



Battling Cancer: One Lymph Node at a Time

Our Mission:

To develop novel technologies that target inefficiencies in the pathology workflow, reduce healthcare costs and optimize cancer care.

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Colorectal Cancer Statistics

➤ **1.9M** patients diagnosed with colorectal cancer in 2020

➤ **5100+** patients diagnosed with colorectal cancer **every day**

➤ **\$2.8 trillion (USD)** total global economic cost for colorectal cancer

(ASCO, 2022; Chen et al., 2023)

[« Go to cancer.org](#)



American Cancer Society Releases New Colorectal Cancer Statistics; Rapid Shifts to More Advanced Disease and Younger People

Mar 1, 2023

“Diagnoses of people under 55 years of age doubled from 11% (1 in 10) in 1995 to 20% (1 in 5) in 2019.”

≡ **CNN** health Life, But Better Fitness Food Sleep Mindfulness Relationships

Colorectal cancer is rising among younger adults and scientists are racing to uncover why



By Jacqueline Howard, CNN

Updated 10:51 AM EDT, Fri March 24, 2023



Problem

Current Colon Cancer Staging Workflow



Lymph Node Search Process is:

Time Consuming

Expensive

Unreliable

Average **human error**= ~50%
Average **human error** for
neoadjuvant cases = **97%**

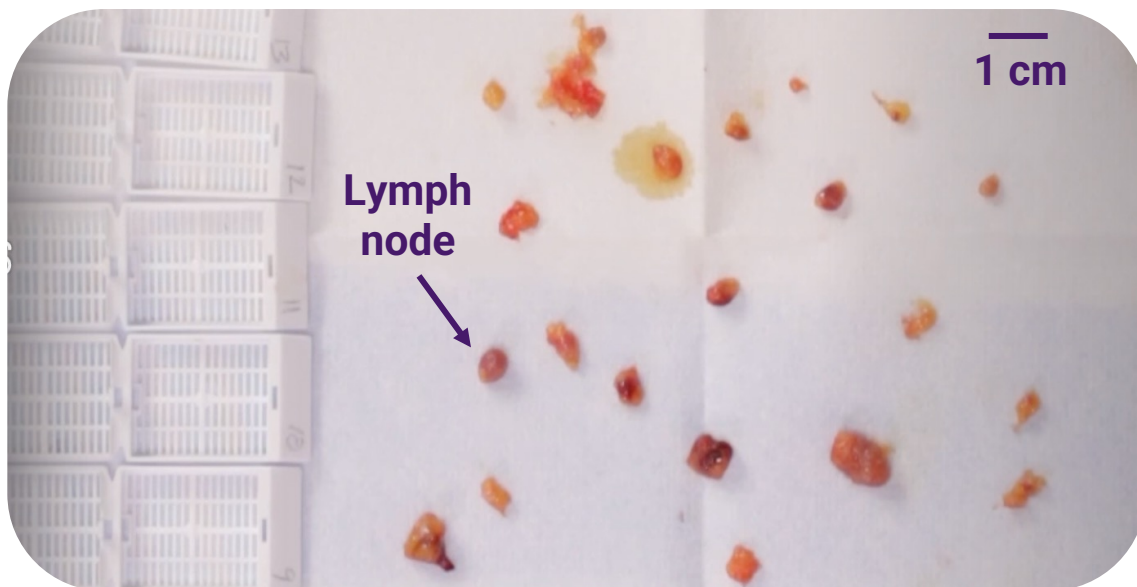
(Biswas et al., unpublished, 2024)



Inaccurate cancer staging
and **improper** treatment



>\$3M/year in
unnecessary costs
for a hospital



Solution Must:

Increase
Productivity

Reduce
Pathology Costs

Reliably Locate
Lymph Nodes

The Lymphonator

Automating the Lymph Node Search Process

Current Pathology Workflow

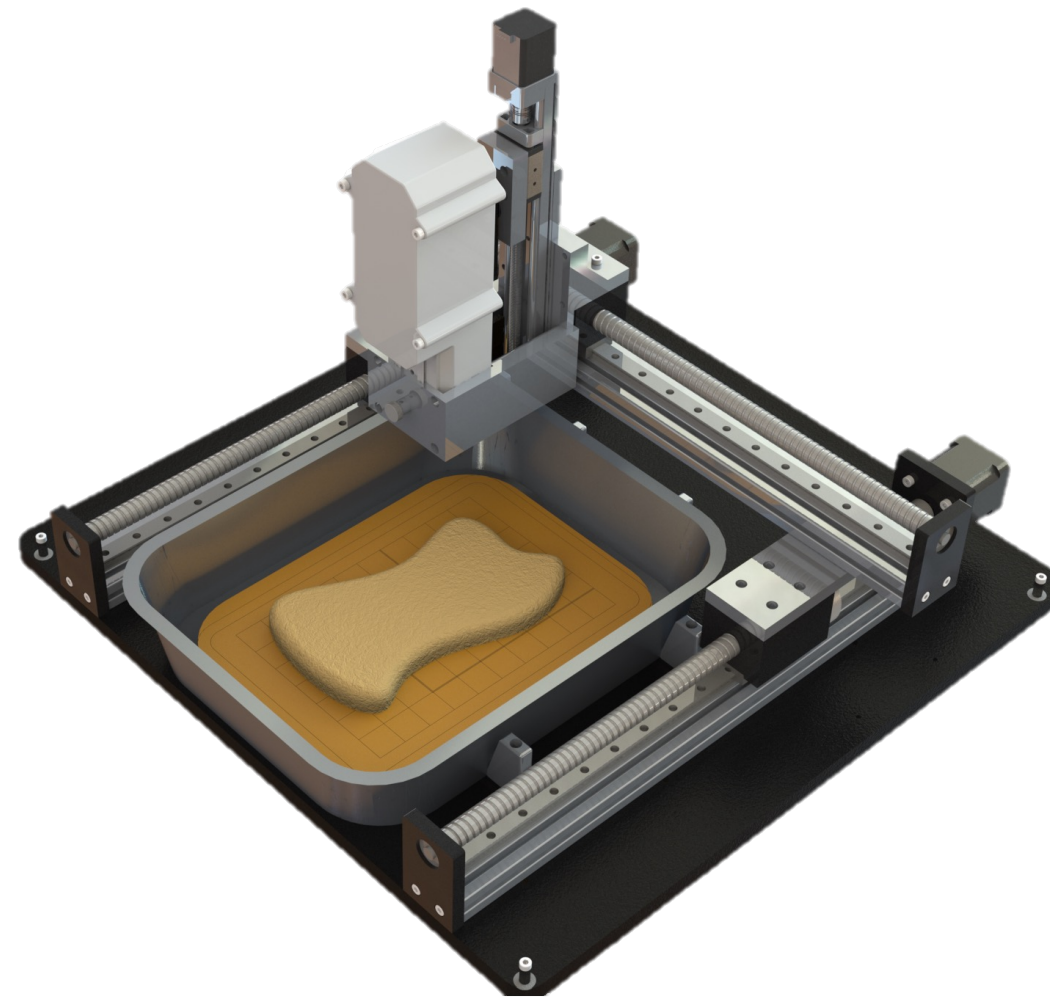
Removal of Colon

Sample Preparation

Manual Palpation

Lymph Node Extraction

Cancer Staging



Beta Prototype (Patent Pending)

Minimal Disruptions to Existing Workflow

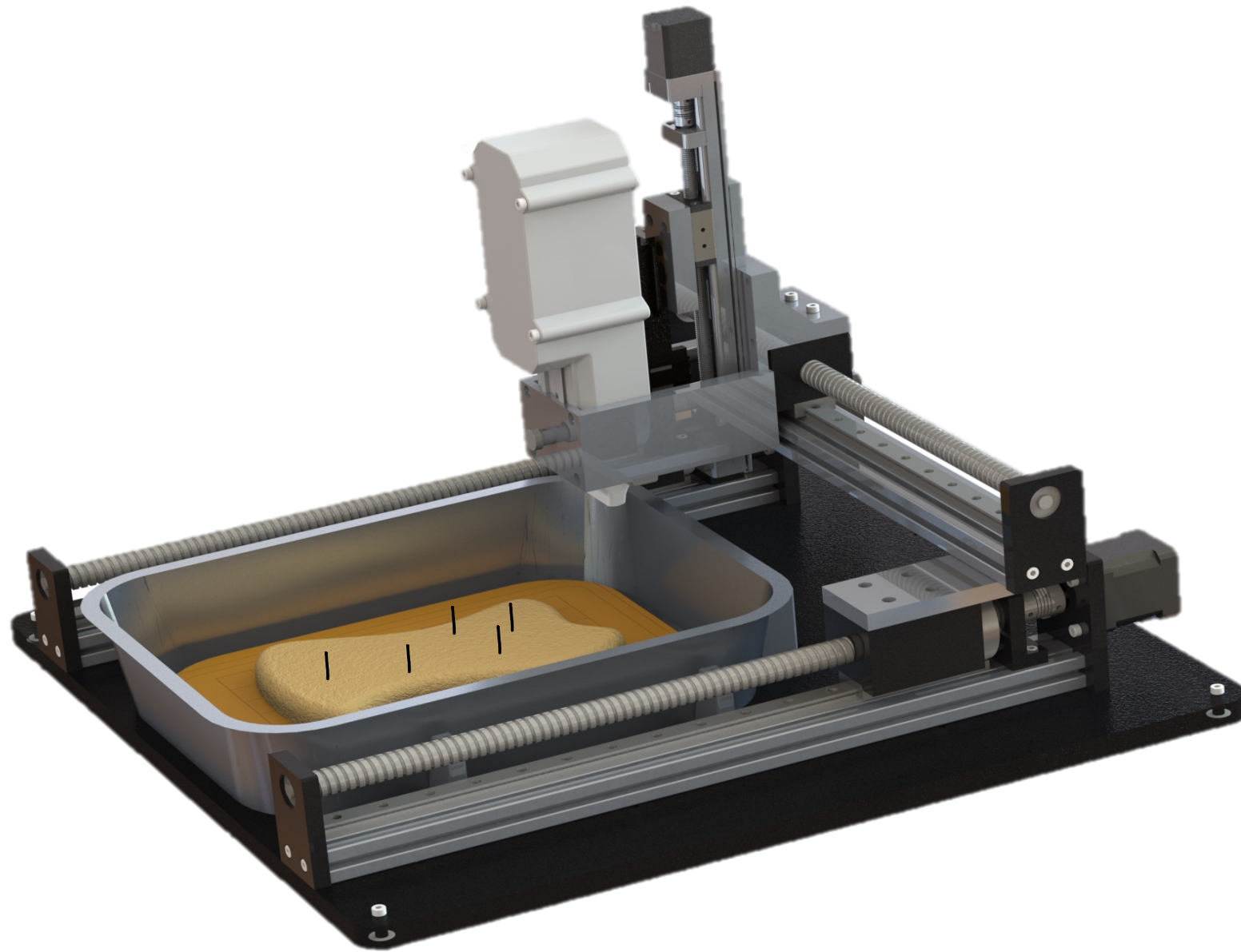
Seamless Workflow Integration

Reduced Costs

Improved Productivity

Better Lymph Node Detection

Regions of interest are pinned



Target regions are displayed to clinicians



Early Performance Metrics

Small lymph nodes (~2 mm) are detectable using the Lymphonator during our human experiments

The Team

The Tenomix Team Combines Pathology, Engineering, Business, and Medicine



Saumik Biswas,
PhD

CEO, Founder
Pathology Scientist,
Entrepreneur

FULLTIME



Eveline Pasman,
MD, PhD

COO, Founder
Physician-Scientist,
Project Manager

FULLTIME



Michael Lavdas,
MEng

CTO, Founder
Mechatronic Systems and
Biomedical Engineer

FULLTIME



Sherif Abdou,
PhD, PEng

CBO, Founder
Entrepreneur,
Mechanical Engineer

PARTTIME

Tenomix Developers

Hardware



Jacob Tryon
PhD

Mechatronics
Engineer

FULLTIME

Software



Nicholas Pehme
BSc

Software Developer,
AI/ML

FULLTIME

Clinical



Matthew Cecchini
MD, PhD

Pathologist at LHSC,
Academic
Collaborator/KOL

Software



Jamie Tremaine
BASc

Former CEO at GestSure
Technologies (computer
vision & deep learning)

Ultrasound



Aaron Fenster
PhD

Globally renowned
imaging expert;
Professor

Sales



RJ McNaughton
BASc

Former Senior
Director Sales at
Becton Dickinson

Business Development



Ying Tam

Former CEO of Mindful
Scientific; MaRS Managing
Director (Health)



Ing Goping
BEng

Former CEO of
Laborie Medical

Current Traction

Clinical engagements in Canada & US

- University Hospital, London, Ontario
- Hamilton Health Science, Hamilton, Ontario
- St. Paul's Hospital, Vancouver, British Columbia
- **Mayo Clinic, Rochester (MN), USA – Paid Pilot**

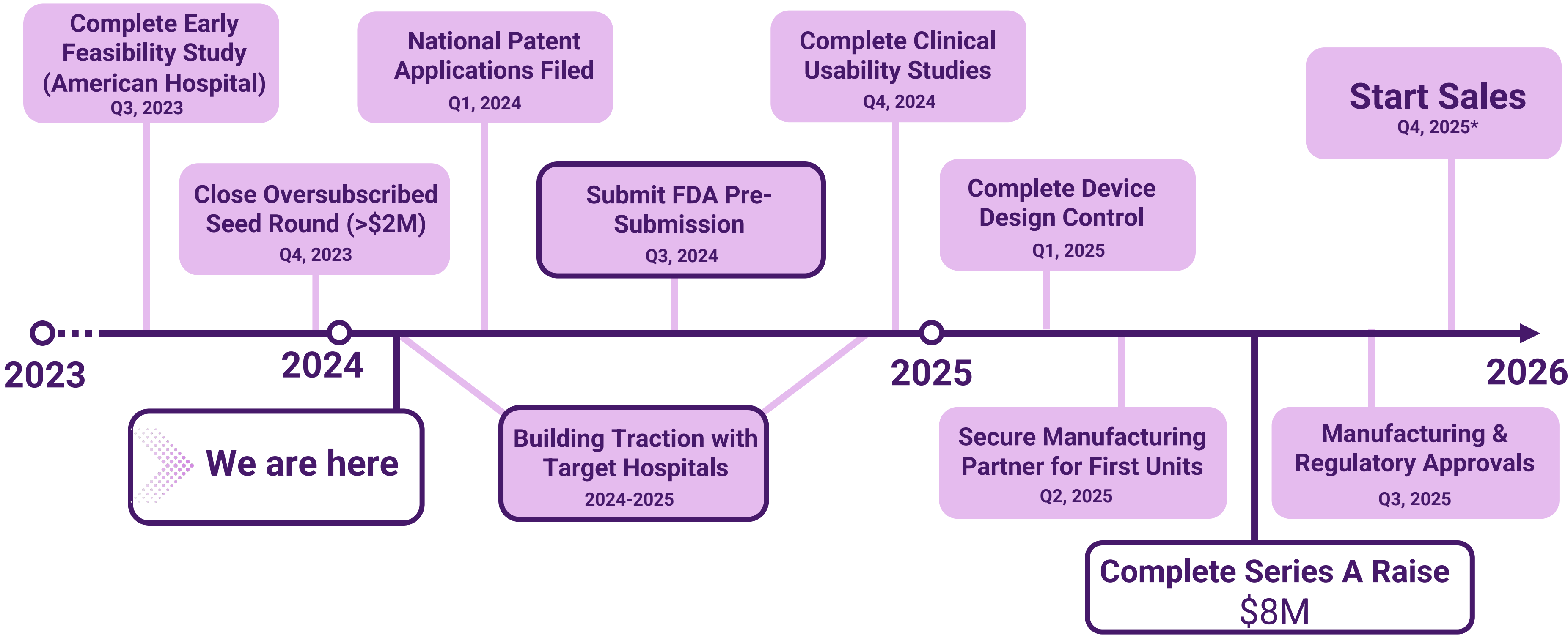
Company milestones (2.5 years)

- **>\$1,270,000** in non-dilutive funding raised
- > 78 stakeholder interviews
- Filed **national patent applications** in **10 regions**
- **Functional beta prototype**
- 4 Prototype feedback sessions with end-users
- Completed **18 hours** of usability testing with **#1 hospital**
- **41 human tissue experiments** to collect images
- Ultrasound OEM support re: image quality

Closed an oversubscribed seed round (\$2.14M)

- Lead investor– **FACIT** for \$1M
- **OCI Life Sciences Innovation Fund** secured (\$500k)
- **OBIO** (\$100K)
- **\$540,000** from angel investors

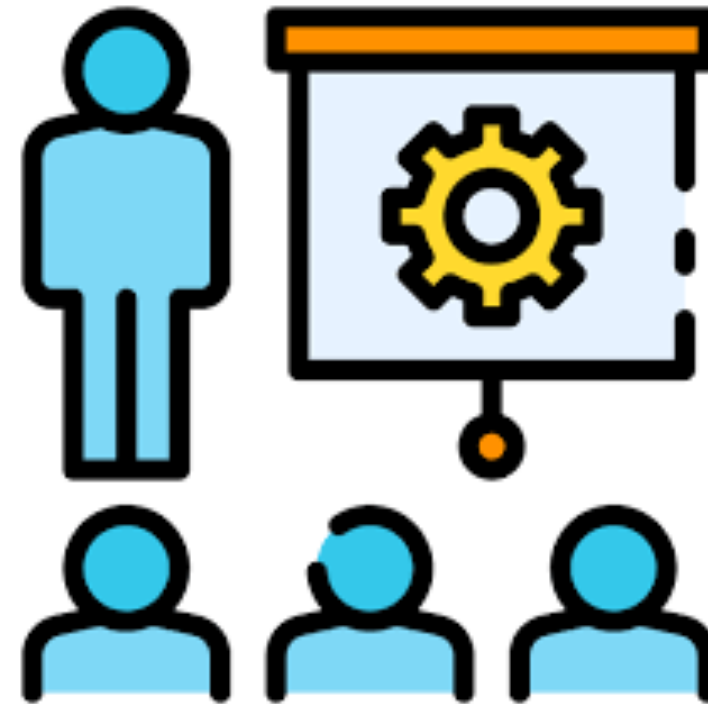
Commercialization Pathway



Why BVZ?



**Top Class Mentors
(life sciences,
investing, and more)**



**Strong
programming &
workshops**



**Support network
& funding
opportunities**

Summary

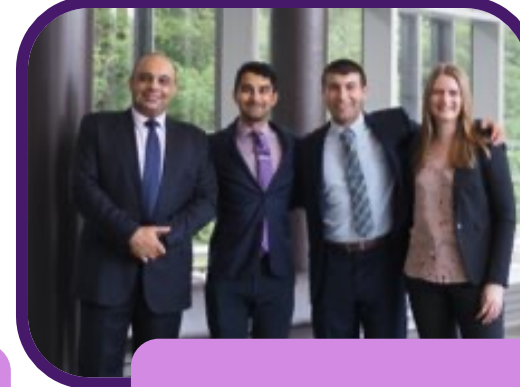
In Loving Memory
Gita Dhar



1963-2010



Validated Need



Dedicated Team

Mayo Clinic, USA
St. Paul's, Vancouver
HHSC, Hamilton
UH, London

Clinical Traction



Scalability

Asks

- **Leads for software developer recruitment**
- **Connect with the pathology or procurement team at William Osler**
- **Connect with Series A Investors**

Join Us!

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