

ADVANCED DETECTION TECHNOLOGIES

(\$15,000 funding opportunity to develop novel detection technologies that can improve human health.)

Summary

In a joint effort between Purdue's College of Health and Human Science (HHS) and the Purdue Institute of Inflammation, Immunology and Infectious Disease (PI4D), the **Advanced Detection Technologies (ADT)** initiative seeks to catalyze the development of novel detection, diagnostic, or a sensor technology that is used to improve human health using new technologies and analysis methods. Using a competitive application process, we aim to incentivize the formation of multidisciplinary teams led by HHS faculty. The ADT aims to support HHS faculty-driven research focused on improving human health and mitigating the risk of disease through the development of novel environmental or *in vivo* sensors and detection devices and novel analysis and algorithm methods focused on detection. The development of laboratory, clinical, and field-deployable diagnostic devices/algorithms is allowable under this funding mechanism. It is essential that the technology be novel (not currently available on the market).

Application Process

Only team applications will be accepted and all team members are considered co-PIs. Teams must be composed of, but not limited to, at least two individuals from different but complementary disciplines. The team must be motivated to make their proposed technology available for public use and broad impact.

Investigators interested in this opportunity are invited to register for the **ADT Competition Day – on February 14th**. Assembled teams will have the opportunity to propose their technology idea to a panel of judges. Team presentations will be ranked and winners will be selected and announced on the same day.

Requirements:

Letter of Intent: Submit the following info to Qualtrics

(https://purdue.ca1.qualtrics.com/jfe/form/SV_7NHotF3SrilwLSR) by Jan 24 at 5:00 PM

- Names of co-PIs, titles, and units

- Short description of the proposed technology and needs assessment
- Short description of how the proposed technology fits within the mission of PI4D and within at least 1 of the three HHS signature areas: Developmental Health and Wellness; Vital Longevity and Healthy Lifestyles; and Sustainable and Thriving Communities

Presentation: 4 Slides to be presented in a 10 minute presentation (+ 3 minute Q&A) on the February 14th, 2020 during the ADT Competition Day from 10:00 am to 3:00 pm.

Slide #1: Investigator short bios & team structure

Slide #2: Proposed technology & needs assessment

Slide #3: Next steps, long-term sustainability and dissemination plan

Slide #4: Budget justification (\$15,000 max) and milestone-driven project timeline (one-year project period)