

# Entrepreneurship and Commercialization at the North America Universities ideas start here™

UNIVERSITY OF  
**WATERLOO**

[uwaterloo.ca](http://uwaterloo.ca)



Ling Loerchner 肖玲  
Waterloo Commercialization Office  
[LLoerchn@uwaterloo.ca](mailto:LLoerchn@uwaterloo.ca)

# Location



- Province of Ontario
- Most populated area of Canada (75km from Toronto)
- Close to U.S Border (Niagara Falls 130km, Detroit 250km)
- Waterloo – concentration of high tech companies (Blackberry, Teledyne Dalsa, Open Text, Google, SAP, Agfa, ComDev, etc)

# Quick Facts...the Numbers



➔ 6 Faculties ( Applied Health Sciences, Arts, Environmental Studies, Science, Math, Engineering)

➔ Over 30000 undergraduate students, ~5000 graduate students, (4500 international), 1100 faculty members

➔ Largest co-operative education program in the world

➔ 16,000 students enrolled

➔ 4500 employers



UNIVERSITY OF  
**WATERLOO**

WeChat ID: lloerchn

# More Quick Facts...



UNIVERSITY OF  
**WATERLOO**

- ➔ Over \$200 M annual research
- ➔ Only dedicated faculty of Mathematics in North America
  - ➔ World's largest centre for education in math and computer sciences
- ➔ Largest concentration of quantum information research in the world
- ➔ Waterloo Institute for Nanotechnology
- ➔ Canada's largest Engineering faculty
- ➔ Top research university four years in a row (Comprehensive category)



# Entrepreneurship

## A Uniquely Entrepreneurial University

GOAL » Solidify Waterloo's global leadership in all forms of entrepreneurship education and practice



# Waterloo Entrepreneurial EcoSystem

“It takes a village to raise a child”

UNIVERSITY OF  
**WATERLOO**



**WatCo**

WATERLOO | RESEARCH



UNIVERSITY OF  
**WATERLOO**



**Business Mentoring facility**

**COMMUNITTECH**

**High Tech Association –  
“Digital Media Hub”**



# Other Entrepreneurial Support Systems..continued



**VELOCITY**

**CONRAD**  
BUSINESS . ENTREPRENEURSHIP . TECHNOLOGY

**WatCo**

WATERLOO | RESEARCH

## ➔ Conrad – Business, Entrepreneurship, Technology

- ➔ MBET Program – student teams working on startup practicum
- ➔ Business plan competitions
- ➔ 50 new startups over past 10 years

## ➔ WatCo

- ➔ Scientist and Engineers (SEB) Commercialization Fellowships
- ➔ Funding partnership with Federal Gov't
  - ➔ \$60k for students to launch hi-tech business

## ➔ Will support 15 fellowships

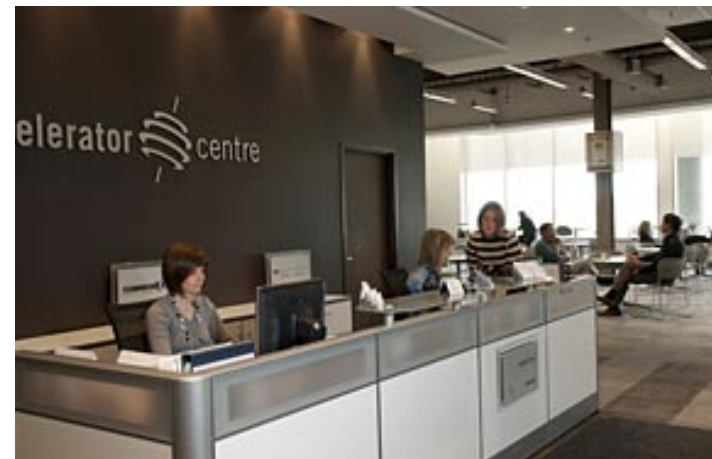
UNIVERSITY OF  
**WATERLOO**

WeChat ID: lloerchn

# Accelerator Centre



- Located on north campus
- Business mentors who provide advice and governance discipline
- network of expert service providers including legal, IP, HR, and accounting
- on- and off-site organized special networking events
- daily networking opportunities with other entrepreneurs



UNIVERSITY OF  
**WATERLOO**

WeChat ID: lloerchn



- **Information Technology industry association**
- Digital Media Hub = 44,000 ft<sup>2</sup> facility that supports start-ups in the digital media market
- Assisted > 450 start-ups with mentoring services, networking, access to capital
- Client companies have raised over \$300M in venture funding
- 573 jobs created by start-ups

# Intellectual Property Policy



University of Waterloo

UNIVERSITY OF  
**WATERLOO**

SEARCH:

[Current Students](#) | [Faculty](#) | [Staff](#) | [Alumni](#) | [Employers](#) | [Future Students](#)

[ABOUT WATERLOO](#) | [TODAY AT WATERLOO](#) | [FACULTIES & ACADEMICS](#) | [OFFICES & SERVICES](#)

**EVERYTHING YOU  
DISCOVER AT  
WATERLOO  
BELONGS TO YOU**

- [CO-OP AT WATERLOO](#)
- [OUR GLOBAL CONNECTIONS](#)
- [LIFE AT WATERLOO](#)
- [RESEARCH AT WATERLOO](#)

**WATERLOO**

WeChat ID: lloerchn

# Intellectual Property Policy



⇒ Inventors OWN - no obligation to share with the University (exception for industry sponsored research contracts)

⇒ Philosophy:

⇒ Ownership attracts high quality entrepreneurial researchers

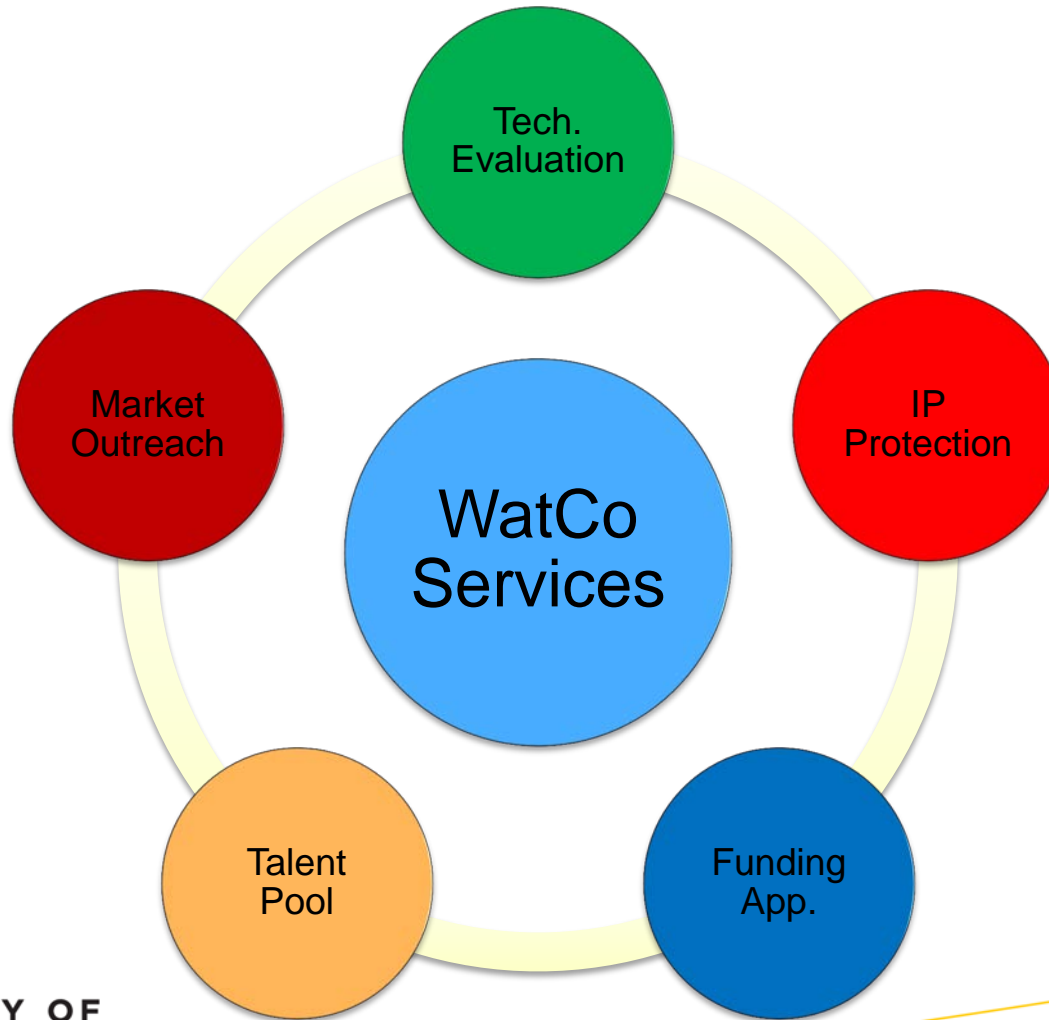
⇒ Incentive is best motivator to promote transfer of technology for societal use and benefit

⇒ Result: UW widely acknowledged as most entrepreneurial research environment in Canada

» **Canada's most innovative university 23 years in a row (Maclean's Magazine)**



# TTO Value Added Services



# Commercialization Snapshot



- ➔ Currently manages ~115 technologies, ~270 Patents and Patent Applications
- ➔ 80 patents (or 30% of patent portfolio) licensed or otherwise commercialized
- ➔ ~ 80 active License Agreements
- ➔ 15 direct start-up companies created with assistance by University, 22 start up created from SEB/JumpStart program.
- ➔ ~ 65 companies created independently based on UW research (mainly inventor founders)

# Current Technology Platforms



UNIVERSITY OF  
**WATERLOO**

WeChat ID: lloerchn

- **Software** (Video compression, Encryption, GIS, Project Mgmt, Pattern Recognition, Text Analytics, etc)
- **Telecommunications** (network hardware)
- **Nanotechnology**: AFM Tips, PM2.5 Detection, batteries, solar\LED, carbon-graphene, nano-encapsulation (drug delivery, diagnostics, etc...)
- **Imaging**: Novel detection systems, OLED, sensors, optimization algorithms (Medical , Security, Industrial Inspection)
- **Automotive**: materials, sensors, wireless, engine



# China-Canada Partnership

## Potential Structures



### ⇒ University of Waterloo (WatCo)

- Licensing to China based company to target Asian markets

### ⇒ New Startups

- Finance or co-finance creation of new startups in Canada and China
- Leverage against Canadian and Chinese government collaborative innovation transfer funding programs

# China-Canada Partnership



University of Waterloo WatCo and Tianjin S&T signed the joint Commercialization MOU in April 2014, in Tianjin China

# Startup Snapshot



## OPEN TEXT

The Content Experts™



### TELEDYNE DALSA

A Teledyne Technologies Company



## BufferBox



## UNIVERSITY OF WATERLOO





**Thank You! 谢谢 !**

- Contact Information:
  - **Ling Loerchner 肖玲**: [LLoerchn@uwaterloo.ca](mailto:LLoerchn@uwaterloo.ca)
  - WeChat ID: lloerchn

