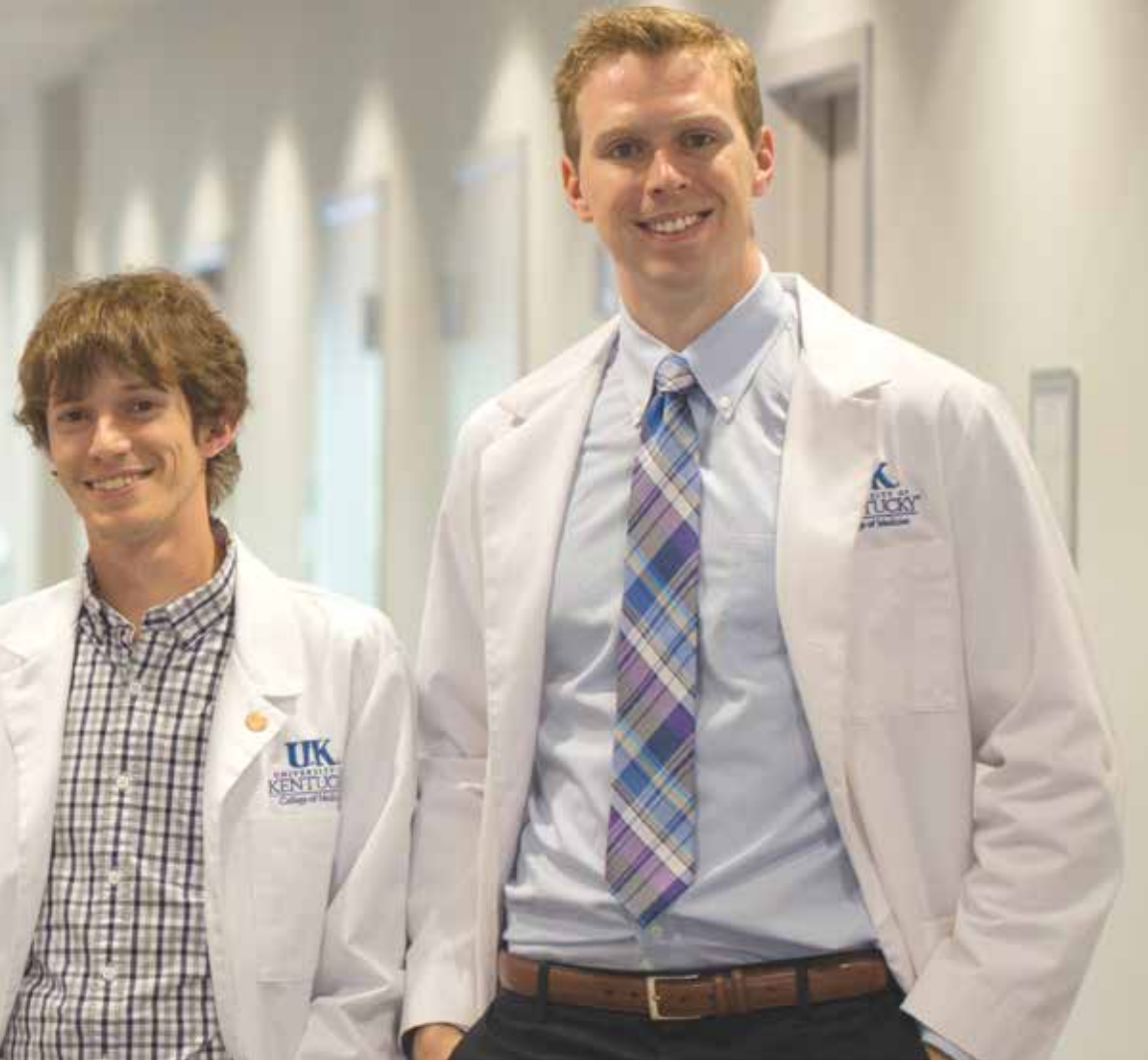
University of Kentucky

ABOUT THE PROGRAM

The University of Kentucky MD/PhD Training Program leverages the strong institutional environment to prepare exceptional students to assume leadership positions at the forefront of scientific and medical discovery. The MD/PhD Program has benefited from broad institutional investment to promote basic, translational, and clinical science by attracting top-caliber students and producing well-prepared physician-scientists. As one of only a handful of universities to have six healthcare colleges on the same campus, we offer a wide range of graduate training opportunities. The range of multidisciplinary research is what makes UK unique.

Did you know

The University of Kentucky's MD/PhD Program trains the best and brightest in the skills, intellectual tools and science of both clinical medicine and ground-breaking biomedical research.



Fast Facts:

- Integrated curriculum
- In fiscal year 2019, UK investigators brought in $417.1 million in research awards. Of that total, $241.8 million were federal grants, including $159.3 million from the National Institutes of Health.
- UK is currently one of only 22 public institutions with a trifecta of federal designations of excellence – for aging, in cancer and in translational science.
- Average time to dual degree is 7.6 years
- Students receive a competitive stipend during medical and graduate school.
- Students receive funding for tuition and fees during their MD/PhD training program years.
- UK's MD/PhD students routinely published in medical and scientific journals, including *Science, Nature, PNAS, Journal of Biological Chemistry,* and *Nature Medicine*.

50%

of our students have published research articles before entering into the program

UK RESEARCH AND HEALTHCARE FACTS

The University of Kentucky MD/PhD Program is designed to prepare exceptional students to assume leadership positions at the forefront of scientific and medical discovery.

University of Kentucky (UK) has strategically invested in faculty recruitment and research infrastructure, enhancing an already robust training environment for physician-scientists. This fosters an integrated approach to research and healthcare that emphasizes: cancer, neuroscience/aging, obesity/diabetes, addiction/substance use, healthcare disparities and cardiovascular disease. As a result, UK ranked in the top 10% of US institutions in the 2019 NSF Higher Education Research and Development Survey, a ranking likely to be sustained in 2020 as UK funding increased by >25%. UK's strategic plan is facilitated by outstanding transdisciplinary centers.

- UK is unique as its colleges (Medicine, Public Health, Pharmacy, Nursing, Engineering) and its hospitals are within walking distance, giving MD/PhD students ready access to a breadth of research expertise and clinical experiences.

- The UK Albert B. Chandler Hospital, a 569-bed, acute care hospital, is the only Level I trauma center and has the only Level IV neonatal intensive care unit in the region.

- There are 100 intensive care beds and 17 operating rooms. With over 1,600 full-time faculty UK is well-positioned to provide for the education and training of our future physician-scientists.

MD/PhD Program Directors

Sidney (Wally) Whiteheart, Ph.D., FAHA

Professor, Molecular and Cellular Biochemistry

PhD – John Hopkins University of Medicine

Postdoctoral Fellow – Princeton University

Postdoctoral Fellow – Sloan-Kettering Institute

Richard D. King, MD, Ph.D.

Associate Professor of Neurology

MD/PhD – Baylor College of Medicine

Residency – Harvard Medical School

Fellow – University of Texas at Dallas

Fellow – University of Utah

Brandon A. Miller, MD, Ph.D.

Assistant Professor of Neurosurgery

MD/PhD – The Ohio State University

Residency – Emory University School of Medicine

Fellow – Washington University in St. Louis

WHAT TO EXPECT

Our current students' qualifications are impressive, not only in terms of academic records, but also in community service, leadership roles, and scientific achievements. During their training, students gain national visibility by presenting high-caliber science at prestigious meetings in the U.S. and at international forums.

Students in our program benefit from participation in NIH-funded research programs that serve as a pipeline to a career in biomedical science. These include training in disease-specific areas such as cancer, cardiovascular disease, neurobiology and drug addition. Mechanistic training programs focus on oxidative stress, pharmacology, nutritional science, biochemistry, nanotechnology, risk behaviors and other areas.

60%

of our students receive extramurally funded fellowships for their doctoral studies*

*American Heart Association Predoctoral Fellowship. NIH Individual Predoctoral F30 Awards. Biomedical Engineering Halcomb Fellowship Award.

As one of UK's MD-PhD students you instantly become part of a "family" comprised of research and clinical faculty and staff who make up our mentoring community.

Upon graduating, students typically move on to residencies at prestigious institutions such as:

Bascom Palmer Eye Institute – Ophthalmology

Emory University – Internal Medicine/Research Track

Indiana University – Internal Medicine – Pulmonary, Critical Care

Johns Hopkins University – Psychiatry

Mayo Clinic Rochester – Neurology

The Ohio State – Anesthesiology & Pediatric Cardiology

University of Alabama at Birmingham – Genetics/Pediatrics

University of California, Davis – Radiology

University of California, Los Angeles – Psychiatry

University of California, San Franscisco – Dermatology

University of Pennsylvania – Neurology

University of Texas-Southwestern – Psychiatry

University of Washington – Neuropathology

Vanderbilt University – General Surgery

Wake Forest University – Neurology

Washington University in St. Louis – Radiology

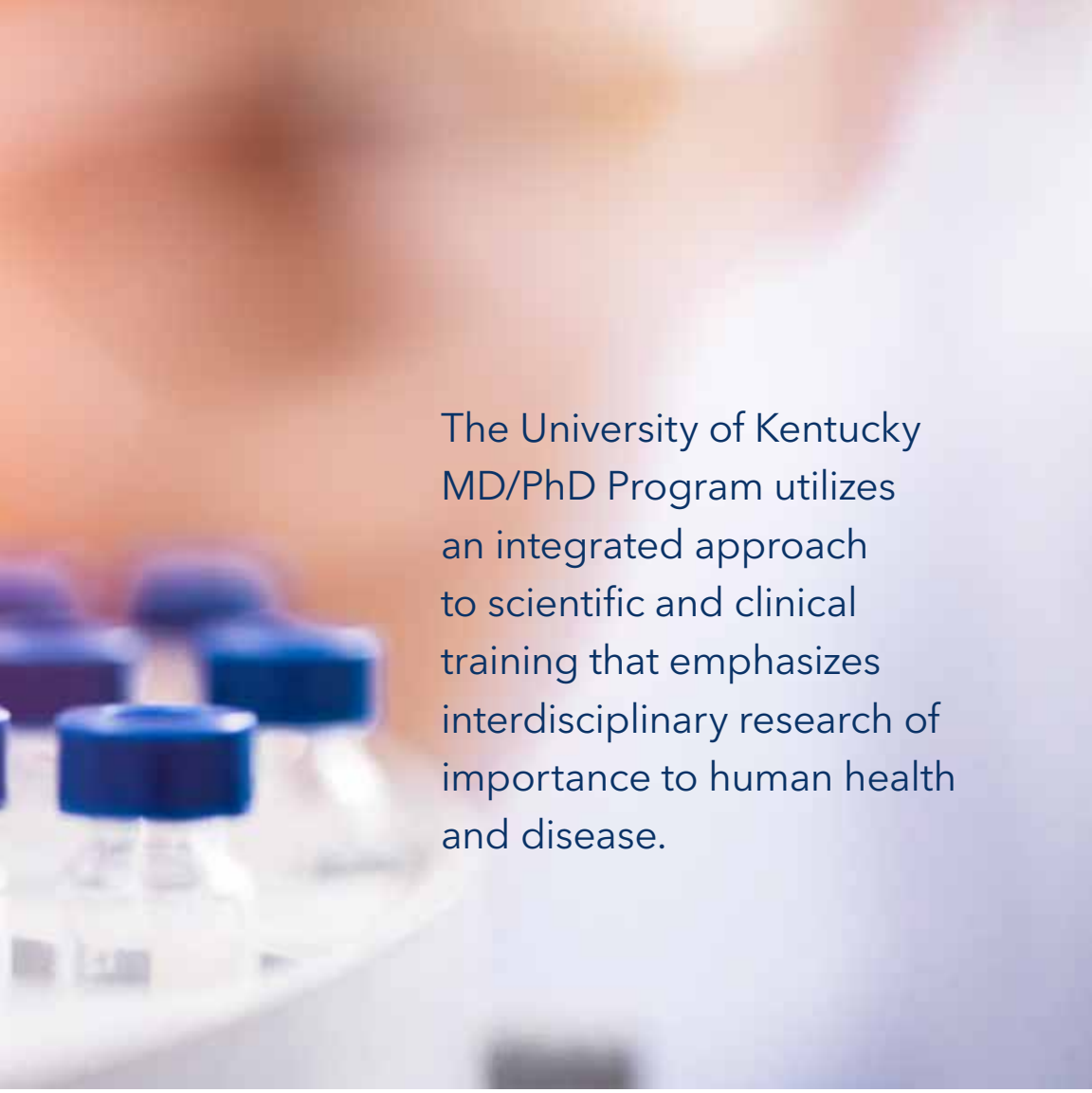
Did you know

Our students have had leadership roles in organizations such as the American Physician Scientist Association and positions as co-chair on the Gordon Research Conference Seminars, and the American Medical Association student board. They hold patents and pursue funding from small business awards.

UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE

The University of Kentucky College of Medicine, which was founded in 1960, provides innovative, high-quality education through its nationally recognized curriculum.

The college's mission is to develop knowledge, skills and attitudes that promote professionalism, teamwork, life-long learning, empathy, scholarship, cultural sensitivity, and leadership, with the goal of providing excellence in education, health care and research within the Commonwealth of Kentucky and beyond. Students can tailor their educational experience by selecting from doctoral programs from departments across campus.



The University of Kentucky MD/PhD Program utilizes an integrated approach to scientific and clinical training that emphasizes interdisciplinary research of importance to human health and disease.

Possible PhD programs include:

Biochemistry

Biomedical Engineering

Clinical & Translational Science

Public Health: Epidemiology & Biostatistics

Microbiology, Immunology & Molecular Genetics

Neuroscience

Pharmacology & Nutritional Sciences

Pharmaceutical Science: Medicinal, Bioorganic & Computational Chemistry

Pharmaceutical Science: Clinic & Experimental Therapeutics

Physiology

Toxicology & Cancer Biology

Did you know

UK is one of only a few universities in the nation to have all six health science colleges – Medicine, Dentistry, Health Sciences, Nursing, Pharmacy and Public Health – on one campus.

One of Nine

Sanders Brown Center on Aging at the University of Kentucky was among the first 10 Alzheimer's Disease Centers funded by the National Institutes of Health. Currently, only 31 designated Alzheimer's Disease Centers exist in the U.S. and only nine, including Sanders-Brown, have been continuously funded since the designation was launched.

29th

For the fourth straight year (2020), the University of Kentucky Markey Cancer Center has earned a top 50 national ranking for cancer care, this year climbing to number 29.

RESEARCH

The University of Kentucky recently accomplished the equivalent of a "triple crown" in the academic medical world, becoming only the 22nd medical center in the country to have a National Cancer Institute (NCI) designation at the Markey Cancer Center; a federally funded Alzheimer's Disease Center (ADC) at the UK Sanders-Brown Center on Aging; and a Clinical and Translational Science Awards grant at the Center for Clinical and Translational Science. As part of this consortium, UK shares the common vision of improving human health by transforming the research and training environment to enhance the efficiency and quality of clinical and translational research.

71 Pilot Projects

The UK CCTS Pilot Funding Program stimulates innovative science to accelerate improvements in health. Our funding prioritizes multidisciplinary research and projects that focus on health disparities, particularly in Appalachia. Since our first CTSA funding in 2011, it has supported 71 pilot projects.

University of Kentucky research facilities include:

Barnstable Brown Kentucky Diabetes and Obesity Center

Center for Drug and Alcohol Research

Gill Heart Institute and the Saha Cardiovascular Research Center

Graduate Center for Biomedical Engineering

Kentucky Neuroscience Institute

Spinal Cord & Brain Injury Research Center

Did you know

UK is one of the institutions designated a Research I University by the Carnegie Foundation. Only 108 universities in the country share this distinction as high research institutions.

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SEE WHAT'S
Possible.

CONTACT US

For more information or to apply, contact:

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University of Kentucky

We are committed to diversity and encourage applications from women and members of racial, ethnic, and/or demographic groups currently underrepresented in biomedical science.