

The Purdue Institute for Cancer Research is one of only seven National Cancer Institute-Designated Basic Laboratory Cancer Centers in the nation. Since 1978, the institute's top investigative minds have had one mission: basic, cancer-fighting discovery.

These discoveries are critical. Statistics show that one in three women and half of all men will be diagnosed with cancer in their lifetimes. Purdue discoveries already are helping prevent, detect, diagnose, treat and cure cancer. Brilliant Purdue researchers in engineering, veterinary medicine, nutrition, medicinal chemistry, pharmacy and biology, are all involved in the cancer institute's persistent fight to conquer cancer.

#### A LEADER CHANGING LIVES

Purdue Institute for Cancer Research member Philip Low, the Ralph C. Corley Distinguished Professor of Chemistry, has created breakthrough therapeutic strategies that target only malignant cells and leave healthy cells alone.

Three of the agents he has developed were approved by the FDA within the last year:

- CYTALUX<sup>™</sup> imaging technology that makes ovarian cancer easier to see and remove. CYTALUX<sup>™</sup> targets only malignant cells and avoids healthy ones.
- PLUVICTO<sup>™</sup> a targeted drug proven successful against a specific form of prostate cancer.
- LOCAMETZ<sup>™</sup> an imaging agent that reveals prostate cancer cells. Use with PLUVICTO<sup>™</sup> enables both targeting and treatment of prostate cancer.

Low also is investigating new approaches to reprogram the immune system to fix imbalances that contribute to nearly all major diseases, including cancers. (ABOVE) Scientists at Purdue are working to use innovative data science techniques to better understand the genetics and cellular biology of cancer cells and tumors.

(Purdue University photo)



FDA-APPROVED CANCER AGENTS Since November 2021

40+

11

IN THE PIPELINE

DRUGS IN CLINICAL TRIALS

150+

Philip Low, Purdue University's Presidential Scholar for

Drug Discovery and the Ralph C. Corley Distinguished Professor of Chemistry. (Purdue University photo)



Institute for Cancer Research



To donate to vital, life-changing Purdue cancer research, go to the link at the OR code.



Contact the cancer institute by phone: 765-494-9129, or email: cancerresearch@purdue.edu

The Purdue Institute for Cancer Research is helping to give more than 500 Purdue undergraduate and graduate students the expertise to lead the next generation of researchers who will fight, and one day win, the battle against cancer. (Purdue University photo)

### **VITAL, LIFE-PRESERVING, URGENT WORK**

Researchers at the Purdue Institute for Cancer Research are fighting bladder, pancreatic, prostate, lung, liver, ovarian, brain, colorectal, blood cancers, breast and cervical cancers as well as osteosarcoma. A recent \$4.2 million grant from the Riney Foundation is supporting research for multiple myeloma.

The Purdue Institute for Cancer Research continues to tackle complex basic discovery, using engineering in oncology to develop therapeutics and invent new drug delivery systems. The institute also is using artificial intelligence and machine learning to break ground in personalized medicine and drug development. All this is happening while the cancer institute is training hundreds of future cancer scientists.



The Purdue Institute for Cancer Research is the nation's only National Cancer Institute basic laboratory cancer center that includes a college of veterinary medicine. (Purdue University photo/John Underwood)

## CANCER RESEARCH TO BENEFIT PET ANIMALS AND PEOPLE

With more than 70 million pet dogs in the U.S., cancer among pets is a growing challenge. Cancer institute researchers in the Purdue Comparative Oncology Program are seizing on the tremendous opportunity to simultaneously solve cancers that are similar in pets and humans. When a new successful approach to prevent, treat, or better manage cancer in pet animals is found, it often shows promise in humans.

# 120+ RESEARCHERS FROM





### STARTUPS DELIVERING PURDUE CANCER INSTITUTE SOLUTIONS TO PATIENTS

- OnTarget Laboratories
- Tymora Analytical
- Endocyte, Inc. purchased by Novartis
- Continuity Pharma
- Enhance Therapies
- Gibson Oncology
- Amplified Sciences
- Savran Technologies
- LoDos Theranostics
- Animated Dynamics



Institute for Cancer Research