

NCI Programs Supporting Technology Development for Population Sciences

Stefanie Nelson, PhD¹; Danielle Carrick, PhD¹; Melissa Rotunno, PhD¹; Kelly Crotty, PhD²; Tony Dickherber, PhD²; Juli Klemm, PhD²; and Angela Mariotto, PhD¹

¹Division of Cancer Control and Population Sciences, NCI; ²Center for Strategic Scientific Initiatives, NCI

The National Cancer Institute's (NCI) Innovative Molecular Analysis Technologies (IMAT) Program and Informatics Technology for Cancer Research (ITCR) Program provide funding opportunities for investigators interested in developing novel molecular technologies and informatics tools to facilitate cancer research, diagnosis, and treatment. IMAT supports the development, technical maturation, and dissemination of novel and potentially transformative next-generation technologies. ITCR supports research-driven informatics technology development spanning all aspects of cancer research and stages of tool development, from algorithm development to prototyping, enhancement and sustainment of these tools. These programs can support the development and application of new technologies for epidemiology research. For example, IMAT funding opportunities support technologies that address needs in areas such as exposure assessment, epigenetics, genomics, transcriptomics, imaging, and collection of biospecimens. ITCR supports development of genomic tools for data analysis, interpretation and visualization, annotation of genetic variants, natural language processing of electronic health records, data harmonization, and extracting unstructured phenotype data from medical records.

Learn more about the funding opportunities and technologies developed through these programs at <https://imat.cancer.gov> and <https://itcr.cancer.gov>. IMAT and ITCR currently support a Notice of Special Interest (NOSI): Technology Development for Cancer Control and Population Science Research (<https://grants.nih.gov/grants/guide/notice-files/NOT-CA-23-037.html>) that seeks to address the particular technology needs of this community.