Resource Summary Report

Generated by NIF on May 4, 2025

Imaging Probe Development Center (IPDC)

RRID:SCR_006744
Type: Tool

Proper Citation

Imaging Probe Development Center (IPDC) (RRID:SCR_006744)

Resource Information

URL: http://commonfund.nih.gov/molecularlibraries/ipdc/index.aspx

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Description: A core synthesis facility dedicated to the preparation of imaging probes, initially for intramural NIH scientists, and later, for the extramural scientific community. The IPDC provides a mechanism for the production of sensitive probes for use by imaging scientists who cannot obtain such probes commercially. The probes to be made will encompass all major imaging modalities including radionuclide, magnetic resonance, and optical. Nearly all of these imaging probes are not commercially available, nor are they viable commercial products, and most are new compositions-of-matter (http://nihlibrary.ors.nih.gov/ipdcdb/IPDCDB_Search.asp). The IPDC was born from the realization that imaging technologies will be crucial in basic, translational, and clinical research in the 21st century, and that the synthetic chemistry required to reliably produce imaging probes lies at the heart of research within imaging technologies. To this end, the IPDC has recruited the equipment and expertise to concurrently synthesize multiple types of imaging probes for bioscientists with diverse research interests, encompassing all imaging modalities, including optical, radionuclide, ultrasound, and magnetic resonance. The IPDC embodies an exciting new approach to apply and combine chemistry and imaging sciences toward specific problems in biology and medical sciences, and will be a truly interdisciplinary effort aimed at maximizing returns from the revolutionary new discoveries being described in modern imaging. A significant part of the IPDC will also be directed, independently, to the discovery of new imaging approaches and compositions. The IPDC houses scientific staff, mostly chemists, who have interests and expertise in one or more aspects of molecular imaging. The IPDC is generating known and novel imaging probes for targeting receptors, cells, and tissues, and for preclinical in vivo evaluations by its intramural collaborators. Many such interesting agents have been described in the scientific literature, but are often not explored further due to lack of a reliable supply of reagent. One aspect of the IPDC"s mission is to rectify this situation. IPDC-supplied reagents will not be limited to one imaging

modality, but will include the flexible application of diverse technologies. Also, the IPDC will seek to develop novel state-of-the-art imaging probes in collaboration with biological and biomedical intramural scientists who can provide or suggest suitable targeting agent/receptor pairs. The Imaging Probe Development Center (IPDC) was initiated in the incubator space of the Common Fund and has transitioned to the intramural program of the National Heart, Lung, and Blood Institute.

Abbreviations: IPDC

Synonyms: Imaging Probe Development Center

Resource Type: database, data or information resource

Defining Citation: PMID:17994866

Keywords: imaging, probe, optical, radionuclide, ultrasound, magnetic resonance, ct, x-ray, fmri, mri, near ir fluorescence, pet, spect, tem, molecular library

Funding: NIH Roadmap for Medical Research

Resource Name: Imaging Probe Development Center (IPDC)

Resource ID: SCR_006744

Alternate IDs: nlx_146256

Record Creation Time: 20220129T080237+0000

Record Last Update: 20250503T055839+0000

Ratings and Alerts

No rating or validation information has been found for Imaging Probe Development Center (IPDC).

No alerts have been found for Imaging Probe Development Center (IPDC).

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.