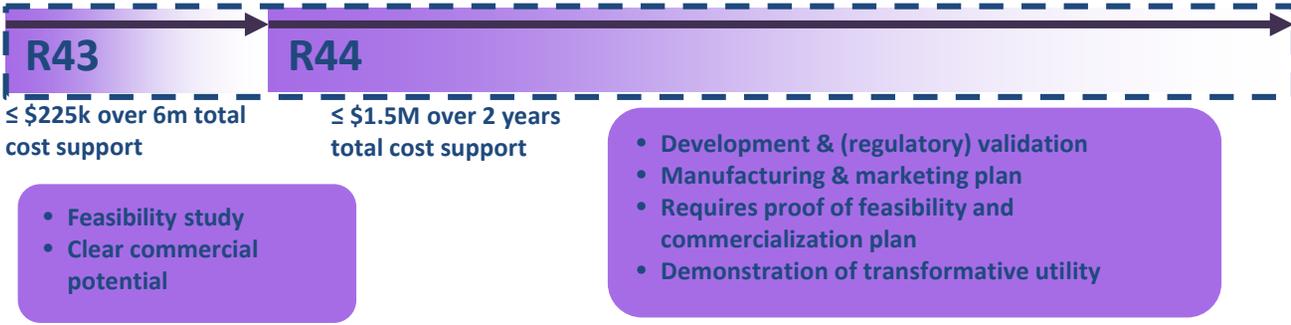


Innovative Molecular Analysis Technologies (IMAT) Program

Program Mission:

To support the development, maturation, and dissemination of novel and potentially transformative next-generation technologies through an approach of balanced but targeted innovation in support of clinical, laboratory, or epidemiological research on cancer.



Fast-Track

Open Funding Opportunities for Innovative Technology Development



INNOVATIVE MOLECULAR
ANALYSIS TECHNOLOGIES

Molecular/ Cellular Analysis Tools	R21 – <ul style="list-style-type: none">- Proof-of-Concept- no preliminary data required	RFA-CA17-010: Early-Stage Innovative Molecular Analysis Technology Development for Cancer Research <ul style="list-style-type: none">• Budget: \$400k/3yrs (direct cost cap)
	R33 – <ul style="list-style-type: none">- Optimization/ scaling- Validation	RFA-CA17-011: Advanced Development and Validation of Emerging Molecular Analysis Technologies for Cancer Research <ul style="list-style-type: none">• Budget: \$900k/3yrs (direct cost cap)
Sample Quality Assessment & Control Tools	R21 – <ul style="list-style-type: none">- Proof-of-Concept- no preliminary data required	RFA-CA17-012: Innovative Technologies for Cancer-Relevant Biospecimen Science <ul style="list-style-type: none">• Budget: \$400k/3yrs (direct cost cap)
	R33 – <ul style="list-style-type: none">- Optimization/ scaling- Validation	RFA-CA17-013: Advanced Development and Validation of Emerging Technologies for Cancer-Relevant Biospecimen Science <ul style="list-style-type: none">• Budget: \$900k/3yrs (direct cost cap)

*Application deadlines: February 28, May 26, and
September 26*

IMAT Awards for Small Business

Open to small business entities only

**Molecular/
Cellular
Analysis
Tools**

**Innovative Molecular Analysis Technology Development for
Cancer Research and Clinical Care
[Most recent issuance: PAR-13-327]**

**Sample
Quality
Assessment
& Control
Tools**

- **R43**
 - Time: 6 months
 - Budget: \$150k (total cost cap)
- **R44**
 - Time: 2 years
 - Budget: \$2M (total cost cap)

Diversity of IMAT: Active Projects FY2015

Innovative Technologies for Molecular Analysis of Cancer (R21)

- Initial proof-of-concept
- Quantifiable milestone driven development plan

Application & Validation of Emerging Technologies for Cancer Research (R33)

- Optimization/scaling or other further development
- Analytical/technical validation in biological context of use

Current IMAT R21 Portfolio (61 Active Projects)



- Epigenomic Screening
- Novel Biosensor
- Drug Targeting/Delivery
- Drug Screening
- Advanced Microscopy
- Imaging Agents
- Liquid Biopsy Platform
- Genomic screening
- Cancer modeling
- Sample Preservation
- Sample Prep
- Proteomic screening
- Transcription screening

Current IMAT R33 Portfolio (34 Active Projects)



- Epigenomic Screening
- Novel Biosensor
- Drug Targeting/Delivery
- Drug Screening
- Advanced Microscopy
- Imaging Agents
- Liquid Biopsy Platform
- Genomic screening
- Cancer modeling
- Sample Preservation
- Sample Prep
- Proteomic screening



INNOVATIVE MOLECULAR ANALYSIS TECHNOLOGIES

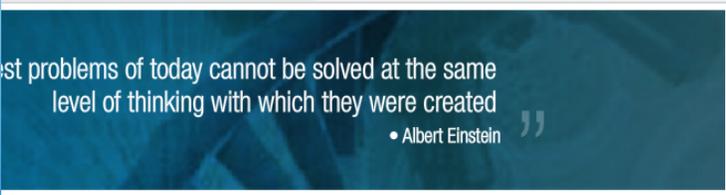
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- History
- Mission
- Center for Strategic Scientific Initiatives
- Management Team
- Scope of Supported Technologies
- Outputs and Achievements
- News Archives
- Annual PI Meetings**
- Grants Awarded



...ities (IMAT) program ... technical maturation, and dissemination of novel and potentially transformative next-generation technologies through an approach of balanced but targeted innovation. In support of its mission, the IMAT program utilizes a variety of investigator-initiated research project grant mechanisms while retaining a strong commitment to diversity and to the training of scientists and clinicians in cross-cutting, research-enabling disciplines.

[Learn More About IMAT +](#)

Funding Opportunities

The NCI is very pleased to announce that the IMAT program has approved reissuance for funding opportunity announcements through calendar year (CY) 2015.

Please use the links below for examples of past funding opportunities. New funding opportunities will be linked once posted.

- [Innovative and Applied Emerging Molecular Analysis Technologies in Cancer Research.](#)
- [Innovative and Applied Emerging Technologies in Biospecimen Science](#)

Recent News and Upcoming Events

FDA holding workshop on NGS.

The Food and Drug Administration (FDA) is announcing a free public Workshop to be held on the NIH campus on Feb 20, 2015 entitled: "Optimizing FDA's Regulatory Oversight of Next Generation Sequencing Diagnostic Tests." The purpose of this workshop is to discuss and receive feedback from the community on FDA's regulatory approach to diagnostic tests for human genetics or genomics using Next Generation Sequencing (NGS) technology. The meeting will be webcast for those not able to attend in person. Please register here if you wish to attend.

New 2015 IMAT RFAs now open!

Cancer Detection, Diagnosis, and Treatment Technologies for Global Health (UH2/UH3)

The NCI has issued a new solicitation to support the development of cancer-relevant technologies suitable for use in low- and middle-income countries (LMICs). Specifically, the FOA solicits applications for projects to adapt, apply, and validate existing or emerging technologies into a new generation of user-friendly, low-cost devices or assays that are clinically comparable to currently used technologies for imaging, in vitro detection/diagnosis, or treatment of cancers in humans living in LMICs. [more +](#)

IMAT support leads to new commercial glycan tagging kit from Cambridge Isotope Laboratories.

Congratulations to the Muddiman group (NCSSU) for commercial launch of their INLIGHTM glycan tagging kit, an important new tool for enabling mass spectrometry-based glycomics research. [more +](#)



**INNOVATIVE MOLECULAR
ANALYSIS TECHNOLOGIES**

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Home Page > Awards: [Current Year Awards](#)

Click on any project title for a more detailed description of the project. For more information about any of these awards (e.g., PI contact information or associated publications), please use the corresponding project number to search for information at the NIH Reporter website. Consistent with NIH policy, abstracts are not available for projects receiving their first award within the past year, so descriptions provided below are from the NCI program director.

[Current Year](#) | [2014](#) | [2013](#) | [2012](#) | [2011](#) | [2010](#) | [2009](#) | [2008](#) | [2007](#) | [2006](#) | [2005](#) | [2004](#) | [2003](#) | [2002](#) | [2001](#) | [2000](#) | [1999](#)

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Award Type	Project #	Year of Award	PI Name(S) All	Institution	Title
Abstract Text (Official)					
R21	CA186853	2014	CHEN, XIAOWEI	RESEARCH INST OF FOX CHASE CAN CTR	A Novel Allele-Specific RNA-ISH For Differential Allele-Specific Expression
R21	CA186798	2014	CHIU, DANIEL T	UNIVERSITY OF WASHINGTON	Ultra-Bright Probes With Ultra-Narrow Emission For Molecular And Cellular Analysis
R21	CA177391	2014	CIMA, MICHAEL J	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Implantable Device For High-Throughput In Vivo Drug Sensitivity Testing
R21	CA182336	2014	ISSADORE, DAVID AARON	UNIVERSITY OF PENNSYLVANIA	A Micro Hall Chip For Circulating Microvesicle Based Cancer Monitoring
R21	CA174573	2014	KUMAR, SANJAY	UNIVERSITY OF CALIFORNIA BERKELEY	Molecular Analysis Of Physical Microenvironmental Control Of Tumor Cell Invasion