Human Toxicology

**Director**
- Peter S. Thorne (Occupational and Environmental Health/Civil and Environmental Engineering)

**Director, Graduate Studies**
- Gabriele Ludewig (Occupational and Environmental Health)

**Graduate degrees:** M.S. in human toxicology; Ph.D. in human toxicology

**Faculty:** [https://toxicology.grad.uiowa.edu/faculty](https://toxicology.grad.uiowa.edu/faculty)

**Website:** [https://toxicology.grad.uiowa.edu](https://toxicology.grad.uiowa.edu)

Toxicology is the study of how biological, chemical, physical, and radiological agents affect living organisms and the ecosystem, and how to prevent or lessen the adverse effects of those agents. The Human Toxicology Program prepares toxicologists to identify and assess environmental exposures, identify mechanisms by which toxicants affect homeostasis or induce disease, identify interventions to prevent adverse effects, and estimate acceptable levels of exposure to protect public health.

The program is interdisciplinary, involving the Graduate College, the Carver College of Medicine, and the Colleges of Engineering, Liberal Arts and Sciences, Pharmacy, and Public Health.

The Human Toxicology Program is supported by the Graduate College and the Iowa Superfund Research Program. Human toxicology faculty members are supported by the Environmental Health Sciences Research Center, a National Institute of Environmental Health Center of Excellence.

**Programs**

**Graduate Programs of Study**

**Majors**
- Master of Science in Human Toxicology
- Doctor of Philosophy in Human Toxicology

**Facilities**

Training is conducted primarily in laboratories and teaching facilities of the departments and colleges of Human Toxicology Program faculty members. These are among the best-equipped laboratories on campus. Together with the University's central research facilities, they provide access to the most up-to-date research equipment and expertise.

**Courses**

**Human Toxicology Courses**

**TOX:7171 Special Problems in Toxicology** arr.
Didactic material that may include tutorial, seminar, or faculty-directed research work; or a special topic.

**TOX:7173 Professional Development in Toxicology** arr.
Presentations and discussion on professional development topics including toxicology research methods and analysis, grant writing, proposal development, oral presentation skills, networking, and creating a portfolio framework that can be used after graduation.

**TOX:7180 Toxicology Research Seminar** 0-1 s.h.
Contemporary research topics.

**TOX:7201 Toxicology Research** arr.
Research that constitutes part of the thesis.

Theor or dissertation research; seminar preparation.