

# WORLDdiscoveries® Asia

## Introduction



## Section 1

# Western University



# Western University

## Background



**Leading**  
Research-intensive  
University



Over **400** Majors,  
Minors & Specializations

**120**  
Professional and Graduate  
Programs

Founded in  
**1878**



**1,500**  
Full-time Faculty



# Western University

## Strengths & Signature

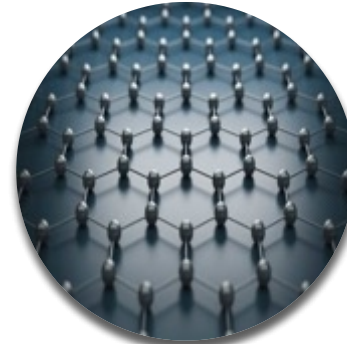
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Neuroscience,  
Brain & Mind



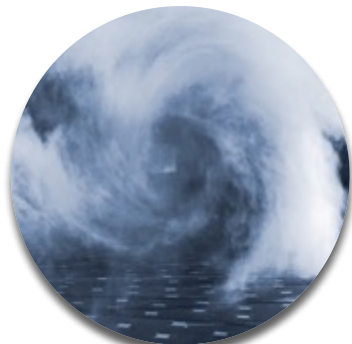
Biomedical Imaging



Materials  
& Biomaterials



Environmental  
Sustainability & Green  
Energy



Wind Engineering  
& Natural Disaster  
Mitigation



Philosophy of Science



Musculoskeletal Health



Planetary Science  
& Exploration





# Western University

## Strengths & Signature

### Neuroscience, Brain & Mind

- 40+ years of global neuroscience expertise, 100+ active researchers
- \$66M BrainsCAN initiative with McGill
- Western Cluster of Research Excellence in Cognitive Neuroscience
- **Brain and Mind Institute**
  - 8 Canada Research Chairs
  - Recruited CERC, Adrian Owen, from University of Cambridge
  - World's premier centre for high-field MR neuroimaging

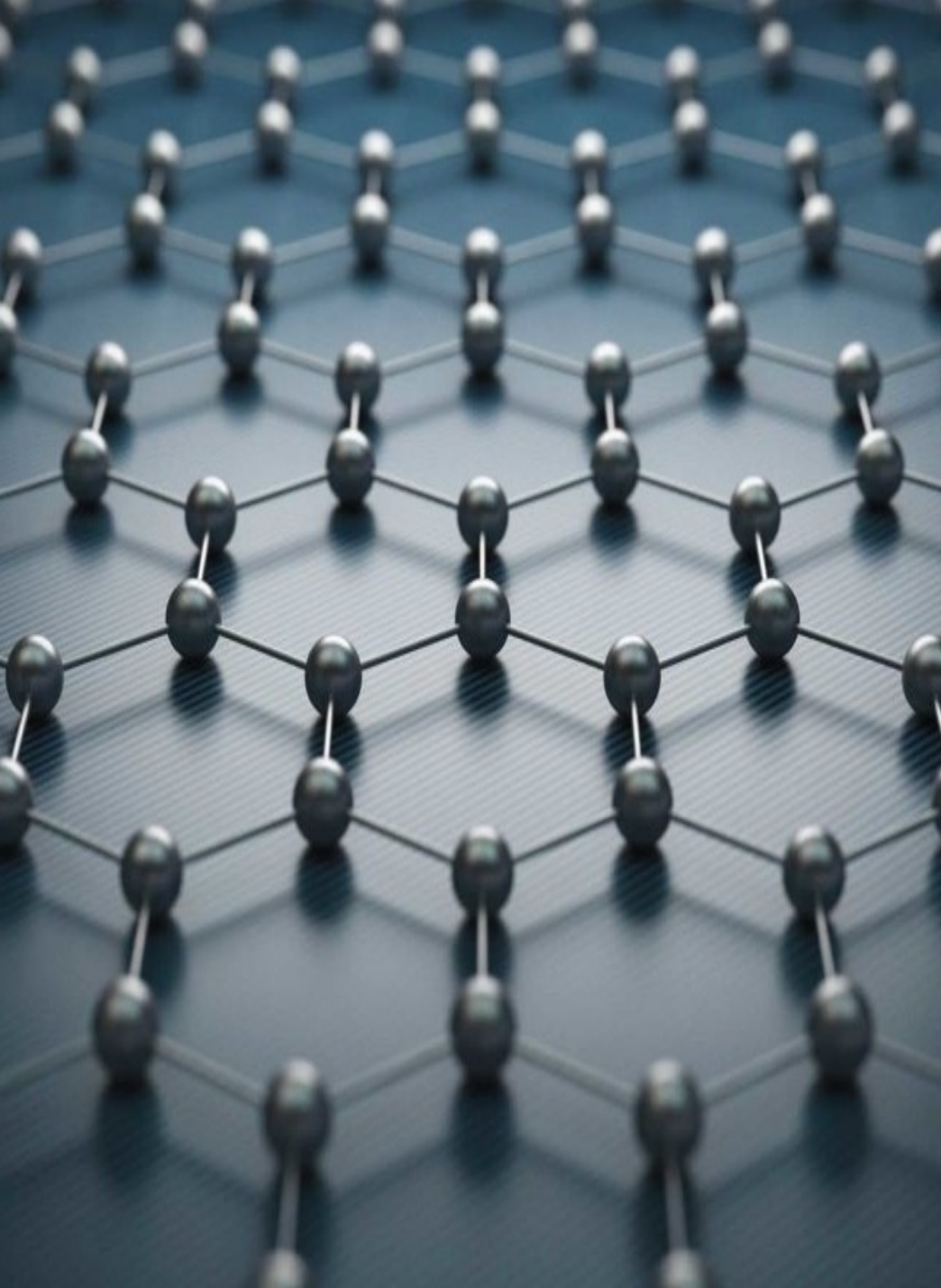


# Western University

## Strengths & Signature

### Biomedical Imaging

- Core imaging facilities among best in the world, includes 7T MR system
- **Biomedical Imaging Research Centre**
  - 400+ active researchers
  - 9 Canada Research Chairs
- Spun-off seven companies; 50 patents over the past decade
- **Focus**
  - Neuroscience, Musculoskeletal Health, Image-guided Surgery



# Western University

## Strengths & Signature

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### Materials & Biomaterials

- 50+ active researchers, 6 Canada Research Chairs
- **Strengths**
  - lightweight composites, surfaces and coatings, biomaterials, materials for energy
- **Surface Science Western**
  - Canada's most comprehensive surface analysis laboratory
- **Fraunhofer Project Centre**
  - Industry-scale production environment for new lightweight materials and processes

## Section 2

# WORLDiscoveries® Asia

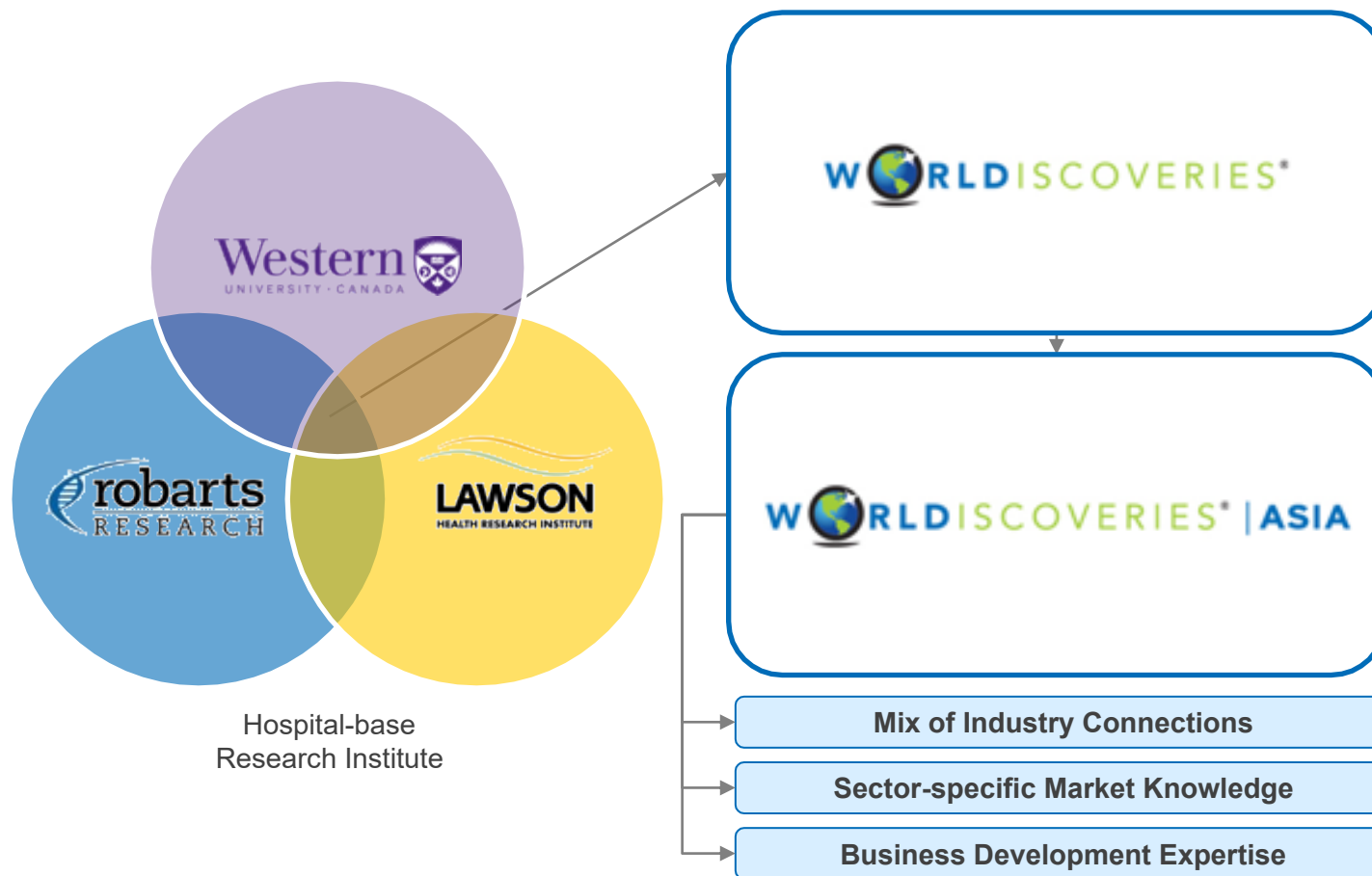




# WORLDDiscoveries® Asia

Western University Canada Technology Transfer Office

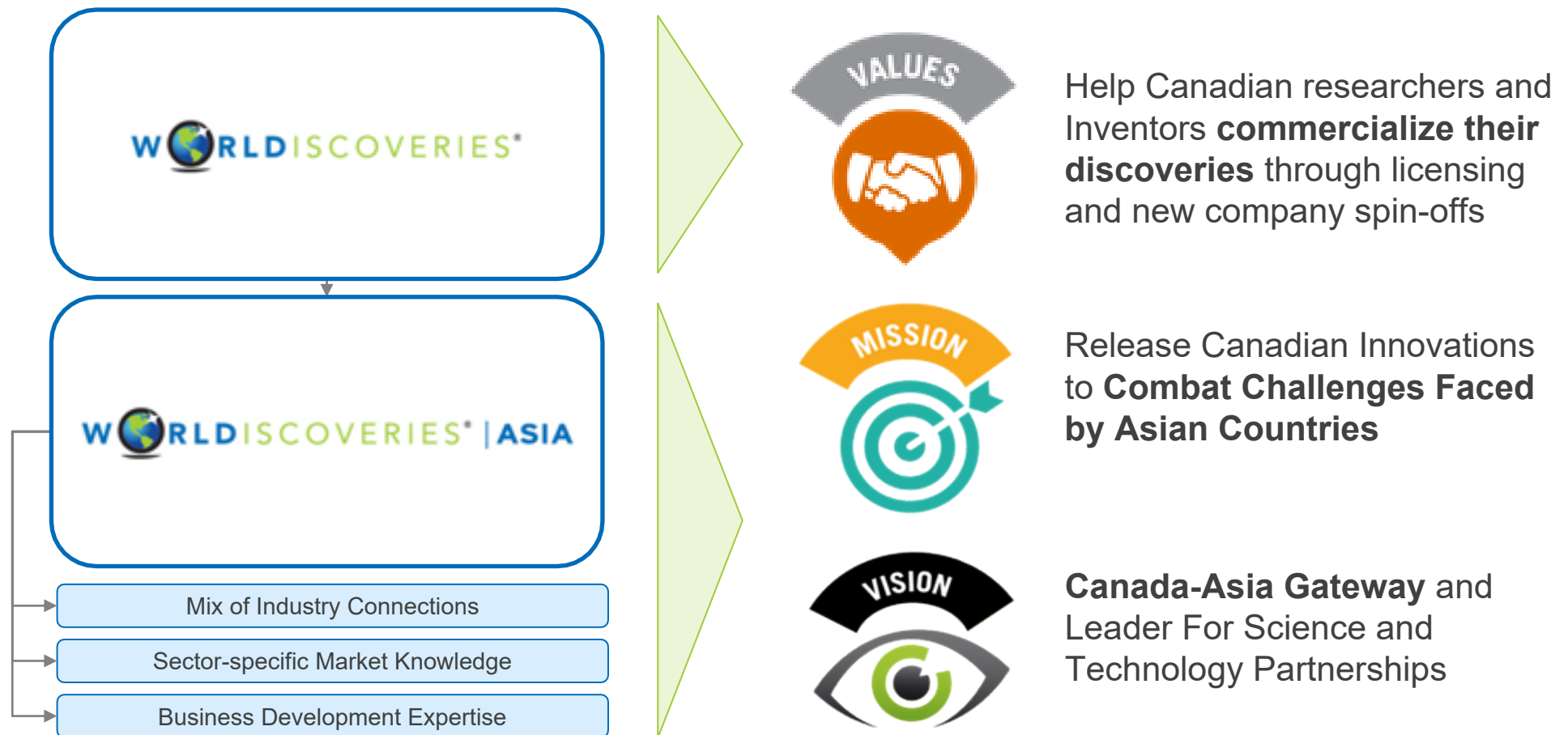
A partnership between The University of Western Ontario,  
Robarts Research Institute and Lawson Health Research Institute



# WORLDDiscoveries® Asia

Western University Canada Technology Transfer Office

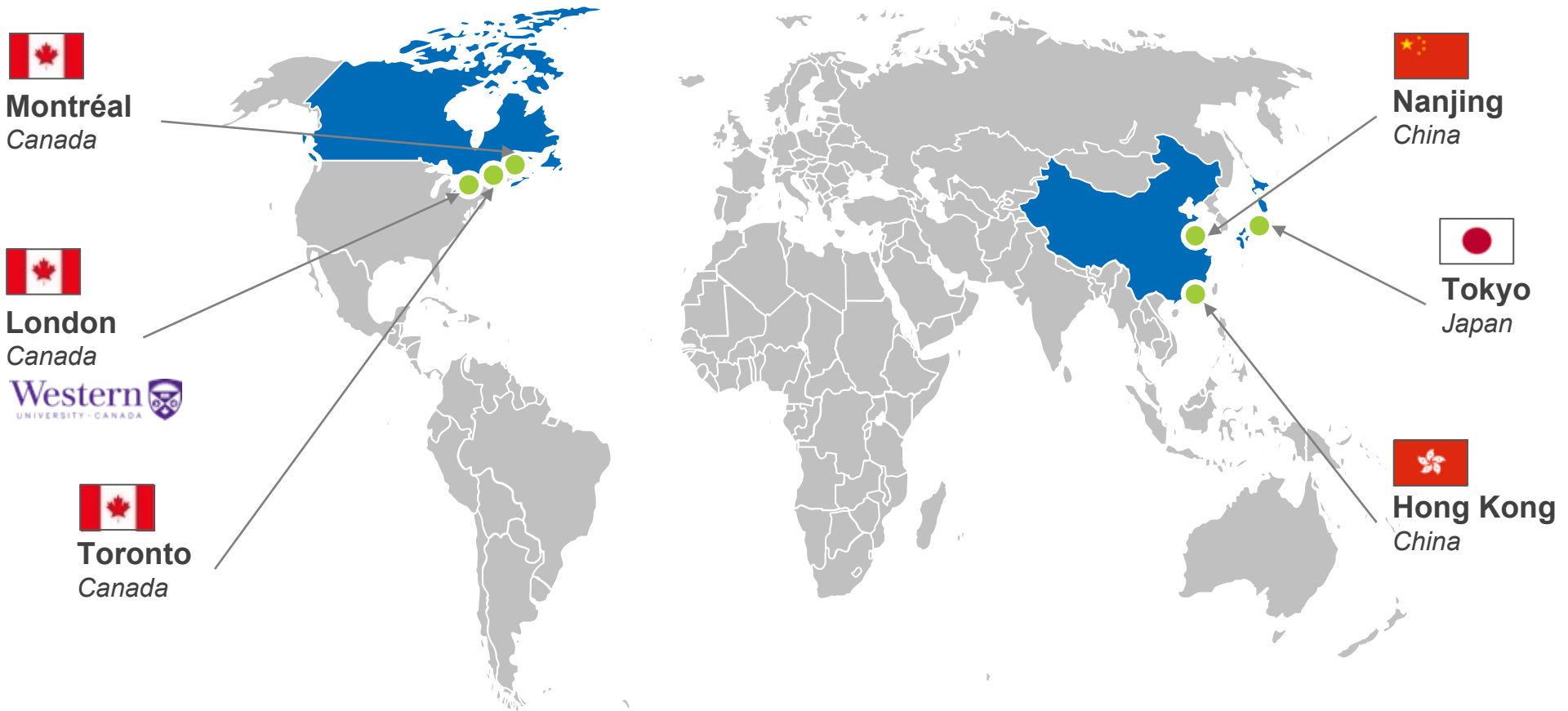
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# WORLDdiscoveries® Asia

## Offices and Operation

### International Operations between Canada & Asia



## Section 3

# Achievements





# Achievements

## Highlights

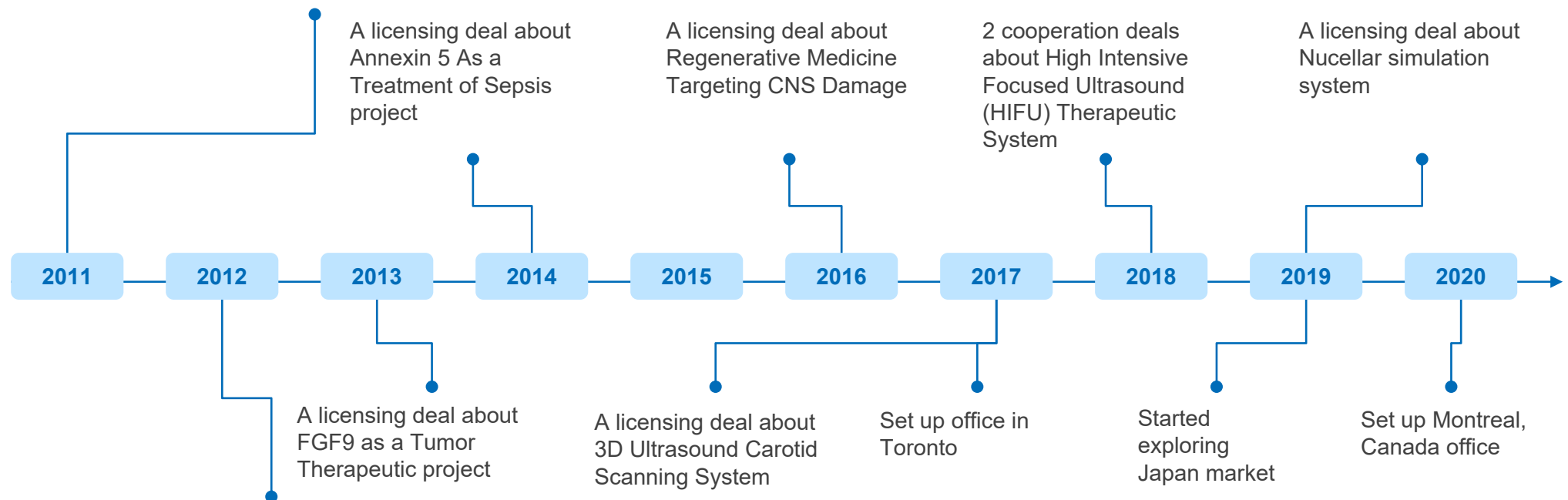
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# Achievements

## Milestones

Since November 2009, WD started to develop collaboration with China, its subsidiary, WORLDDiscoveries Asia (WD Asia) was established in Hong Kong in 2011



Set up domestic company in Nanjing, China. The first permanent tech transfer operation set up in Asia by a Canadian university

## Section 4

# Portfolio



# Portfolio

## Projects



- Super Sentinel Cells, which is an off-the-shelf product to target invasive disease such as cancer
- New gene editor which cuts DNA differently to accurately disrupt or repair disease-causing genes.



- Simple solutions to dramatically improve surgical, emergency and respirological care.
- Less invasive yet expandable surgical access ports (trocars) for minimally invasive surgeries

**Bio-  
technology**

**Artificial  
Intelligence**

**Medical  
Device**

**Green  
Technology**



- Novel algorithms for data-efficient deep learning, with application in drug discovery
- Helps organizations of all sizes and maturities in their adoption of data science and artificial intelligence

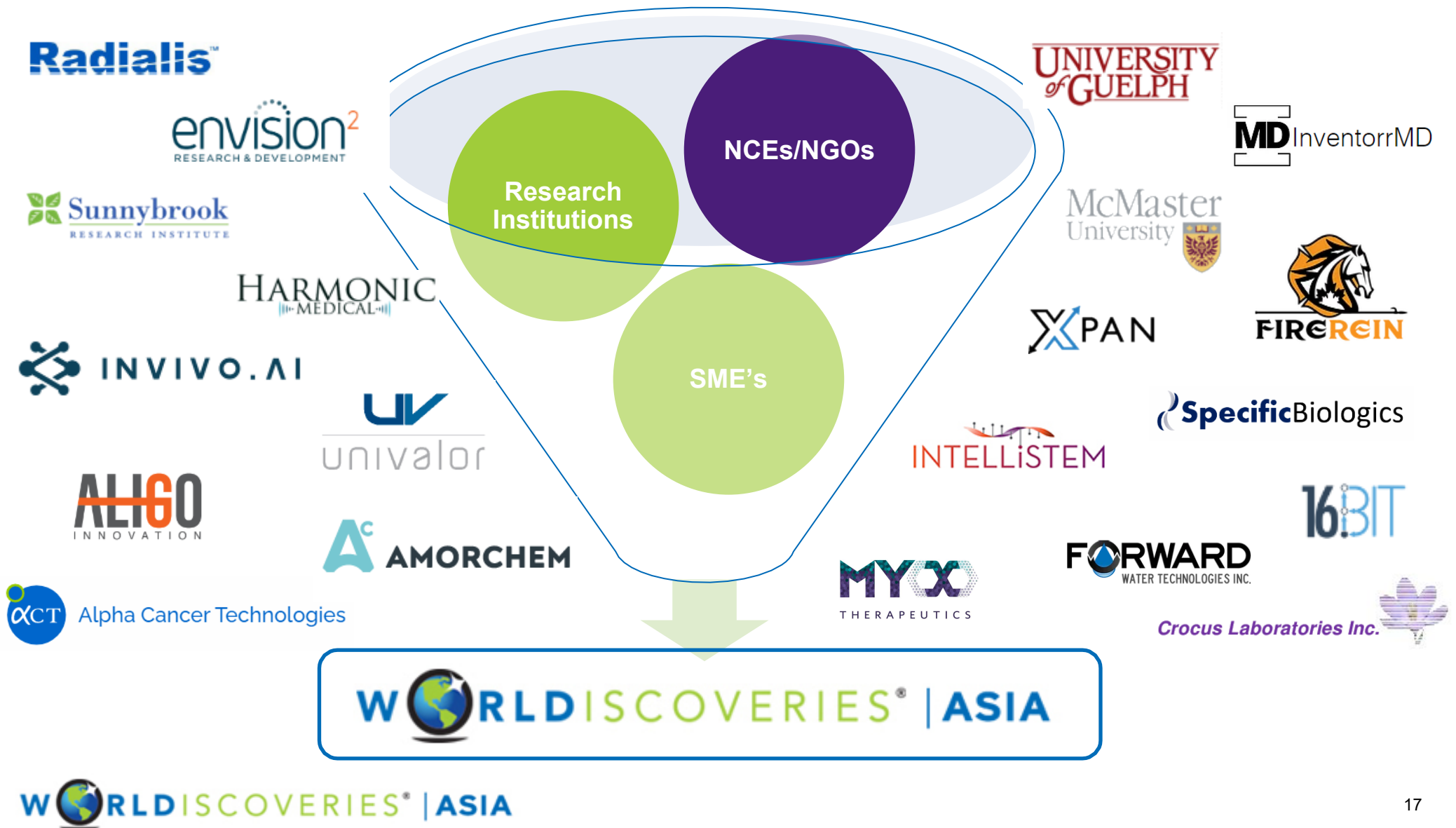


- Cost-effective, convenient, zero-waste targeted gas cleaning solution
- Highly effective liquid disinfectant against bacteria and viruses



# Portfolio

## Partners



## Section 5

# Service



# Service

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## **Nation-wide Technology Scouting**

- Represents a large number of advanced technologies from Canada

## **Partnership Facilitation**

- Helps to initiate partnership discussions and facilitate follow-up communications

## **Deal Negotiation and Execution**

- Acts as an intermediary to connect technology seekers in the region with the researchers and inventors who have the desired technologies

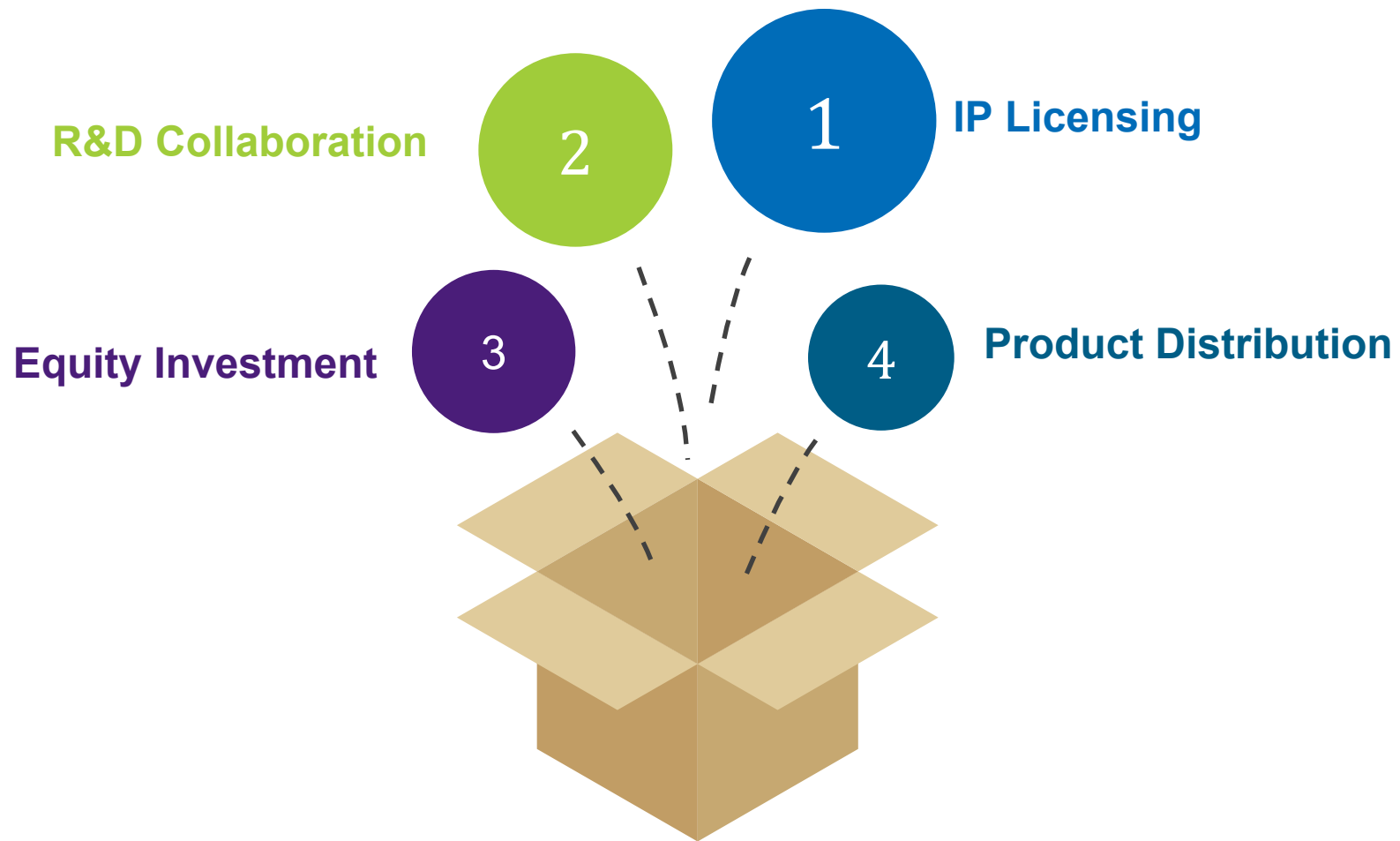
## **International Partnering Events Organization**

- Leads Canadian delegation mission trips to Asia to have targeted road show events

# Service

## Collaboration Model

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*Thanks for your attention*