OHIO STATE'S DRUG DEVELOPMENT INSTITUTE (DDI)

Accelerating Innovative Research to Speed Cures to Cancer Patients

The Drug Development Institute (DDI) is a biotech-like institute embedded within The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James) that employs a combination of **targeted investments**, **strategic management** and **cutting-edge resources** to drive projects from discovery through early-stage drug development, thus creating high-value new drug candidates.

The DDI Advantage: For Industry Partners

- The **depth and breadth** of a highly collaborative, NCI-designated comprehensive cancer center, clinical trial expertise (all phases) and the third largest cancer hospital in the country
- An extraordinary opportunity to identify novel technologies from the **latest scientific discoveries** made in research laboratories
- Expertise with **U.S. and international** intellectual property rights filings
- Earlier access to innovative preclinical drug candidates that can be **expedited to IND readiness**
- An extensive network of **subject-matter experts** to maximize commercial value
- **Flexible** agreement models

The DDI Advantage: For Researcher Partners

- Helps **identify pharmaceutical/biotech collaborators** and resources by cultivating relationships
- Provides a systematic approach to managing the drug development process through **timeline and milestone management**
- Offers **strategic advisory capabilities** led by industry-experienced scientists who have extensive knowledge of early-stage drug development and access to **financial resources**
- Helps researchers **navigate** the complex pharmaceutical drug development process
- Brings an **industry-focused perspective** to all investment and management decisions
- **De-risks projects**, thus enhancing the likelihood of partnership and progression to clinical development

The James

THE OHIO STATE UNIVERSITY
COMPREHENSIVE CANCER CENTER

Learn more at **cancer.osu.edu/DDI**

Contact the DDI
Email: DDI@osumc.edu
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Pipeline

The DDI works with world-renowned investigators who perform cutting-edge research in multidisciplinary teams. Highlights of a few current projects in our portfolio:

Activated B Cells as a Cancer Vaccine

Investigators: Thomas L. Cherpes, MD, DVM; Rodolfo Vicetti Miguel, MD; and Nirk Quispe Calla, MD

A novel B cell-based cancer vaccine, with the potential to be personalized to an individual's own tumor signature, is being developed for use in the treatment of a wide variety of cancer types.

Tumor-Targeted Self Assembling Peptide Amphiphiles (Theranostic)

Investigators: Michael Tweedle, PhD, and Joshua Goldberger, PhD

This team has designed molecules that can home in on the acidic environment associated with rapidly growing cancer tumors. These specialized molecules could be used to deliver chemo- or radio-therapeutic agents to kill tumor cells or imaging agents to enhance visualization of tumors.

Multivalent Notch Ligand Modulators (First in Class)

Investigators: Mikhail Dikov, PhD; Thomas Magliery, PhD; Ming Poi, PharmD, PhD; and David Carbone, MD, PhD

This team of researchers has developed a new class of molecules that modulate a signaling pathway in immune cells to reprogram the immune system to recognize and fight evasive cancer tumor cells.

Selective RAL A GTPase Inhibitors as a Cancer Treatment

Investigators: Steven Sizemore, PhD, and Steffen Lindert, PhD

The Ral A protein has been shown to be a critical node in the signaling pathways allowing growth of several types of cancer. This team is developing first-in-class, selective inhibitors of Ral A.

Estrogen Receptor Beta (ER-β) Agonist as a New Approach to Targeting a Cancer Driver

Investigator: Werner Tjarks, Dr.rer.nat.

A novel series of selective estrogen receptor beta agonists are in development for the treatment of cancer.

An Anti-EGFL7 Antibody for Acute Myeloid Leukemia (AML)

Investigators: Adrienne Dorrance, PhD, and Ramiro Garzon, MD

The secreted protein EGFL7 has been found to be a driver for AML blast proliferation. This team has identified that EGFL7 blocking antibodies can significantly reduce disease burden.

DDI Team

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