



2021-2022 COLUMBIA LIFE SCIENCE ACCELERATORS

BIOMEDICAL ENGINEERING TECHNOLOGY ACCELERATOR (BIOMEDX)

TRANSLATIONAL THERAPEUTICS RESOURCE (TRx)

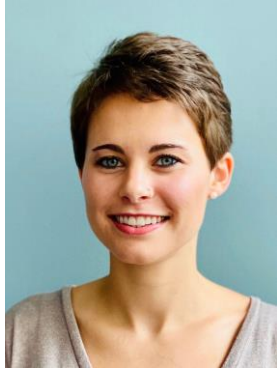
ACCELERATING CANCER THERAPEUTICS (ACT)

Information Session

November 2021

Program Staff

 COLUMBIA | BIOMEDX
Biomedical Engineering Technology Accelerator



Meghan Pinezich, MS
Program Manager

 COLUMBIA | IRVING INSTITUTE FOR CLINICAL
AND TRANSLATIONAL RESEARCH
TRANSLATIONAL
THERAPEUTICS ACCELERATOR



Maria Rahmany, PhD, MBA
Program Manager

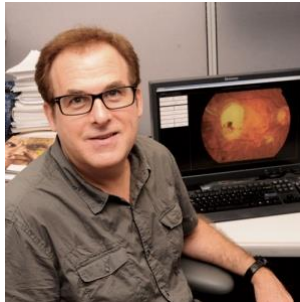
 COLUMBIA | ACT
Accelerating Cancer Therapeutics



Emer Smyth, PhD
Program Director



Paul Sajda, PhD
Dept. of Biomedical Engineering



Andrew Laine, PhD
Dept. of Biomedical Engineering

Columbia L2M Team:



Jack Steele



Carter Schmitt

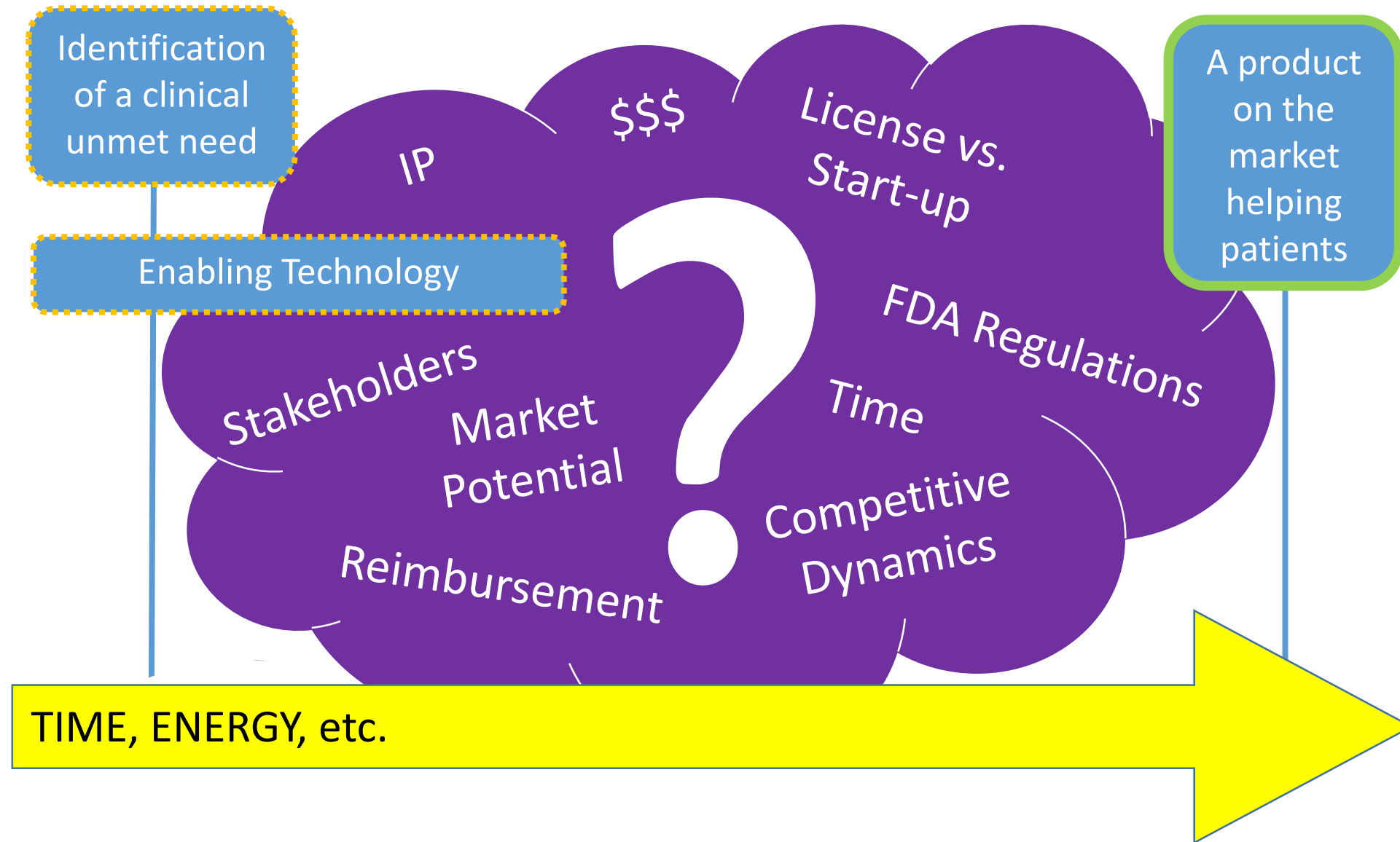


Dmytro Pokhylko, MSc

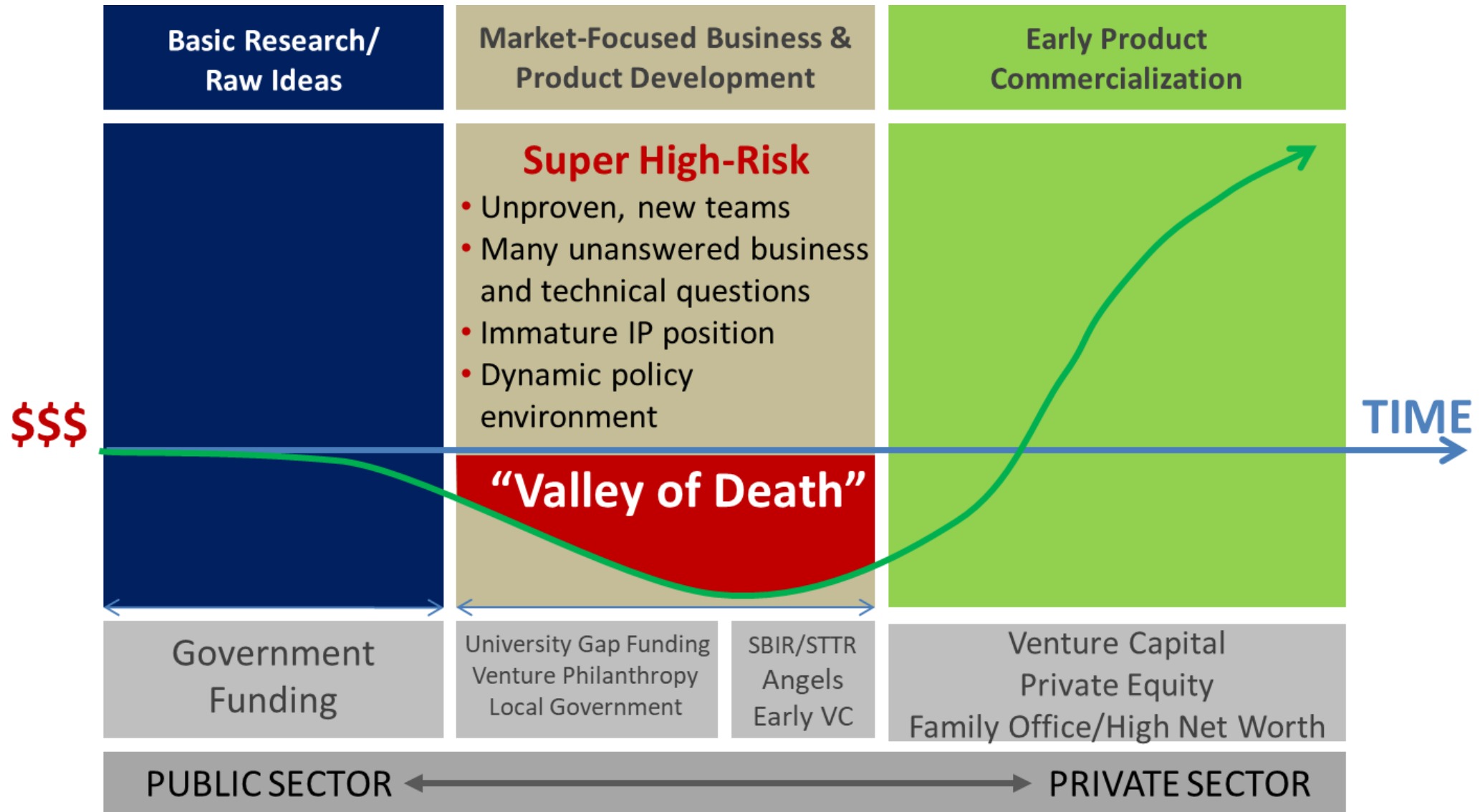
Program Goal

The goal of these programs is to translate outstanding basic science discoveries at Columbia, from the lab to the market through funding, education, partnership, and mentorship.

From Idea to Market



Bridging the "Gap"



CALL FOR PRE-PROPOSALS

Project funding, education and support for interdisciplinary teams working to advance innovative ideas with the potential to positively impact health outcomes.

 COLUMBIA | BIOMEDX
Biomedical Engineering Technology Accelerator

 COLUMBIA | IRVING INSTITUTE FOR CLINICAL
AND TRANSLATIONAL RESEARCH
TRANSLATIONAL
THERAPEUTICS ACCELERATOR

 COLUMBIA | ACT
Accelerating Cancer Therapeutics

- **Interdisciplinary, cross-departmental** accelerator programs aimed at supporting and catalyzing health innovation.
- Goal: Bring cutting-edge ideas out of the lab to benefit human health and society

Program Sponsors Include:

 COLUMBIA UNIVERSITY
MEDICAL CENTER

 COLUMBIA | IRVING INSTITUTE FOR CLINICAL
AND TRANSLATIONAL RESEARCH

 COLUMBIA | ENGINEERING
The Fu Foundation School of Engineering and Applied Science

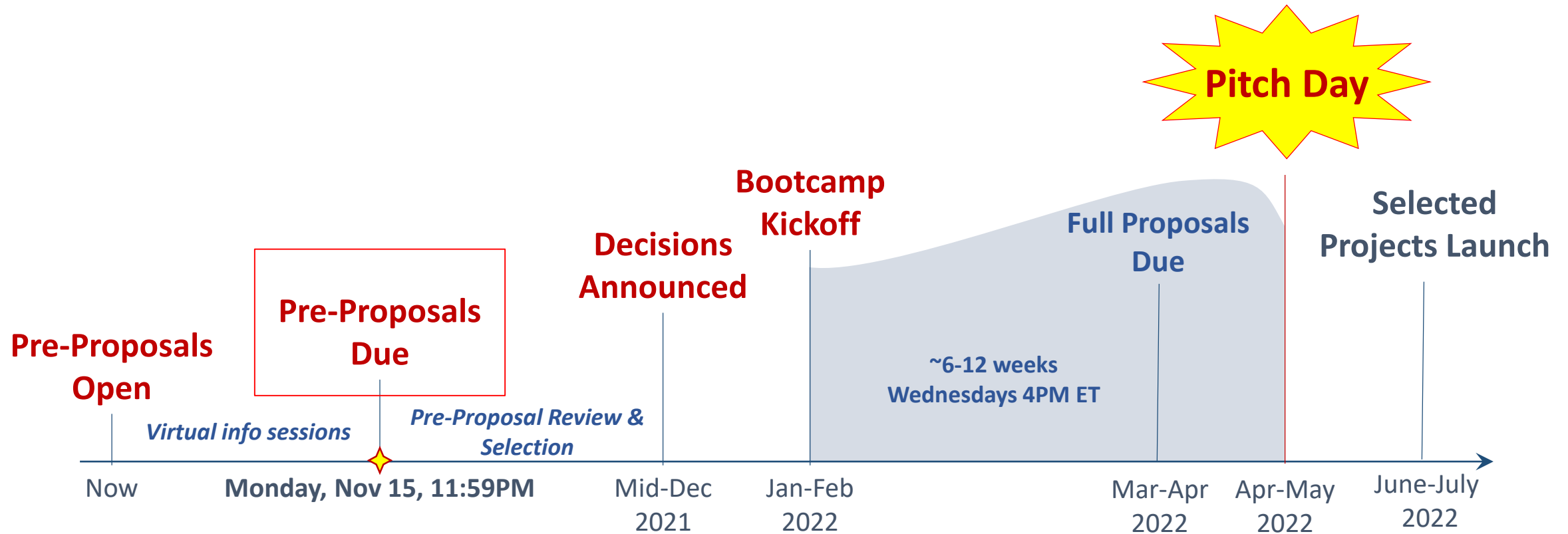
 COLUMBIA | TECHNOLOGY VENTURES

CTSA Clinical & Translational[®]
Science Awards

 COLUMBIA | Lab-to-Market
Accelerator Network

PRE-PROPOSALS DUE: NOV 15, 2021

Applications due: Monday, November 15, 11:59PM ET



<https://ColumbiaLSA.submittable.com/submit>

Areas of Focus

 COLUMBIA | BIOMEDX
Biomedical Engineering Technology Accelerator

- Technologies that may have direct impact on human health (e.g., medical devices, diagnostics, software, platform technologies, coordination of care, remote medicine, etc.)
- Discovery research will not be considered

 COLUMBIA | IRVING INSTITUTE FOR CLINICAL
AND TRANSLATIONAL RESEARCH
TRANSLATIONAL
THERAPEUTICS ACCELERATOR

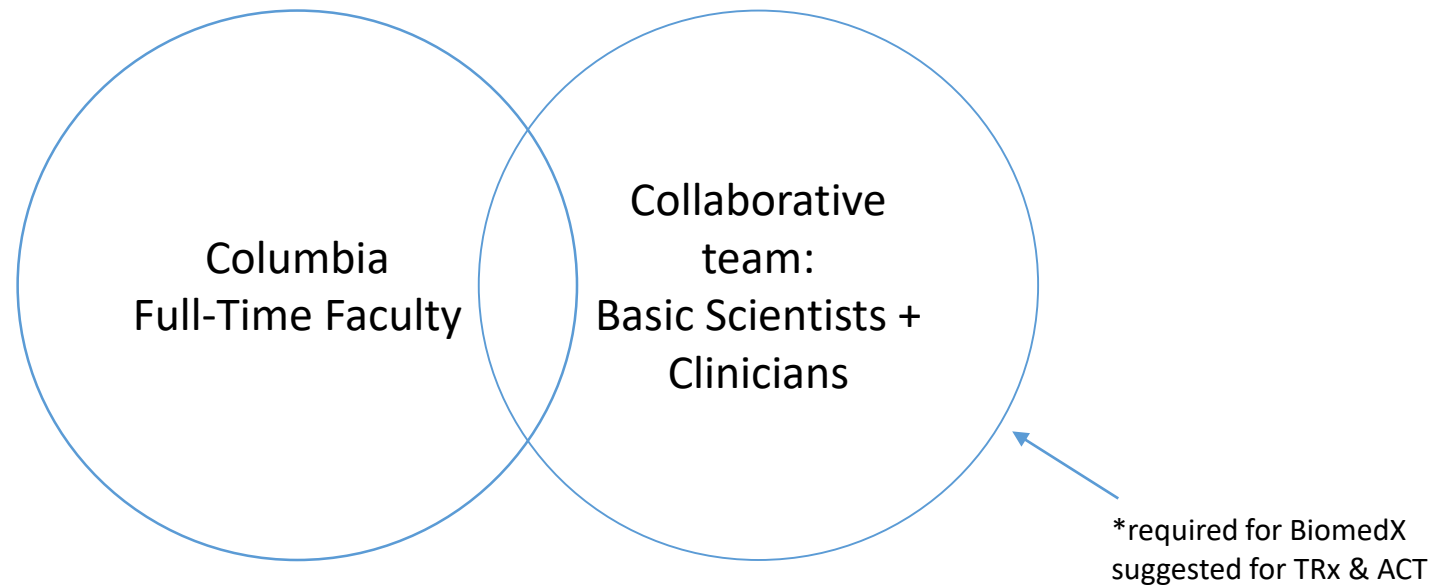
- Novel Therapeutics and treatment modalities
- Indication agnostic
- Early stage to clinical stage projects

 COLUMBIA | ACT
Accelerating Cancer Therapeutics

- Oncology focused therapeutics
- Early stage to clinical stage projects

Program Eligibility

Accelerator programs focus on **translational projects** that address a clear unmet medical need and have a pathway towards commercialization.



Graduate students and post doctorate trainees can act as project leads with permission from the principal investigators (PIs)

Part of a Larger Ecosystem of Accelerators

Program	Funding	Focus	Target Scope
Biomedical Accelerator (BioMedX)	Mix (Foundations → CU)	Biomedical engineering	CU Faculty
Translational Therapeutics Accelerator (TRx)	Mix (NIH, CU)	Therapeutics	CU Faculty
Accelerating Cancer Therapeutics (ACT)	Mix (NIH, CU)	Oncology therapeutics	CU Faculty
NYS Biodefense Fund	Public (NYS ESD)	Pandemic preparedness	New York State
CU-NYU-Takeda Alliance	Private (Takeda)	Gastroenterology	CU / NYU Faculty
CU-SDP Oncology Research Alliance	Private (Sumitomo)	Oncology	CU Faculty
Hudson Heights Innovations	Private (Deerfield)	Therapeutics	CU Faculty
Corning Advanced Materials Prize	Private (Corning)	Advanced materials	CU Faculty
CU-IBM Launch Accelerator	Private (IBM)	Deep tech	New York City
“Math Meets Bio”	Private (AlleyCorp)	Computational biology	New York City
CU RTW Rare Diseases Alliance	Philanthropic (RTWCF)	Rare diseases	New York City
NY Foundry	Public (NYSERDA)	Carbon capture	New York State
Cyber NYC (I2F)	Public (NYCEDC)	Cybersecurity	New York City
PowerBridgeNY	Public (NYSERDA)	Clean tech	New York State
NYC Media Lab Combine	Public (NYCEDC)	Media and emerging tech	New York City

408

Alumni - teams that went through one of the accelerators

40+

Commercial launches – licenses, companies launched, exits

250

of cash awards to teams

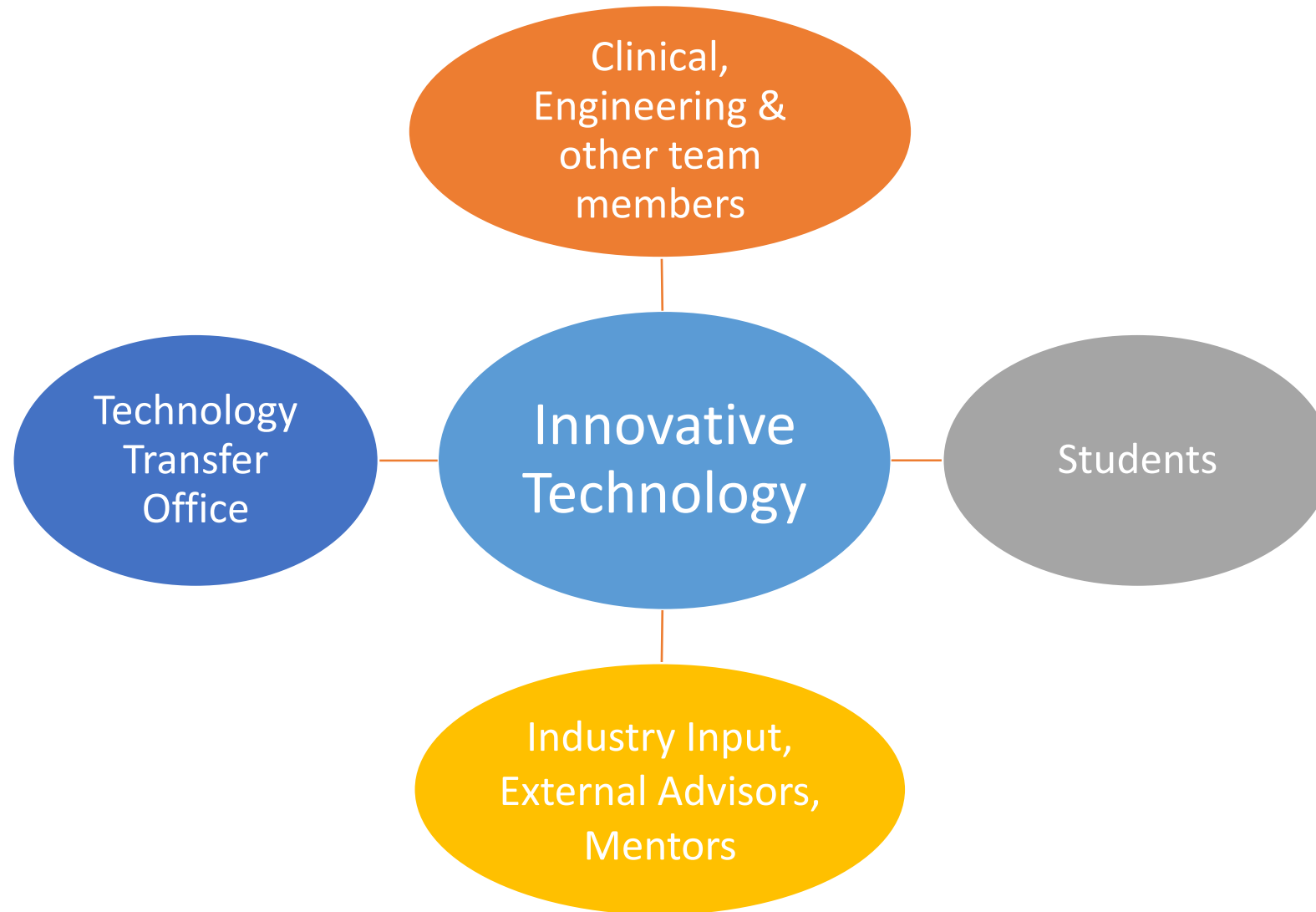
\$16.3M

Funding – awarded to accelerator teams

\$225M

Additional funding – raised by accelerator teams

Intersection of Roles



Key Program Elements

- **Education** to support teams in determining whether their envisioned technology solves a clinical problem and whether there is a business opportunity
- **Business resources** including access to experienced business mentors/advisers and technology transfer support
- **Active project management** to execute projects in a managed process with measurable outcomes that will enable a go/no-go decision by commercial partners
- **Funding** to perform specific, determinative experiments to get to human studies (if required) and to patients as quickly as possible

Program Elements – Cont.

Sample REQUIRED Course Sessions

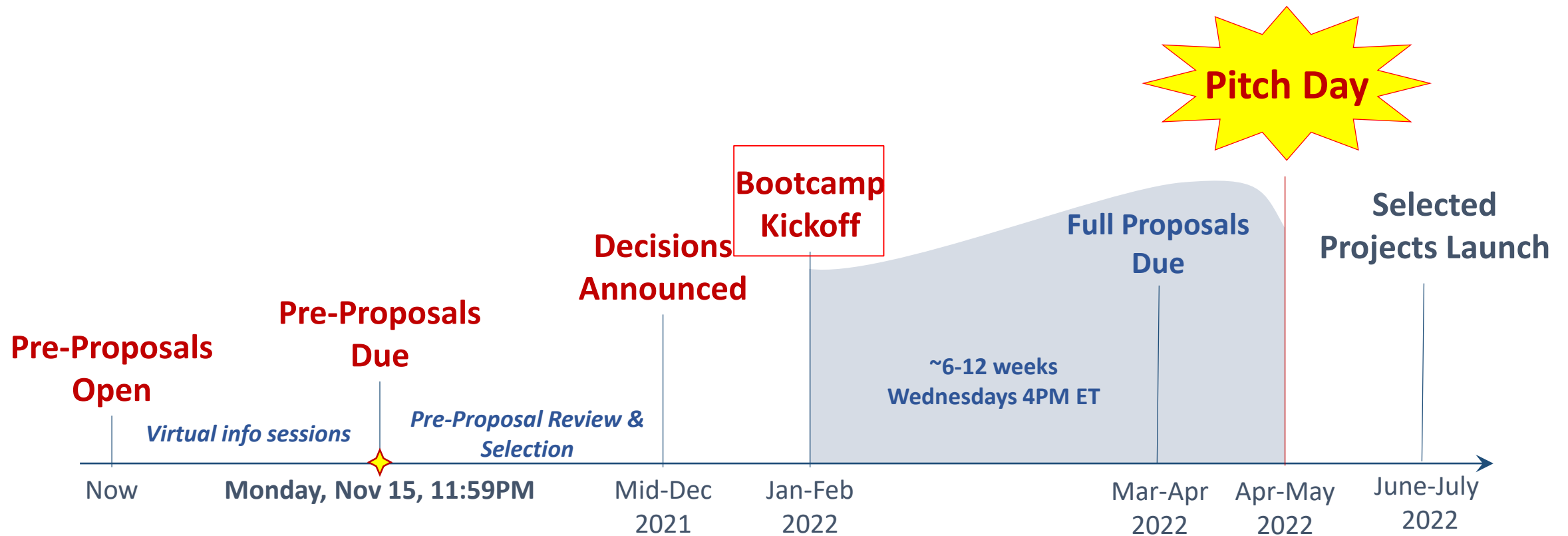
Date	Session
Week 1	Team & Course Introductions
Week 2	Validating the Problem: Unmet Need, Cycle of Care, Stakeholders, Interviews
Week 3	Validating the Business Case: Value Proposition, Market Size, Who Will Pay
Week 4	Commercialization De-Risking Part 1: Technology Validation (Killer Experiment), Intellectual Property
Week 5	Commercialization De-Risking Part 2: Regulatory (IND, IDE) and clinical study considerations. Reimbursement, and Manufacturing
Week 6 & 7	Market Landscape Overview
Week 8	Crafting your Narrative / Storytelling Workshop
Week 9	Pitch Practice



Sample *Supplemental* Course Seminars

Date	Session
Week 10	Commercializing Technology: Licensing and Start-Ups, Negotiations
Week 11	Start-Ups Part 1: Start-Up Financing, IP Due Diligence
Week 12	Investor Perspective: How to Evaluate a Commercial Opportunity
Week 13	Start-Ups Part 2: Start-Up Formation, Key Things to Think About When Starting a Company

Applications due: Monday, November 15, 11:59PM ET



<https://ColumbiaLSA.submittable.com/submit>

Steering Committee Members

- Steering committee members (in collaboration with program staff) are responsible for the **evaluation and selection** of full proposals and final awardee teams
- They represent a wide array of clinical, academic, and industry experts including (but not limited to):

AI SLING
CAPITAL



POWDER | GATE



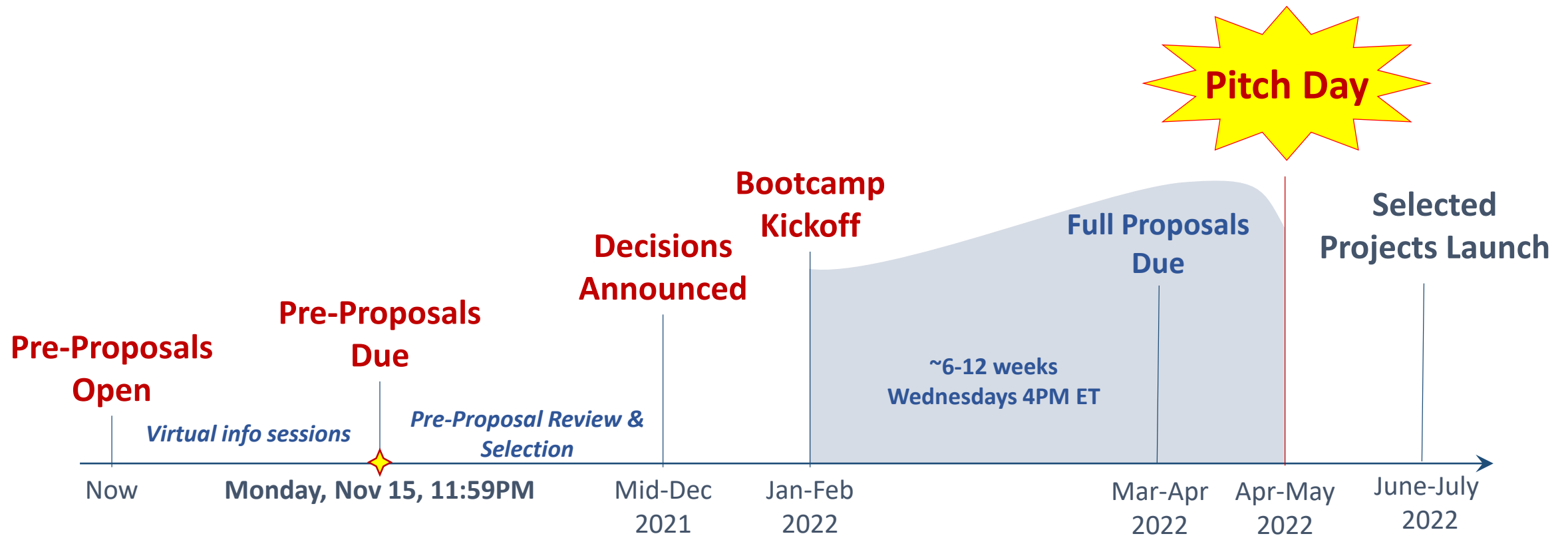
DEERFIELD®
Advancing Healthcare®



Columbia Technology Ventures

- Prior to applying, we suggest you discuss the application and project with your Columbia Technology Ventures licensing officer
- If you do not have a licensing officer, please reach out to **techventures@columbia.edu**

Applications due: Monday, November 15, 11:59PM ET



<https://ColumbiaLSA.submittable.com/submit>

Questions? Contact L2M@ctv.Columbia.edu