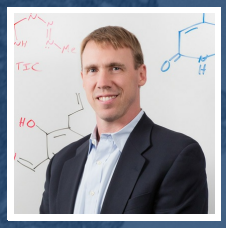
Novel Methods to Treat Veterinary and Human Cancer Patients



Paul J. Hergenrother
Professor, Chemistry

CURRENT RESEARCH

Advancing cancer therapies by innovatively tackling cancer in pets

Cancer is a top killer that impacts the lives of both humans and animals. The typical cancer drug discovery process is often long and the costs are high. In the standard model, cancer is induced in lab mice and rats, and these lab animals are then treated to test a drug's efficacy. Unfortunately, this model is not widely successful and leads to tremendous inefficiencies: over 90% of cancer drugs that are effective in mice show disappointing results in human trials and hence do not become drugs. But what if we could efficiently advance the best cancer therapeutics by successfully treating pets with naturally-occurring cancers? Dr. Paul J. Hergenrother, Professor of Chemistry at University of Illinois, Urbana-Champaign (U of I) develops new cancer drugs in a novel way, and evaluates candidate drugs in pets—specifically dogs and cats—who have naturally-occurring cancer. He is advancing effective cancer therapies that benefit both animal and human patients.

Many dogs and cats suffer from cancer, and are typically euthanized because there are no viable treatment options. Dr. Hergenrother offers experimental therapeutics developed in his lab to tackle common cancers in pets—lymphoma, osteosarcoma, brain cancers, among others—which share close genetic similarities to the human diseases. By evaluating candidate drugs in a veterinary cancer patients, Dr. Hergenrother's lab is able to advance the most promising cancer drugs to humans. Dr. Hergenrother and his interdisciplinary team includes collaborators and students specializing in chemical biology, organic chemistry, cell biology, pharmacology, and veterinary oncology. They closely collaborate with Professor Tim Fan, a U of I veterinary oncologist, as well as...

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AFFILIATION

University of Illinois Urbana-Champaign

EDUCATION

- Postdoctorate 2001,Harvard
- Ph.D. 1999, University of Texas at Austin
- B.S. in Chemistry 1994,University of Notre Dame

AWARDS

- Innovation Transfer Award, 2016
- University Scholar, 2014-2017
- American Cancer Society Research Scholar, 2006-2010
- Eli Lilly Award in Biological Chemistry, 2008
- Camille Dreyfus Teacher-Scholar
- and 2 more...

RESEARCH AREAS

Life Science, Infectious, Neurological / Cognitive, Oncology / Cancer

FUNDING REQUEST

Your contributions will help fund Dr. Hergenrother's continuous research in developing novel compounds to tackle cancer cells and treat both canines and humans. One of the drugs his lab developed is currently treating human patients. Your donations will help support the $5M needed for resources in order to expand this effort and replicate this success multiple times in a short amount of time. Any amount supports this innovative oncology research; fund Dr. Hergenrother.