



# HHS IS | HEALTH SCIENCES



## **PATHS TO MAKE A DIFFERENCE**

Our comprehensive and innovative programs provide a foundation for learning and critical thinking. Students are prepared to succeed as tomorrow's leaders in a challenging global environment. Our diverse faculty, staff and student population reflects the world we live in. Quality research and education programs in this school enhance health, the environment and safe working conditions. We develop strong ties with our students, alumni, university colleagues, industry and community. Through the School of Health Sciences, Purdue is making a profound and positive impact on people's lives.





## CURRICULUM WITH A CAREER FOCUS

Purdue's School of Health Sciences (HSCI) prepares students for careers that directly improve human health and the environment in which we work and live. Our rigorous, science-based programs emphasize quality and undergraduate research.

- **Pre-Professional Health Sciences:** This interdisciplinary program lays the foundation for graduate and professional study in medicine, dentistry, optometry, occupational therapy, physical therapy, chiropractic, physician's assistant and public health.
- **Radiological Health Science:** This degree opens the door for a career in medical physics and diagnostics or entry-level positions in the nuclear sector, industry, medicine, government and academia.
- **Occupational Health Science:** Part of the nation's only accredited industrial hygiene undergraduate and graduate programs, this degree equips graduates to recognize, evaluate, and control the health and safety risks of hazardous agents.
- **Environmental Health Science:** This degree is launching tomorrow's leaders in public health and toxicological research, with an emphasis in environmental risk assessment, environmental causes of human diseases, and environmental protection and policy compliance.
- **Medical Laboratory Sciences:** This will position graduates for a leadership role as a laboratory scientist, performing clinical tests to aid physicians in the diagnosis and treatment of disease and the maintenance of wellness.



## SETTING THE STANDARD FOR HEALTH RESEARCH

With a unique mix of basic medical science researchers and physicists focused on toxicological and biomedical issues, HSCI is seeking solutions to some of life's grand challenges:

- Addressing neurodegenerative diseases such as Parkinson's and Alzheimer's diseases as well as carcinogenesis.
- Advancing technology to examine how our environment, vocations and lifestyles interact with our genes and organ systems, leading to health disorders.
- Identifying lead exposure-associated Alzheimer's, chemical-induced Parkinson's, pesticide-caused cancers and radiation-triggered developmental disorders.
- Developing in vivo animal models and in vitro testing systems to screen brain toxins and therapeutic agents.
- Discovering in vivo, noninvasive technology to quantify metal accumulation in human bone and 3D neutron imaging technology for metal distribution in life human tissues.
- Designing magnetic resonance imaging (MRI) and spectroscopic (MRS) technologies for brain disease diagnosis.

## PRESTIGE OF PURDUE

Our programs offer one-of-a-kind opportunities:

- Two nationally accredited programs — Industrial Hygiene and Medical Physics.
- Only Indiana program combining 3-year undergraduate study in Pre-Professional Health Sciences and 2-year MBA in health care management through Krannert School of Management.



- Oldest, acclaimed Medical Laboratory Sciences program trains students and supplies medical technologists to hospitals and testing centers.
- First radiation and environmental management program in the nation (established 1942).
- Access to state-of-the-art medical imaging technology and facilities at Purdue and Indiana University School of Medicine.

## **COLLABORATING FOR BETTER HEALTH**

HSCI faculty members have extensive collaborations nationally and worldwide in such countries as Italy, Finland, China, India, Namibia and Ireland. Faculty serve on national councils, advisory groups and review boards. They are presidents of professional organizations, chair major international conferences, and lead symposia and workshops in professional societies.

Closer to home, they participate in community lectures and seminars geared toward senior citizens, children's groups and cancer awareness activities. HSCI researchers are partnering with colleagues in Psychological Sciences to understand how a high-fat diet affects human memory and behavior. They collaborate with faculty in Speech, Language, and Hearing Sciences to study how reactive oxygen species damage the vocal function.

With Nutrition Science, they are examining the diet's effect on muscle function. Teams with Health and Kinesiology are studying ergonomics as well as the impact of childhood sports on brain injury.

**[LEARN MORE AT WWW.PURDUE.EDU/HHS/HSCI](http://WWW.PURDUE.EDU/HHS/HSCI)**

# **PURDUE**

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**HEALTH & HUMAN SCIENCES**

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