Columbia Lab-to-Market Accelerator Network

ANNUAL REPORT
2023 - 2024

ABOUT L2M

<u>The Columbia Lab-to-Market (L2M) Accelerator Network</u> serves as a framework to successfully develop, launch, and execute initiatives that help commercialize academic research. Since 2008, Columbia University has founded or co-founded multiple accelerator programs encompassing medical (therapeutics, diagnostics, devices, etc.), clean energy, advanced materials, artificial intelligence, cybersecurity, pathogen surveillance, blockchain, smart cities, and digital media technologies, providing **$51.5M to early-stage deep-tech teams.**

L2M is a collective model for providing core infrastructure and resources to programs which support early-stage university teams as they move technologies forward. By building on industry-specific core competencies through their participation in the network, programs are able to prioritize focus on the provision of domain expertise to scientific teams.

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L2M NETWORK
2011 - TODAY

672 Alumni Teams

$51.6M Award Funding

356 Cash Awards

Program	Focus Areas	Target Scope
Accelerating Cancer Therapeutics (ACT)	Cancer-related Therapeutics	CU Faculty
Biomedical Engineering Technology Accelerator (BiomedX)	Biomedical Engineering	CU Faculty
Carbontech Development Initiative (CDI)	Carbon Capture	New York State
Corning Advanced Materials Prize	Advanced Materials	CU Faculty
Columbia - RTW Rare Diseases Alliance	Rare Diseases	New York City
Columbia - IBM Launch Accelerator	Deep Tech	New York City
CU - NYU - Takeda Alliance	Gastroenterology	CU / NYU Faculty
CU - SDP Oncology Research Alliance	Oncology	CU Faculty
Cyber NYC (I2F)	Cybersecurity	New York City
Hudson Heights Innovation	Therapeutics	CU Faculty
'Math Meets Bio' Columbia - AlleyCorp Collaboration	Computational Biology	New York City
Materialize New York	Manufacturing	New York City
NSF Engineering Research Center for Smart Streetscapes (CS3) VALIDATE Accelerator	Smart Cities	National
NYC Media Lab Combine	Emerging media tech	New York City
NYS Biodefense Commercialization Fund	Pandemic Preparedness	New York State
PowerBridgeNY	Clean Tech	New York State
PORTENT - POC Diagnostics Accelerator	Point-of-Care Diagnostics	National
Translational Therapeutics Accelerator (TRx)	Therapeutics	CU Faculty

YEAR IN REVIEW

Dear Friends of Columbia Lab-to-Market (L2M) Accelerator Network,

As we conclude the 2023-2024 cycle of L2M programming, we are excited to share some noteworthy milestones and updates.

The Columbia Life Science Accelerators (LSA) Program (encompassing **Columbia Biomedical Engineering Technology Accelerator**, **Translational Therapeutics Accelerator**, **and Accelerating Cancer Therapeutics**, and joined by **Puerto Rico's ENTRUST Network**) administered another successful year of the Lab-to-Market bootcamp, during which each of the 31 participating faculty-led teams was paired with Columbia Biomedical Engineering and Business School students to explore product-market fit and commercial viability of their research. Joining forces with CTV, the LSA programs **awarded $755,250 in pilot funding to 12 faculty-led teams** to advance their innovations from their labs towards commercialization.

In partnership with Mount Sinai Innovation Partners (MSIP), we administered the third round of ESD's **New York State Biodefense Commercialization Fund**, which prioritized applicants developing promising diagnostic technologies, including point-of-care diagnostics, novel sequencing and pathogen surveillance tools, and processes to improve manufacturing and access to diagnostics. Award decisions are in the final stages of deliberation and expected to be announced in the coming weeks.

This year, we **launched three new programs** supporting early-stage deep-tech innovation:
1. We partnered with deep-tech VC fund **Material Impact** to launch the **Materialize New York Accelerator** to advance the development of deep tech teams from NYC-based universities. 11 teams from Columbia, CUNY, and NYU were selected to participate in a hands-on commercialization bootcamp led by Material Impact and supported by Columbia Business School Venture Fellows.
2. L2M led the launch of the inaugural cycle of the **NSF Engineering Research Center for Smart Streetscapes (CS3) VALIDATE Accelerator**, a 9-week non-dilutive program focused on building and scaling successful early-stage teams developing innovations for urban environments. Six teams from Columbia and Florida Atlantic University leveraged technologies like IoT, computer vision, next-gen comms, drones, and AI/ML to develop innovative life-saving applications across flood detection, smart intersections, and public safety.
3. In partnership with Cornell University, L2M kicked off the **PORTENT Accelerator**, a program focused on advancing point-of-care diagnostics technologies in low- and middle-income countries (LMICs), through technology development, human validation, user and developer training and rotations, and commercialization. The workshop covered relevant topics, ranging from practical considerations for developing sustainable diagnostics in LMICs to in-depth discussions on venture capital investments in the global health sector. It concluded with a technical showcase, highlighting the teams' innovative solutions and fostering valuable collaborations.

In addition to programmatic mentorship, education, and funding opportunities, we continued to partner with industry experts, like Osage University Partners, to offer several Business Operations Workshops to our alumni. These sessions provided first-hand guidance on leadership training and executive coaching, VC fundraising, and additional aspects of standing up new deep tech ventures. Select recordings of L2M workshops are available on the **L2M Knowledge Bank**.

Looking ahead, we have several new programs in the works and will share additional details about them in the coming months. In the following pages, we share additional details and milestones from L2M's 2023-2024 cycle programs. If you are interested to learn more about or engage with any of our programs or teams, please **reach out** or complete this **intake form** if you or your organization would like to get involved and explore collaboration opportunities with Columbia L2M.

We look forward to continuing and deepening our engagement with you in the coming cycle. In the meantime, enjoy what's left of summer!

Best,

Dmytro Pokhylko, Director
Jack Steele, Senior Program Associate
Michelle Lee, Alliance Associate
COLUMBIA LAB-TO-MARKET ACCELERATOR NETWORK

EXISTING PROGRAMS

Columbia Life Sciences Accelerators

31 faculty-led teams participated in the Columbia Life Science Accelerators (Columbia Biomedical Engineering Technology Accelerator, Translational Therapeutics Accelerator, and Accelerating Cancer Therapeutics) for a virtual business validation and life science commercialization bootcamp. The course covered a wide range of life science commercialization topics and prepared teams to identify potential hurdles and opportunities that may arise as they progress through development pathways. **12 finalist teams were awarded a shared total of $755K in pilot funding** to advance their research from the lab into commercial markets.

12
AWARDS

$755K
in funding

ESD Biodefense Commercialization Fund

In September 2023, Empire State Development (ESD), led by Gov. Kathy Hochul, released a call for applications for the third round of New York's $40 Million Biodefense Commercialization Fund prioritizing startup and academic applicants developing promising diagnostic technologies, including point-of-care diagnostics, novel sequencing and pathogen surveillance tools, and processes to improve manufacturing and access to diagnostics. In response to the call for applications, the program received **32 short proposal applications,** from which a subset were invited to submit long proposals for potential project funding.

With programmatic support from Columbia Technology Ventures and Mt. Sinai Innovation Partners, award decisions are in the final stages of deliberation and expected to be announced in the coming weeks.

NEW
INITIATIVES

Materialize New York Accelerator

The Materialize New York Accelerator aims to advance the development of novel technologies in the New York City area, facilitating the transition of technologies from academic labs to startup formation with a commitment to human impact. With programmatic support from L2M, the Material Impact team delivered the **MaterializeNY Bootcamp** where **11 selected teams** participated in interactive learning sessions and office hours. They were taught how to "de-risk" their innovations through customer identification, product-market fit, market sizing, and milestone assessment across their product lifecycle. MaterializeNY focused on teams led by a faculty and entrepreneurial lead focused on bio-manufacturing and sustainable products, sustainable food and water, data storage and security, robotics, AI, and augmented reality, transportation and mobility, and underrepresented healthcare. **Learn more here**.

NSF Engineering Research Center for Smart Streetscapes (CS3) VALIDATE Accelerator

L2M launched the inaugural <u>CS3 VALIDATE Accelerator Program</u> as part of the <u>NSF Engineering Research Center for Smart Streetscapes (CS3)</u>. Six teams from Columbia and Florida Atlantic University were selected to participate in the 9-week program focused on customer discovery and technical development. Two Ignition Awards were granted: to <u>KeeVeeve</u>, led by Columbia Engineering PhD students Mahshid Ghasemi and Jeremy Johnston, and <u>FLOODSENSE</u>, led by FAU College of Engineering & Computer Science Master's students Aishwarya Jawne and Dan Zimmerman. Each team received the **top award of $10,000** in recognition of their remarkable progress over the program. <u>Learn more here</u>.

PORTENT Accelerator

PORTENT aims to advance promising point-of-care technologies through: technology development, human validation, user and developer training and rotations, and commercialization. The center is enabled by a one-of-a-kind international network of clinical, training, and device development facilities and unique worldwide expertise in point-of-care diagnostics, their application and commercialization. This includes integrated core clinical and validation facilities across four continents – North America (United States – New York City), Africa (Uganda), South America (Ecuador), and Asia (India), enabling the validation of technologies on a global range of populations and with a unique set of users. In coordination with L2M, PORTENT held a **2-day long commercialization workshop for the center's 4 academic teams** on topics ranging from manufacturing considerations to intellectual property. <u>Learn more here</u>.

STUDENT VENTURE ASSOCIATES

The L2M Student Venture Associate (SVA) Program offers a unique opportunity for Columbia University and Barnard College students to gain in-depth experience with university technology commercialization and acceleration efforts.

SVAs work closely with the L2M team, accelerator program managers, and individual teams that are part of accelerator cohorts. They provide operational, marketing, and strategic support to L2M and its teams.

We were so fortunate and thankful to have Murun Jargal, MS in Sustainability Management candidate, Emaan Qazi, MS in Applied Analytics candidate, and Olivia Kwon, BS in Financial Economics & Computer Science candidate, join our team for the 2023-2024 cycle.

Murun supported the administration of the Life Science Accelerator Bootcamp and the Business Operations Workshops, Emaan supported the MaterializeNY and Life Science Accelerators, while Olivia assisted with Center for Smart Streetscapes (CS3).

This summer Murun will intern at Altus Power as an Energy Analyst in Stamford, CT, Emaan will intern at Galaxy Digital as a Trading Summer Analyst in NYC and Olivia will intern at Blackthorn Ventures. We wish them all the best as they continue their academic and professional journeys!

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To lean more about the SVA program and get involved, please visit:

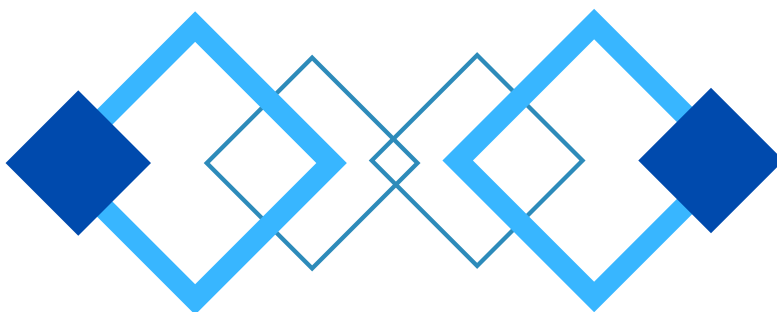## SVA Program Page

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GET INVOLVED

Sponsor, Partner, Mentor

Each Lab-to-Market program is incredibly fortunate to engage excellent sponsors, partners, and mentors from across the early-stage entrepreneurial ecosystem. If you are interested in getting involved please fill out the intake form below.

[INTAKE FORM](#)

Newsletter

To stay up to date on program announcements, updates from cohort teams, and award funding from across the Lab-to-Market landscape, please subscribe to our newsletter.

[SUBSCRIBE HERE](#)