



LYONS AND OFFERMAN ARE **SUPPORTERS** OF BASIC SCIENCE RESEARCH

Funding for basic science research is one of the biggest needs of the Wilmot Cancer Institute (WCI). According to Jonathan Friedberg, MD, MMSc, Wilmot's director and Samuel E. Durand Professor of Medicine, "Every treatment comes from basic science."

Among WCI's staunchest supporters of basic research are Stafford Lyons and Henry Offermann. They believe funding cancer research is about supporting what can make a difference today and have impact decades into the future. "Basic science affects everything, and this is one place we can fill in the gap," Offermann says. "We want to support things that are important to us, but also bigger than us," says Lyons.

Basic science research expands our understanding of biological mechanisms and serves as a foundation for the development of new cancer treatments. Despite its importance, federal funding for basic science research has been declining, making it more difficult to enable discoveries that could one day advance care.

The couple began supporting research at WCI several years ago with modest annual gifts. As they learned more about Wilmot's research programs, they increased their support. In 2014, they gave \$25,000

to match gifts pledged during Planting Seeds of Hope, a telethon that raised seed grant funds for research at WCI. Several months later, they gave an additional \$100,000 for seed grants and arranged for a \$2.5 million bequest to establish the Lyons/Offermann Professorship for Cancer Biology, an endowed professorship dedicated to basic science research. "We weren't interested in anything flashy," Lyons recalls. "We wanted to do something that Wilmot thought was most important and that they had trouble funding."

While Lyons and Offermann say funding an effort with this kind of potential is thrilling, they also say it's an important way of supporting their community. Even though the University of Rochester Medical Center is almost 90 miles from their home, it plays a major role in the health and well-being of their friends and neighbors.

You can support basic science research like Stafford Lyons and Henry Offermann. Please contact the Wilmot Advancement team at (585) 276-4717.



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A DIFFERENT APPROACH TO **CANCER RESEARCH**

For more than 30 years, the cornerstone of research conducted by Hartmut “Hucky” Land, PhD, is that different cancers have many shared features, and he is trying to understand how the common characteristics of cancer might unlock the next generation of targeted treatments. Currently, most targeted therapies are highly specific, and only apply to a narrow number of cancers, limiting the number of eligible people.

Dr. Land studies the similarities between diverse types of cancer. Instead of searching for single cancer gene mutations, his laboratory studies the genetic programs that control all of cancer’s worst shared features—such as a cancer cell’s ability to grow, quickly divide, and survive despite aggressive treatment. His goal is to discover new ways to block or interfere with the genetic programs at the core of what makes cells cancerous. Dr. Land believes this is the best way to stop the disease at its core.

This approach to cancer is different from what many scientists do. They are looking for the cancer gene mutations specific to individual malignancies. From there, scientists search for drugs that target those mutations. However, because hundreds of cancer mutations exist, and only a few of them can be successfully targeted by drugs, not all patients will benefit from the current approach.

Dr. Land was among the first scientists to discover that malignant cell transformation required multiple mutations in distinct cancer genes. The innovative cancer researcher—who pushes the boundaries of what’s possible—has been with WCI since 1999. His research has been published in *Nature* and *Cell*, and he is one of the most frequently cited authors in the field of molecular genetics.



In 2015, Dr. Land was an inaugural recipient of the Outstanding Investigator Award from the National Cancer Institute (NCI), a \$6.3 million grant that supports exceptional scientists by providing them seven years of uninterrupted funding. The award was designed to reward productive and influential researchers by giving them the freedom to pursue long-term goals without having to re-submit grants each cycle.

Dr. Land is collaborating with Aram Hezel, MD, to study a gene network that controls cancer progression, with a focus on pancreatic cancer.

They were awarded a five-year, \$2 million grant from the NCI to fund new scientific experiments involving a gene known as Plac8. Earlier work showed that by inactivating Plac8 they could stop or slow pancreatic tumor growth in mice and significantly extend survival. This makes Plac8 an attractive target for drug development.

The research of WCI scientists such as Drs. Land and Hezel will hopefully lead to new therapies to treat and cure cancer and help patients worldwide.

“Research is essential to testing new treatment plans that will help future cancer patients. I would not be here today if not for research and clinical trials at Wilmot that were done prior to my diagnosis for acute myeloid leukemia.”

—RALPH OLNEY, Wilmot patient and donor

You have the opportunity to support Wilmot researchers develop new cancer therapies, preventions, and cures.
Please contact the Wilmot Advancement team at:
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