

NCI Funding Opportunities in Imaging and Image-Guided Interventions

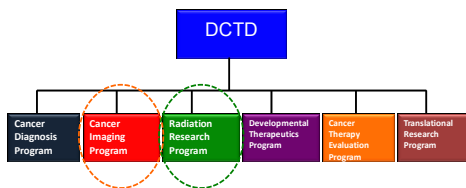
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NIH Institutes and Centers



NCI Division of Cancer Treatment and Diagnosis (DCTD)



Current NCI Funding Opportunities in Cancer Imaging

1. Academic Industry Partnerships (R01)
2. Early Phase Clinical Trials (R01)
3. Quantitative Imaging (U01)
4. NCI Clinical and Translational Exploratory Studies (R21)
5. Bioengineering Research Grants (R01), Partnerships (U01), Exploratory (R21)
6. Image-Guided Drug Delivery (R01)
7. Imaging and Biomarkers for Early Cancer Detection (U01)
8. Informatics Technologies for Cancer Research (R21, U01 & U24)

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Academic-Industrial Partnerships to Translate and Validate in vivo Cancer Imaging Systems (R01) – [PAR-17-093]

- Purpose: Stimulate translation of imaging technologies into tools addressing problems in cancer biology, prevention, diagnosis, staging, and/or treatment.
- Requires formation partnership between academic and industrial investigators
- Receipt Dates: March, June, Oct: 2017-2019
- SEP Review (CSR)

➤ <https://grants.nih.gov/grants/guide/pa-files/PAR-17-093.html>

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Early Phase Clinical Trials in Imaging & IGI (R01) [PAR-17-167]

- 3 year clinical trials in novel imaging or IGI
- Intended to accelerate the development of imaging and IGI modalities, methodologies, and agents through the early stages of clinical development -such as trials evaluating safety and preliminary efficacy
- Phase I & II studies to establish treatment parameters and early therapeutic efficacy
- SEP Review (CSR)

➤ <https://grants.nih.gov/grants/guide/pa-files/PAR-17-167.html>

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Quantitative Imaging Tools and Methods for Cancer Therapy Response Assessment- (UG3/UH3) [PAR-17-128, PAR-17-129]

- QI tool development and optimization for treatment planning, prediction or measurement of response to cancer therapy, including IGI
 - Validation of tools in clinical settings to demonstrate value for decision support in clinical trials
 - Funded teams join the QI Network (QIN)
- <https://grants.nih.gov/grants/guide/pa-files/PAR-17-128.html>

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Bioengineering Research Initiatives

Support the use of bioengineering to solve problems in biomedical research and clinical practice.

1. Exploratory Bioengineering Research Grants (EBRG) [R21]
<https://grants.nih.gov/grants/guide/pa-files/PA-16-040.html>
 2. Bioengineering Research Grants (BRG) [R01]
<https://grants.nih.gov/grants/guide/pa-files/PA-16-242.html>
 3. Bioengineering Research Partnerships (BRP) [U01]
<http://grants.nih.gov/grants/guide/pa-files/PA-16-116.html>
- Sponsoring Institutes include: NIBIB, NCI, NINDS
 - CSR standard review

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Image-Guided Drug Delivery (R01) [PAR-16-044]

- Development of integrated platforms for multifunctional / multiplexed IGDD systems
 - Development of quantitative in-vivo imaging methods in IGDD for cancer and other indications
 - interrogate tumor/drug interaction
 - imaging studies of biodistribution, PK/PD, Tx response
 - Receipt dates: June and November: 2016-2018
- <http://grants.nih.gov/grants/guide/pa-files/PA-16-044.html>

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Imaging and Biomarkers for Early Detection of Aggressive Cancer (U01) – [PAR-16-089]

- Supports collaborative research in imaging and biomarker association to address cancer screening, early detection of aggressive cancer, cancer risk, and cancer diagnosis
- Establish a Consortium for Imaging and Biomarkers (CIB)
- Receipt dates: July and December: 2016-2018

➤ <https://grants.nih.gov/grants/guide/pa-files/PA-16-089.html>

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Informatics Technologies in Cancer Research – ITCR [PAR-15-332 & PAR-15-331]

- to improve acquisition, management, analysis, and dissemination of data and knowledge across the cancer research continuum, incl. cancer biology, prevention, diagnosis, and treatment

➤ U01: Early stage development
<http://grants.nih.gov/grants/guide/pa-files/PA-15-332.html>

➤ U24: Advanced development
<http://grants.nih.gov/grants/guide/pa-files/PA-15-331.html>

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NHLBI Funding of Pulmonary and Cardiovascular IGI

- NIH Research Project Grant (Parent R01): PA-16-160
- Proposed project must be related to the programmatic interests of participating NIH Institutes based on their scientific missions.
- Also supported by NCI, NIBIB, NIDDK, and NINDS
- CSR review by chartered study sections
- Standard receipt dates
- <https://grants.nih.gov/grants/guide/pa-files/PA-16-160.html>

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