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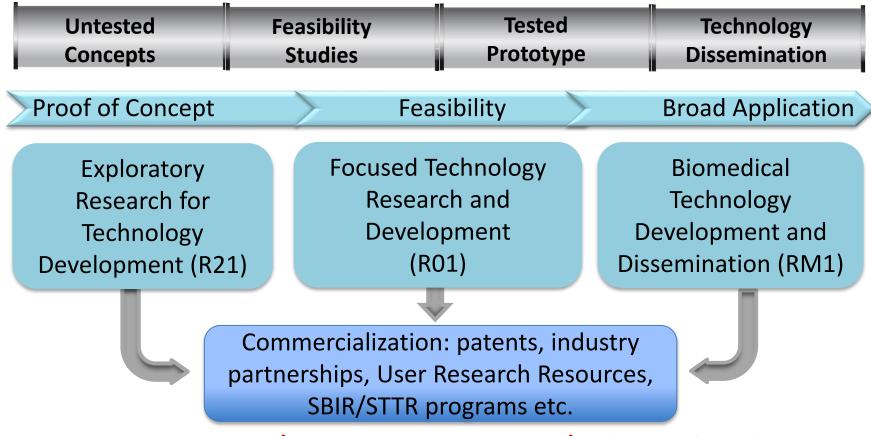


NIGMS Technology Development (R21 and R01) Program Funding Opportunity Announcements (FOAs)

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NIGMS Funding Opportunities for the Biomedical Technology Pipeline

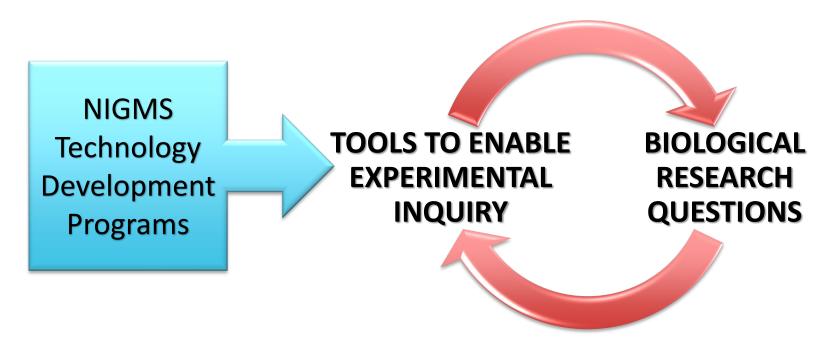


From Untested Concepts to Broad Dissemination





Technology Development Enables Biological Discoveries

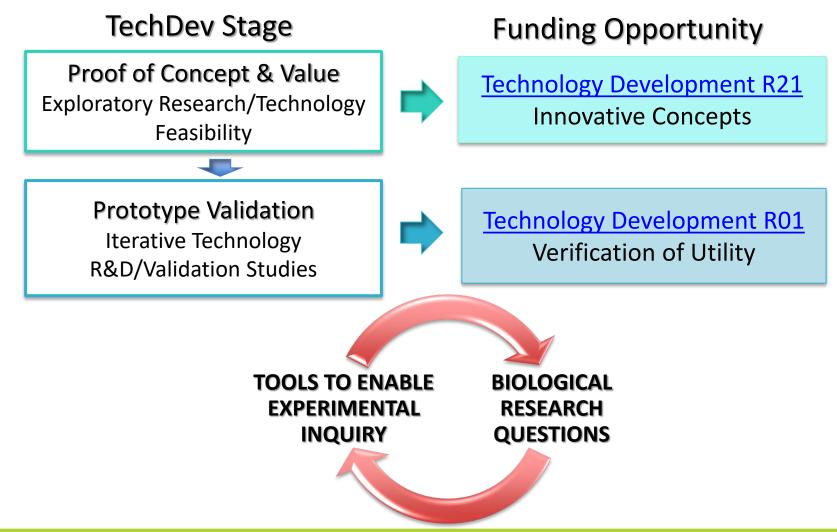


- Technology enables new approaches to addressing biological and biomedical research questions
- Challenging biological and biomedical questions can identify technological needs and emerging technological opportunities





NIGMS Funding Opportunities for Early-Stage Technology Development







Funding Opportunity Announcements (FOAs)

PAR-22-126 (R21)

PAR 22-127 (R01)

New Applications only NO resubmission

New and Renewal Applications NO resubmission ONE renewal only

Standard Receipt Dates





TechDev R21/R01 Program Objectives

Both FOAs support applications that are focused on INNOVATION rather than feasibility, with the POTENTIAL to ADVANCE biomedical research

PAR-22-126 (R21)

• Evaluate untested concepts

- Establish feasibility
- Must not have already been developed in the literature or with preliminary data

Develop technologies adequately to address biological questions

PAR 22-127 (R01)



TechDev R21/R01 Application Characteristics

- Focus on technology development
- Address a technology need or emerging technological opportunity
- DO NOT apply technology to new biological questions
- Adhere to the mission of a participating NIH Institute (<u>NIGMS</u>, <u>NIA</u>, <u>NCI</u>)

Other NIH Institutes and Centers also support technology development through the NIH Parent R21 or R01 and EBRG or BRG





TechDev R21 – Establish Feasibility and Proof of Concept

- Two-year grants that support technology development at a conceptual stage
- Technology developed is non-obvious and will be a significant advance over state of the art
- Technology has not been tested for feasibility No Preliminary Data Allowed
- Only New applications are accepted No resubmissions





TechDev R21 Review

Broad utility for biomedical research

Non-obvious, significant advance over state-of-the-art

High level of risk appropriate for exploratory research

Conceptual – not yet supported by data - Published or unpublished data that forecast project objectives or support proof of concept are not allowed

Validated with well-characterized biological models or systems – no biological, hypothesis-driven research

Well-defined, measurable milestones and objectives that establish feasibility





TechDev R01 – Focused Technology R&D

- Projects optimize and validate new technologies
- Technology developed is a significant advance over state of the art and will have broad utility for biomedical research
- Tech Dev R01 is for technologies with established feasibility that require further work to produce a useful prototype.
- Only New applications are accepted No resubmissions
- TechDev R01 may only be renewed once under this FOA, and may also be renewed under the Parent R01





TechDev R01 Review

Broad utility for biomedical research

Significant advance over state-of-the-art

Potential impact on biomedical research commensurate with risk

Feasibility supported by preliminary data

Validated with well-characterized biological models or systems – biological, hypothesis-driven research aims are not allowed

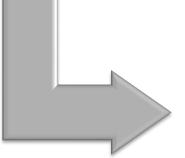
Well-defined, measurable milestones and objectives that establish readiness for biomedical research applications





NIGMS Technology Development Programs

NIGMS TechDev R21/R01 Program Develop tools to enable experimental inquiry without addressing biological questions



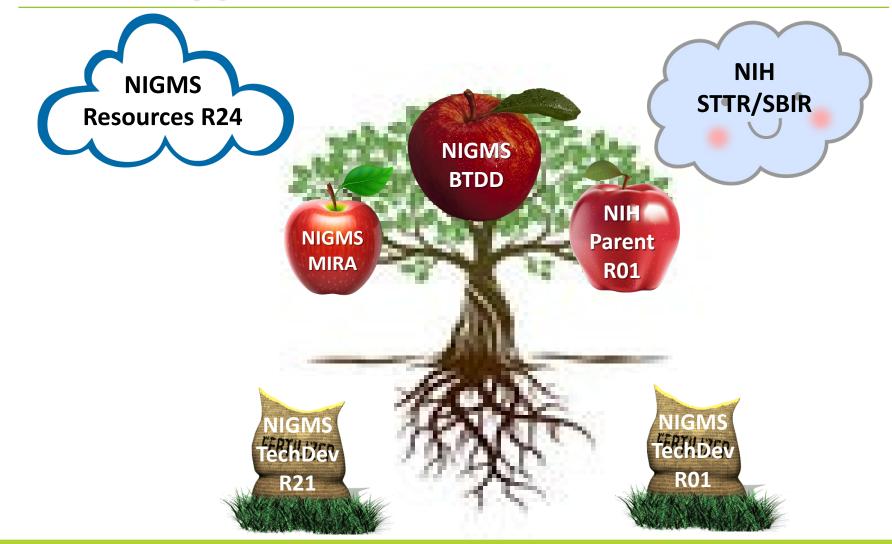
- Address biological questions
- Disseminate technology

NIH Parent R01, STTR/SBIR and more





NIGMS Support of TechDev and Dissemination



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National Institute of General Medical Sciences

Send your questions to

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