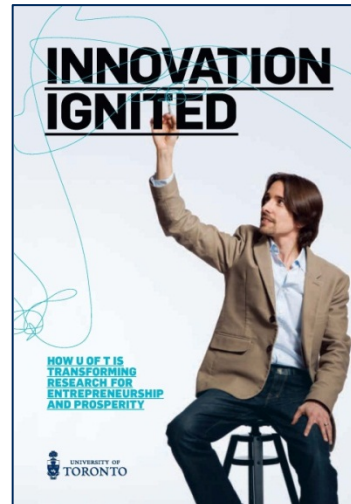




UNIVERSITY OF
TORONTO

Innovations & Partnerships Office

a division of the Vice-President Research and Innovation



BOUNDLESS



The Innovations & Partnerships Office (IPO) helps build **successful partnerships between industry and the University of Toronto research community**


and

manages U of T's portfolio of intellectual property – turning ideas and innovations into products, services, companies, and jobs.



INNOVATIONS & PARTNERSHIPS

EXECUTIVE DIRECTOR
DEREK NEWTON

Partnerships (Contracts)	Business Development	Innovations (Commercialization)
<p>Director Lino DeFacendis</p>	<p>Officers Colin Swift / Sonya Brijbassi</p>	<p>Director Jennifer Fraser</p>
<p>Negotiates, drafts, and administers all agreements for collaboration and partnerships on behalf of the University;</p> <p>Sponsored Research Agreements, Collaboration Agreements, Material Transfer Agreements and Confidentiality Agreements</p> <p>Review and submit many federal and provincial funding programs that support industry-academic connections</p>	<p>Assist Faculty members in augmenting their research through industry engagement</p> <p>Assist industry to find strategic partnerships with our Faculty members</p> <p>Facilitates University-Industry research partnerships</p> <p>Matching to the many federal and provincial funding programs that support industry-academic connections</p>	<p>Protects & manages intellectual property across the UofT system</p> <p>Works in partnership with MaRS Innovation to commercialize inventions</p> <p>Licenses UofT technologies to industry</p> <p>Creates start-up companies</p> <p>Supports entrepreneurial faculty & students</p> <p>Provides outreach to Campus-linked Accelerators</p>
<p>“Pre- Invention”</p>		<p>“Post-Invention”</p>
<p>innovations.partnerships@utoronto.ca</p>	<p>s.brijbassi@utoronto.ca</p>	<p>ip.officer@utoronto.ca</p>

Reasons to Collaborate with Industry

- New Research Funding Opportunities
 - *Industry Matching Grants*
 - *Strategic and collaborative programs*
- Enhanced Resources:
 - *Research \$\$ (Leverage funds)*
 - *Expanded Training Opportunities for HQP*
 - *Research Opportunities (Eqpt etc)*
- Enhance Your Research Profile
 - *Expand your network*
 - *Make new contacts*
 - *Build long term relationships*
- Knowledge Transfer Mechanism
 - *Research results applied to real world situations*



Advancing Research and Maximizing Research Funding

Industry Matching, Collaborating
and Leveraging Funding
Opportunities



Canadian Institutes
of Health Research

Industry-Partnered
Collaborative
Research
POP

NCE
BL-NCE
CECR

 Government of Canada
Networks of Centres
of Excellence



Engage
CRD
Strategic Network
I2I

Accelerate
Elevate



VIP/VIP2
Talent Edge
OCE/CQDM

GAPP



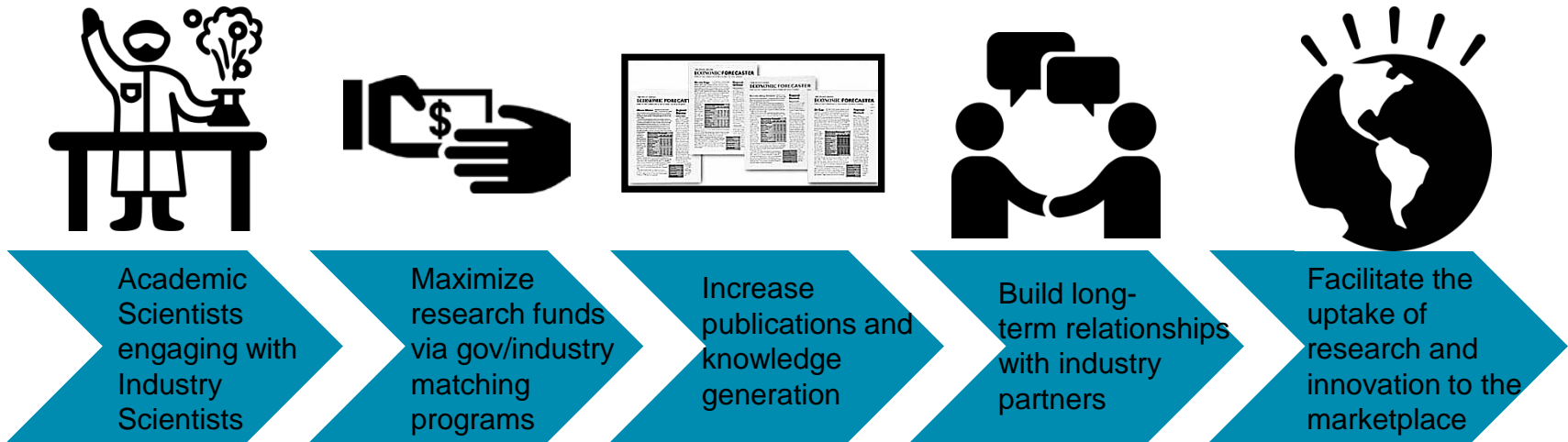
ORF-RE

AMF
ICP

FedDev Ontario

IPO: Successfully Partnering with Industry

What is the big picture?



Strong UofT tradition in industry partnering with transparency and public accountability; focused on translating discoveries and know-how to society for the benefits of Canadians and the world.

Helping You Build Industry Connections

1. Identify your own strengths (institutional, departmental, personal) and needs;
 - People (researchers, students etc)
 - Infrastructure (lab facilities, specialized equipment)
 - Your previous work – publications, background IP etc
 - **Needs: What outcomes do YOU want out of the partnership?**
2. Identify potential partners, local resources;
 - IPO can help, but you probably know the landscape better in your field
 - Networking at conferences
 - Networking with colleagues
3. Identify existing research funding opportunities:
 - Research Alerts
 - Funding Opportunities database (OVPRI website)
 - Don't fall into a rut – be creative! Try a Mix'n'Match approach, e.g.:
 - OCE VIP + NSERC-Engage + Talent Edge
 - NSERC-Engage + Mitacs-Accelerate;
 - NSERC-Engage + NSERC CRD
 - OCE VIP + NSERC CRD

Helping You Build Industry Connections

4. Start the conversation:

- Preliminary non-confidential discussion, 'testing the waters'
- Test for scope, mutual areas of interest, field of use
- Is there a good 'cultural' match?
- CDA – mutual or 1-way

5. Keep the conversation going:

- Find an internal champion at the company with related goals
- Identify the key decision-makers your champion will need to cultivate
- MOU if appropriate
- Develop detailed plans/budgets/timeframes

6. Close the deal:

- Sponsored/Collaborative Research Agreement;
- Master Agreement if suitable;
- Matching Gov't funding to maximize Research \$\$\$\$

Industry-Academic Partnering Opportunities

Industry Partner Matching Funding Program	Fund\$	Match Required from industry partner
NSERC Engage Program	\$25,000	In-kind
NSERC Engage Plus (after Engage)	\$12,500	\$12,500
OCE VIP 1	\$20,000	\$5k + in-kind
OCE VIP 2	Up to \$250K	50% cash/in-kind match
NSERC Collaborative Research and Development (CRD) Grants	\$10K-\$500K	1:1 ratio on cash 0.5:1 ratio on in-kind
OGI-GAPP	\$300K-\$\$\$6M	1/3 cash and in-kind
Collaborative Health Research Projects Program (NSERC + CIHR)	Up to \$300K	Industry support/ in-kind

Student Internship Matching Funding Program	Fund\$	Match Required from industry partner
MITACS - Accelerate	\$7,500	\$7,500
OCE – Talent Edge	\$5,000	\$5,000

NSERC and NCE Partnerships Program Landscape

INNOVATION

ENGAGE

**Connect
with colleges & universities**
(Grant: Connect)

**Engage
with colleges & universities**
(Grant: Engage)

Student Training in Industry
(Grants: IUSRA, IPS & ICREATE)

COLLABORATE

**Collaborative R&D
with colleges & universities**
(Grants: CRD, ARD, CU-I2I)

**Industrial Research Chairs
at colleges and universities**
(Grants: IRC, IRCC, CDE)

**Strategic Partnerships
with universities**
(Grants: Strategic Networks & Projects)
Strategic Initiatives
(Grants: CHRP, APC)

Networks of Centres of Excellence
(Grants: NCE, BL-NCE)

Building College Capacity
(Grants: IE, ARTI)

COMMERCIALIZE

**Idea to Innovation
for colleges & universities**
(Grant: I2I)

**Centres of Excellence for
Commercialization and
Research**
(Grant: CECR)

**College Technology Access
Centres**
(Grant: TAC)

CELEBRATE

**Synergy Awards
for Innovation**

UT-Engage Partnerships

Year	Title	Department
2011	Developing an anti-flagellin IgA microplate ELISA assay as a diagnostic tool	Immunology
2011	Characterizing Anti-Hormone Cancer Therapeutics	Medicine
2011	Peptide Functional Bone Implant Coatings for Improved Osteointegration	IBBME
2012	A microfluidic screening platform to quantify nanoparticle interaction with ex vivo tissue	IBBME
2012	Developing neuro-active small molecule compounds that inhibit protein aggregation	Molecular Genetics
2013	Biosurface modification using nanoparticles to manage infected dentin	Dentistry
2013	High-throughput screening of nanoparticle tissue penetration using a microfluidic device	IBBME
2013	Characterization of starch nanoparticle surface chemistry, aggregation, and gelation characteristics: Correlating physico-chemical nanostructure to macroscopic performance	Biochemistry
2013	A Yeast Surface Display Method Tailored for Nanobody Display	Cell Systems Biology
2013	Metabolic reconstruction and analysis of probiotic bacteria	Biochemistry
2013	Design of Polymeric Nanoparticle Formulations for Enhanced Drug Loading	IBBME
2014	Validation of Drosophila as a model to identify anti-lipogenic and anti-diabetic compounds.	Molecular Genetics
2014	A Method for the Simultaneous Optimization of Expression Levels for Multiple Enzymes	CELL SYSTEMS BIOLOGY
2014	Tumour treatment planning for a preclinical therapeutic ultrasound system	MEDICAL BIOPHYSICS
2014	Validation of the SensiMAT System to monitor pressure relieving behaviour of individuals with spinal cord injury using wheelchairs	IBBME
2014	Use of fecal microRNAs as biomarkers for probiotic administration	NUTRITIONAL SCIENCES
2015	The Effect of Lyophilization on the Structure of Bone Morphogenetic Protein	IBBME
2015	Platform technologies for podocyte in vitro cultivation	IBBME
2015	Investigation of applying neurosurgery planning MRI scanning standards to radiosurgery planning and followup	RADIATION ONCOLOGY

PROGRAM OVERVIEW



Ontario Centres of
Excellence

Where Next Happens

INDUSTRY-ACADEMIC R&D COLLABORATION

- **Collaboration Voucher Program**
 - Voucher for Industry Association R&D Challenge (VIA)
 - **Voucher for Innovation and Productivity (VIP I & VIP II)**
 - Voucher for E-Business (VEB)
- Alberta-Ontario Innovation Program
- Connected Vehicle/Autonomous Vehicle Research Program (CVAV) for Road Vehicles
- **TalentEdge**
 - Internships
 - Fellowships
- OCE/CQDM Explore Program

ENTREPRENEURSHIP

- On-Campus Entrepreneurship Activities
- **Campus Linked Accelerators**
- **SmartStart Seed Fund**
- Entrepreneurship Fellowships
 - Martin Walmsley Award for Entrepreneurship
 - David McFadden Energy Entrepreneur Challenge
- High School Competition
 - Young Entrepreneurs, Make Your Pitch

COMMERCIALIZATION

- **Market Readiness Program**
 - Market Readiness (Customer Creation)
 - Market Readiness (Company Building)
- Advancing Health Program



Upcoming GC Funding Competitions

Genomics Application Partnership Program (GAPP)

- User-academia partnerships to promote application of genomics-derived solutions that address key sector challenges (User-pull)
- Downstream R&D: proof of concept, validation, product development with significant commercial market potential
- Socioeconomic benefit to Canada
- 1:2 co-funding (GC, user, other)
- Project size: \$300k-\$6M over 3 years
- **Deadline: Round 5 EOIs due May 5th**

Rolling, Round 5



Natural Resources and the Environment: Large Scale Projects

“This funding opportunity will be aimed at supporting projects focused on using genomic approaches to address challenges and opportunities of importance to Canada’s natural resources, including interactions between natural resources and the environment, thereby contributing to Canada’s bioeconomy and the wellbeing of Canadians. The scope of this funding opportunity will include areas such as genomics research related to **energy, mining, forestry, water stewardship, wildlife management/conservation** and bioproducts that help conserve natural resources and protect the environment”

Launch Spring

- Expected to launch in June
- Total Project values: \$2M- \$10M;
- 1:2 co-funding (1/3 GC and 2/3 co-funding)
- Tentative Registrations August 2015

Building research collaborations



- ➔ Financing of applied, collaborative research projects
 - Executed by graduate students and PDF's
 - Includes flexible funds for consumables, expenses and/or additional expertise
- ➔ Access to universities across the country
 - All Canadian research-based universities are partners of Mitacs
- ➔ Supports all university disciplines and industry sectors
 - Non-competitive adjudication
 - Mitacs provides assistance with applications
 - Scalable Projects



Creating R&D leaders



Important dates:
LOI – April 23
Submit – May 13
Results – mid July

- ➔ For postdoctoral fellows
- ➔ Creating R&D management leaders
- ➔ Professional skills and leadership development
- ➔ Two year fellowship
- ➔ Research collaboration with private sector partner
- ➔ Open to any discipline
- ➔ Competitive applications



Program Representatives



Ontario Centres of
Excellence

Where Next Happens

Laura Yu

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Central Ontario

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Ontario**Genomics**Institute

Elaine Corbett

*Manager, Business Development
and Research*

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Jillian Hatnean

Business Development Specialist

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Commercialization Funding Opportunities

Commercialization Funding Program	Fund\$	Match Required from industry partner
CIHR POP 1	\$150,000	N/A
CIHR POP 2	Up to \$300,000	50%
NSERC I2I 1a	\$125,000	\$5k + in-kind
NSERC I2I 1b	Up to \$350,000	50% cash/in-kind match
MI-POP	\$100,000	N/A
Connaught Innovation Award	\$100,000	N/A
OGI SPARK	\$25,000	N/A
OGI Pre-Business Development Fund	\$100,000	N/A
OCE Market Readiness (start-up companies)	Up to \$125,000	50% cash 50% in-kind
OCE Market Readiness (company building)	Up to \$250,000	100% cash

IPO Support

- Info Session/Workshops
- Resource for questions and liaison with Funding Agency
- Suggestions for leveraging opportunities
- Introductions to potential collaborators
- Market Info
- Partner Introductions/Connections
- Assist with management of relationship with Industry Partners – answer any questions pertaining to program, leveraging funds, Intellectual Property, Agreement details and negotiation
- Review of Proposals – providing feedback
- Review and verification of budget
- Institutional Letter of Support
- LOI Submission - MRA

Where Can I get more Information?

Contact Us:

Business Development – Industry Partnerships

Sonya Brijbassi s.brijbassi@utoronto.ca 416-946-3483

General Inquiries: industry.connects@utoronto.ca

Website: <http://www.research.utoronto.ca>

List of templates/forms for industry interactions:

<http://www.research.utoronto.ca/forms/>



Innovations & Partnerships Office

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