

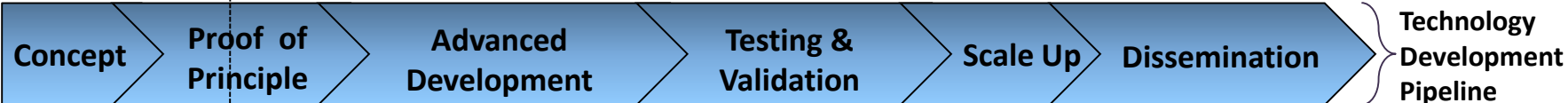
Innovative Molecular Analysis Technologies (IMAT) Program



INNOVATIVE MOLECULAR ANALYSIS TECHNOLOGIES

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.



R21 ≤\$400k over 3 years direct cost support

- Feasibility/Proof-of-principle study
- Highly innovative technology
- No preliminary data required

R33 ≤\$900k over 3 years direct cost support

- Advanced development & validation phase
- Demonstration of transformative utility
- Requires proof of feasibility

R43

≤ \$225k over 6m total cost support

- Feasibility study
- Clear commercial potential

R44

≤ \$1.5M over 2 years total cost support

- Development & (regulatory) validation
- Manufacturing & marketing plan
- Requires proof of feasibility and commercialization plan
- Demonstration of transformative utility

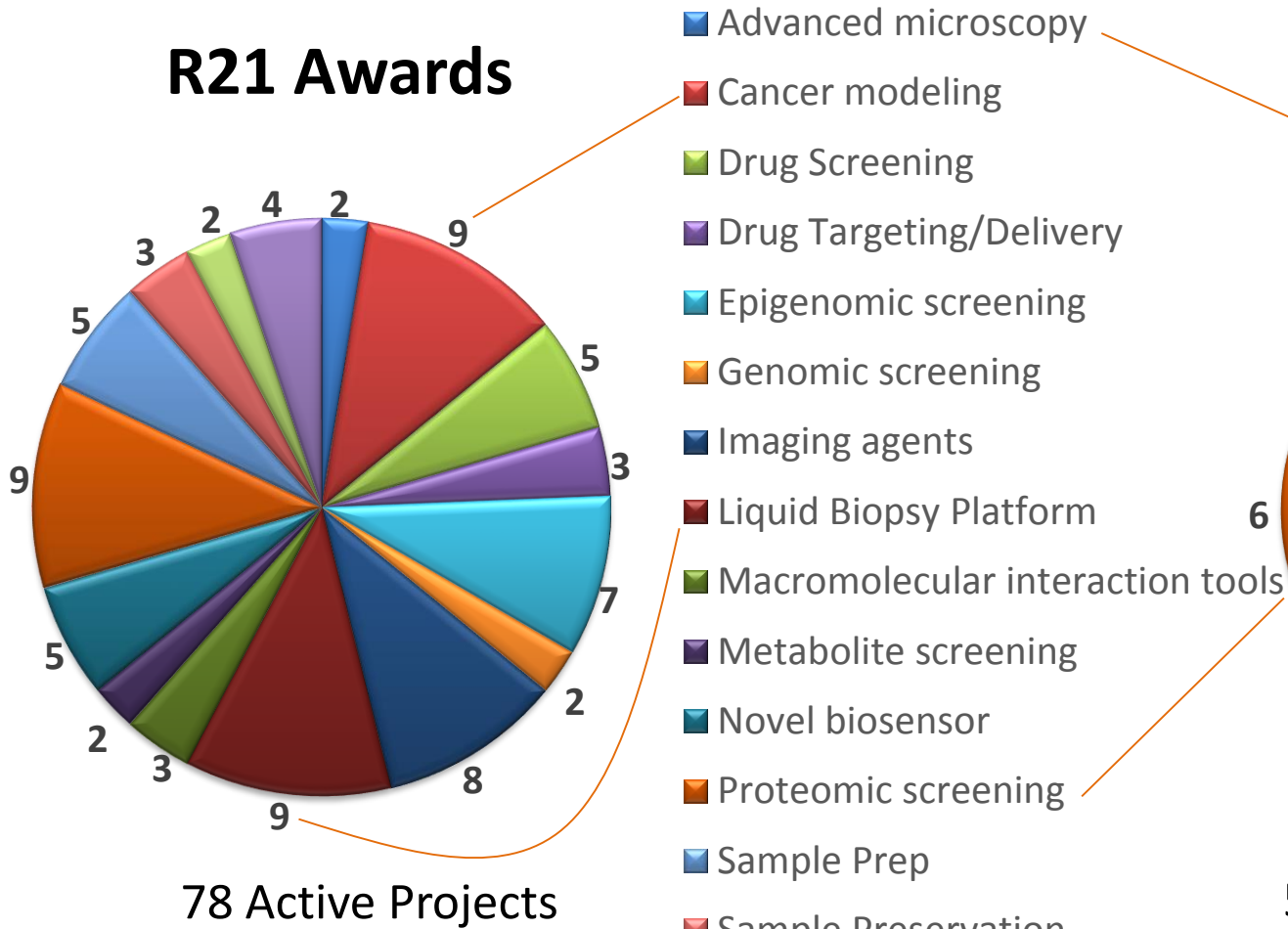
Fast-Track

Active IMAT Portfolio Breakdown

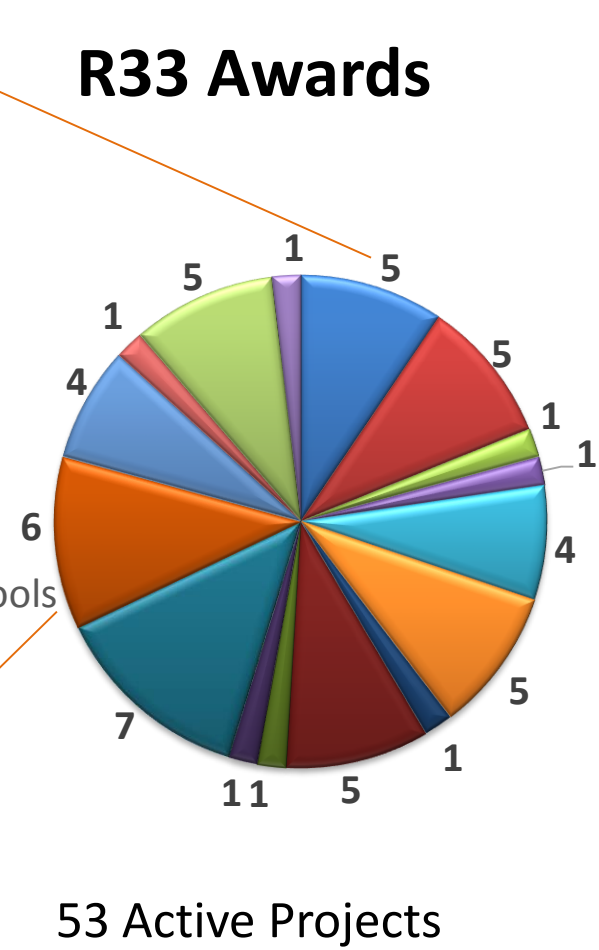


INNOVATIVE MOLECULAR
ANALYSIS TECHNOLOGIES

R21 Awards



R33 Awards



- Advanced microscopy
- Cancer modeling
- Drug Screening
- Drug Targeting/Delivery
- Epigenomic screening
- Genomic screening
- Imaging agents
- Liquid Biopsy Platform
- Macromolecular interaction tools
- Metabolite screening
- Novel biosensor
- Proteomic screening
- Sample Prep
- Sample Preservation
- Single Cell Analysis
- Transcription screening

IMAT-ITCR Collaboration Opportunities



INNOVATIVE MOLECULAR
ANALYSIS TECHNOLOGIES

- Scientific tool priorities
 - Tumorigenicity (esp. interactome/pathway analyses)
 - Tumor heterogeneity (esp. pairing imaging and molecular profiling with single-cell resolution)
 - Leverage existing NCI efforts, prioritize translation efforts with clinical potential
 - More sophisticated statistical methods for biomarker discovery
- Targeted challenges
 - Opportunities for repurposing tools
 - Improving awareness of existing efforts
 - Identifying appropriate support mechanisms
 - Organize future discussions around technologies rather than scientific need to identify pilot projects