

# Universities, Cities, & Prosperity

## An Agenda for the Future

*Big City, Big Ideas*

Professor Meric Gertler  
President,  
University of Toronto

Thursday, September 18, 2014



UNIVERSITY OF  
TORONTO





# A Symbiotic Relationship

“ A strong university helps build a strong city, and the reverse is also true: a strong city helps build a strong university. We need to leverage this relationship to our mutual advantage to advance our shared prosperity



# Executive Summary

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2. At the same time, universities are tremendously important *stabilizing* forces on urban economies, and on the local neighbourhoods they inhabit.



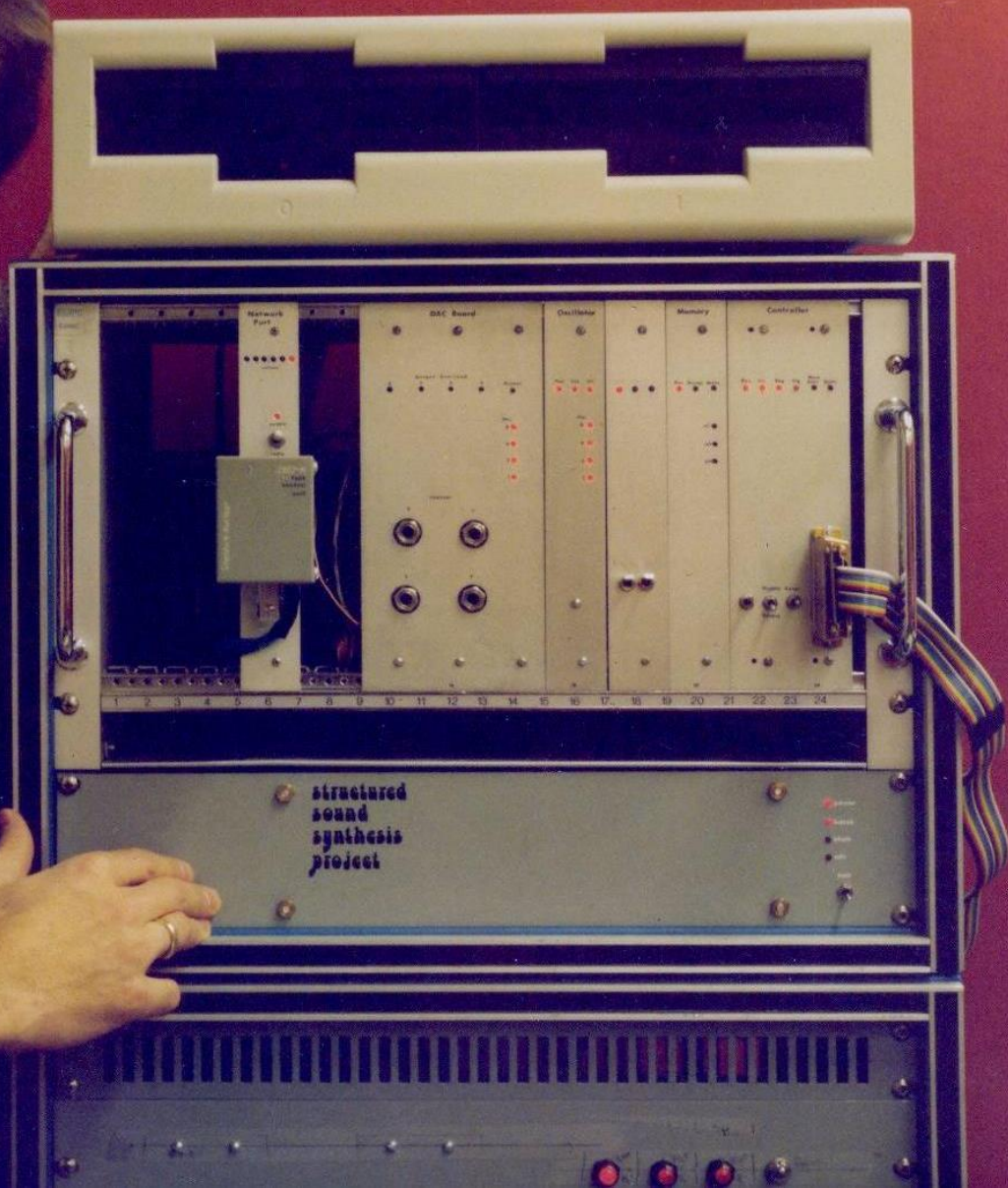
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3. Universities *connect* their host regions to the world, and vice versa.
4. The University of Toronto *is a wonderful example*.

















100 University of Toronto graduates:

- 45 from the Dynamic Graphics Project
- 20 from other Computer Science programs
- 35 from other disciplines



NSERC Synergy Award for Innovation:

*University of Toronto and Autodesk, 2011*

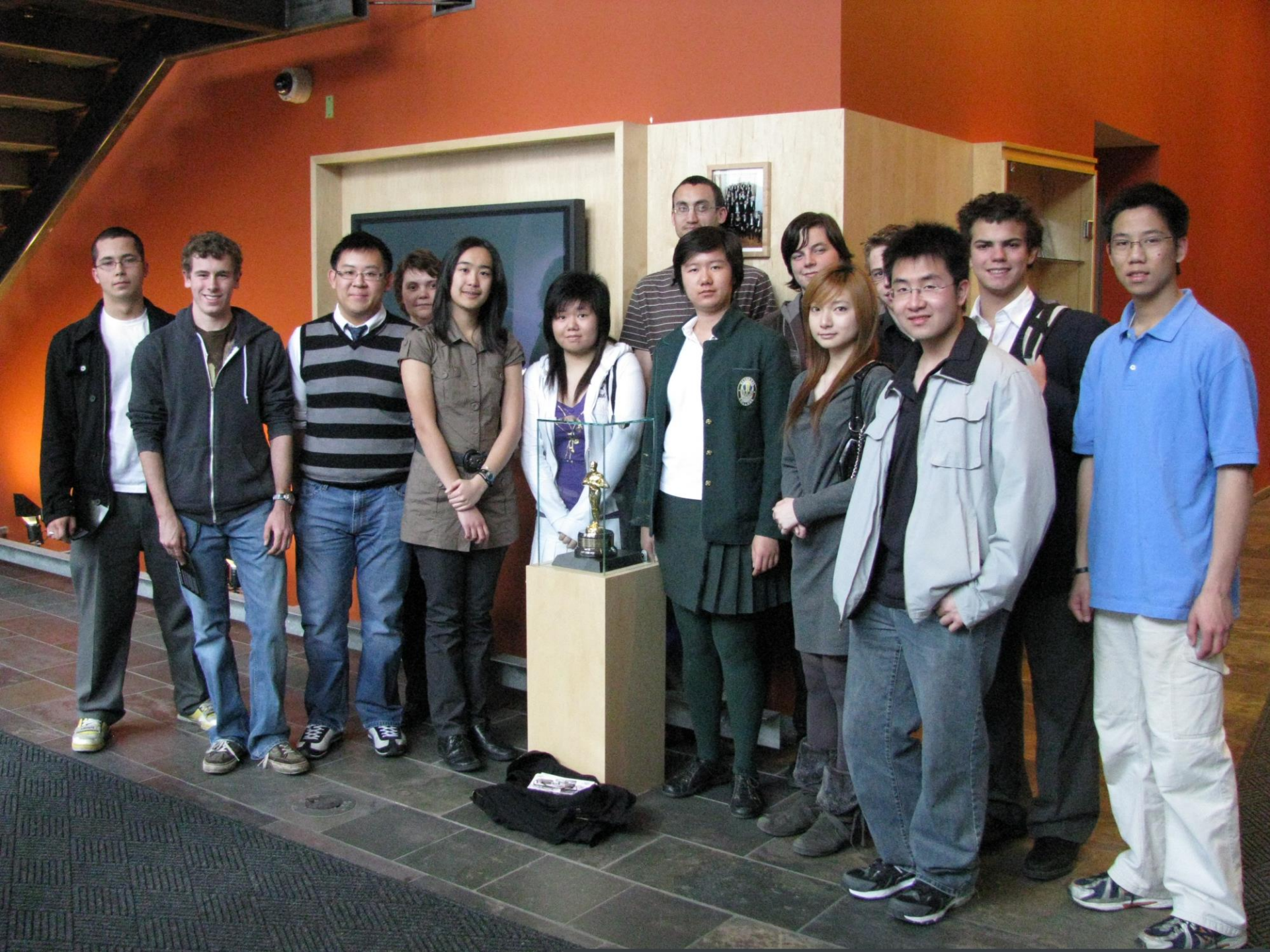


**NSERC**  
**CRSNG**



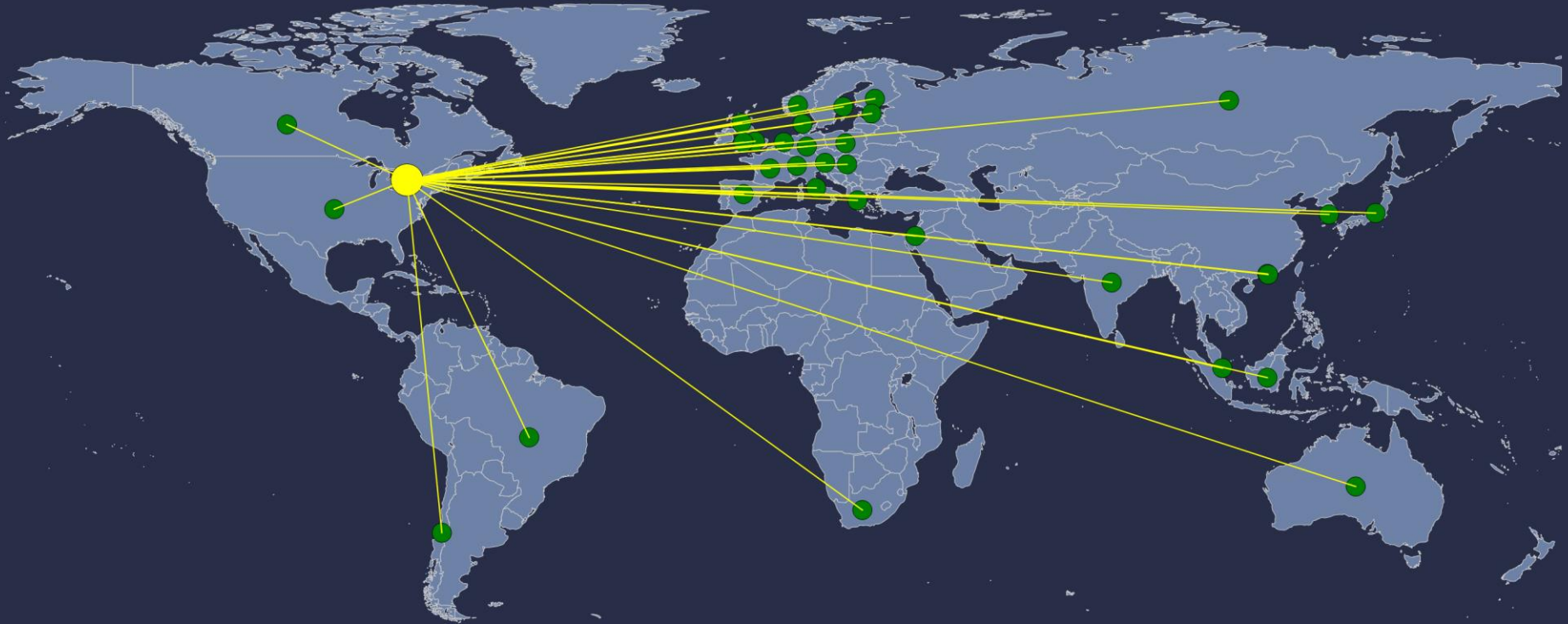
43%

...of Canada's tech-sector R&D investment.

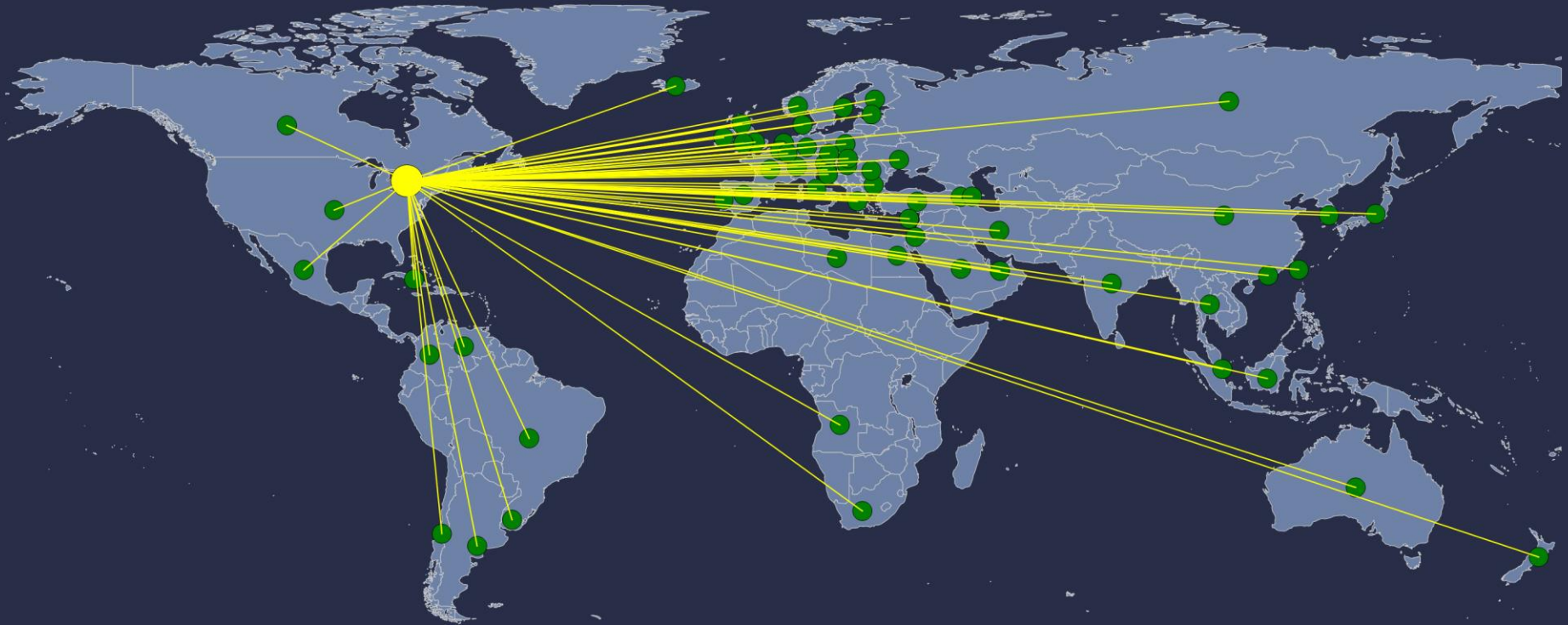




# Connecting to the World



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# Collaboration = Connectivity

*“Well connected research cities are likely to be important cities in the global economy; nodality in research often corresponds to nodality in other parts of the economy.”*

Matthiessen, Schwarz and Find (2011) ‘Research nodes and networks’ in D. Andersson et al. *Handbook of Creative Cities*, Cheltenham, UK: Edward Arnold, 211-228.

# One of the World's Top Institutions

**24<sup>th</sup>**

2014 *Academic Ranking of World Universities* Shanghai Jiao Tong

**20<sup>th</sup>**

2013 *Times Higher Education World University Rankings*

**17<sup>th</sup>**

2013 *QS World University Rankings*

**8<sup>th</sup>**

2013 *National Taiwan University Ranking*

**3<sup>rd</sup>**

2012 *SCImago Institutions Rankings*

# U15 Universities in World Rankings

Toronto	UBC	McGill	Alberta	McMaster	U de M	Calgary	Waterloo	Western	Ottawa	Queen's	Laval	Dalhousie	Saskatchewan	Manitoba	
<b>24</b>	37	67	101-150	90	101-150	151-200	201-300	201-300	201-300	201-300	201-300	201-300	301-400	301-400	2014 Academic Ranking of World Universities Shanghai Jiao Tong
<b>20</b>	31	35	109	92	106	201-225	226-250	226-250	185	226-250	201-225	251-275	**	301-350	2013 Times Higher Education World University Rankings
<b>17</b>	49	21	96	140	92	201	180	199	227	189	329	244	421-430	431-440	2013 QS World University Rankings
<b>8</b>	27	34	77	118	109	151	256	193	199	287	235	296	411	306	2013 National Taiwan University Ranking
<b>3</b>	25	51	54	116	171	112	161	158	184	255	252	289	323	286	2012 SCImago Institutions Rankings

# Shanghai Jao Tong, ARWU

U15 Universities,  
select disciplines 2014

	Toronto	UBC	McGill	Alberta	McMaster	U de M	Calgary	Waterloo	Western	Ottawa	Queen's	Laval	Dalhousie	Saskatchewan	Manitoba	
<b>10</b>	41	76-100	51-75		76-100	151-200	76-100									Computer Science*
<b>21</b>	76-100	101-150	151-200			151-200	101-150			51-75	151-200					Chemistry*
<b>24</b>	38	51-75	37	51-75	76-100	101-150	151-200	76-100			101-150					Economics*
<b>24</b>	101-150	76-100	76-100	151-200	101-150		47									Engineering/Technology & Computer Sciences†

† Overall field ranking \* Specific subject ranking

# Productivity

	Canadian Peers		North American Public Peers		North American Public & Private Peers		
	Publications	Citations	Publications	Citations	Publications	Citations	
All Fields	1	1	1	1	2	2	
Clinical Medicine	1	1	1	1	2	2	
Health & Life Sciences	1	1	1	1	2	2	
Nursing	1	1	1	1	2	2	
Pediatrics	1	1	1	1	2	4	
Pharmacology & Pharmacy	1	1	1	1	2	2	
Rehabilitation	1	1	1	1	1	1	
Rheumatology	1	1	1	1	1	2	
Cell & Tissue Engineering	1	1	2	1	3	3	
Biomedical Engineering	1	1	1	2	2	4	
Materials Sciences, Biomedical	1	1	1	5	3	7	
Nanoscience & Nanotechnology	1	1	13	10	20	17	
Acoustics	1	1	5	1	5	1	
Biophysics	1	1	1	3	2	7	
Chemistry	1	1	2	8	4	13	
Mathematics	1	1	4	6	6	10	
Anthropology	1	1	1	6	2	9	
Behavioral Sciences	1	1	1	1	2	2	
Economics	1	1	3	3	14	13	
Education & Educational Research	1	1	3	9	4	13	
Language & Linguistics	1	1	1	1	1	2	
Philosophy	1	1	1	4	1	5	

Health & Life Sciences

Engineering & Materials Science

Physical Sciences

Humanities & Social Sciences

# Excellence and Productivity

Share of the 100 most highly-cited papers with an author at a Canadian University, 2009-2013

	All Fields	Technology	Arts & Humanities	Physical Sciences	Social Sciences	Life Sciences	
<b>40</b>	<b>34</b>	<b>23</b>	<b>33</b>	<b>23</b>	<b>32</b>		UofT
14	6	3	5	7	19		McMaster
11	3	0	6	3	14		Ottawa
5	5	9	0	4	7		Western
1	6	3	8	0	0		Waterloo
3	1	2	2	2	3		Queen's
2	4	0	2	4	0		York
0	4	3	0	1	0		Guelph
2	0	1	3	2	0		Carleton
2	0	1	0	0	0		Laurier
0	0	0	0	2	0		Brock
0	1	1	0	0	0		UOIT
0	0	0	1	1	0		Trent
0	0	0	0	2	0		Windsor
0	0	0	1	0	0		Lakehead
0	0	0	0	0	0		Algoma
0	0	0	0	0	0		Laurentian
0	0	0	0	0	0		Ryerson
0	0	0	0	0	0		RMC
0	0	0	0	0	0		OCAD
0	0	0	0	0	0		Nipissing

COU



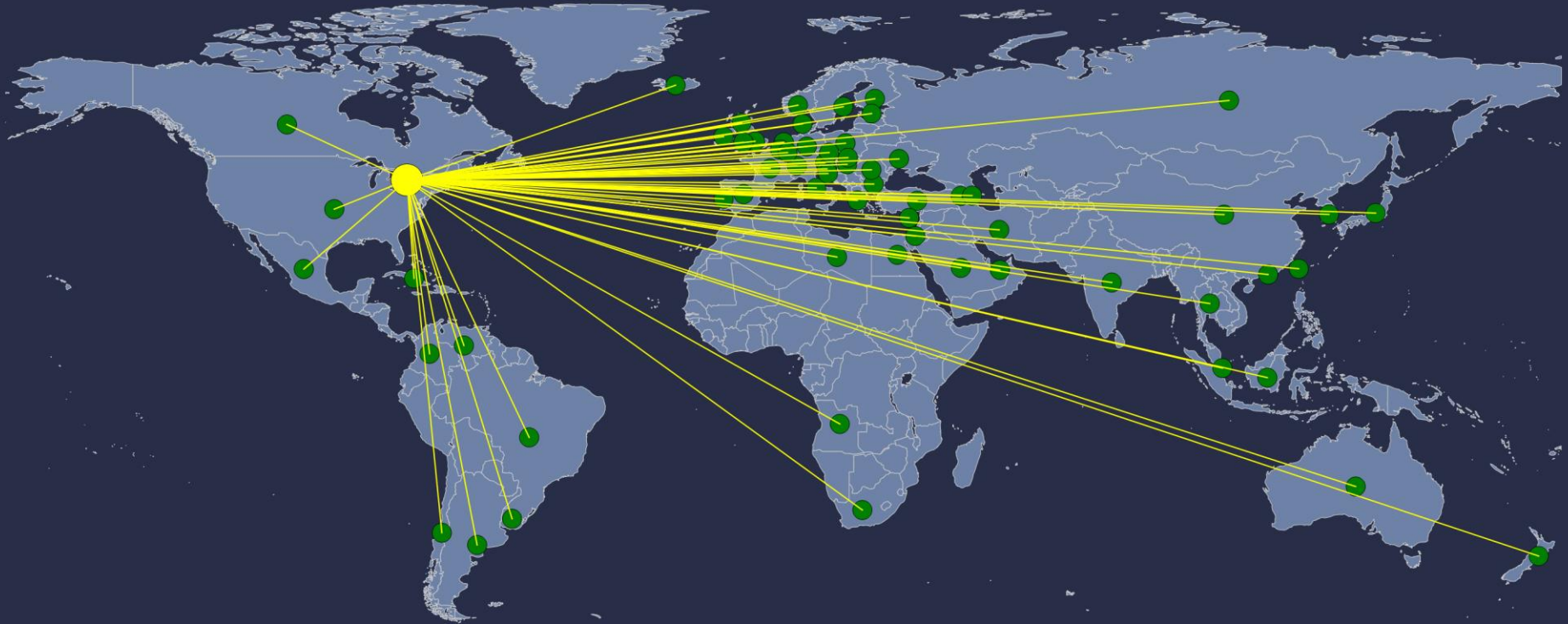
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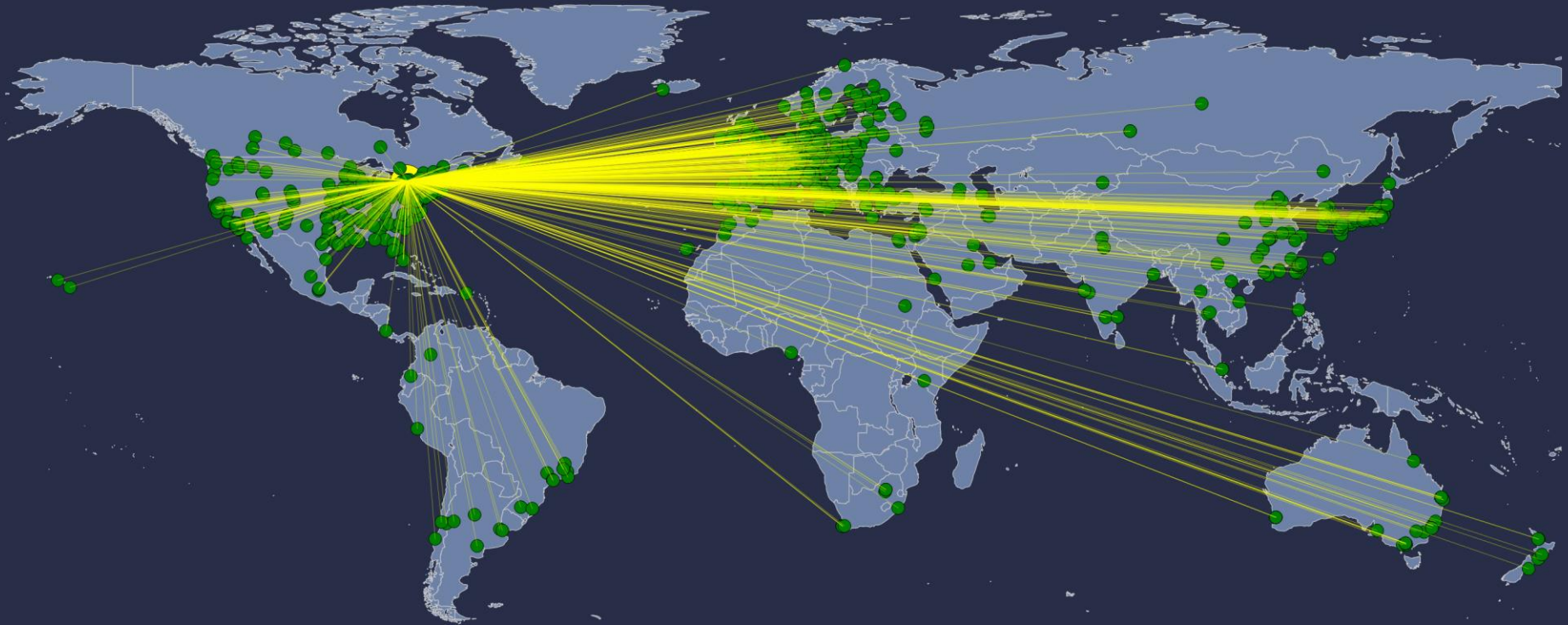
	U15						COU						
	All Fields	Technology	Arts & Humanities	Physical Sciences	Social Sciences	Life Sciences	All Fields	Technology	Arts & Humanities	Physical Sciences	Social Sciences	Life Sciences	
UofT	40	34	23	33	23	32	40	34	23	33	23	32	UofT
UBC	24	24	8	17	24	21	14	6	3	5	7	19	McMaster
McGill	16	13	15	6	11	23	11	3	0	6	3	14	Ottawa
McMaster	14	6	3	5	7	19	5	5	9	0	4	7	Western
Montreal	15	10	6	7	2	11	1	6	3	8	0	0	Waterloo
Ottawa	11	3	0	6	3	14	3	1	2	2	2	3	Queen's
Alberta	7	8	3	7	3	8	2	4	0	2	4	0	York
Calgary	6	3	7	3	3	8	0	4	3	0	1	0	Guelph
Western	5	5	9	0	4	7	2	0	1	3	2	0	Carleton
Dalhousie	4	3	4	2	3	3	2	0	1	0	0	0	Laurier
Waterloo	1	6	3	8	0	0	0	0	0	0	0	0	Brock
Laval	3	2	2	4	4	1	0	1	1	0	0	0	UOIT
Queen's	3	1	2	2	2	3	0	0	0	1	1	0	Trent
Manitoba	1	1	0	1	2	2	0	0	0	0	2	0	Windsor
Saskatchewan	0	2	0	0	0	1	0	0	0	0	0	0	Lakehead
							0	0	0	0	0	0	Algoma
							0	0	0	0	0	0	Laurentian
							0	0	0	0	0	0	Ryerson
							0	0	0	0	0	0	RMC
							0	0	0	0	0	0	OCAD
							0	0	0	0	0	0	Nipissing

Source: Web of Science © and the University of Toronto

# Connecting to the World



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CHRISTIE'S  
BISCUITS

THE FINEST  
WOOD & CO.  
WOOD & CO.  
WOOD & CO.

\$25

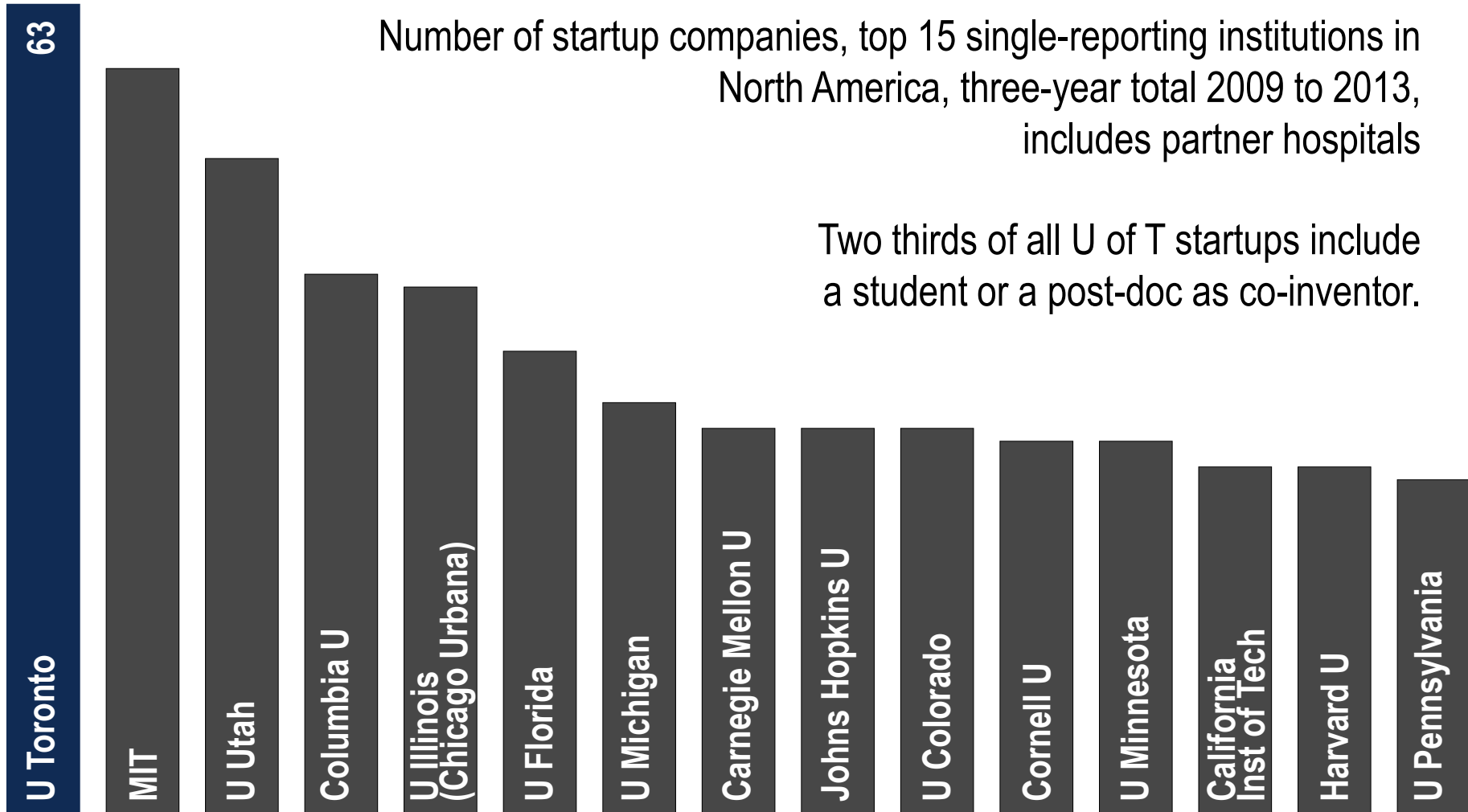
BOYSHFORM



# A Remarkable Startup Culture

Number of startup companies, top 15 single-reporting institutions in North America, three-year total 2009 to 2013, includes partner hospitals

Two thirds of all U of T startups include a student or a post-doc as co-inventor.





The University of Toronto directly employs more people on its three campuses than Chrysler and GM employ in all of Canada – combined.





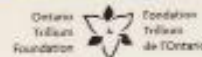
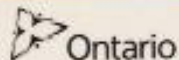


E A S T S C A R B O R O U G H

# STOREFRONT

4040 LAWRENCE AVE. E

**METCALF  
FOUNDATION**



**EMPLOYMENT  
ONTARIO**



# Next?



# An Important Partnership

“ The Toronto region is fortunate to have both a globally renowned research university and a world-class city-region right here in Toronto.

*Let's work together.*



UNIVERSITY OF  
TORONTO