



Family name, Given name  
Brommeland, Richard

**Partner Information**

**Organization Information**

Full organization name National Institute for Nanotechnology	Organization type Research organization
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Sector  
Federal government

Address 11421 Saskatchewan Drive NW	City/Municipality Edmonton	Prov./State AB	Postal/Zip code T6G2M9
	Country CANADA		

**Contact Information**

Contact family name  
Brommeland

Given name Richard	Initials
-----------------------	----------

	Country code	Area code	Number	Extension
Telephone number	1	780	641-1620	
Secondary phone number				
Fax number				

E-mail  
richard.brommeland@nrc-cnrc.gc.ca

Web address



Prof. Rob Shields and Dr. Kevin Jones  
CRSC, Faculty of Extension  
2-184 Enterprise Square  
10230 Jasper Ave.  
Edmonton, AB T5J 4P6

November 16, 2011

**RE: Your "Nanotechnology and the Community" SSHRC Partnership Development Grant Program Application**

Dear Rob and Kevin,

The National Institute for Nanotechnology is pleased to confirm our support for your application to the SSHRC Partnership Development Grant Program in the area of nanotechnology and the community. We would be happy to participate in and assist the project over its term. For instance, we offer to support the development of the project's research and engagement activities by:

- continuing our membership on the project steering committee;
- providing technical expertise on developments in nanotechnology and the role of facilities such as NINT to the project as a whole, and in the following areas in particular:
  - a) assisting the development of case studies and issues around which the citizen panel and community engagement activities would take place.
  - b) assistance in preparing learning materials for citizens participating in these exercises.
- participating in the engagement activities by contributing scientific expertise and in helping facilitate the development of a public dialogue around nanotechnology;
- assisting the project to liaise with Alberta's emerging nanotechnology sector.

We consider your proposed work to be valuable to our mission and potentially very rewarding for our community. When the community participates in such initiatives, it gains a facts-based confidence in the safety of, regulatory framework for, and societal benefits related to nanotechnology based innovation. That confidence is essential to enable NINT and its stakeholders to smoothly deploy such innovation in fulfillment of our mandate.

Sincerely yours,

Marie D'Iorio  
A/Director General



Family name, Given name  
Brommeland, Richard

### Contributions from Partner

A partner is an organization that participates actively in a formal partnership and contributes in a meaningful way to the success of the endeavour.

	Confirmed	Cash	Confirmed	In-kind
		Amount		Amount
<b>Personnel costs</b>				
<b>Student salaries and benefits/Stipends</b>				
Undergraduate				
Masters				
Doctorate				
<b>Non-student salaries and benefits/Stipends</b>				
Postdoctoral				
Other				
<b>Travel and subsistence costs</b>				
<b>Applicant/Team member(s)</b>				
Canadian travel				
Foreign travel				
<b>Students</b>				
Canadian travel				
Foreign travel				
<b>Other expenses</b>				
<b>Professional/Technical services</b>	<b>N</b>	0	<b>N</b>	6,400
<b>Supplies</b>				
<b>Non-disposable equipment</b>				
Computer hardware				
Other				
<b>Other expenses (specify)</b>				
<b>Total</b>		0		6,400
<b>Total of all contributions (cash + in-kind)</b>				6,400



Family name, Given name

Carpenter, David

**Partner Information**

**Organization Information**

Full organization name  
Northern Alberta Institute of Technology

Organization type  
College

Sector  
Higher education

Address  
11762-106 Street

City/Municipality  
Edmonton

Prov./State  
AB

Postal/Zip code  
T5G2R1

Country  
CANADA

**Contact Information**

Contact family name  
Carpenter

Given name  
David

Initials  
C

	Country code	Area code	Number	Extension
Telephone number	1	780	4717714	
Secondary phone number				
Fax number	1	780	4718994	

E-mail  
dcarpent@nait.ca

Web address  
www.nait.ca



SCHOOL OF INFORMATION COMMUNICATION  
AND ENGINEERING TECHNOLOGIES

18 November 2011

Prof. Rob Shields and Dr. Kevin Jones  
CRSC, Faculty of Extension  
2-184 Enterprise Square  
10230 Jasper Ave.  
Edmonton, AB T5J 4P6

Dear Rob and Kevin,

I am writing to confirm our support for your application the SSHRC Partnership Development Grant Program in the area of nanotechnology and the community and for the project aims and objectives. I shall be pleased to participate for the entire term of the project as a partner. We will support the development of the project's research and engagement activities by:

- joining the membership of the project steering committee for the term of the project;
- lending expertise to inform the project development in areas relating to product design and the commercial development of nanotechnologies;
- participating in citizen panel and engagement activities as experts in product development and skills training;
- participate in the development of research activities relating to training and career development in the nanotechnology sector in Edmonton;
- support NAIT technology students in participating in citizen panels and engagement activities.

We see this as an interesting and potentially very rewarding project and hope that through our participation we will be able to foster greater innovation and engagement with nanotechnology in the community.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'DCCarpenter', is written over a light blue grid background.

David C. Carpenter  
Dean, School of Information Communication and Engineering Technology,  
NAIT



Family name, Given name  
Carpenter, David

### Contributions from Partner

A partner is an organization that participates actively in a formal partnership and contributes in a meaningful way to the success of the endeavour.

	Confirmed	Cash	Confirmed	In-kind
		Amount		Amount
<b>Personnel costs</b>				
<b>Student salaries and benefits/Stipends</b>				
Undergraduate				
Masters				
Doctorate				
<b>Non-student salaries and benefits/Stipends</b>				
Postdoctoral				
Other				
<b>Travel and subsistence costs</b>				
<b>Applicant/Team member(s)</b>				
Canadian travel				
Foreign travel				
<b>Students</b>				
Canadian travel				
Foreign travel				
<b>Other expenses</b>				
<b>Professional/Technical services</b>				
<b>Supplies</b>				
<b>Non-disposable equipment</b>				
Computer hardware				
Other				
<b>Other expenses (specify)</b>				
<b>Total</b>		0		0
<b>Total of all contributions (cash + in-kind)</b>				0



Family name, Given name

Djukich, Dan

**Partner Information**

**Organization Information**

Full organization name Alberta Innovates Technology Futures	Organization type Provincial/Territorial government
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Sector  
Provincial government

Address 250 Karl Clark Road	City/Municipality Edmonton	Prov./State AB	Postal/Zip code T6N1E4
	Country CANADA		

**Contact Information**

Contact family name  
Djukich

Given name Dan	Initials
-------------------	----------

	Country code	Area code	Number	Extension
Telephone number	780	450	5111	
Secondary phone number				
Fax number				

E-mail  
dan.djukich@albertainnovates.ca

Web address





**Edmonton**

250 Karl Clark Road  
Edmonton, AB  
Canada T6N 1E4  
Tel 780.450.5111  
Fax 780.450.5333

**Calgary**

3608 – 33 St NW  
Calgary, AB  
Canada T2L 2A6  
Tel 403.210.5222  
Fax 403.210.5380

**Vegreville**

P.O Bag 4000  
Vegreville, AB  
Canada T9C 1T4  
Tel 780.632.8211  
Fax 780.632.8385

**Devon**

C/O 250 Karl Clark Road  
Edmonton, AB  
Canada T6N 1E4  
Tel 780.450.5111  
Fax 780.450.5333

November 1, 2011

Prof. Rob Shields and Dr. Kevin Jones  
CRSC, Faculty of Extension  
2-184 Enterprise Square  
10230 Jasper Ave.  
Edmonton, AB T5J 4P6

Dear Rob and Kevin:

I am writing to confirm our support for your application to the SSHRC Partnership Development Grant Program in the area of nanotechnology and the community. I, or another representative of Alberta Innovates - Technology Futures (AITF), will be happy to participate as a partner for the entire term of the project and will support the development of the project's research and engagement activities by:

- continuing our membership on the project steering committee
- providing expertise on policy and strategy development relating to nanotechnology in the Province of Alberta
- participating in the engagement activities as representatives of AITF and in helping facilitate the development of a public dialogue around nanotechnology
- assisting the project to liaise with Alberta's emerging nanotechnology sector
- provide financial support for the development of the Citizen Panel and Community Engagement activities as outlined in the attached activity description and budget

I see this as an interesting and potentially very rewarding project and hope that through our participation we will be able to foster greater innovation and engagement with nanotechnology in the community.

Sincerely,

Dan Djukich  
Director, nanoAlberta

DD/ifm





Family name, Given name  
Djukich, Dan

<b>Contributions from Partner</b>				
A partner is an organization that participates actively in a formal partnership and contributes in a meaningful way to the success of the endeavour.				
	<b>Confirmed</b>	<b>Cash</b>	<b>Confirmed</b>	<b>In-kind</b>
		Amount		Amount
<b>Personnel costs</b>				
<b>Student salaries and benefits/Stipends</b>				
Undergraduate				
Masters				
Doctorate				
<b>Non-student salaries and benefits/Stipends</b>				
Postdoctoral				
Other				
<b>Travel and subsistence costs</b>				
<b>Applicant/Team member(s)</b>				
Canadian travel				
Foreign travel				
<b>Students</b>				
Canadian travel				
Foreign travel				
<b>Other expenses</b>				
<b>Professional/Technical services</b>	<b>N</b>	0	<b>N</b>	6,400
<b>Supplies</b>				
<b>Non-disposable equipment</b>				
Computer hardware				
Other				
<b>Other expenses (specify)</b>				
Engagement Exercises	<b>Y</b>	48,808	<b>N</b>	0
<b>Total</b>		48,808		6,400
<b>Total of all contributions (cash + in-kind)</b>				55,208



Do not photocopy this page.

<b>Internal use</b>	CID (if known)
257635	

**Identification**  
Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

Name			
Family name	Given name	Initials	Title
Guston	Dave		Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input checked="" type="radio"/> Other (country)	Have you applied for permanent residency?
			UNITED STATES	<input type="radio"/> Yes <input checked="" type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
	<input type="radio"/> F <input checked="" type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**  
The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
1	480	727-8829					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail: dave.gustonsshrc@gmail.com							
Secondary E-mail: david.guston@asu.edu							

Personal information will be stored in the Personal Information Bank for the appropriate program.

**Checked**  
Web CV  
2011/11/17



**Do not photocopy this page.**

Family name, Given name

Guston, Dave

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address Arizona State University			Address		
PO Box 875603					
City/Municipality Tempe	Prov. / State AZ	Postal/Zip code 85287	City/Municipality	Prov. / State	Postal/Zip code
Country UNITED STATES			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality	Prov./ State		City/Municipality	Prov./ State	Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number			
		Country code	Area code	Number	Extension
Temporary E-mail					



**Do not photocopy this page.**

Family name, Given name

Guston, Dave

### Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

#### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	360	Science and technology
2	320	Politics and government
3	244	Innovation, Industrial and Technological Development

#### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year				Year			
		BC	AD			BC	AD
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>

#### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

#### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1			
2			
3			
4			
5			



Family name, Given name

Guston, Dave

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)	
Full Professor				2005/1	
Org. code	Full organization name				
9976102	Arizona State University				
Department/Division name					
Politics and Global Studies					
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input type="radio"/> Full-time	<input type="radio"/> Part-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Non-salaried	<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Co-Director			2008/7		
Org. code	Full organization name				
9976102	Arizona State University				
Department/Division name					
Consortium for Science, Policy and Outcomes					
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Acting Director			2007/7	2008/6	
Org. code	Full organization name				
9976102	Arizona State University				
Department/division name					
Consortium for Science, Policy and Outcomes					
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Full Professor			2005/1		
Org. code	Full organization name				
9976102	Arizona State University				
Department/Division name					
Politics and Global Studies					

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV



Family name, Given name

Guston, Dave

**Work Experience (cont'd)**

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Director	2005/10	

Org. code	Full organization name
9976102	Arizona State University

Department/Division name  
Center for Nanotechnology in Society (CNS-ASU)

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Associate Director	2005/1	2007/6

Org. code	Full organization name
9976102	Arizona State University

Department/Division name  
Consortium for Science, Policy, & Outcomes

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Director	2001/7	2004/12

Org. code	Full organization name
9932103	Rutgers, The State University of New Jersey

Department/Division name  
Public Policy

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Associate Professor	2000/7	2004/12

Org. code	Full organization name
9932103	Rutgers, The State University of New Jersey

Department/Division name  
Bloustein School of Planning & Public Policy

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Assistant Professor	1994/7	2000/6

Org. code	Full organization name
9932103	Rutgers, The State University of New Jersey

Department/Division name  
Public Policy



Family name, Given name

Guston, Dave

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Adjunct Lecturer		1994/4	1994/6
Org. code	Full organization name		
9927102	Harvard University		
Department/Division name			
John F. Kennedy School of Government			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate		1993/6	1994/6
Org. code	Full organization name		
9927102	Harvard University		
Department/Division name			
Belfer Center for Science and International Affairs			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Research Assistant		1992/9	1993/5
Org. code	Full organization name		
9927102	Harvard University		
Department/Division name			
Belfer Center for Science and International Affairs			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Research Assistant		1990/6	1990/9
Org. code	Full organization name		
9953010	Smithsonian Institution		
Department/Division name			
National Museum of American History			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			





Family name, Given name

Guston, Dave

<b>Academic Background</b>				
List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1989/01		1993/01
Disc. code	Discipline			Did SSHRC support enable you to get this degree?
62800	Political Science			<input type="radio"/> Yes <input checked="" type="radio"/> No
Org. code	Organization			
9927103	Massachusetts Institute of Technology			
Country <b>UNITED STATES</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1984/09		1987/01
Disc. code	Discipline			Did SSHRC support enable you to get this degree?
63499	Technology and Society			<input type="radio"/> Yes <input checked="" type="radio"/> No
Org. code	Organization			
9929101	Yale University			
Country <b>UNITED STATES</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline			Did SSHRC support enable you to get this degree?
				<input type="radio"/> Yes <input type="radio"/> No
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline			Did SSHRC support enable you to get this degree?
				<input type="radio"/> Yes <input type="radio"/> No
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline			Did SSHRC support enable you to get this degree?
				<input type="radio"/> Yes <input type="radio"/> No
Org. code	Organization			
Country				

Personal information will be stored in the Personal Information Bank for the appropriate program.



Family name, Given name

Guston, Dave

### Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Professional Designation	American Association for the Advancement of Scienc	non-profit organization UNITED STATES		\$0 2003
Non-Academic Prize	Don K. Price Award	American Political Science Association UNITED STATES	12	2002

### Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

#### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Political Science, Nanotechnology, Planning & Public Policy, Politics and Government, Innovation

#### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	62800	Political Science	
2	62820	Public Policy Studies	
3			
4			
5			



Family name, Given name

Guston, Dave

**Funded Research**

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code 1	Full name of funding organization National Science Foundation	Year awarded (yyyy) 2010	Total amount (CAN\$) \$6,500,000
----------------	--	-----------------------------	-------------------------------------

Role Applicant	Completion status <input type="checkbox"/> Complete
-------------------	---

Project title NSEC/Center for Nanotechnology in Society at Arizona State University
--

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code 1	Full name of funding organization National Science Foundation	Year awarded (yyyy) 2009	Total amount (CAN\$) \$109,000
----------------	--	-----------------------------	-----------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
-------------------	--

Project title NSEC/Center for Nanotechnology in Society at Arizona State University
--

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code 1	Full name of funding organization National Science Foundation	Year awarded (yyyy) 2009	Total amount (CAN\$) \$543,000
----------------	--	-----------------------------	-----------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
-------------------	--

Project title Socio-Technical Integration Research
---

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code 1	Full name of funding organization National Collegiate Inventors and Innovators Alliance	Year awarded (yyyy) 2007	Total amount (CAN\$) \$30,000
----------------	--	-----------------------------	----------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
-------------------	--

Project title New Futures for Human Health and Enhancement: An Exploration of Nanotechnology-based Product Concepts in InnovationSpace
---

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------



## 1. Research Contributions Over the Last Six Years (2005-11)

### Refereed contributions

#### Books

- R D. H. Guston. 2000. *Between Politics and Science: Assuring the Integrity and Productivity of Research*. New York: Cambridge University Press.
- R D. H. Guston and D. Sarewitz, eds. 2006. *Shaping Science and Technology Policy: The Next Generation of Research*. Madison: University of Wisconsin Press.

#### Book Chapters

- R M.C. Roco, B. Harthorn, D. Guston, and P. Shapira. 2010. "Innovative and Responsible Governance of Nanotechnology for Responsible Development." Pp. 441-87 in M.C. Roco, C.A. Mirkin, and M.C. Hersam, eds., *WTEC Panel report on Nanotechnology Research Directions to 2020: Retrospective and Outlook*. New York: Springer.(Reprinted as: M.C. Roco, B. Harthorn, D. Guston and P. Shapira. 2011. "Innovative and Responsible Governance of Nanotechnology." *Journal of Nanoparticle Research* 13(9).)
- R R.E. Smits, R. van Merkerk, D.H. Guston, and D. Sarewitz. 2010. "Strategic Intelligence: The Role of TA in Systemic Innovation Policy." In R.E. Smits, S. Kuhlman, and P. Shapira, eds., *The Theory and Practice of Innovation Policy: An International Research Handbook*. Northampton, MA: Edward Elgar.
- R D. H. Guston. 2010. "Science, Politics, and Two Unicorns: An Academic Critique of Science Advice." Pp. 7-15 in R. Pielke, Jr. and R. A. Klein, eds., *Presidential Science Advisors: Perspectives and Reflections on Science, Policy, and Politics*. New York: Springer.
- R R. Karinen and D. H. Guston. 2010. "Toward Anticipatory Governance: The Experience with Nanotechnology." Pp. 217-232 in M. Kaiser, M. Kurath, S. Maasen, and C. Rehmann-Sutter, eds. *Governing Future Technologies: Nanotechnology and the Rise of an Assessment Regime*. Dordrecht: Springer.
- R H. Fenyk and D. H. Guston. 2006. "Citizen Expertise and Citizen Action in the Creation of the Freshwater Wetlands Protection Act." In N. Maher, ed., *New Jersey's Environments*. New Brunswick: Rutgers University Press.
- R D. H. Guston. 2005. "Institutional Design for Robust Knowledge: The National Toxicology Program's Report on Carcinogens." Pp. 63-79 in S. Maasen and P. Weingart, eds., *Democratization of Expertise? Sociology of Science*, 24. Dordrecht: Springer.

#### Journal articles

- R W. C. Clark, T.P. Tomich, M. von Noordwijk,, D. Guston, D. Catacutan, N.M. Dickson, and E. McNie. 2011. "Boundary work for sustainable development: Natural Resource Management at the Consultative Group on International Agricultural Research (CGIAR)." *Proceedings of the National Academy of Sciences USA*. DOI: 10.1073/pnas.0900231108.
- R D. H. Guston. 2010. "The Anticipatory Governance of Emerging Technologies." *Journal of the Korean Vacuum Society* 19(6):432-41.
- R M. Brown and D. H. Guston. 2009. "Science, Democracy, and the Right to Research." *Science and Engineering Ethics* 15(3):351-66.
- R S. Shapiro and D. H. Guston. 2007. "Procedural Control of the Bureaucracy, Peer Review, and Epistemic Drift." *Journal of Public Administration, Research, and Theory* 17(4):535-51.
- R D. A. Scheufele, E. A. Corley, S. Dunwoody, T. Shih, E. Hillback, and D. H. Guston. 2007. "Nanotechnology: Scientists Worry About Some Risks More Than the General Public." *Nature Nanotechnology* 2(12):732-34.

R G. Gano, J. E. Crowley, and D. H. Guston. 2007. “‘Shielding’ the Knowledge Transfer Process in Human Services Research” *Journal of Public Administration, Research, and Theory* 17(1):39-60.

#### **Forthcoming refereed contributions**

D. H. Guston. (submitted). “The Pumpkin or the Tiger? The Anticipatory Governance of Emerging Technologies.” *Minerva*.

A. Wiek and D. H. Guston. (submitted). “The Nano-Enhanced City, Sustainability Challenges, and Anticipatory Governance.” *Environment and Planning C*.

#### **Non-refereed contributions**

Professor Guston has numerous invited or editorially reviewed contributions in prominent professional journals, including invited commentaries in *Nature* and *People & Science*, four authored or co-authored articles in *Issues in Science and Technology*, and articles in *Society*, *Minerva*, *Centennial Review*, *Forum for Applied Research & Public Policy*, and *Social Epistemology*. Among other brief writings, Professor Guston has authored or co-authored two articles in *The Encyclopedia of Science, Technology, & Ethics*, an article in *The History of Science in the United States: An Encyclopedia*, book reviews in *The Journal of Nanoparticle Research*, *Science*, *Public Understanding of Science*, *Futures*, and *Technology and Culture*, opinion pieces in *The Newark Star-Ledger*, *The Chronicle of Higher Education*, *The Scientist*, and *IEEE Technology and Society Magazine*, and letters in *The New York Times*, *The New York Times Magazine*, *The Science Times*, *The New Republic*, *Science*, *The New Yorker*, *Issues in Science and Technology*, and *Academe*.

D. H. Guston, ed. 2010. *Encyclopedia of Nanoscience and Society* (two volumes). Thousand Oaks, CA: Sage Publications.

Selin, C., A. Wiek, D. H. Guston, A. Wilkinson and R. Ramirez. 2010. *Plausibility Project Workshop: Creating Research Agendas*. CNS-ASU Report #R10-0001. Center for Nanotechnology in Society, Arizona State University, Tempe, AZ.

D. H. Guston, 2010. *Societal Dimensions Research in the National Nanotechnology Initiative*. CSPO Report #R10-02. Consortium for Science, Policy and Outcomes and Center for Nanotechnology in Society, Arizona State University, Tempe, AZ.

D. H. Guston. 2010. *Between Politics and Science: Assuring the Integrity and Productivity of Research*. New York: Cambridge University Press. (China edition, with new preface).

P. Hamlett, M. D. Cobb, and D. H. Guston. 2008. *National Citizens’ Technology Forum: Nanotechnologies and Human Enhancement*. CNS-ASU Report #R08-0002.

D. Barben, E. Fisher, C. Selin, and D. H. Guston. 2008. “Anticipatory Governance of Nanotechnology: Foresight, Engagement, and Integration.” Pp. 979-1000 in E. J. Hackett, O. Amsterdamska, M. E. Lynch, and J. Wajcman, eds., *The New Handbook of Science and Technology Studies*. Cambridge: MIT Press.

C. A. Miller, D. H. Guston, D. Barben, J. Wetmore, C. Selin and E. Fisher. 2007. *Nanotechnology and Society: Ideas for Education and Public Engagement*. CNS-ASU Report #R07-0001. Center for Nanotechnology in Society, Arizona State University, Tempe, AZ.

D. H. Guston. 2007. “Toward Centres for Responsible Innovation in the Commercialized University.” Pp. 295-312 in P. W. B. Phillips and J. Porter, eds., *Public Science in Liberal Democracy: The Challenge to Science and Democracy*. Toronto: University of Toronto Press.

D. H. Guston. 2007. “The Center for Nanotechnology in Society at Arizona State University and the Prospects for Anticipatory Governance.” Pp. 377-92 in N. Cameron and M. Ellen Mitchell, eds., *Nanoscale: Issues and Perspectives for the Nano Century*. New York: John Wiley and Sons.



- D. H. Guston, J. Parsi, and J. Tosi. 2007. "Anticipating the Ethical and Political Challenges of Human Nanotechnologies." Pp. 185-97 in F. Allhoff, P. Lin, J. Moor, and J. Weckert, eds., *Nanoethics: The Ethical and Social Implications of Nanotechnology*. New York: John Wiley and Sons.
- D. H. Guston. 2006. "On Consensus and Voting in Science: From Asilomar to the National Toxicology Program." Pp. 378-404 in S. Frickel and K. Moore, eds., *The New Political Sociology of Science*. Madison: University of Wisconsin Press.
- M. Feldman, D. Guston, S. Hilgartner, R. Hollander, and S. Slaughter. 2005. *Research Policy as an Agent of Change: Workshop Report*. NSF 05-209. Arlington, VA: National Science Foundation.

## 2. Other Research Contributions

Professor Guston has made more than one hundred and fifty presentations of his research at professional meetings (e.g., American Association for the Advancement of Science, American Political Science Association, Society for Social Studies of Science, Society for the Study of Nanoscience and Emerging Technologies), meetings by special invitation (e.g., Harvard Medical School, San Francisco Exploratorium, Brookings Institution, Gordon Research Conference, AAAS Science and Technology Policy Colloquium, Sigma Xi, Sam Nunn/Bank of America Public Policy Forum, NSEC/National Center for Learning and Teaching, Bassetti Foundation), community groups (e.g., Spirit of the Senses Salon, Humanist Society of Greater Phoenix, Science Café), and through invitations by universities, governmental and quasi-governmental bodies in the US, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United Kingdom. He was a keynote speaker at the Dublin Institute of Technology's meeting Research Ethics: Challenges and Dilemmas, in Dublin, Ireland in May 04, the Dutch NanoNed Flagship TA and Societal Aspects of Nanotechnology meeting in Utrecht, the Netherlands in Jul 08, the Nanotechnology, Policy and Society meeting at Manchester University, UK, in Sep 08, and the ESRC-sponsored Critical Public Engagement seminar at Durham University in Dec 09. In Mar 09, he organized and spoke at a briefing to the US Congressional Nanotechnology Caucus on "Nanotechnology and the Public: Data for Decision Makers," and he organized a "Workshop on Real-time Technology Assessment and Anticipatory Governance" prior to the Sep 09 inaugural meeting of the Society for the Study of Nanoscience and Emerging Technologies, in Seattle. In Oct 09, he presented on the chair's plenary panel on "STS and Policy in the Academy" at the annual meeting of the Society for Social Studies of Science. In Feb 10, he briefed a working group of the President's Council of Advisors for Science and Technology (PCAST) on the societal dimensions of nano-scale science and engineering.

## 3. Five Most Significant Career Research Contributions

1. *Between Politics and Science: Assuring the Integrity and Productivity of Research*. Cambridge U. Press, 2000. This book was awarded the 2002 Don K. Price Prize by the American Political Science Association for best book in science and technology policy. It outlines a coherent new framework for analyzing the changing relationship between politics and science in the United States.
2. Boundary organizations in environmental policy and science: an introduction. *Science, Technology & Human Values*. 26, 399-408, 2001. Describes how science acts as a boundary organization.
3. Real-Time Technology Assessment. *Technology in Society* 24:93-109, 2002 (with D. Sarewitz). The paper outlines an important contribution to real-time technology assessment, which bridges natural and social science knowledge. It is the third most cited paper in the journal *Technology in Society*.
4. Understanding Anticipatory Governance." *Social Studies of Science* (submitted). This article presents



the central assumptions guiding an anticipatory approach to governing technologies. It charts a new course of research that attempts to understand the future impact of technologies within society.

5. Innovation policy: not just a jumbo shrimp. *Nature*, 454, 940-941, 2008. How does one predict and direct something that is by nature unpredictable and, by necessity, often undirected? The paper introduces three key forms of anticipatory governance – engagement, foresight and integration – to a non-social science audience.

#### **4. Career Interruptions and Special Circumstances: N/A**

#### **5. Contributions to Training**

##### Undergraduate Supervision

At ASU, Professor Guston has supervised two undergraduate independent projects, chaired one undergraduate honors thesis, and served as second reader on two additional honors theses (both of which were awarded Fulbright scholarships). He has supervised numerous undergraduate researchers at CNS-ASU and CSPO.

##### Graduate Supervision

Professor Guston has been a member of nine completed doctoral dissertations in: political science, communication, urban planning and policy development, public affairs, life sciences, and chemistry & biochemistry. He currently serves on 7 doctoral committees in urban planning and policy development, public affairs, and political science. He has been a member of one completed master's thesis committee in life sciences and currently supervises one in political science. Professor Guston has supervised dozens of internships and independent studies, including one independent study by a master's student at Rutgers that resulted in briefings for policy makers in Trenton and Washington, DC (sponsored by Reps. Rodney Frelinghuysen and Rush Holt).

##### Post-doctoral Supervision

Professor Guston has supervised eight post-doctoral fellows.

Professor David Guston

My work is interdisciplinary and has taken up issues of innovation, science, and public policy, with a particular focus on developing conceptual and policy models to assess and study nanotechnology within society.

1. Director, *NSEC/Center for Nanotechnology in Society at Arizona State University*. As director of the Nanotechnology centre at ASU, I am responsible for advancing research on nanotechnology that improves the overall quality of life for Americans. The focus of the research is on the societal aspects of nanoscale and engineering, carried out in close collaboration with NSE scientists, and various public engagement exercises. The centre collaborates with many other academic institutions, disciplines, and local community outreach programs.

2. Co-Director, *Consortium for Science, Policy and Outcomes, Arizona State University*. As co-director, I am responsible for carrying the vision of the consortium forward. The consortium is an intellectual network aimed at enhancing the contribution of science and technology to society's pursuit of equality, justice, freedom, and overall quality of life. It focuses on the development of knowledge and public engagement that helps decision makers chart a course for the future.

3. Series Editor, *Yearbook of Nanotechnology in Society*. New York: Springer. The goal of the nanotechnology book series is to present emerging scholarship on nanotechnology to scholars and students interested in the field. It draws much of its approach from the social studies of science and technology, and it exemplifies the kind of research done at CNS-ASU.

4. Editor, *Encyclopedia of Nanoscience and Society* (two volumes). Thousand Oaks, CA: Sage Publications, 2010. This two-part series on nanotechnology and society brings together nearly 500 entries describing the societal aspects of nanoscience.

5. Innovation policy: not just a jumbo shrimp. *Nature*, 454, 940-941, 2008. This commentary outlines three key forms of anticipatory governance – engagement, foresight and integration – to a non-social science audience. It considers why nanotechnology innovation can be further integrated into the needs of society through anticipatory governance.

6. The Anticipatory Governance of Emerging Technologies. *Journal of the Korean Vacuum Society* 19(6):432-41, 2010. This article presents the central assumptions guiding an anticipatory approach to governing (nano) technologies, which emphasizes the development of new models to understand the future impact of technologies within society.

7. Real-Time Technology Assessment. *Technology in Society* 24:93-109, 2002 (with D. Sarewitz). This paper develops a model that integrates natural science and engineering investigations with social science and policy research in to a real-time assessment. Using examples from the nanoscale, the paper outlines investigations into analogical case studies, research program mapping, communication and early warning, and technology assessment and choice.



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<b>Internal use</b>	CID (if known)
971056	

**Identification**  
Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

Name			
Family name	Given name	Initials	Title
Horst	Maja		Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input checked="" type="radio"/> Other (country)	Have you applied for permanent residency?
			DENMARK	<input type="radio"/> Yes <input checked="" type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1969	<input checked="" type="radio"/> F <input type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**  
The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
+45	202	86866					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail <b>maja.horstsshrc@gmail.com</b>							
Secondary E-mail <b>horst@hum.ku.dk</b>							

Personal information will be stored in the Personal Information Bank for the appropriate program.

**Checked**  
Web CV  
2011/11/17



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Family name, Given name

Horst, Maja

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address			Address		
Faculty of Humanities					
University of Copenhagen					
Njalsgade 80					
DK-2300 Copenhagen S			City/Municipality		Prov. / State
					Postal/Zip code
Country DENMARK			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality		Prov./ State	City/Municipality		Prov./ State
					Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)		End date (yyyy/mm/dd)		Temporary telephone/fax number	
				Country code	Area code
				Number	Extension
Temporary E-mail					



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Family name, Given name

Horst, Maja

### Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

#### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	120	Communication
2	360	Science and technology
3	244	Innovation, Industrial and Technological Development

#### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year				Year			
		BC	AD			BC	AD
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>

#### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

#### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1			
2			
3			
4			
5			



Family name, Given name

Horst, Maja

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Danish
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Head				2011/1
Org. code	Full organization name			
9129101	University of Copenhagen			
Department/Division name				
Department of Media, Cognition and Communication				
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input type="radio"/> Full-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
External Lecturer			2011/1	
Org. code	Full organization name			
9129103	Aalborg Universitet			
Department/Division name				
Department of Development and Planning				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Associate Professor			2010/1	2011/1
Org. code	Full organization name			
9129108	Copenhagen Business School			
Department/division name				
Organization and Industrial Sociology				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Associate Professor			2007/1	2010/1
Org. code	Full organization name			
9129108	Copenhagen Business School			
Department/Division name				
Management, Politics and Philosophy (MPP)				



Family name, Given name

Horst, Maja

**Work Experience (cont'd)**

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Appointed external examiner	2006/1	

Org. code	Full organization name
9129104	Roskilde University

Department/Division name  
Communications, Journalism and Performance-design

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Assistant Professor	2004/1	2006/1

Org. code	Full organization name
9129108	Copenhagen Business School

Department/Division name  
Management, Politics and Philosophy (MPP)

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Research Assistant	1999/1	2003/1

Org. code	Full organization name
9129108	Copenhagen Business School

Department/Division name  
Management, Politics and Philosophy (MPP)

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Research Assistant	1999/1	1999/12

Org. code	Full organization name
9129109	University of Southern Denmark

Department/Division name  
Journalism

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Research Assistant	1998/1	1999/1

Org. code	Full organization name
1	Centre for Journalism and Further Education

Department/Division name  
Centre for Journalism and Further Education





Family name, Given name

Horst, Maja

**Work Experience (cont'd)**

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Research Assistant	1997/1	1998/1

Org. code	Full organization name
9129104	Roskilde University

Department/Division name  
Languages, Culture and Communication

Position	Start date (yyyy/mm)	End date (yyyy/mm)

Org. code	Full organization name

Department/Division name

Position	Start date (yyyy/mm)	End date (yyyy/mm)

Org. code	Full organization name

Department/Division name

Position	Start date (yyyy/mm)	End date (yyyy/mm)

Org. code	Full organization name

Department/Division name

Position	Start date (yyyy/mm)	End date (yyyy/mm)

Org. code	Full organization name

Department/Division name



Family name, Given name

Horst, Maja

<b>Academic Background</b>				
List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1999/01		2003/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Knowledge and Management	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9129108	Copenhagen Business School			
Country <b>DENMARK</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1994/01		1996/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Communication and Social Science	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9129104	Roskilde University			
Country <b>DENMARK</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Gen.		1990/01		1993/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Bachelor of social science	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9129104	Roskilde University			
Country <b>DENMARK</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Personal information will be stored in the Personal Information Bank for the appropriate program.



Family name, Given name

Horst, Maja

### Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	Research Communication	FUHU DENMARK		\$4,630 2009
Academic Prize	The Science Communication Prize	Federal Government DENMARK		\$18,520 2009

### Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

#### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Science and Technology Studies; Public Understanding of Science; Science Communication; Public Communication; Research Management; Sociology of Innovation

#### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	50600	Communications and Media Studies	
2	63499	Other Sociology	Science and Technology Studies
3	62699	Other Administrative Studies	Sociology of Innovation
4			
5			



Family name, Given name

Horst, Maja

**Funded Research**

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code 1	Full name of funding organization The Danish Social Science Research Council	Year awarded (yyyy) 2009	Total amount (CAN\$) \$674,967
Role Applicant		Completion status <input type="checkbox"/> Complete	
Project title Scientific Social Responsibility			
Applicant's family name		Applicant's given name	
Applicant's family name Horst		Applicant's given name	
Org. code 1	Full name of funding organization The Danish Strategic Research Council	Year awarded (yyyy) 2008	Total amount (CAN\$) \$237,970
Role Co-applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Sense-making strategies and the user-driven innovations of virtual worlds			
Applicant's family name Horst		Applicant's given name	
Org. code 1	Full name of funding organization The Danish Social Science Research Council	Year awarded (yyyy) 2007	Total amount (CAN\$) \$200,942
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Research Management and Risk			
Applicant's family name		Applicant's given name	
Org. code 1	Full name of funding organization Danish Research council for the Humanities	Year awarded (yyyy) 2007	Total amount (CAN\$) \$103,341
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Stem cell research in the public sphere			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	



Family name, Given name

Horst, Maja

**Funded Research (cont'd)**

Org. code 1	Full name of funding organization Danish Social Science Research Council	Year awarded (yyyy) 2004	Total amount (CAN\$) \$555,600
----------------	---	-----------------------------	-----------------------------------

Role Co-applicant	Completion status <input checked="" type="checkbox"/> Complete
----------------------	--

Project title Creating Science: Crafting stem cell research in a moral landscape

Applicant's family name Horst	Applicant's given name	Initials
----------------------------------	------------------------	----------

Org. code 1	Full name of funding organization Danish Social Science Research Council	Year awarded (yyyy) 2004	Total amount (CAN\$) \$370,400
----------------	---	-----------------------------	-----------------------------------

Role Co-applicant	Completion status <input checked="" type="checkbox"/> Complete
----------------------	--

Project title PRO-Media: Production, representation & organisation of Business News

Applicant's family name Horst	Applicant's given name	Initials
----------------------------------	------------------------	----------

Org. code 1	Full name of funding organization The Danish Medical Research Council	Year awarded (yyyy) 1999	Total amount (CAN\$) \$740,800
----------------	--	-----------------------------	-----------------------------------

Role Research Assistant	Completion status <input checked="" type="checkbox"/> Complete
----------------------------	--

Project title Molecular diagnostics and disease prevention.

Applicant's family name Horst	Applicant's given name	Initials
----------------------------------	------------------------	----------

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
-----------	-----------------------------------	---------------------	----------------------

Role	Completion status <input type="checkbox"/> Complete
------	---

Project title

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

## 1. Research Contributions Over the Last Six Years (2005-11)

### Refereed contributions:

#### **Books and research reports:**

- R Roy Langer, Peter Kjær & Maja Horst (eds.) (2009): Produktiv Journalistik – Virksomheder – Medier - Markeder. København: Handelshøjskolens Forlag.
- R Rob Hagendijk, Peter Healey, Maja Horst & Alan Irwin (2005). Science, Technology and Governance in Europe: Challenges of Public Engagement. Stage network, final report to the European commission (HPSE-CT2001-50003)
- Book chapters (Selected):
- R Maja Horst (2008) Media power? Influencing public opinion formation about stem cell research in Denmark. In Salla Lötjönen & Helena von Troil (eds): Bioethics, Politics and Business. Norden, Nordic Council of Ministers.
- R Maja Horst (2008): In search of dialogue: staging science communication in consensus conferences. In Bernard Schiele, Cheng Donghong, Michel Claessens, Toss Gascoigne, Jenni Metcalfe & Shi Shunke (Eds.): Science Communication in Social Context: Strategies for the future. Springer.
- R Alan Irwin & Maja Horst (2005): Science, Technology and Governance in Europe: Lessons from the STAGE project. In Ciencia, Tecnologia e Sociedade: Novos Modelos de Governanca. Brasilia, CGEE.

#### **Journal articles (Selected):**

- R Maja Horst & Mike Michael (2011): On the shoulders of idiots – Re-thinking Science Communication as ‘event’. Science as Culture. 1470-1189, First published on 08 April 2011
- R Maja Horst (2011): Taking our own medicine – on an experiment in science communication. Science and Engineering Ethics 17(3).
- R Maja Horst (2010): Le réseau des cellules souches: Une installation spatiale pour communiquer les sciences sociales. Questions de Communication. # 17, 2010.
- R Maja Horst (2010): Collective Closure? – Public debate as the solution to controversies about science and technology. Acta Sociologica 53(3)195-211.
- R Maja Horst & Alan Irwin (2010): Nations at ease with radical knowledge: on consensus, consensusing and false consensusness. Social Studies of Science. 40(1)105-126.
- R Maja Horst (2008): The laboratory of Public Debate: understanding the acceptability of stem cell research. Science and Public Policy 35(3)197-205.
- R Maja Horst, Alan Irwin, Peter Healey & Rob Hagendijk (2007): European scientific governance in a global context – resonances, implications and reflections. IDS Bulletin 38(5)6-20.
- R Maja Horst (2007): Public Expectations of Gene Therapy: Scientific Futures and their Performative Effects on Scientific Citizenship. Science, Technology and Human Values 32(2)150-171.
- R Maja Horst (2005): Cloning Sensations: Mass Mediated Articulation of Social Responses to Controversial Biotechnology. In Public Understanding of Science, 14(2)185-200.

### Non-refereed Contributions

Maja Horst: Learning from dialogue. Talk to the faculty of Law, Copenhagen University, 19. November 2009.

P1 Morgen: Interview in Scientific Social Responsibility. 18. June 2010.

Maja Horst & Alan Irwin: The Fairy Tale of Copenhagen? In Science and Public Affairs. Magazine for the British Science Association, 2009.

Dalsgård, B & M Horst: The Stem Cell Network II: Landscape of expectations. Movable installation created in spring 2007 and exhibited at CBS, KU, Fields.

Dalsgård, B, & M Horst: The Stem Cell Network. A social science research lab.

Performed February-March 2005 Nørrebro, Copenhagen. Documented in an unpublished DVD.

Maja Horst: Research Communication. Presentation to the Danish Institute for International Studies, 15. March 2007.

Forthcoming Contributions (Selected)

Ursula Plesner & Maja Horst (submitted): Selling the Selling Point: How Innovation Communication creates Users of Virtual Worlds Architecture. *Convergence*.

Maja Horst (submitted): Deliberation, Dialogue or Dissemination: changing objectives in the communication of Science and Technology in Denmark. In Claessens, Schiele & Shunke (Eds): *The Development of Public Communication of Science and Technology Studies – A comparative approach*. Springer.

## **2. Other Research Contributions**

Conference papers and invited talks (Selected):

Maja Horst (2011): It is probably something I ought to do... University of Auckland Business School, February.

Maja Horst (2010): Scientific Social Responsibility- or how to prepare research leaders of tomorrow to manage science in society. 4th annual conference of the European Forum on Philanthropy and Research Funding, Stuttgart, December.

Maja Horst (2010): Scientific Social Responsibility – Or how to think about science in society. Aarhus University, October.

Maja Horst (2010): Scientific Social Responsibility. EULASUR summerschool, Bariloche Argentina, October.

Maja Horst (2010): What do you learn from your audience? Presented at Dialogic Communication Workshop in Tampere, September.

Ursula Plesner & Maja Horst (2010): Monstrous Models and Virtual Buildings. Presented at 4S conference in Tokyo.

Maja Horst (2010): Do what I do – or not? Research Leaders' views on the organization of science communication. Presented at the CLSTI workshop in Gothenburg, July.

Maja Horst (2010): Communicating Science – shaping scientific identities? Presented at CSPO, Arizona State University, February.

Maja Horst (2009): Public Engagement: challenges to expertise? Invited Keynote at the conference: Revisiting Expertise, Copenhagen, November.

Maja Horst (2009): Looking at research managers as the embodiment of science. Presented at the Aesthetics & Organization workshop series – Looking, Copenhagen, November.

Birgitte Gorm Hansen & Maja Horst (2009): A promise worth funding? Presented at the 4S conference, Washington, October.

Maja Horst (2008): To learn from objections? Presented at the Art and Management conference on Taste, Essex University, November.

Maja Horst (2008): To learn from objections? Presented at the 4S/EAASST Conference, Rotterdam, August.

Maja Horst (2008): Taking our own medicine. Presented at the PCST 10 Conference, Malmo in Sweden, June.

Maja Horst (2008): Valuable Visions – Research applications as future-generating genre. Presented at the second DASTS conference, Århus, June.

- Maja Horst (2008): Choosing themes and planning demand-driven science communication. Presented at the AAAS 2008 Conference, Boston, February.
- Maja Horst (2008): A European Governance of Science. Presented at the Center for Nanotechnology and Society, Arizona State University, February.
- Maja Horst (2008): On Experimenting with Spatial Research Communication. Presented at the New Frontiers in Research and Communication Workshop, CSPO, Arizona State University, February.
- Maja Horst (2008): Public engagement with STS: Experimenting with the social science laboratory. Presented at the workshop on science communication as the co-production of sciences and their publics, Nobel Museum, Stockholm, February.
- Maja Horst (2007): The Stem Cell NetWork: Experiments in social science communication. Presented at the NISE network annual Meeting, San Francisco, November.
- Maja Horst (2007): Public engagement with STS: Experimenting with the social science laboratory. Presented at the 4S Conference, Montreal, October.
- Maja Horst & Alan Irwin (2007): Nations at ease with radical knowledge: Science, technology and consensus in contemporary Europe. Presented at the 4S Conference, Montreal, October.
- Maja Horst (2007): Media Power: Public opinion formation about stem cell research in Denmark. Presented at the Bioethics or Biopolitics Workshop, Nordforsk, Espoo, June.
- Maja Horst (2007): Learning from objections. Presented at the Dissensus Conference organised by Danish Science Journalists, Copenhagen, 1. June.
- Maja Horst (2007): Public deliberation as the solution to controversies about science. Presented at the workshop on Deliberation and Democratic Governance, SCORE, Stockholm, May.
- Maja Horst (2007): Experiments in social science communication. Presented at the DASTS Conference, CBS, May.
- Rob Hagendijk, Alan Irwin & Maja Horst (2006): Best Practice or Exceptionalism? Participation and scientific governance from a European perspective. Presented at the EASST Conference in Lausanne, August.

### **3. Five Most Significant Career Research Contributions**

1. Taking our own medicine – on an experiment in science communication. *Science and Engineering Ethics*, 17(3), 2010. This article reflects on the Stem Cell Network installation. It offers new knowledge about experimenting with different forms of public dialogue that make science communication more socially robust.
2. Collective Closure? – Public debate as the solution to controversies about science and technology. *Acta Sociologica* 53(3)195-211. The article contributes to debates about the public understand of science. It shows the inherent tension that comes with expectations from public debate about technologies, and the role public engagement plays in creating practical solutions to controversies.
3. The laboratory of Public Debate: understanding the acceptability of stem cell research. *Science and Public Policy* 35(3)197-205. This demonstrates how compromise in policy formation is a pre-condition for the decision to permit stem cell research.
4. Cloning Sensations: Mass Mediated Articulation of Social Responses to Controversial Biotechnology. The article contributes to science communication literature – it describes the main cultural dialogues on risk related to human cloning.
5. On the shoulders of idiots – Re-thinking Science Communication as ‘event’ (with Michael, M. *Science as Culture*, 1470-1189, 2010. This article reflects on visitor reactions to a science communication installation. It contributes new lessons for public engagement related to the complex power relations that exist between experts and citizens.

### **4. Career Interruptions and Special Circumstances: N/A**



## **5. Contributions to Training**

### PHD Supervisorship

- 2010- Marie Chimwemwe Degenbol, LIFE, KU
- 2010- Cecilie Glerup, CBS (Main supervisor)
- 2010- Anders Koed Madsen, CBS (Main supervisor)
- 2009- Maria Duclos, KU
- 2009- Ditte Degenbol, AAU
- 2008-2011 Dina Friis Jensen, CBS (Main supervisor)
- 2008-2011 Birgitte Gorm Hansen, CBS (Main supervisor)
- 2007-2010 Adam Buchhorn, CBS
- 2006-2009 Ursula Plesner, RUC

### Assessment Committees

- 2010 PhD thesis, Australian National University,
- Assistant Professorship, IT-University, Denmark
- PhD thesis, NTNU, Norway
- 2009 PhD thesis, University of Aarhus, Denmark
- PhD thesis, NTNU, Norway
- 2008 Senior researcher position, University of Aarhus, Denmark
- PhD thesis, Aalborg University, Denmark
- PhD thesis, CBS

Professor Maja Horst

My work considers the intersection between innovation, science and technology, and the public understanding of science, with a particular focus on developing novel methods for engaging in public dialogues.

1. *The Stem Cell Network II: Landscape of expectations* (with Dalsgård, B). This is a movable installation created in the Spring of 2007, and exhibited at CBS, KU, and Fields. The project is documented at [www.stamcellenetvaerket.dk](http://www.stamcellenetvaerket.dk). It is an experiment with spatial research communication. Its aim is to communicate social scientific knowledge about the development of new research and controversial technologies using communication techniques that are dialogical and interactive.
2. Taking our own medicine – on an experiment in science communication. *Science and Engineering Ethics*, 17(3), 2010. This article is a follow-up reflection on the *Stem Cell Network* installation. It is argued that experimentation in different forms of public dialogue is crucial to making science communication more socially robust.
3. On the shoulders of idiots – Re-thinking Science Communication as ‘event’ (with Michael, M. *Science as Culture*, 1470-1189, 2010. This article reflects on the ‘wrong’ ways in which visitors to a science communication installation engaged, and the lessons that can be learned about the complex power relations that exist between experts and citizens.
4. Collective Closure? – Public debate as the solution to controversies about science and technology. *Acta Sociologica* 53(3)195-211. The article highlights the inherent tension that comes with expectations from public debate about technologies, and the role public engagement plays in creating practical solutions to public policy controversies.
5. The laboratory of Public Debate: understanding the acceptability of stem cell research. *Science and Public Policy* 35(3)197-205. This paper studies the specific processes that went in to the formation of public opinion about stem cell research. It shows how compromise in policy formation is a pre-condition for the decision to permit stem cell research.
6. Member of advisory group on Synthetic Biology, Danish Board of Technology. As a member of the advisory board, I was part of the working group – comprised of experts from biology, physics, chemistry, philosophy, and knowledge dissemination – that made policy recommendations for synthetic biology. The group concluded that it is important that both citizens and professionals debate use of synthetic biology, given that its application raises potentially controversial issues.



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**Identification**  
Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

Name			
Family name Irwin	Given name Alan	Initials	Title Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status <input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input checked="" type="radio"/> Other (country) <u>UNITED KINGDOM</u>	Have you applied for permanent residency? <input type="radio"/> Yes <input checked="" type="radio"/> No
--	---	---	--

**Statistical and Administrative Information**

Birth year 1955	Gender <input type="radio"/> F <input checked="" type="radio"/> M	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language <input checked="" type="radio"/> English <input type="radio"/> French	Previous contact with SSHRC? (i.e. applicant, assessor, etc.) <input type="radio"/> Yes <input checked="" type="radio"/> No
Full name used during previous contact, if different from above				

**Contact Information**  
The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
+45	325	50201					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail airwinsshrc@gmail.com							
Secondary E-mail							

Personal information will be stored in the Personal Information Bank for the appropriate program.

Checked

Web CV

2011/11/17

Identification

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Family name, Given name

Irwin, Alan

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address Copenhagen Business School			Address		
Kilevej 14a					
DK-2000					
			City/Municipality		Prov. / State
					Postal/Zip code
Country DENMARK			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
			City/Municipality		Prov. / State
					Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number			
		Country code	Area code	Number	Extension
Temporary E-mail					



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Family name, Given name

Irwin, Alan

### Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

#### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	242	Information Technologies
2	360	Science and technology
3	244	Innovation, Industrial and Technological Development

#### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year				Year			
		BC	AD			BC	AD
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>

#### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

#### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1			
2			
3			
4			
5			



Family name, Given name

Irwin, Alan

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Danish, Spanish
French	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position		Start date (yyyy/mm)
Dean of Research		2007/1
Org. code	Full organization name	
9129108	Copenhagen Business School	
Department/Division name		
Dean of Research		
Position type	<input type="radio"/> Tenured <input type="radio"/> Non-tenure <input type="radio"/> Tenure-track <input type="radio"/> Non-academic	Employment status <input type="radio"/> Full-time <input type="radio"/> Part-time <input type="radio"/> Non-salaried <input type="radio"/> Leave of absence
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Dean	2004/1	2007/1
Org. code	Full organization name	
9121125	University of Liverpool	
Department/Division name		
Social and Environmental Studies		
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Pro-Vice-Chancellor	2004/1	2004/12
Org. code	Full organization name	
9121108	Brunel University	
Department/division name		
Research and Enterprise		
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Acting Dean	2003/1	2004/1
Org. code	Full organization name	
9121108	Brunel University	
Department/Division name		
Technology and Information Systems		



Family name, Given name

Irwin, Alan

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Dean		2001/1	2004/1
Org. code	Full organization name		
9121108	Brunel University		
Department/Division name			
Arts and Social Sciences			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Head		1998/1	2001/1
Org. code	Full organization name		
9121108	Brunel University		
Department/Division name			
Human Sciences			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Lecturer		1989/1	1991/1
Org. code	Full organization name		
9121100	University of Manchester		
Department/Division name			
Sociology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			



Family name, Given name

Irwin, Alan

<b>Academic Background</b>				
List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1978/01		1980/10
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Science and Technology Policy	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121100	University of Manchester			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1976/09		1977/10
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Structure & Organization of Science and Technology	<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
9121100	University of Manchester			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1972/09		1976/06
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63400	Sociology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121134	University of Salford			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Personal information will be stored in the Personal Information Bank for the appropriate program.





Family name, Given name

Irwin, Alan

### Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	David Edge Prize		0	2009
Academic Prize	Vice Chancellor's Award	UNITED KINGDOM		\$0 1976

### Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

#### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

science and technology policy, sociology, managment

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	63400	Sociology	
2	62600	Management, Business, Administrative Studies	
3			
4			
5			



Family name, Given name

Irwin, Alan

**Funded Research**

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code 1	Full name of funding organization Leverhulme Trust	Year awarded (yyyy) 2001	Total amount (CAN\$) \$2,113,310
----------------	---	-----------------------------	-------------------------------------

Role Co-applicant	Completion status <input checked="" type="checkbox"/> Complete
----------------------	--

Project title Public understanding of risk: perception, trust and stakeholder participation in public policy

Applicant's family name Irwin	Applicant's given name	Initials
----------------------------------	------------------------	----------

Org. code 1	Full name of funding organization European Commission	Year awarded (yyyy) 2001	Total amount (CAN\$) \$553,628
----------------	--	-----------------------------	-----------------------------------

Role Co-applicant	Completion status <input checked="" type="checkbox"/> Complete
----------------------	--

Project title Science, Technology and Governance in Europe'

Applicant's family name Irwin	Applicant's given name	Initials
----------------------------------	------------------------	----------

Org. code 1	Full name of funding organization The Economic and Social Research Council	Year awarded (yyyy) 2000	Total amount (CAN\$) \$19,752
----------------	---	-----------------------------	----------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
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Project title The social dynamics of controversy and control in the biosciences'

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code 1	Full name of funding organization Economic and Social Research Council	Year awarded (yyyy) 1998	Total amount (CAN\$) \$105,325
----------------	---	-----------------------------	-----------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
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Project title New Opportunities Programme in the `Public Understanding of Science'

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------



Family name, Given name

Irwin, Alan

**Funded Research (cont'd)**

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	The Economic and Social Research Council	1994	\$179,873
Role	Co-applicant	Completion status <input checked="" type="checkbox"/> Complete	
Project title	Regulatory Science; industry, academic research and the European control of chemical toxicity		
Applicant's family name		Applicant's given name	
Irwin			
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	European Commission	1994	\$484,158
Role	Co-applicant	Completion status <input checked="" type="checkbox"/> Complete	
Project title	The social management of environmental change		
Applicant's family name		Applicant's given name	
Irwin			
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	European Economic Community	1992	\$58,583
Role	Co-applicant	Completion status <input checked="" type="checkbox"/> Complete	
Project title	The environmental consequences of plastics innovation in the automobile sector		
Applicant's family name		Applicant's given name	
Irwin			
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	The Economic and Social Research Council	1990	\$53,134
Role	Applicant	Completion status <input checked="" type="checkbox"/> Complete	
Project title	Clean Technology: an evaluation of policy making and implementation in the UK		
Applicant's family name		Applicant's given name	

## 1. Research Contributions in the Last Six Years (2005-2011)

### Refereed Contributions

#### **Books: Monographs**

- R Irwin, A. and Michael, M., Science, Social Theory and Public Knowledge. (Open University Press, Maidenhead; 2003) ISBN 0335209475
- R Irwin, A., Sociology and the Environment: a critical introduction to society, nature and knowledge. (Polity, Cambridge; 2001) ISBN 0-7456-1359-4 (hardback) and 0-7456-1360-8 (paperback)
- R Irwin, A., Ciencia Cidadã (Portuguese translation of Citizen Science) (Instituto Piaget, Lisboa: 1999). ISBN 972-771-059-X (paperback). Also translated into Korean (Dangdae, 2011).
- R Irwin, A., Citizen Science; a study of people, expertise and sustainable development (Routledge, London; 1995). ISBN 0-415-11548-5 (hardback) and 0-415-13010-7 (paperback)
- R Irwin, A., Risk and the Control of Technology (Manchester University Press; 1985; reprinted as paperback 1987). ISBN 0-7190-1723-8 (hardback) and 0-7190-1829-3 (paperback)
- R Irwin, A., (with various authors), Cancer in Britain (Pluto Press, London; 1983). ISBN 0-86104-394-4 (paperback)
- R Stilgoe, J., Irwin, A., Jones, K., The Received Wisdom: opening up expert advice. (Demos, London: 2006) ISBN 1-84180-170-4

#### **Edited Books**

- R Molin, J. and Irwin, A. (eds), The Distinctiveness of Diversity: CBS, a case in point. Festschrift for Finn Junge-Jensen, President of CBS 1987-2009. (CBS, Copenhagen: 2009) ISBN 978-87-993186
- R Irwin, A. and Wynne, B., (eds) Misunderstanding Science? the public reconstruction of science and technology (Cambridge University Press, Cambridge; 1996). ISBN 0-521-43268-5

#### **Book Chapters**

- R Irwin, A., 'Foreword'. In Dowty, R.A. and Allen, B.L. (eds) Dynamics of Disaster: lessons in risk, response and recovery (Earthscan, London and Washington DC: 2011) pp xv-xix.
- R Jones, K.E. and Irwin, A., 'Creating space for engagement? Lay membership in contemporary risk governance'. In Hutter, B.M. (ed) Anticipating Risks and Organising Risk Regulation in the 21<sup>st</sup> Century (Cambridge University Press, Cambridge: 2010) pp185-207
- R Fischbacher-Smith, D., Irwin, A. And Fischbacher-Smith, M., 'Bringing light to the shadows and shadows to the light: risk, risk management and risk communication'. In Bennett, P., Calman, K., Curtis, S. and Fischbacher-Smith, D., (eds) Risk Communication and Public Health (Oxford University Press, Oxford: 2010) pp23-38.
- R Irwin, A., 'Foreword'. In Lidskog, R., Soneryd, L. And Ugglå, Y., Transboundary Risk Governance (Earthscan, London and Sterling, VA: 2010) pp xiii-xvii
- R Irwin, A., 'Moving forwards or in circles? Scientific communication and scientific governance in an age of innovation'. In Holliman, R., Whitelegg, E., Scanlon, E., Smidt, S. and J. Thomas (eds) Investigating Science Communication in the Information Age: implications for public engagement and popular media (Oxford University Press, Oxford: 2008) pp3-17.
- R Irwin, A., 'Science, Democracy, and Social (Dis)order: some concluding reflections'. In Stehr, N. (ed) Knowledge and Democracy: a 21<sup>st</sup> century perspective (Transaction Publishers, New Brunswick and London: 2008). pp217-226.
- R Irwin, A., 'Risk, science and public communication: third order thinking about scientific culture'. In Bucchi, M. and Trench, B. (eds) Handbook of Public Communication of Science and Technology (Routledge, London and New York 2008) pp199-212
- R Irwin, A., 'STS perspectives on scientific governance'. In Hackett, E.J, Amsterdamska, O., Lynch, M. and Wajcman, J. (eds) The Handbook of Science and Technology Studies Third Edition (MIT

Press, Cambridge MA: 2008) pp583-607.

- R Irwin, A., 'Public dialogue and the scientific citizen'. In Flynn, R. and Bellaby, P. (eds) Risk and the Public Acceptance of New Technologies. (Palgrave-Macmillan, Basingstoke: 2007) pp24-40.
- R Irwin, A., 'Beyond the toolkit: bringing engagement into practice'. In Turney, J. (ed) Engaging Science: thoughts, deeds, analysis and action. (Wellcome Trust, London: 2006) pp50-55.
- R Irwin, A., 'The global context for risk governance: national regulatory policy in an international framework'. In Bennett, B. and Tomossy, G. (eds) Globalization and Health: challenges for health law and bioethics. (Springer, Amsterdam: 2006) pp71-85.
- R Irwin, A. and Horst, M., 'Science, technology and governance in Europe: lessons from the STAGE project'. In Centro de Gestão e Estudos Estratégicos (ed) Ciência, Tecnologia e Sociedade: novos modelos de governança (CGEE, Brasilia: 2005) pp15-46.
- R Irwin, A., Entries on 'sociology of the environment' (Vol. 1: pp305-07) and 'risk society' (Vol. 2: pp884-6) in Kuper, A. and Kuper, J. (eds) The Social Science Encyclopedia . Third Edition. (Routledge, London: 2005).

### Journal Articles

- R Irwin, A., Jensen, T.E., Jones, K.E., 'The good, the bad and the perfect: anticipating engagement amidst critical regimes'. Submitted to Social Studies of Science (July 2011)
- R Horst, M. and Irwin, A., 'Nations at Ease with Radical Knowledge: on consensus, consensusing and false consensusness'. Social Studies of Science Vol 40(1) 2010 pp105-126.
- R Irwin, A., 'Se confronter à l'engagement: discussion autour de trois perspectives critiques'. Questions de Communication. Vol 17. 2010 pp107-128
- R Horst, M., Irwin, A., Healey, P. and Hagendijk, R., 'European scientific governance in a global context: resonances, implications and reflections'. IDS Bulletin. Vol 38(5) 2007 pp6-20.
- R Smith, D. and Irwin, A. 'Complexity, risk and emergence: elements of a "management" dilemma'. Risk Management: an international journal. Vol 8(4) 2006 pp221-26.
- R Hagendijk, R. and Irwin, A., 'Public deliberation and governance: engaging with science and technology in contemporary Europe'. Minerva Vol. 44(2) 2006 pp167-184.
- R Irwin, A., 'The politics of talk: coming to terms with the "new" scientific governance.' Social Studies of Science Vol. 36(2) 2006. pp299-320.

### 2. Other Research Contributions

I am regularly invited to give lectures and presentations to national and international audiences.

I will not list these here but will give as examples my upcoming keynote presentations to the Irish Academy of Management and at Seoul National University, and talks over the last year at Harvard, Tokyo, Trondheim, Florianopolis and the Society for Risk Analysis in London.

### 3. Five Most Significant Career Research Contributions (for Regular Scholars)

1. Citizen Science: A study of people, expertise and sustainable development. London: Routledge, 1995. This book advanced core tenants and practices of how citizen knowledge and experience can be incorporated into a more reflexive, socially robust form of science. It is now widely recognized as a core text in the broader field of public engagement within science and technology studies.
2. Misunderstanding Science? the public reconstruction of science and technology (with Wynne, B). Cambridge: Cambridge University Press, 1996. This edited collection brings together experts concerned with the public understand of science. It is a core text in science-society relations.
3. The politics of talk: coming to terms with the "new" scientific governance. Social Studies of Science Vol. 36(2) 2006. pp299-320. The article was awarded the David Edge Prize in 2009 from the Society for the Social Studies of Science (4S) for the best peer reviewed paper. It discusses the complex process of engaging with the public.

4. Science, Social Theory and Public Knowledge (with Michael, M.). Maidenhead: Open University Press, 2003. This text brings together more recent theoretical ideas in the field of science studies – public understanding of science, scientific and public governance, and social theory – through in-depth case studies.

5. Sociology and the Environment: a critical introduction to society, nature and knowledge. Cambridge: Polity, 2001. This book outlines the contribution that sociology brings to the pressing environmental problems of our day – the coming risks, hazards and changes.

**4. Career Interruptions and Special Circumstances: N/A**

**5. Contributions To Training**

External Examiner to PhD theses: University of Aston (1988), University of Bristol (1997), Cardiff University (2006, 2010), Copenhagen Business School (2003), Copenhagen University (2010), Danish Technical University (2010), University of Dublin (2002), University of Durham (1998), University of East Anglia (1999, 2002, 2007), University of Lancaster (1992, 1994, 1997, 2002), University of Leeds (1986 and 1987), Liverpool John Moores University (1998), Imperial College London (1999), University College London (2003), University of Manchester ( 2001), Manchester Metropolitan University (2007), University of Nottingham (2007), University of Sussex (1992, 1995), University of Technology Sydney (2002).

External Examiner (2004-10): Open University. MSc in Science and the Public

External Examiner (2004-6): Goldsmiths College, University of London. Department of Sociology

External assessor (2002): University of Edinburgh, postgraduate programme in Science Studies

External Assessor (1997): University of Leicester, M.Sc. in Risk, Crisis and Disaster Management

External Examiner (1996-2002): University of Salford, M.Sc. in Technology and Society

External Examiner (1992-1996): University of the West of England, Masters programme in Social Sciences

External Examiner (1991-1996): Manchester Metropolitan University, Diploma in Public Health

External Assessor (1991): University of the West of England, postgraduate programme in Social Sciences

External Assessor (1989): Manchester Polytechnic, undergraduate programme in Combined Studies.

## Professor Alan Irwin – Relevant Experience

My work primarily concerns the relations between science and society, and more specifically how to engage citizens' knowledge and experience with scientific expertise. My academic work and current administrative duties have involved extensive interdisciplinary collaboration with citizens, scientists, regulators, and policy makers.

1. *Acting President (2011) and Dean of Research (2007-12), Copenhagen Business School*. Since 2007, I have had responsibility for the main academic salary budget, for departmental management, for external research funding, for PhD students, and for academic recruitment. As such, I have extensive experience in collaborating across different disciplines and communities.

2. *Citizen Science: A study of people, expertise and sustainable development*. London: Routledge, 1995. This book advanced core tenants and practices of how citizen knowledge and experience can be incorporated into a more reflexive, socially robust form of science. The text is now widely recognized as a core book in the broader field of public engagement within science and technology studies. Cited 987 times (Google Scholar).

3. *Misunderstanding Science? the public reconstruction of science and technology* (with Wynne, B). Cambridge: Cambridge University Press, 1996. This edited collection brings together experts concerned with the public understand of science. Through in-depth case studies across a variety of fields, it shows how many of the problems with modern science – in terms of uptake, authority and effectiveness – could be overcome through more reflexivity and openness. Cited 829 times (Google Scholar).

4. *Science, Social Theory and Public Knowledge* (with Michael, M.). Maidenhead: Open University Press, 2003. This book brings together three different perspectives on science and society relations: public understanding of science, scientific and public governance, and social theory. Using in-depth case studies, it contributes to the debates about how to bridge science and society relationships. Cited 288 times (Google Scholar).

5. The politics of talk: coming to terms with the "new" scientific governance. *Social Studies of Science* Vol. 36(2) 2006. pp299-320. The article was awarded the David Edge Prize in 2009 from the Society for the Social Studies of Science (4S) for the best peer reviewed paper. It discusses the complex process of engaging with the public, including the relationship between talk and trust, the search for the good citizen, and pursuit of social consensus. Cited 247 times (Google Scholar).

6. *Chair (2008-10) and Member (2005-7) of UK Biotechnology and Biological Sciences Research Council (BBSRC) Bioscience for Society Strategy Panel*. Currently, member of the UK Global Food Security Strategy Advisory Board.

7. Editor, *Risk Management: an international journal*. Acting editor of the journal published by Palgrave Macmillan, which aims to facilitate the exchange of information and expertise across countries and across disciplines, and promote good practices for those involved in managing risk.



8. European Commission: academic coordinator of thematic network on 'Science, Technology and Governance in Europe' (STAGE). The STAGE project involved extensive collaboration across eight countries, whose aims were to develop a heuristic model of science and technology governance in Europe. It also involved building many different sorts of collaboration across academic, citizen and policy groups.





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**Identification**  
Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

Name			
Family name	Given name	Initials	Title
Jack	Stilgoe		Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input checked="" type="radio"/> Other (country)	Have you applied for permanent residency?
			UNITED KINGDOM	<input type="radio"/> Yes <input checked="" type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1977	<input type="radio"/> F <input checked="" type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**  
The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
+44	7870	212463					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail: jackstilgoesshrc@gmail.com							
Secondary E-mail:							

Personal information will be stored in the Personal Information Bank for the appropriate program.

Checked  
Web CV  
2011/11/17



**Do not photocopy this page.**

Family name, Given name

Jack, Stilgoe

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address University of Exeter Business School			Address		
			City/Municipality	Prov. / State	Postal/Zip code
Country UNITED KINGDOM			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality		Prov. / State	City/Municipality		Prov. / State Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)		Temporary telephone/fax number		
			Country code	Area code	Number Extension
Temporary E-mail					



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Family name, Given name

Jack, Stilgoe

### Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

#### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	244	Innovation, Industrial and Technological Development
2	360	Science and technology
3	320	Politics and government

#### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year				Year			
		BC	AD			BC	AD
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>

#### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

#### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1			
2			
3			
4			
5			



Family name, Given name

Jack, Stilgoe

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)	
Research Associate				2011/9	
Org. code	Full organization name				
9121116	University of Exeter				
Department/Division name					
School of Business and Economics					
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input type="radio"/> Full-time	<input type="radio"/> Part-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Non-salaried	<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Senior Policy Advisor			2009/1	2011/1	
Org. code	Full organization name				
1	The Royal Society				
Department/Division name					
The Royal Society					
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Senior Researcher			2006/1	2009/1	
Org. code	Full organization name				
1	Demos				
Department/division name					
Demos					
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Researcher			2005/1	2006/1	
Org. code	Full organization name				
1	Demos				
Department/Division name					
Demos					

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV



Family name, Given name

Jack, Stilgoe

**Work Experience (cont'd)**

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate	2004/1	2005/1

Org. code	Full organization name
9121153	University College London

Department/Division name  
Science and Technology Studies

Position	Start date (yyyy/mm)	End date (yyyy/mm)

Org. code	Full organization name

Department/Division name

Position	Start date (yyyy/mm)	End date (yyyy/mm)

Org. code	Full organization name

Department/Division name

Position	Start date (yyyy/mm)	End date (yyyy/mm)

Org. code	Full organization name

Department/Division name

Position	Start date (yyyy/mm)	End date (yyyy/mm)

Org. code	Full organization name

Department/Division name



Family name, Given name

Jack, Stilgoe

<b>Academic Background</b>				
List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		2000/01		2004/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Sociology of Science	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121153	University College London			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1999/01		2000/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Science and technology policy	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121100	University of Manchester			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1996/01		1999/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
61000	Economics	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121100	University of Manchester			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Personal information will be stored in the Personal Information Bank for the appropriate program.



Family name, Given name

Jack, Stilgoe

### Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded

### Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

#### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

innovation, science and technology studies, science policy, public policy

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	63400	Sociology	
2			
3			
4			
5			

## 1. Research Contributions in the Last Six Years (2005-2011)

### Refereed Contributions

#### Book Chapters

R 'How can new technologies fulfil the needs of developing countries?' in *Nanotechnology Applications: Solutions for Improving Water Quality*, William Andrew Publishing, 2009 (reprinted in Cozzens, Susan E.; Wetmore, Jameson (Eds.) *Nanotechnology and the Challenges of Equity, Equality and Development*, Springer, 2011) (with David Grimshaw and Lawrence Gudza)

R 'The new politics of public engagement with science,' in *Investigating Science Communication in the Information Age: Implications for public engagement and popular media* Richard Holliman, Elizabeth Whitelegg, Eileen Scanlon, Sam Smidt, Jeff Thomas, Oxford University Press, 2008 (with James Wilsdon)

R 'The Rules of Engagement: Dialogue and Democracy in Creating Nanotechnology Futures' in *Nanoethics: The ethical and social implications of nanotechnology*, Wiley, 2007 (with James Wilsdon)

R 'Between people and power: Nongovernmental organisations and public engagement' ch. 10 in *Engaging Science: Thoughts, deeds, analysis and action*, Wellcome Trust, 2006

R 'Mobile Telephones' and 'Catamarans', articles for the *Encyclopædia of 20<sup>th</sup> Century Technology*, London: Routledge, 2005

#### Journal Articles

R 'Pathologising the public – from upstream engagement to responsible innovation' – forthcoming in 'Nanotechnology and Democracy', *2011 Yearbook of Nanotechnology in Society* (Miller C and Barben D eds), Springer

R 'A question of intent', *Nature Climate Change*, Vol. 1, No. 7, 11 Sept 2011

'Experts and Anecdotes - The role of 'anecdotal evidence' in public scientific controversies', *Science, Technology and Human Values* Vol. 34, No. 5, 654-677, 2009 (with Alfred Moore)

R 'The (co-)production of public uncertainty: UK scientific advice on mobile phone health risks' *Public Understanding of Science*, Vol. 16, No. 1, 45-61, 2007

R 'Controlling mobile phone health risks in the UK: A fragile discourse of compliance', *Science and Public Policy*, Volume 32, Number 1, 1 February 2005, pp. 55-64(10)

### Non-Refereed Contributions

#### Magazines

'Dr Finlay is Dead' *The Guardian*, CommentIsFree, May 15<sup>th</sup> 2008,

(<http://www.guardian.co.uk/commentisfree/2008/may/15/benbradshawinvokestheviews>)

'It's good to talk,' Opinion piece in *Times Higher Education*, 31<sup>st</sup> January 2008

([www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=400357&c=1](http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=400357&c=1))

'Three words we should like to hear: 'I don't know'', Opinion piece in *Times Higher Education Supplement*, 19<sup>th</sup> January 2007

([www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=207521](http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=207521))

'Between hype and doom: keeping an eye on nanotech', 21<sup>st</sup> April 2006, *Opendemocracy*

([www.opendemocracy.net/globalization-vision\\_reflections/nanotechnology\\_3468.jsp](http://www.opendemocracy.net/globalization-vision_reflections/nanotechnology_3468.jsp))

'Challenging the received wisdom: the role of expertise in decision making,' *Transformation*, Spring 2007

Various articles on innovation, expertise, and science and society in *Science and Public Affairs*, *Elements* and *Parliamentary Monitor*

#### Review Essays (Selected)



‘The Politics of Data, A review of J Gleick, *The Information*,’ *The Lancet*, Volume 378, Issue 9791, Page 559, ([http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(11\)61277-4/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)61277-4/fulltext))

‘Why scientists need to get a life, A review of S Shapin, *The Scientific Life*,’ *The Lancet*, Volume 373, Issue 9680, Pages 2015-2016,

([http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61096-5/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61096-5/fulltext))

‘Handle with care, A review of A Mol, *The Logic of Care*,’ *The Lancet*, Volume 371, Issue 9631, Pages 2163-2164,

([http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(08\)60938-1/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(08)60938-1/fulltext))

Assorted book reviews for Science and Public Policy, Health, Risk and Society and *The Lancet*

### Policy Reports

*The Scientific Century – Securing out future prosperity* (as project director and lead author), Royal Society, 2010 (<http://royalsociety.org/The-scientific-century/>)

*The Global Governance of Science*, Report of the Expert Group on Global Governance of Science, 2009 (as Rapporteur) ([http://ec.europa.eu/research/science-society/document\\_library/pdf\\_06/global-governance-020609\\_en.pdf](http://ec.europa.eu/research/science-society/document_library/pdf_06/global-governance-020609_en.pdf))

*Citizen Scientists – Reconnecting science with civil society*, Demos, 2009

([www.demos.co.uk/publications/citizenscientists](http://www.demos.co.uk/publications/citizenscientists))

*Knowledge Nomads – why science needs migration* (with Natalie Day), Demos, 2009

([www.demos.co.uk/publications/knowledgenomads](http://www.demos.co.uk/publications/knowledgenomads))

*The Talking Cure – Why conversation is the future of healthcare*, (with Faizal Farook) Demos, 2008

([www.demos.co.uk/publications/thetalkingcure](http://www.demos.co.uk/publications/thetalkingcure))

*Nanodialogues – Experiments in public engagement with science*, Demos,

2007([www.demos.co.uk/publications/nanodialogues](http://www.demos.co.uk/publications/nanodialogues))

Featured in a Nature editorial, ‘Enough talk already’, *Nature*, 448, 5<sup>th</sup> July 2007, p.1

([www.nature.com/nature/journal/v448/n7149/index.html](http://www.nature.com/nature/journal/v448/n7149/index.html))

‘Doctor, the patient will see you now – participating and innovating in healthcare’ (with Faizal Farook) ch. 3 in *Unlocking Innovation*, Demos, 2007 ([www.demos.co.uk/publications/unlockinginnovation](http://www.demos.co.uk/publications/unlockinginnovation))

*The Received Wisdom – Opening up expert advice* (with Alan Irwin and Kevin Jones) Demos, 2006

([www.demos.co.uk/publications/receivedwisdom](http://www.demos.co.uk/publications/receivedwisdom))

*The Public Value of Science – Or how to ensure science really matters* (with James Wilsdon and Brian Wynne) Demos, 2005 ([www.demos.co.uk/publications/publicvalueofscience](http://www.demos.co.uk/publications/publicvalueofscience))

‘Between people and power: Nongovernmental organisations and public engagement’ ch. 10 in *Engaging Science: Thoughts, deeds, analysis and action*, Wellcome Trust, 2006

(<http://www.wellcome.ac.uk/About-us/Publications/Books/WTX032706.htm>)

*Evidence, expertise and engagement – a report for the board of the Food Standards Agency* (with James Wilsdon) Demos/FSA, 2006 ([www.food.gov.uk/multimedia/pdfs/fsa061004b.pdf](http://www.food.gov.uk/multimedia/pdfs/fsa061004b.pdf))

### 2. Other Research Contributions

Press and other media

Interviewed on *Radio 4 Today* programme, 30<sup>th</sup> November 2006, about science and innovation policy

Interviewed on *Farming Today*, Jan 18<sup>th</sup> 2008, about the politics of genetically-modified crops

### 3. Five Most Significant Career Research Contributions

1. *The Received Wisdom – Opening up expert advice* (with Alan Irwin and Kevin Jones) Demos, 2006.

This pamphlet considers how governments can open up the process of expert advice to involve a wider range of perspectives beyond the simple model of ‘evidence-based policy.’ It contributes to debates about the public understanding of science and citizen engagement, with particular focus on communicating these approaches to people in policy and government.

2. Nanodialogues – Experiments in public engagement with science. Demos, 2007. The pamphlet describes findings from the Nanodialogues project, which attempted to incorporate upstream engagement into nanotechnology governance.
3. ‘The (co-)production of public uncertainty: UK scientific advice on mobile phone health risks’ *Public Understanding of Science*, Vol. 16, No. 1, 45-61, 2007. This paper draws from qualitative interviews with policy makers and scientists. It outlines how publics can be constructed as instruments of credible policymaking. It contributes new knowledge for improving the public understanding of science.
4. ‘Experts and Anecdotes - The role of ‘anecdotal evidence’ in public scientific controversies’, *Science, Technology and Human Values* Vol. 34, No. 5, 654-677, 2009 (with Alfred Moore). This paper considers the central role that ‘anecdotal evidence’ plays in scientific debates, and how it changes shape at the boundary point between scientists and non-scientists.
5. The Rules of Engagement: Dialogue and Democracy in Creating Nanotechnology Futures’ in *Nanoethics: The ethical and social implications of nanotechnology*. Wiley, 2007 (with James Wilsdon). The paper reflects on the People's Inquiry into Nanotechnologies in the UK, and how a group of 13 ordinary citizens contributed to discussions about the societal impact of nanotechnologies.

**4.Career Interruptions and Special Circumstances: N/A**

**5.Contributions to Training: N/A**

Professor Jack Stilgoe

My work deals with the theory and practice of science policy. I work with academics, policy makers, and the media to advance debates on emerging technologies, public engagement with science, the use of expert advice, and the value of innovation.

1. Nanodialogues – Experiments in public engagement with science. Demos, 2007. This pamphlet presents the findings of the Nanodialogues – a series of experiments in upstream public engagement with different partners in different contexts. It is grounded in the idea that as nanotechnology and new forms of participatory governance coincide, there is great opportunity to reimagine the relationship between science and democracy.

2. The Rules of Engagement: Dialogue and Democracy in Creating Nanotechnology Futures’ in Nanoethics: The ethical and social implications of nanotechnology. Wiley, 2007 (with James Wilsdon). The paper reflects on the People's Inquiry into Nanotechnologies in the UK, and how a group of 13 ordinary citizens contributed to discussions about the societal impact of nanotechnologies.

3. The Received Wisdom – Opening up expert advice (with Alan Irwin and Kevin Jones) Demos, 2006. This pamphlet considers how governments can open up the process of expert advice to involve a wider range of perspectives beyond the simple model of ‘evidence-based policy.’ Drawing on recent case studies and research with lay members of expert committees, it looks to a new model of expertise which is more diverse, takes better account of uncertainty, is aware of its context and trusts the public.

4. How can new technologies fulfil the needs of developing countries? in Nanotechnology Applications: Solutions for Improving Water Quality. William Andrew Publishing, 2009. The paper considers how emerging nanotechnologies can assist with practical and pressing social problems in developing countries.

5. ‘Pathologising the public – from upstream engagement to responsible innovation’ – forthcoming in ‘Nanotechnology and Democracy’, 2011 Yearbook of Nanotechnology in Society. Springer. The paper outlines how upstream engagement with citizens contributes to a more open and responsible process of nanotechnology innovation grounded in the needs and concerns of the public.

6. Chair of Sciencewise Subgroup on GM dialogue. I chaired a subgroup on the genetically modified group dialogue for Sciencewise, which is the UK’s national centre for public dialogue in policy making involving science and technology issues. Many of the lessons learned in the GM case are applicable to issues currently facing nanotechnology development.



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293976	79168

**Identification**  
Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

<b>Name</b>			
Family name	Given name	Initials	Title
Jones	Kevin	E	Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input checked="" type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
		_____	_____	<input type="radio"/> Yes <input type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1973	<input type="radio"/> F <input checked="" type="radio"/> M	T6J0K7	<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**  
The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
1	780	9102878		1	780	4921746	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail				Secondary E-mail			
k.e.jones@ualberta.ca				kevinedsonjones@yahoo.com			

Personal information will be stored in the Personal Information Bank for the appropriate program.

**Checked**  
Web CV  
2011/11/17



**Do not photocopy this page.**

Family name, Given name

Jones, Kevin

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address			Address		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Country CANADA			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
			10920 38 Avenue		
City/Municipality	Prov./ State		City/Municipality	Prov./ State	Postal/Zip code
			Edmonton	AB	T6J0K7
Country			Country CANADA		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number			
		Country code	Area code	Number	Extension
Temporary E-mail					



**Do not photocopy this page.**

Family name, Given name

Jones, Kevin

**Research Expertise (optional)**

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

**Areas of Research**

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	360	Science and technology
2	180	Environment and Sustainability
3	320	Politics and government

**Temporal Periods**

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year				Year			
		BC	AD			BC	AD
_____	<input type="radio"/>	<input type="radio"/>		_____	<input type="radio"/>	<input type="radio"/>	
_____	<input type="radio"/>	<input type="radio"/>		_____	<input type="radio"/>	<input type="radio"/>	

**Geographical Regions**

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	3200	Western Europe
2	1000	North America
3	1130	Western Canada

**Countries**

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1	3225	UNITED KINGDOM	
2	1100	CANADA	
3	6404	INDIA	
4			
5			



Family name, Given name

Jones, Kevin

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position	Start date (yyyy/mm)
Research Associate	2010/4

Org. code	Full organization name
1480111	University of Alberta

Department/Division name

Faculty of Extension

Position type	<input type="radio"/> Tenured <input type="radio"/> Tenure-track	<input checked="" type="radio"/> Non-tenure <input type="radio"/> Non-academic	Employment status	<input checked="" type="radio"/> Full-time <input type="radio"/> Non-salaried	<input type="radio"/> Part-time <input type="radio"/> Leave of absence
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Position	Start date (yyyy/mm)	End date (yyyy/mm)
Lecturer	2004/12	2009/12

Org. code	Full organization name
9121125	University of Liverpool

Department/Division name

Management School

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Senior Research Fellow	2003/1	2004/12

Org. code	Full organization name
9121108	Brunel University

Department/division name

Human Sciences

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Teaching Assistant	1999/9	2002/6

Org. code	Full organization name
9121108	Brunel University

Department/Division name

Human Sciences



Family name, Given name

Jones, Kevin

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Research Assistant		1999/4	2001/9
Org. code	Full organization name		
1350211	Carleton University		
Department/Division name			
Sociology and Anthropology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Teaching Assistant		1997/9	1999/5
Org. code	Full organization name		
1350211	Carleton University		
Department/Division name			
Sociology and Anthropology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			





Family name, Given name

Jones, Kevin

<b>Academic Background</b>				
List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1999/09		2004/03
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Science and Technology Studies	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121108	Brunel University			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1997/09		1999/11
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63400	Sociology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1350211	Carleton University			
Country <b>CANADA</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1993/09		1997/10
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Sociology with concentration in Political Science	<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
9121108	Brunel University			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV



Family name, Given name

Jones, Kevin

### Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	Overseas Research Scholarship - British Council	UNITED KINGDOM	24	1999
Graduate Scholarship	Departmental Scholarship and Teaching Studentship	University CANADA	24	1997
Academic Prize	Award of Merit	University CANADA	24	1995
Academic Prize	Award of Excellence	CANADA	12	1994
Academic Prize	Dean's List	University CANADA	48	1993

### Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

#### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

science and technology studies; environmental governance; public understanding of science; scientific policy-making

#### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	63499	Other Sociology	Science and Technology Studies
2	62820	Public Policy Studies	
3	61406	Regional Planning	
4			
5			



Family name, Given name

Jones, Kevin

### Funded Research

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code 1	Full name of funding organization Killam Trusts Foundation	Year awarded (yyyy) 2011	Total amount (CAN\$) \$30,099
Role Applicant		Completion status <input type="checkbox"/> Complete	
Project title Nanotechnology and the Community			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2011	Total amount (CAN\$) \$37,000
Role Collaborator		Completion status <input type="checkbox"/> Complete	
Project title Rebirth of the Mini-Mall			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Org. code 1	Full name of funding organization UK Department for the Environment, Food and Rural Affairs (Defra) and the University of Liverpool	Year awarded (yyyy) 2006	Total amount (CAN\$) \$82,484
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Challenging Expertise, Engagement and Democracy: Developing a UK Policy for Nanotechnology.			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Org. code 1	Full name of funding organization UK Department for the Environment, Food and Rural Affairs	Year awarded (yyyy) 2006	Total amount (CAN\$) \$160,000
Role Co-applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Understanding, assessing and applying non-expert (lay) contributions to scientific advisory bodies			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV



Family name, Given name

Jones, Kevin

**Funded Research (cont'd)**

Org. code 1	Full name of funding organization UK Department for the Environment, Food and Rural Affairs and the University of Liverpool	Year awarded (yyyy) 2005	Total amount (CAN\$) \$83,000
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Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
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Project title Science, Participation and Governance: Contested Meanings and Practices of Environmental Policy Making (PhD Dissertation)

Applicant's family name Schulte Zu Berge (PhD Student)	Applicant's given name Marion	Initials
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Org. code 1	Full name of funding organization DEFRA	Year awarded (yyyy) 2005	Total amount (CAN\$) \$20,000
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Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
-------------------	--

Project title Understanding Risk in Everyday Policy Making.

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
-----------	-----------------------------------	---------------------	----------------------

Role	Completion status <input type="checkbox"/> Complete
------	---

Project title

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
-----------	-----------------------------------	---------------------	----------------------

Role	Completion status <input type="checkbox"/> Complete
------	---

Project title

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

## **1. Research Contributions in The Last Six Years (2005-2011)**

### **A. Refereed Contributions – Book chapters and journal articles**

- R with Alan Irwin (2010) “Creating space for engagement? Lay membership in contemporary risk governance”, pp.185-207 in B. Hutter (ed.) *Anticipating Risks and Organizing Risk Regulation in 21st Century*. Cambridge, Cambridge University Press.
- R Jones, K.E. and O.A.L. Paramor (2010) “Inter-disciplinarity in Ecosystems Research: Developing Social Robustness in Environmental Science.” In C.L.J. Frid and D.J. Raffaelli (eds) *Ecosystem Ecology: A new synthesis*. BES Ecological Review Series. Cambridge, Cambridge University Press.
- R Jones, K.E. and A. Irwin (2010) “Creating space for engagement? Lay membership in contemporary risk governance.” In B. Hutter (ed.) *Anticipating Risks and Organizing Risk Regulation in 21st Century*. Cambridge, Cambridge University Press.
- R Jones, K. E. (2004) “BSE and the Phillips Report: A Cautionary Tale about the Uptake of ‘Risk’.” In N. Stehr (ed.) *The Governance of Knowledge*, pp 161-186. Brunswick NJ: Transaction Books.
- R (2001) “BSE, Risk and the Communication of Uncertainty: A Review of Lord Phillips' report from the BSE Inquiry (UK). *Canadian Journal of Sociology*, 26 (4) 655-666.
- R (2000) Constructing rBST in Canada: Biotechnology, Instability and the Management of Nature. *Canadian Journal of Sociology*, 25(3), pp.311-341.

### **B. Other Publications**

#### **Research Reports and Policy Papers**

- R Jones, K.E., A. Irwin, M. Farrelly, and J. Stilgoe. (2008) *Understanding Lay Membership in Scientific Governance*. London, Defra.
- Stilgoe, J., A. Irwin, and K.E. Jones (2006) *The Received Wisdom: Opening up Expert Advice*. London: DEMOS.
- Jones, K.E. (2007) “Independent Evaluator’s Report.” In P. Irving et al. *A people's inquiry on nanotechnology and the environment*. Environment Agency Science Report ref. SCHO0607BMUJ-E-P. Environment Agency, Bristol.
- Jones, K.E. (2005) *Understanding Risk in Everyday Policy Making*. Department for Environment, Food and Rural Affairs, London.

#### **Dissertation**

- Jones, K. E. (2004) *The Politics of New Agricultural Technologies: Contesting, Risk, Science and Governance*. PhD Dissertation, CRICT, Brunel University, London. Examined by Prof. Brian Wynne, Lancaster University and Prof. Ian Robinson, Brunel University.

#### **Non-Refereed Publications**

- Jones, K.E. (2010) “Putting the ‘local’ into economic development planning.” *CURB Magazine*, 1(2). With Stilgoe, Jack, and Irwin, Alan. (2006) *The Received Wisdom: Opening up Expert Advice*. London: DEMOS.
- Jones, K.E. and A. Smart (2004) “Maximise the return on ethics consultations by minimising ‘deficit thinking’,” *European Biopharmaceutical Review*, Summer.

#### **Policy Reports**

- With Shields, Rob, Bogden, Eva and McDonald, Amy (2010) *Partnerships: Responding to the Changing Dynamics of Urban-Rural Interdependency*. CRSC, Edmonton.
- With Irwin, Alan, Farrelly, Michael and Stilgoe, J. (2008) *Understanding Lay Membership in Scientific Governance*. London, Defra.
- Independent Evaluator’s Report, in Irving, P. (et al.) (2007) *A people's inquiry on nanotechnology and the environment*. Environment Agency Science Report ref. SCHO0607BMUJ-E-P. Environment Agency, Bristol.

(2005) *Understanding Risk in Everyday Policy Making*. London, Defra.

### **Papers presented at scholarly meetings or conferences**

- Jones, K.E. and B.Sluggett (2011). *If You Build It They Will Come?": Innovation Clustering and Socio-Economic Development in the Alberta Capital Region*. Society for Social Studies of Science (4S). November 4, Cleveland.
- Jones, K.E. (Aug. 2011) *What Matters about 'One dead cow?': Institutional Responses and Adaptations to BSE and Food Risks in Canada*. Society for the Study of Social Problems, Las Vegas.
- Jones, K.E. (April 2011) *Partnerships: Responding to the Changing Dynamics of Urban-Rural Interdependency*. ARDN Creating Rural Connections, Edmonton.
- Jones, K.E. (Aug. 2010) "Reluctant Expertise: Reflections on knowledge and practice in environmental policy making." 4S, Tokyo.
- Jones, K.E. and A. Irwin (Oct. 2009) "Creating Space for Engagement? Lay Membership in Contemporary Risk Governance." 4S, Washington D.C.
- Jones, K.E. (Oct. 2009) "A Reluctant Expert, Science, Evidence and Policy Making." ESRC Seminar Series, Policy as Practice. The Mechanics Institute, Manchester.
- Jones, K.E. (August 2009) "STS, Mad Cows and Mandarins: Reflections on Developing Risk Governance and Expertise in Environmental Policy Making." Departmental Seminars, Rural Economy, University of Alberta, Edmonton.
- Jones, K.E. (May 2009) "A Reluctant Expert: Reflections on a Study of Scientific Expertise in Environmental Risk Governance." Congress of the Humanities and Social Sciences, Ottawa.
- Jones, K.E. (September 2007) "Understanding, Assessing and Applying Non-Expert (Lay) Contributions to Scientific Advisory Bodies." Advisory Committee on Hazardous Substances. Defra, London.
- Jones, K.E. (August 2007) "Understanding, Assessing and Applying Non-Expert (Lay) Contributions to Scientific Advisory Bodies." Code of Practice for Science Advisory Councils Consultation Workshop. Government Office of Science, Central Hall, London.
- Jones, K.E. (April 2007) "Lay Membership and Scientific Advice Giving." UK Chemical Stakeholder Forum, Defra, London.
- Jones, K.E., A. Irwin and J. Stilgoe (Dec. 2006) "The Received Wisdom: opening up expert advice." Demos Launch Event, EEF London.
- Jones, K.E. and M. Schulte Zu Berge (Aug 2006) "Developing a UK Policy for Nanotechnology: A Case Study in the Application of Engagement and Knowledge in Governance." EASST, University of Lausanne, Lausanne, Switzerland.
- Jones, K.E. and A. Irwin (Jan. 2006) "Science, Governance and Engagement in Europe: From Principles into Practice." Defra Science Seminar Series, Defra, London, UK.
- Jones, K.E. and P. Kang (June 2005) "Ethnicities of Risk? Inequity, Inclusion and Ethnicity in the Public Understanding of Risk." CORNEM Future of Multicultural Britain, Roehampton University, London UK.
- Jones, K.E. (May 2005) "Communities at Risk? Inequity, Inclusion and Ethnicity in Public Perceptions of Risk and the Environment." Centre for Environmental Risk, UEA, Norwich UK.
- Jones, K.E. (June 2005) "Understanding Risk in Everyday Policy Making: A Commitment to Research and Practice." CSAA Annual Meeting. University of Western Ontario, London, Canada.
- Jones, K.E. (May 2005) "Public Perceptions and Knowledge of Risk: Implications for Governance." Pesticide Residues Committee, Pesticides Safety Directorate, York UK.
- Jones, K.E. (Feb. 2005) "Understanding Risk in Environmental Governance." Invited Speaker, Defra, London UK.



Jones, K.E. (Sept. 2004) "Involving the Public in Decision-Making." Workshop event, Defra Science Forum, The Royal Society, London, UK.

Jones, K.E. (Aug. 2004) "Contesting Science, Scientific Authority and the Politics of New Agricultural Technologies." EASST – Écoles des Mines, Paris, France.

Jones, K.E. and A. Irwin (Aug. 2004) "Inequity and Social Exclusion in the Public Understanding of Risk and Science." 4S/EASST – Écoles des Mines, Paris, France.

### **C. Forthcoming contributions**

Irwin, A., T. Jensen, and K. E. Jones "The Good, the Bad and the Perfect - anticipating engagement amidst critical regimes." *Social Studies of Science*, (submitted July 2010, accepted with revision)

Jones, K. E. and D. Davidson. "Exploring Success, Failure and Luck in Adaptations to Food-Safety and BSE in Canada." *Science, Technology & Human Values* (submission in November 2011)

With Lord, Alex and Shields, Rob (eds) *City-Regions in Prospect? The Meeting of Place and Practice*. McGill-Queens, Montreal. (submission to the publisher in November 2011).

Jones, K.E. & Sluggett, B. "If You Build It They Will Come?": Innovation Clustering and Socio-Economic Development in the Alberta Capital Region. *Canadian Journal of Sociology* (intend submission in January).

### **2. Other Research Contributions in the Last Six Years (2005-2011)**

Principal Investigator (with R. Shields) *Innovation, Nanotechnology and the Alberta Capital Region*. Funded by Killam Foundation Cornerstone Grant Program (CAN\$30,099). Completion January 2012.

Director and Principal Researcher. *Understanding, assessing and applying non-expert ('lay') contributions to scientific advisory bodies*. Funded by UK Department for Environment, Food and Rural Affairs (DEFRA) (£80,001). Completed 2008.

Supervising Academic. *Challenging Expertise, Engagement and Democracy: Developing a UK Policy for Nanotechnology*. PhD studentship. Jointly funded by DEFRA and the University of Liverpool (£51,270). Completed 2009.

Research Secondment. *Understanding Risk in Everyday Policy Making*. Funded by Defra (£8,800). Completed 2005.

### **3. Five Most Significant Career Research Contributions:**

My five most significant career research contributions are derived from three areas of research I have, and continue to be, involved with:

Risk Governance, Engagement and Expertise: A significant emphasis in my research involves bridging the social scientific knowledge and theory in the fields of science and technology study and the public understanding of science with the development of risk and environmental policy making. Reflecting a number of participative research exercises (please see above) contributions have been produced which advance *academic scholarship, policy knowledge and citizen engagement* (1,2,3):

1. Jones, K.E. and A. Irwin (2010) "Creating space for engagement? Lay membership in contemporary risk governance." In B. Hutter (ed.) *Anticipating Risks and Organizing Risk Regulation in 21st Century*. Cambridge, Cambridge University Press.

2. Jones, K.E (2005) *Understanding Risk in Everyday Policy Making*. London, Defra.

- influential policy report contributing to active changes in policy approaches to risk and expertise.

3. Jones, K.E., Stilgoe, Jack, and Irwin, Alan. (2006) *The Received Wisdom: Opening up Expert Advice*. London, Demos.

- A booklet translating research expertise into an accessible and widely read account of science and public participation in risk governance. With participation of London think tank Demos this pamphlet was launched to an audience of politicians, civil servants, academics, media and members of the public

at a well-attended public even in London, UK.

Critical Research on city-regions: This research seeks to revisit the concept of the city-region and to re-ground concepts of development and governance within local practices. Along with Alex Lord (Liverpool) and Rob Shields (Alberta) we have recently completed an edited manuscript which provides local accounts of city-regional governance and involves leading authors in the field from Canada, the US and Europe.

4. Jones, K.E, A.D. Lord and R. Shields. *City-Regions in Prospect? The Meeting of Place and Practice*. McGill-Queens, Montreal. (submission to the publisher in November 2011).

Food safety and Agricultural Sustainability: I continue to be involved in research which addresses the link between agricultural practice (including the development of new agricultural technologies), food safety and the ability to maintain agricultural practices and livelihoods in Canada. An early product of this research was the publication of an article documenting a Senate Inquiry into the use of recombinant DNA technology produced growth hormones in milk. This research published in Canadian Journal of Sociology was one of the first social science articles to be published on the social implications of biotechnology in Canada and was critically well-received.

5. Jones, K. E. (2000) Constructing rBST in Canada: Biotechnology, Instability and the Management of Nature. *Canadian Journal of Sociology*, 25(3) 311-341.

**4.Career Interruptions and Special Circumstances:** N/A

#### **5.Contributions to Training in the Last Six Years**

##### **PhD (Canada)**

Sluggett, Bryan (in progress). *Risk Governance and Disasters*. Sociology, University of Alberta. Doctoral supervisory committee.

Isaev, Nurlan (in progress) BSE and the Development of Alternative Food Systems. Rural Economy, University of Alberta. Doctoral supervisory committee.

##### **PhD (UK)**

Schulte zu Berge, Marion (2010) *Challenging Expertise, Engagement and Democracy: Developing a UK Policy for Nanotechnology*. University of Liverpool (£51,270). Examined by Prof. Susan Owens, Cambridge and Prof. D. Elliott, Liverpool. Dr. Jones was the primary supervisor of this dissertation project.

##### **M.A. and M.P.A (UK)**

I have supervised over twenty master level dissertations at the University of Liverpool, on topics including innovation, risk management, business development and policy studies. All students were awarded their degrees, with over half achieving a grade of distinction. Please contact Dr. Jones for a full list of students and the degree awarded.



Dr. Kevin E. Jones

My research expertise involves the relationship between science and society, and involves a substantial focus on the development of science policy, community engagement and the development of participatory risk regulation. More recently I have been developing research expertise on the topics of innovation, community and regional development. In particular, this research seeks to investigate the links between global rhetorics of development and the knowledge economy with the local contexts in which innovation, growth and governance take place. A strong focal point of my research involves the ability to translate and apply research findings in ways which inform policy practice and governance.

1. Innovation, Nanotechnology and the Alberta Capital Region. Killam Foundation. Along with Rob Shields I am the principal investigator on a research project investigating the networks and relationships being created around nanotechnology innovation in Edmonton. This exploratory research seeks to identify fault lines in these networks and to understand how fragmentations between innovation policy and local communities are revealed, constructed and overcome. This research provides an important contextual background to this PDG proposal.

2. Institutional Adaptation to BSE and Food-safety in Canada. APRI. I am the senior research associate on a study of institutional responses to BSE and food safety (PI. Debra Davidson, University of Alberta). This research addresses the ways in which network relations, institutional values and practices have been reflexively adapted to account for risk scenarios such as posed by the 2003 outbreak of BSE in Alberta.

3. Understanding Lay Membership in Scientific Governance. London, Defra, 2008. I was principle investigator and grant holder (£80,001) of a research project investigating the development of scientific advisory processes for the British Department for Environment, Food and Rural Affairs (Defra). This research made an important contribution to the development of the UK Code of Practice for Scientific Advisory Committees.

4. The Received Wisdom: Opening up Expert Advice. London: DEMOS. Along with colleagues at Copenhagen Business School and Demos, this series of essays was presented to key policy officials, politicians and academics in the UK. The report was presented at a high profile event at the EEF in London, in 2006, with participation from: Sir John Krebs, Principal of Jesus College, Oxford and former Chair of the Food Standards Agency; Richard Horton, Editor of The Lancet; Sue Mayer, Director, Genewatch; and Bill Stow, Director General, Environment, Defra.

5. Understanding Risk in Everyday Policy Making, 2005. Defra, London. I was seconded to Defra (£8,800) by invitation to assist the Department in developing its risk governance strategies. An important part of this work involved expanding notions of risk beyond scientific assessments to account for social and normative valuations of risk and how these might be accounted for through the expansion of citizen engagement and access to wider forms of expert knowledge.

6. Independent Evaluator, A people's inquiry on nanotechnology and the environment. I was invited to evaluate a community engagement project which was financially supported by the UK Environment Agency and Sciencewise, and organized by Demos the London policy thinktank.

7. Science, Participation and Governance, 2010, PhD dissertation, M. Schulte zu Berge, University of

Liverpool. I was the grant holder (£51,000) and supervisor of this PhD which addressed innovations in the use of science and public engagement in UK environmental governance.

Alongside my work with Government, I am also developing an academic publication profile. Two recent publications include:

8. “The Good, the Bad and the Perfect - anticipating engagement amidst critical regimes.” *Social Studies of Science*, (submitted July 2010, accepted with revision - with A. Irwin and T. Jensen). This paper, co-authored with two leading European authors in the study of scientific citizenship, provides an important account of both the progress made in integrating citizen expertise into science and risk policy in the United Kingdom, as well as a theoretical and empirical account of why this progress has stumbled in recent years. The paper proposes the development of a critical sociology of anticipation and the need to develop reflexive accounts of the discursive roles of critical science studies scholarship in contributing to the current impasse.

9. “Creating space for engagement? Lay membership in contemporary risk governance.” In B. Hutter (ed.) *Anticipating Risks and Organizing Risk Regulation in 21st Century*. Cambridge, Cambridge University, 2010 (with A. Irwin). This chapter makes an important contribution to a key text in the field, edited by leader in the field of Risk studies, and which has already received positive reviews from leading scholars Ulrich Beck and Diane Vaughan.

10. “Inter-disciplinarity in Ecosystems Research: Developing Social Robustness in Environmental Science.” In C.L.J. Frid and D.J. Raffaelli (eds) *Ecosystem Ecology: A new synthesis*. BES Ecological Review Series. Cambridge, Cambridge University Press, 2010. Part of the prestigious British Ecological Review series this chapter is the outcome of an interdisciplinary engagement with key scholars in ecosystems ecology.



Family name, Given name

Lumb, Chris

**Partner Information**

**Organization Information**

Full organization name  
TEC Edmonton

Organization type  
Public business enterprise

Sector  
Business enterprise

Address  
4000-10230 Jasper Ave N.W.

City/Municipality  
Edmonton

Prov./State  
AB

Postal/Zip code  
T5J4P6

Country  
CANADA

**Contact Information**

Contact family name  
Lumb

Given name  
Chris

Initials

	Country code	Area code	Number	Extension
Telephone number	780	492	8977	
Secondary phone number				
Fax number				

E-mail  
chris.lumb@tecedmonton.com

Web address



November 18, 2011

Professor Rob Shields and Dr. Kevin Jones  
CRSC, Faculty of Extension  
2-184 Enterprise Square  
10230 Jasper Ave.  
Edmonton, AB T5J 4P6

Dear Rob and Kevin,

I am writing to confirm our support for your application to the SSHRC Partnership Development Grant Program in the area of nanotechnology and the community, and for the project's aims and objectives. I or another representative of TEC Edmonton will be happy to participate for the two-year term of the project as a partner. We will support the development of the project's research and engagement activities by:

- continuing our membership on the project steering committee;
- sharing expertise in the area of commercial innovation and business development with the research team;
- acting as a liaison between the project and the emerging nanotechnology industry in Alberta;
- participating in the project's proposed stakeholder and citizen engagement exercises as experts in innovation and business development;
- sponsoring a Masters level graduate research assistant for a period of one year, with the intent that the cost for the student (\$22,938) would be borne 1/3 by SSHRC, 1/3 by TEC Edmonton, and 1/3 from other sources that we will identify in advance of the RA's commencement on the project. In addition, we will provide expertise in mentoring this student and involve the student in our day-to-day activities. The student in turn will be expected to contribute to TEC Edmonton by bridging the expertise being developed in the project with the activities of our organization.

We see this as an interesting and potentially very rewarding project and hope that through our participation we will be able to foster greater innovation and engagement with nanotechnology and innovation in the community.

Sincerely yours,

A handwritten signature in cursive script, appearing to read 'Chris Lumb', followed by a period.

Chris Lumb, P. Eng.  
CEO, TEC Edmonton



Family name, Given name

Lumb, Chris

### Contributions from Partner

A partner is an organization that participates actively in a formal partnership and contributes in a meaningful way to the success of the endeavour.

	Confirmed	Cash	Confirmed	In-kind
		Amount		Amount
<b>Personnel costs</b>				
<b>Student salaries and benefits/Stipends</b>				
Undergraduate				
Masters	Y	7,646	N	0
Doctorate				
<b>Non-student salaries and benefits/Stipends</b>				
Postdoctoral				
Other				
<b>Travel and subsistence costs</b>				
<b>Applicant/Team member(s)</b>				
Canadian travel				
Foreign travel				
<b>Students</b>				
Canadian travel				
Foreign travel				
<b>Other expenses</b>				
<b>Professional/Technical services</b>				
<b>Supplies</b>				
<b>Non-disposable equipment</b>				
Computer hardware				
Other				
<b>Other expenses (specify)</b>				
Assistance to secure funding	N	0	Y	7,646
Steering Committee	N	0	Y	6,400
<b>Total</b>		7,646		14,046
<b>Total of all contributions (cash + in-kind)</b>				21,692



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Internal use	CID (if known)
710434	

**Identification**  
Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

Name			
Family name	Given name	Initials	Title
Petersen	Nils		Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input checked="" type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
		_____	_____	<input type="radio"/> Yes <input type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
	<input type="radio"/> F <input checked="" type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input type="radio"/> No
Full name used during previous contact, if different from above				

**Contact Information**  
The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
1	780	248-1487		1	780	492-3169	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail: <b>nils.petersensshrc@gmail.com</b>							
Secondary E-mail							

Personal information will be stored in the Personal Information Bank for the appropriate program.

**Checked**  
Web CV  
2011/11/17



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Family name, Given name

Petersen, Nils

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address			Address		
Faculty of Science, 6-195 CCIS					
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Edmonton	AB	T6G2E1			
Country CANADA			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality	Prov./ State		City/Municipality	Prov./ State	Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number			
		Country code	Area code	Number	Extension
Temporary E-mail					



**Do not photocopy this page.**

Family name, Given name

Petersen, Nils

### Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

#### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	360	Science and technology
2		
3		

#### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year				Year			
		BC	AD			BC	AD
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>

#### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

#### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1			
2			
3			
4			
5			





Family name, Given name

Petersen, Nils

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)	
Full Professor				2004/11	
Org. code	Full organization name				
1480111	University of Alberta				
Department/Division name					
Chemistry					
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input type="radio"/> Full-time	<input type="radio"/> Part-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Non-salaried	<input type="radio"/> Leave of absence
Position				Start date (yyyy/mm)	End date (yyyy/mm)
Associate Dean				2011/1	
Org. code	Full organization name				
1480111	University of Alberta				
Department/Division name					
Research					
Position				Start date (yyyy/mm)	End date (yyyy/mm)
Director				2004/1	2011/1
Org. code	Full organization name				
1	National Institute of Nanotechnology				
Department/division name					
National Research Council of Canada					
Position				Start date (yyyy/mm)	End date (yyyy/mm)
Vice-President Research				2002/1	2004/1
Org. code	Full organization name				
1351211	The University of Western Ontario				
Department/Division name					
Office of Research					

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV



Family name, Given name

Petersen, Nils

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Distinguished Research Professor		2001/1	2002/1
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Faculty of Science			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Associate Vice President		1999/1	2000/1
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Research			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Full Professor		1997/1	
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Biochemistry			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Full Professor		1997/1	
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Chemistry			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Chair		1995/1	1999/1
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Chemistry			



Family name, Given name

Petersen, Nils

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Full Professor		1993/1	
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Chemistry			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Associate Dean		1993/1	1995/1
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Graduate Studies			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Associate Professor		1987/1	1993/1
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Chemistry			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Honorary Lecturer		1982/1	1997/1
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Biochemistry			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate		1981/1	1987/1
Org. code	Full organization name		
9943101	Washington University in St. Louis		
Department/Division name			
Chemistry			



Family name, Given name

Petersen, Nils

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Assistant Professor		1981/1	1987/1
Org. code	Full organization name		
1351211	The University of Western Ontario		
Department/Division name			
Chemistry			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate		1977/1	1979/1
Org. code	Full organization name		
9931102	Cornell University		
Department/Division name			
Applied Physics			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			



Family name, Given name

Petersen, Nils

<b>Academic Background</b>				
List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1973/01		1978/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80300	Chemistry	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9983130	California Institute of Technology			
Country <b>UNITED STATES</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1968/01		1972/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80300	Chemistry	<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
1351211	The University of Western Ontario			
Country <b>CANADA</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Personal information will be stored in the Personal Information Bank for the appropriate program.



Family name, Given name

Petersen, Nils

### Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	Distinguished Research Fellowship	University		\$0 2001
Fellowship	The Chemical Institute of Canada	Private Sector CANADA		2001
Academic Prize	E. G. Pleva Award (Excellence in Teaching)	University CANADA		\$0 1993
Academic Prize	Lt. Governor's Laurel Award (Teaching)	University CANADA		\$0 1993
Academic Prize	OCUFA Teaching Award	University		\$0 1993
Fellowship	NSERC University Research Fellowship	Federal Government	0	\$0 1981

### Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

#### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

chemistry, biochemistry, nanotechnology, research,

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	80300	Chemistry	
2	80099	Other Natural Sciences and Engineering	Biochemistry
3	80600	Biological Sciences	
4			
5			

## 1. Research Contributions Over the Last Six Years (2005-11)

### Refereed Publications

#### Journal Articles

- R M. Anikovski, Z.D. Wiltshire, K. Weisshart, and N.O. Petersen “Photon Counting Histogram Analysis for Two-Dimensional Systems” *ChemPhysChem* (in press – published electronically August 2011) Cover Article
- R Y. Jiang, A.J. Nohe, B. Gragdon, C. Tian, N. Rudarakanchana, N.W. Morrell, and **N.O. Petersen**, “Trapping of BMP receptors in distinct membrane domains inhibits their function in pulmonary arterial hypertension” *American Journal of Physiology – Lung Cellular and Molecular Physiology* 301:L218-L227 (2011)
- R E. Keating, A.J. Waring, F.J. Walther, F. Possmayer, R. A. Veldhuizen, and **N.O. Petersen** “ A TOF-SIMS study of the lateral organization of lipids and proteins in pulmonary surfactant systems” *BBA-Biomembranes* 1808, 614-621 (2011) (CIHR)
- R B. Bragdon, S. Thinakaran, O. Moseychuk, D. King, K. Young, D.W. Litchfield, **N.O. Petersen**, and A. Nohe “Casein Kinase 2 beta-Subunit is a regulator of Bone Morphogenetic Protein 2 Signaling.” *Biophysical Journal* **99**, 897-904 (2010)
- R F. Possmayer, S.B. Hall, T. Haller, **N.O. Petersen**, Y.Y. Zuo, J. Bernardino de la Serna, A.D. Postle, R. A.W. Veldhuizen, S. Orgeig “Recent Advances in Alveolar Biology: Some new looks at the alveolar interface” *Respiratory Physiology and Neurobiology* **173S**, S55-S64 (2010)
- R M.S. Bakshi, V.S. Jaswal, F. Possmayer, and **N.O. Petersen** “Solution Phase Interactions Controlled Ordered Arrangement of Gold Nanoparticles in Dried State” *J. Nanoscience and Nanotechnology* **10**, 1747-1756 (2010)
- R B. Bragdon, S. Thinakaran, J. Bonor, T.M. Underhill, **N.O. Petersen**, and A. Nohe “FRET Reveals Novel Protein-Receptor Interaction of Bone Morphogenetic Protein Receptors and Adaptor Protein 2 at the Cell Surface” *Biophys J*, **97**, 1428-1435 (2009)
- R M.S. Bakshi, V.S. Jaswal, G. Kaur, T.W. Simpson, P.K. Banipal, T.S. Banipal, F. Possmayer, and **N.O. Petersen** “Biomineralization of BSA-Chalcogenide Bioconjugate Nano- and Microcrystals” *J. Phys Chem C* **113**, 9121-9127 (2009)
- R M.S. Bakshi, P. Thakur, G. Kaur, H. Kaur, T.S. Banipal, F. Possmayer, and **N.O. Petersen**, “Stabilization of PbS Nanocrystals by Bovine Serum Albumin in its Native and Denatured States” *Adv. Func. Mat.* **19**, 1451-58 (2009)
- R M. Anikovski and **N.O. Petersen** “Photon Counting Histogram Analysis as a Tool for Studying the Nature of Intermolecular Interactions” *J. Phys. Chem* **113**, 3404-12 (2009)
- R J. Popov, D. Vobornik, O. Cuban, E. Keating, D. Miller, J. Francis, **N.O. Petersen**, L.J. Johnston “Chemical Mapping of Ceramide Distribution in Sphingomyelin-Rich Domains in Monolayers” *Langmuir* **24**, 13502-9 (2008)
- R M. Anikovski, L. Dale, S. Ferguson, and **N.O. Petersen** “Resonance Energy Transfer in Cells: a new look at fixation effect and receptor aggregation on cell membranes” *Biophysical J.* **95** 1-11 (2008)
- R A.K. Panda, P. Wojciechowski, K. Nag, F. Possmayer and **N.O. Petersen** “Thermodynamic and fluorescence studies on the interaction of cholesterol with POPC and sphingomyelin” *J. Dispersion Science and Technology* **30**, 1255-1261 (2009)
- R Y.Y. Zuo, S.M. Tadayyon, E. Keating, L. Zhao, R.A.W. Veldhuizen, **N. O. Petersen**, M. W. Amrein and F. Possmayer, "Atomic force microscopy studies of functional and dysfunctional pulmonary surfactant films. II. Albumin-inhibited pulmonary surfactant films and the effect of SP-A" *Biophys. Journal*, **95**, 2779-91 (2008)

- R M.S. Bakshi, S. Sachar, G. Kaur, P. Bhandari, G. Kaur, M.C. Biseinger, F. Possmayer and **N.O. Petersen** “Dependence of crystal growth of gold nanoparticles on the capping behaviour of surfactant at ambient conditions” *Crystal Growth and Design* **8**, 1713-19 (2008)
- R M.S. Bakshi, F. Possmayer and **N.O. Petersen** “Aqueous-phase room-temperature synthesis of gold nano-ribbons: Soft template effect of Gemini surfactants” *J. Phys. Chem. C* **112**, 8259-65 (2008)
- R M.S. Bakshi, G. Kaur, F. Possmayer, **N.O. Petersen** “Shape-controlled synthesis of poly(siren sulfonate) poly(vinyl pyrrolidone) capped lead sulphide nanocubes, bars and threads” *J. Phys. Chem. C* **112**, 4948-53 (2008)
- R M.S. Bakshi, P. Thakur, S. Sachar, G. Kaur, T.S. Banipal, F. Possmayer and **N.O. Petersen** “Aqueous Phase Surfactant Selective Shape Controlled Synthesis of Lead Sulfide Nanocrystals” *J. Phys. Chem C* **111**, 18087-98 (2007)
- R Y.Y. Zuo, R.A. Veldhuizen, A.W. Neuman, **N.O. Petersen** and F. Possmayer “Current perspective in pulmonary surfactant – Inhibition, enhancement and evaluation” *Biochim Biophys Acta* **1778**, 1947-1977 (2008) - Apr 8 (2008) e-publication ahead of print
- R Y.Y. Zuo, E. Keating, L. Zhao, S.M. Taddyon, R.A. Veldhuizen, **N.O. Petersen** and F. Possmayer “Atomic Force Microscopy studies of functional and dysfunctional pulmonary surfactant films I: Micro- and nanostructures of functional pulmonary surfactant films and the effect of SP-A.” *Biophys J.* **94**, 3549-64 (2008)
- R A. Nohe and **N.O. Petersen** “Image Correlation Spectroscopy” *Science’s STKE* Dec 18; 2007 (417): p17
- R E. Keating, A. Nohe and **N.O. Petersen** “Studies of distribution, location and dynamic properties of EGFR on the cell surface measured by image correlation spectroscopy.” *Eur Biophys J* **37**, 469-81 (2007) (ePub Nov 28)
- R M.S. Bakshi, L. Zhao, R. Smith, F. Possmayer, and **N.O. Petersen** “Metal Nanoparticle Pollutants Interfere with Pulmonary Surfactant Function In Vitro” *Biophys J.* **94**, 855-868 (2008)
- R M.S. Bakshi, F. Possmayer, and **N.O. Petersen** “Role of Different Phospholipids in the Synthesis of Pearl-Necklace-Type Gold-Silver Bimetallic Nanoparticles as Bioconjugate Materials” Accepted *J. Phys. Chem. C* **111**, 14113-124 (2007)
- R N. Patriito, C. McCague, P.R. Norton, and **N.O. Petersen** “Spatially Controlled Cell Adhesion via Micropatterned Surface Modifications of Poly(dimethylsiloxane)” *Langmuir* **23**, 715-719 (2007)
- R M.S. Bakshi, G. Kaur, Pankaj Thakur, T.S. Banipal, F. Possmayer, and **N.O. Petersen** “Surfactant Selective Synthesis of Gold Nanowires by Using a DPPC-Surfactant Mixture as a Capping Agent at Ambient Conditions” *J. Phys Chem C*, **111**, 5932-5940 (2007)
- R M.S. Bakshi, F. Possmayer, and **N.O. Petersen** “Simultaneous Synthesis of Au and Cu Nanoparticles in Pseudo-Core-Shell Type Arrangement Facilitated by DMPG and 12-6-12 Capping Agents, *Chem Mater.* **19**, 1257-1266 (2007)
- R A.K. Panda, K. Nag, R.R. Harbottle, F. Possmayer, and **N.O. Petersen** “Thermodynamic studies of bovine lung surfactant extract mixing with cholesterol and its palmitate derivative” *J. Colloid and Interface Science* **311**, 551-555 (2007)
- R E. Keating, L. Rahman, J. Francis, A. Petersen, F. Possmayer, R. Veldhuizen and **N.O. Petersen** “Effect of Cholesterol on the Biophysical and Physiological Properties of a Clinical Pulmonary Surfactant” *Biophys J*, **93**, 1391-1401 (2007)
- R X. Zhao, **N.O. Petersen**, and Z. Ding “Comparison study of live cells by atomic force microscopy, confocal microscopy, and scanning electrochemical microscopy” *Can. J. Chem.* **85**, 1-9 (2007) [Cover]



- R M. S. Bakshi, P. Sharma, T. S. Banipal, G. Kaur, K. Torigoe, **N. O. Petersen**, and F. Possmayer “Lamellar Phase Supported Synthesis of Colloidal Gold Particles, Nanoclusters, and Nanowires Formation” *Jour. Nanoscience and Nanotechnology* **7**, 916-924 (2007)
- R A. Nohe, E. Keating, M. Fivaz, F.G. van der Goot and **N.O. Petersen** “Dynamics of GPI Anchored proteins on the surface of living cells” *Nanomedicine*, **2**, 1-7, 2006
- R N. Patriito, C. McCaige, S Chiang, P.R. Norton and **N.O. Petersen** “Photolithographically Patterned Surface Modification of Poly(dimethylsiloxane) via UV-Initiated Graft Polymerization of Accrylates” *Langmuir* **22 (8)** 3453-3455 (2006)
- R K. L. DeJong, H. C. MacLeod, P. R. Norton, **N. O. Petersen** and M. Jasnin “An AFM compatible device for stretching cells and adsorbed proteins” *Rev Sci Instr.* **77**, 23701 (2006)
- R Kathy L. DeJong, Heather C. MacLeod, Peter R. Norton and **Nils O. Petersen** “Fibronectin organization under and near cells” *European Biophysics Journal* **35**, 695-708 (2006)
- R A.K. Panda, F. Possmayer, **N.O. Petersen**, K. Nag and S.P. Moulik “Physico-chemical studies on mixed oppositely charged surfactants: their uses in the preparation of surfactant ion selective membrane and monolayer behaviour at the air water interface. *Colloids and Surfaces A: Physicochem Eng Aspects* **264**, 106-113 (2005)
- R A. Nohe, E. Keating, M. Underhill, P. Knaus and **Nils O. Petersen** “Dynamics and Interactions of Caveolin-1 Isoforms with BMP Receptors” *J. Cell Science*, **118**, 643-650 (2005)

#### **Refereed Proceedings:**

- R M.C. Biesinger, David J. Miller, Robert R. Harbottle, Fred Possmayer, N. Stewart McIntyre and **Nils O. Petersen** “Imaging Lipid Distributions in Model Monolayers by ToF-SIMS with selectively Deuterated Components and Principal Component Analysis“ The 15<sup>th</sup> International Conference on Secondary Ion Mass Spectrometry (SIMS XV) Manchester, UK September 12-16 (2005)

#### **Book Reviews:**

- B4 "Topics in Fluorescence Spectroscopy. Volume 3" By Joseph R. Lakowicz Editor. *J. Am. Chem. Soc* (1994)
- B3. "Topics in Fluorescence Spectroscopy. Volume 1" by Joseph R. Lakowicz, Editor. *J. Am. Chem. Soc.* 114, 10096 (1992)
- B2. "Annual Review of Biophysics and Biophysical Chemistry. Volume 14" *J. Am. Chem. Soc.* 107, 7802 (1985).

#### **Book Chapter Reviews:**

- R E. Keating, C.M. Brown and **N.O. Petersen**, “Mapping Molecular Interactions and Transport in Cell Membranes by Image Correlation Spectroscopy” Chapter 16 in *Molecular Imaging: FRET Microscopy and Spectroscopy* Edited by Pariasamy and Day, Oxford University Press, June 2005.

#### **2.Other Research Contributions**

Member CIHR Institute of Genetics Institute Advisory Board	2007-11
Member NSERC Discovery Accelerator Selection Committee (Chair 09)	2007-09
Member ArboraNano – Business Led National Centre of Excellence Board	2009-
Member Ontario Innovation Trust Legacy Report Editorial Committee	2008-09
Member Canadian Light Source Human Resource Committee	2008-
Chair BiopSys - NSERC Strategic Network Board	2008-
Member NSERC GSC Reorganization Advisory Committee	2007-08
Member NSERC Cell Biology GSC Reorganization Advisory Board	2007
Member California Nano Systems Institute Board of Directors	2007-

### 3. Five Most Significant Career Research Contributions: see Relevant Experience

1. "More on the Motional State of Lipid Bilayer Membranes: Interpretation of Order Parameters Obtained from Nuclear Magnetic Resonance Experiments" *Biochem.* 16, 2657-2667, 1977 (with S.I. Chan). This paper established the proper interpretation of nuclear magnetic resonance data for lipids in membranes.
2. "Dependence of Locally Measured Cellular Deformability on Position on the Cell, Temperature and Cytochalasin B" *Proc. Natl. Acad. Sci. USA* 79, 5327-5331, 1982 (with W.B. McConnaughey and E.L. Elson). This research provided the first mechanical data on deformations of cell surfaces in response to drug treatments.
3. "Quantitation of Membrane Receptor Distributions by Image Correlation Spectroscopy: Concept and Application" *Biophysical Journal* 65, 1135-1146, 1994 (with P. L. Hoddellius, P. W. Wiseman, O. Seger and K.-E. Magnusson). This paper described the first analysis of protein distributions in cell membranes using fluorescence imaging and image analysis, which established a new field of image correlation spectroscopy.
4. "Molecular Organization in Bovine Pulmonary Surfactant Films Revealed by Time-of-Flight Secondary Ion Mass Spectrometry" *Langmuir* 19, 3698-3704, 2003 (with R.R. Harbottle, K. Nag, N.S. McIntyre, F. Possmayer). This research provided some of the first evidence for lipid organization in lung surfactants using imaging mass spectrometry.
5. "Signal Transduction of Bone Morphogenetic Protein Receptors" Invited and refereed review, *Cellular Signalling*, 16, 291-299, 2004 (with A. Nohe, E. Keating, P. Knaus). This paper provides a comprehensive and highly cited review of the function of Bone Morphogenetic Protein Receptor function.

### 4. Career Interruptions and Special Circumstances: N/A

### 5. Contributions to Training

#### Teaching:

- Instructor Chem 026 (First year general); Chem 204, 224a, 234b and 254 (all second year physical chemistry); Chem 324a, 374a/b (third year quantum mechanics and kinetics) and Chem 378 (polymer chemistry); Chem 445b (photochemistry); Chem 474a (spectroscopy), Biochem 455 (biomembranes) and Biochem 468 (physical biochemistry); Biochem 524a (biomembranes); Chem 490 (research project), Chem 614b (Lasers and Spectroscopy).
- Instructor 2 week graduate course in Cell Membranes in Linkoping, Sweden  
2 week NORFA course on Video Microscopy in Linkoping, Sweden

#### Training of Highly Qualified Personnel:

- Post-Doctoral Fellows 14, In progress 3  
 Doctoral Thesis 14, In progress 1  
 Master's Thesis 1  
 Undergraduate Thesis >20  
 Summer Undergraduates Research >20  
 High School Independent Studies Programs >4

Professor Nils Petersen

As former Director General of NINT, I played an important role in developing Edmonton's nanotechnology research centre at the University of Alberta. My central contribution to this project is my broad knowledge of nanoscience, connection to the nanotechnology research network (academic, government and commercial aspects), and long-standing commitment to engaged scientific research within the community.

1. *Director General, NINT (2004-2011)*. In my role as Director General, I took a central administrative role in leading the nanotechnology centre at the University of Alberta. I bring first-hand knowledge of how nanoscience and clustering currently operate within the city, with experience in the interactions between the different levels of government (municipal, provincial, federal) and research organizations.
2. *Vice-President (Research), University of Western Ontario (2002-2004)*. I have experience as Vice-President (Research) at Western in dealing with the potential for research on society – particularly through management of technology transfer activities at Western, in management of the UWO Research Park, and establishment of a Research Park in Sarnia. I was also involved in University-Community activities in that role (in London, Ontario) for which I received an award from the London Economic Development Corporation.
3. *Nanotechnology Expertise* (see Research Contributions for more detail). I have a broad understanding of the field of nanotechnology – its promises, its limitations, its applications.
4. *Community Engagement with Nanotechnology*. I have spoken on a number of occasions to community groups (from Rotary Clubs to EEDC) on the topic of nanotechnology and can speak to the public about nanotechnology in a comprehensible way.
5. *Communication*. I am a good communicator with several teaching awards as a professor at Western.
6. *Interdisciplinary*. My research is interdisciplinary and I have a reasonable perspective on the research activities in general in the social sciences and humanities from my role as Associate Dean of Graduate Studies and Vice President (Research).
7. *Public Understanding*. Most importantly, I think it is important that nanotechnology and its implications be understood by the public and communities that it will impact – positive or negative.



Internal use  
550145

# Application for a Grant

<b>Identification</b>														
This page will be made available to selection committee members and external assessors.														
Funding opportunity <b>Partnership Development Grants</b>														
Program name <b>1 - Insight 2 - Connection</b>		Type of partnership <b>New</b>												
Grant type <b>Individual</b>														
Application title <b>Nanotechnology and the Alberta Capital Region -- A Case Study in Integrating Communities, Innovation and Development</b>														
Applicant family name <b>Shields</b>		Applicant given name <b>Rob</b>		Initials <b>M</b>										
Org. code <b>1480111</b>	Full name of applicant's organization and department <b>University of Alberta City-Region Studies Centre (Faculty of Extension)</b>													
Org. code <b>1480111</b>	Full name of administrative organization and department <b>University of Alberta Faculty of Extension</b>													
Scholar type Regular <input checked="" type="radio"/> New <input type="radio"/>														
If New, specify category 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>														
Does your proposal involve human beings as research subjects? If "Yes", consult the <i>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans</i> and submit your proposal to your organization's Research Ethics Board. Yes <input checked="" type="radio"/> No <input type="radio"/>														
Does your proposal involve activity that requires a permit, licence, or approval under any federal statute; or physical interaction with the environment? If 'Yes', complete Appendices A and B. Yes <input type="radio"/> No <input checked="" type="radio"/>														
<table border="0" style="width:100%; text-align:right;"> <tr> <td></td> <td>Year 1</td> <td>Year 2</td> <td>Year 3</td> <td>Total</td> </tr> <tr> <td>Total funds requested from SSHRC</td> <td><u>88,580</u></td> <td><u>111,357</u></td> <td><u>0</u></td> <td><u>199,937</u></td> </tr> </table>						Year 1	Year 2	Year 3	Total	Total funds requested from SSHRC	<u>88,580</u>	<u>111,357</u>	<u>0</u>	<u>199,937</u>
	Year 1	Year 2	Year 3	Total										
Total funds requested from SSHRC	<u>88,580</u>	<u>111,357</u>	<u>0</u>	<u>199,937</u>										



**Activity Details**

The information provided in this section refers to your research proposal.

**Keywords**

List keywords that best describe your proposed research or research activity. Separate keywords with a semicolon.

City-region, innovation, development, community engagement; nanotechnology; planning and governance

**Priority Areas** - Priority area(s) most relevant to your proposal.

**Partnership Approaches**

One or more possible formal partnership approaches.

Cross-sector co-creation of knowledge & understanding; Disciplinary and interdisciplinary research partnerships; Networks for research and/or related activities; Partnered knowledge mobilization

If "Other", specify

Extending partnerships to wider citizen engagement.

**Disciplines** - Indicate and rank up to 5 disciplines that best correspond to your proposal.

Rank	Code	Discipline	If "Other", specify
1	61412	Urban Planning	
2	63499	Other Sociology	Science and Technology Studies
3	61406	Regional Planning	
4	61820	Social/Cultural Geography	
5	63404	Social Organization	

**Areas of Research**

Indicate and rank up to 3 areas of research related to your proposal.

Rank	Code	Area
1	131	Economic and Regional Development
2	360	Science and technology
3	244	Innovation, Industrial and Technological Development

**Temporal Periods**

If applicable, indicate up to 2 historical periods covered by your proposal.

From	To
<p>Year</p> <p>BC AD</p> <p>_____ ○ ○</p> <p>_____ ○ ○</p>	<p>Year</p> <p>BC AD</p> <p>_____ ○ ○</p> <p>_____ ○ ○</p>



Family name, Given name  
Shields, Rob

**Activity Details (cont'd)**

**Geographical Regions**

If applicable, indicate and rank up to 3 geographical regions covered by or related to your proposal. Duplicate entries are not permitted.

Rank	Code	Region
1	1130	Western Canada
2	9001	International
3	1000	North America

**Countries**

If applicable, indicate and rank up to 5 countries covered by or related to your proposal. Duplicate entries are not permitted.

Rank	Code	Country	Prov./ State
1	1100	CANADA	AB
2			
3			
4			
5			



Family name, Given name

Shields, Rob

### Summary of Proposed Partnership and Activity

The summary of your proposal should indicate the challenges or issues to be addressed; the overall goal and objectives of the proposed partnership; and the breadth of the partnership, and the meaningful engagement of the partners involved.

What can cities and communities do to support and benefit from new technologies? How can knowledge-intensive sectors develop in ways which account for local contexts and local needs? How can benefits and prosperity be made to 'stick' to the communities in which new technologies are innovated? We are developing a partnership to explore these questions and to foster networks which integrate scientific innovation, community development, and urban planning in the development of local 'innovation clusters'. Using the local case of nanotechnology in Edmonton, the University of Alberta's City-Region Studies Centre is developing partnerships with the National Institute of Nanotechnology (NINT), the Northern Alberta Institute of Technology (NAIT), NanoAlberta - Alberta Innovates Technology Futures (AITF), TEC Edmonton, the municipalities making up the Alberta Capital Region and an emerging nanotechnology business sector. Our aim in developing this partnership is to inform and research innovation networks which recognize and engage people and place as key constituents of successful science policy and development strategies.

While Edmonton has long been defined by its northerly location as a transportation and support centre, as a provincial capital, and its passion for hockey, Edmonton's designation as the national centre for the commercial development of nanotechnologies is less well known. Nanotechnology is imagined as a force of change and diversification, recasting the spatialization of the city as a northern capital, attracting a new class of high tech workers and entrepreneurs and bootstrapping a livable and world-leading city. However, pilot research funded by the Killam Foundation has shown that caution should be taken in drawing straightforward links between innovation cluster policies and community impacts: relationships between cutting-edge science, businesses, related communities of practice and the public are fragile and fragmented. It is the identification of this practical problem -- of expanding partnerships across innovation, local development agendas and communities -- that motivates our proposed partnership approach. The nanotechnology case in Alberta's Capital Region has been shaped by tensions between an ideal model of state science policy and economic development, a limited local labour force, demand from resource extraction industries and a disengaged public, including the wider business community.

Drawing financial support and expertise from our proposed partnership we will conduct: a) an intensive Citizen Panel involving key stakeholders and leaders from across the community; and b) and a wider and more extensive Community Engagement Exercise. Each of these activities will be supported directly through partnership activities and stakeholder working groups. Our intention is to draw partners and communities together to create platforms for research and consultation. This is both an exploration and a recognition of opportunities within Alberta and the Alberta capital region. Our methodology is anchored by CRSC's Public Research Model involving a uniquely interdisciplinary team of researchers, partners, postdoctoral and graduate students. This model uses multiple methods including group and individual interviews, ethnographic and discourse analysis as well as digital tools to examine the structure and dynamics of networks around nanotechnology. Through a program of partnership, engagement and participatory research we seek to promote opportunities for shared knowledge construction and the creation of governance scenarios which connect local needs and international opportunities for nanotechnology development.





Family name, Given name

Shields, Rob

### Participants

List names of your team members (co-applicants and collaborators) who will take part in the intellectual direction of the research. Do not include assistants, students or consultants.

Role Co-applicant <input type="radio"/> Collaborator <input checked="" type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Guston		Given name Dave	Initials
Org. code 9976102	Full organization name Arizona State University		
Department/Division name Politics and Global Studies			
Role Co-applicant <input type="radio"/> Collaborator <input checked="" type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Irwin		Given name Alan	Initials
Org. code 9129108	Full organization name Copenhagen Business School		
Department/Division name Dean of Research			
Role Co-applicant <input checked="" type="radio"/> Collaborator <input type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Jones		Given name Kevin	Initials E
Org. code 1480111	Full organization name University of Alberta		
Department/Division name Faculty of Extension			
Role Co-applicant <input checked="" type="radio"/> Collaborator <input type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Petersen		Given name Nils	Initials
Org. code 1480111	Full organization name University of Alberta		
Department/Division name Chemistry			
Role Co-applicant <input type="radio"/> Collaborator <input checked="" type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Horst		Given name Maja	Initials
Org. code 9129101	Full organization name University of Copenhagen		
Department/Division name Department of Media, Cognition and Communication			

Personal information will be stored in the Personal Information Bank for the appropriate program.

Application WEB





Family name, Given name

Shields, Rob

**Participants (cont'd)**

Role Co-applicant <input type="radio"/> Collaborator <input checked="" type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Stilgoe		Given name Stilgoe	Initials
Org. code 9121116	Full organization name University of Exeter		
Department/Division name School of Business and Economics			
Role Co-applicant <input type="radio"/> Collaborator <input checked="" type="radio"/>		Academic <input checked="" type="radio"/> Non-academic <input type="radio"/>	
Family name Wilsdon		Given name james	Initials
Org. code 9121140	Full organization name University of Sussex		
Department/Division name Science and Democracy			
Role Co-applicant <input type="radio"/> Collaborator <input type="radio"/>		Academic <input type="radio"/> Non-academic <input type="radio"/>	
Family name		Given name	Initials
Org. code	Full organization name		
Department/Division name			
Role Co-applicant <input type="radio"/> Collaborator <input type="radio"/>		Academic <input type="radio"/> Non-academic <input type="radio"/>	
Family name		Given name	Initials
Org. code	Full organization name		
Department/Division name			
Role Co-applicant <input type="radio"/> Collaborator <input type="radio"/>		Academic <input type="radio"/> Non-academic <input type="radio"/>	
Family name		Given name	Initials
Org. code	Full organization name		
Department/Division name			

Personal information will be stored in the Personal Information Bank for the appropriate program.

Application WEB

## List of Partners and Other Contributors

### Invited Partners (Confirmed)

1. NanoAlberta, Alberta Innovates Technology Futures  
Contact: Dan Djukich, Director  
250 Karl Clark Road  
Edmonton, Alberta, T6N 1E4  
E: [dan.djukich@albertainnovates.ca](mailto:dan.djukich@albertainnovates.ca)  
T: 780-450-5563  
W: <http://www.albertatechfutures.ca/nanoAlberta.aspx>
2. TEC Edmonton  
Contact: Chris Lumb, CEO  
4000 TEC Centre  
10230 Jasper Avenue  
Edmonton, Alberta, T5J 4P6  
E: [chris.lumb@tecedmonton.com](mailto:chris.lumb@tecedmonton.com)  
T: 780-492-8318  
W: <http://www.tecedmonton.com>
3. National Institute for Nanotechnology (NINT)  
Contact: Rick Brommeland, Director of External Relations  
11421 Saskatchewan Drive  
Edmonton, Alberta, T6G 2M9  
E: [Rick.Brommeland@nrc.cnrc.gc.ca](mailto:Rick.Brommeland@nrc.cnrc.gc.ca)  
T: 780-641-1620  
W: <http://www.nrc-cnrc.gc.ca/eng/ibp/nint.html>
4. Northern Alberta Institute of Technology  
Contact: David Carpenter, Dean  
School of Information Communication and Engineering Technologies  
11762 - 106 Street  
Edmonton, Alberta, T5G 2R1  
E: [dcarpent@nait.ca](mailto:dcarpent@nait.ca)  
T: 780-471-7714  
W: <http://www.nait.ca/>

### Other Contributors (confirmed)

1. Michael Phair  
Former Councilor, City of Edmonton  
City-Region Studies Centre Advisory Board Member  
T: 780-426-1516  
E: [michaelphair@shaw.ca](mailto:michaelphair@shaw.ca)

2. Gord Jackson  
Director, Urban Planning and Environment  
Sustainable Development, City of Edmonton  
5th floor, 10250 - 101 Street  
Edmonton, AB T5J 3P4  
E: [gord.jackson@edmonton.ca](mailto:gord.jackson@edmonton.ca)  
T: 780-496-6117
3. George Matteotti  
Director of Special Projects  
Sustainable Development  
Office of the General Manager  
City of Edmonton  
E: [george.matteotti@edmonton.ca](mailto:george.matteotti@edmonton.ca)  
T: 780-442-0812

#### Other Contributors (Unconfirmed)

We will be working with our current partners to extend our partnership to the following organizations, communities and businesses.

1. Capital Region Board  
#1405 Bell Tower  
10104 - 103 Avenue  
Edmonton AB T5J 0H8  
T: 780-638-6000  
W: <http://capitalregionboard.ab.ca/>  
\* The CRSC maintains an ongoing relationship with the CRB and have previously supported the Board's mandate in providing expertise and by organizing practitioner conferences and workshops. (<http://www.crsc.ualberta.ca/nav01.cfm?nav01=98386>).
2. Town of Beaumont; Town of Bon Accord; Town of Bruderheim; Town of Calmar; Town of Devon; City of Fort Saskatchewan; Town of Gibbons; County of Lamont; Town of Lamont; City of Leduc; County of Leduc; Town of Legal; Town of Morinville; Village of New Sarepta; Parkland County; Town of Redwater; City of Spruce Grove; City of St. Albert; Town of Stony Plain; Strathcona County; Sturgeon County; Village of Thorsby; Village of Wabamun; Village of Warburg
3. Nanotechnology businesses in the Alberta Capital Region: Micralyne, Scanimetrics, Acoustic Vision, Alberta Mining/May-Ruben Technologies, Dycor Technologies, Ukalta Engineering and others.
4. We aim to approach Telus World of Science for support in hosting and assisting the project team develop our two citizen engagement activities. <http://www.edmontonscience.com/>



Family name, Given name

Shields, Rob

**Partners** - A partner organization may be, for example, a Canadian or foreign: postsecondary institution, government department (federal, provincial, territorial, municipal), for-profit or not-for-profit organization, or foundation.

Org. code	Full organization name Alberta Innovates Technology Futures		Organization type Provincial/Territorial government			
Address 250 Karl Clark Road			Contact family name Djukich			
			Given name Dan		Initials	
City/Municipality Edmonton	Prov./State AB	Postal/Zip code T6N1E4	Country code 780	Area code 450	Number 5111	Extension
Country CANADA			Telephone number Secondary number Fax number			
E-mail dan.djukich@albertainnovates.ca						
Web address						
Org. code	Full organization name National Institute for Nanotechnology		Organization type Research organization			
Address 11421 Saskatchewan Drive NW			Contact family name Brommeland			
			Given name Richard		Initials	
City/Municipality Edmonton	Prov./State AB	Postal/Zip code T6G2M9	Country code 1	Area code 780	Number 641-1620	Extension
Country CANADA			Telephone number Secondary number Fax number			
E-mail richard.brommeland@nrc-cnrc.gc.ca						
Web address						
Org. code	Full organization name Northern Alberta Institute of Technology		Organization type College			
Address 11762-106 Street			Contact family name Carpenter			
			Given name David		Initials C	
City/Municipality Edmonton	Prov./State AB	Postal/Zip code T5G2R1	Country code 1	Area code 780	Number 4717714	Extension
Country CANADA			Telephone number Secondary number Fax number 1 780 4718994			
E-mail dcarpent@nait.ca						
Web address www.nait.ca						



Family name, Given name  
**Shields, Rob**

Partners (cont'd)						
Org. code	Full organization name <b>TEC Edmonton</b>			Organization type <b>Public business enterprise</b>		
Address <b>4000-10230 Jasper Ave N.W.</b>			Contact family name <b>Lumb</b>			
			Given name <b>Chris</b>		Initials	
City/Municipality <b>Edmonton</b>	Prov./State <b>AB</b>	Postal/Zip code <b>T5J4P6</b>	Country code <b>780</b>	Area code <b>492</b>	Number <b>8977</b>	Extension
Country <b>CANADA</b>			Telephone number			
			Secondary number			
			Fax number			
E-mail <b>chris.lumb@tecedmonton.com</b>						
Web address						
Org. code	Full organization name			Organization type		
Address			Contact family name			
			Given name		Initials	
City/Municipality	Prov./State	Postal/Zip code	Country code	Area code	Number	Extension
Country			Telephone number			
			Secondary number			
			Fax number			
E-mail						
Web address						
Org. code	Full organization name			Organization type		
Address			Contact family name			
			Given name		Initials	
City/Municipality	Prov./State	Postal/Zip code	Country code	Area code	Number	Extension
Country			Telephone number			
			Secondary number			
			Fax number			
E-mail						
Web address						



Family name, Given name  
Shields, Rob

### Partner's Contributions

A partner is an organization that participates actively in a formal partnership and contributes in a meaningful way to the success of the endeavour.

	Cash	In-kind
	Amount	Amount
<b>Personnel costs</b>		
<b>Student salaries and benefits/Stipends</b>		
Undergraduate	0	0
Masters	7,646	0
Doctorate	0	0
<b>Non-student salaries and benefits/Stipends</b>		
Postdoctoral	0	0
Other	0	0
<b>Travel and subsistence costs</b>		
<b>Applicant/Team member(s)</b>		
Canadian travel	0	0
Foreign travel	0	0
<b>Students</b>		
Canadian travel	0	0
Foreign travel	0	0
<b>Other expenses</b>		
<b>Professional/Technical services</b>	0	12,800
<b>Supplies</b>	0	0
<b>Non-disposable equipment</b>		
Computer hardware	0	0
Other	0	0
<b>Other expenses (specify)</b>		
	48,808	14,046
<b>Total of all partners' contributions</b>	<b>56,454</b>	<b>26,846</b>
<b>A. Total of all partners' contributions (cash + in-kind)</b>		<b>83,300</b>
<b>B. Total funds from other sources</b>		<b>140,200</b>
<b>C. Total funds requested from SSHRC</b>		<b>199,937</b>
<b>Total cost of project (A + B + C)</b>		<b>423,437</b>



Family name, Given name  
Shields, Rob

### Funds Requested from SSHRC

For each budget year, estimate as accurately as possible the research costs that you are asking SSHRC to fund through a grant. For each Personnel costs category, enter the number of individuals to be hired and specify the total amount required. For each of the other categories, enter the total amount required.

	Year 1		Year 2		Year 3	
<b>Personnel costs</b>	No.	Amount	No.	Amount	No.	Amount
<b>Student salaries and benefits/Stipends</b>						
Undergraduate						
Masters	1	22,762	1	15,644	0	0
Doctorate	1	24,492	1	25,471	0	0
<b>Non-student salaries and benefits/Stipends</b>						
Postdoctoral	1	30,883	1	32,117	0	0
Other	0	0	0	0	0	0
<b>Travel and subsistence costs</b>						
		<b>Year 1</b>		<b>Year 2</b>		<b>Year 3</b>
<b>Applicant/Team member(s)</b>						
Canadian travel		495		0		0
Foreign travel		0		14,545		0
<b>Students</b>						
Canadian travel		5,800		0		0
Foreign travel		0		3,805		0
<b>Other expenses</b>						
<b>Professional/Technical services</b>						
<b>Supplies</b>						
		825		825		0
<b>Non-disposable equipment</b>						
Computer hardware		0		0		0
Other		1,823		0		0
<b>Other expenses (specify)</b>						
1day acad. and policy workshop		0		17,450		0
Steering Committee Meetings		500		500		0
Stakeholder Planning Meetings		1,000		1,000		0
<b>Total</b>		<b>88,580</b>		<b>111,357</b>		<b>0</b>



### Funds from Other Sources

List all contributors (e.g., individuals, not-for-profit, philanthropic foundations, private sector organizations) that are providing cash and/or in-kind contributions for the proposal.

Full organization name Contribution type	Confirmed	Year 1	Year 2	Year 3
NanoAlberta AITF  In Kind	<input checked="" type="checkbox"/>	3,200	3,200	0
NanoAlberta, Alberta Innovates Technology Futures  Cash	<input checked="" type="checkbox"/>	48,808	0	0
National Institute for Nanotechnology  In Kind	<input checked="" type="checkbox"/>	3,200	3,200	0
Northern Alberta Institute for Technology  In Kind	<input checked="" type="checkbox"/>	3,200	3,200	0
TEC Edmonton  Cash	<input checked="" type="checkbox"/>	7,646	0	0
TEC Edmonton  In Kind	<input checked="" type="checkbox"/>	10,846	3,200	0
University of Alberta CRSC / Faculty of Extension  In Kind	<input checked="" type="checkbox"/>	13,000	13,000	0
University of Alberta, Dept. of Sociology  Staff	<input checked="" type="checkbox"/>	5,250	5,250	0
University of Alberta, Faculty of Science  In Kind	<input checked="" type="checkbox"/>	7,000	7,000	0
<b>Total funds from other sources</b>		102,150	38,050	0



## Budget Justification

The personnel costs are based on salary scales at the University of Alberta include benefits such as EI and WCB. There is a 4% increase between year one and year two to account for cost of living increases.

### PERSONNEL COSTS

*Masters Students (2 years)* \$38,406

Two Masters students will be required: one MA graduate research assistant and one MBA student. The MA student will be employed by the CRSC for the entire term of the project and will play an important role in assisting the project team facilitate partnership activities. Partial funding for this position will be provided by the U of A's Department of Sociology at \$7,706 for year 1 and \$8,091 for year 2; the remaining funding is being requested from SSHRC at \$15,115.90 for year 1 and \$15,643.78 for year 2.

An MBA student will be employed in the first year of the project and serve as a TEC Edmonton intern and be involved in researching the relationship between commercial start-ups, community and the cultural and aesthetic nature of cities. Partial funding for this position will be provided by TEC Edmonton at \$7646 cash, \$7646 in kind (TEC has committed to assisting us to secure an additional \$7646), with the balance \$7646 requested from SSHRC.

*Doctorate (2 years)* \$49,963

A doctoral level graduate research assistant will be employed to assist in both research and engagement aspects of the project. This student will be supported by the research co-applicants and receive training in participatory research methods, data analysis and in community engagement techniques. The student will assist the research team develop a series of reflexive research activities.

*Postdoctoral (2 years)* \$63,000

A post-doctoral fellow will be engaged for two years in all aspects of the project and will be expected to provide significant, original contributions to the project in terms of research design, data collection, network analysis, and dissemination. Candidates for these positions will receive interdisciplinary supervision and support from the project

### TRAVEL AND SUBSISTENCE COSTS

**Applicant/Team member(s)** \$15,040

**Canadian Travel** – One co-applicant will be required to travel in Province to other nanotechnology centres and businesses. Travel \$255; Hotel \$150; Per Diem one day \$45(x2 = \$90); *Subtotal \$495*

**Foreign Travel** – Four international experts on innovation and community development will be invited to share learning with local stakeholders at a one-day academic conference. Invited guests are: Alan Irwin, Maja Horst, Dave Guston, and one of either James Wilsdon or Jack Stilgoe. Airfare from major cities in Europe (\$2000 x 4) \$8000; Ground transportation (\$100 x 4) \$400; Per diem (\$45/day x 3 days x 4) \$540; Hotel (\$150/day x 3 days x 4) \$1800; *Subtotal \$10,740*

A portion of Foreign Travel will also provide an opportunity for one of the co-applicants to disseminate research at two academic conferences (*Society for the Social Studies of Science* (4 days) in San Diego, California, and the conference of the *Association of American Geographers* (5 days) in Los Angeles). Airfare (\$600 + \$600) \$1200; Ground Transportation \$200; Conference Fees \$650; Per diem (\$45/day x 9) \$405; Hotel (\$150/day x 9) \$1350; *Subtotal \$3,805*

**Students** \$9605

*Canadian Travel* – Three students and the post-doctoral fellow will present at Congress of the Humanities in 2013 or 2014. Flight: \$400; Hotel (\$150 x 7 nights) \$1050; *Subtotal* \$5800

*Foreign Travel* – One student will be provided the opportunity to disseminate research at the *Society for the Social Studies of Science* (4 days) in San Diego, California, and the conference of the *Association of American Geographers* (5 days) in Los Angeles, California. Airfare (\$600 + \$600) \$1200; Ground Transportation \$200; Conference Fees \$650; Per diem (\$45/day x 9) \$405; Hotel (\$150/day x 9) \$1350; *Subtotal* \$3805

**OTHER EXPENSES**

*Eligible Supplies* \$1650

Administrative costs involved in carrying out this project include: printing and photocopying, postage, stationery, flip charts, materials for meetings, and other supplies.

*Non-disposable equipment* \$1823

Funds will be used to purchase three licenses for NVivo, an essential tool for organizing and analyzing research data.

**Other expenses**

*One-day academic and policy workshop* \$17,450

This conference will link academic research on innovation and community development with people who work in policy and government planning. We expect approximately 80-100 delegates at the conference. Venue Rental \$1250; Catering \$3750; AV \$2700; Materials \$250; Promotion \$2000; Transcription, printing, dissemination (\$3500); and honorarium (\$1000x4) \$4000

*Half-day Steering committee meetings* \$1000

Throughout our proposed Partnership activities we plan to expand and maintain the steering committee as an essential means of engaging, and learning from, our partnership network in all aspects of the project development. This group will meet minimum twice per year. Meeting space \$400; Hosting/catering \$400; Materials \$200

*Half-day Stakeholder group meetings* \$2000

Sharing membership with the project steering committee, a planning stakeholder working group will be created with an expanded membership to provide essential expertise to the project in helping address how communities can ‘plan for innovation’. Meeting space \$800; Hosting/catering \$800; Materials \$400

## **Previous SSHRC Funding**

This proposed Partnership Development Grant (PDG) is new research with new partners. It applies previous policy analysis and participatory social research methods that emphasize interdisciplinary refined by the Applicant, Prof. Rob Shields, Co-Applicant Dr. Kevin Jones and CRSC researchers. These methods address the development of urban spaces and how innovation activities in construction and engineering relate to community and urban identity (e.g. Shields, 1991; 1998; 1999a; 2003a; 2006a). This is buttressed by Co-Applicant Prof. Nils Petersen who contributes a long track-record of leadership of NRC and NSERC-funded nanoscience and biochemistry at nanometre scales.

### Relation to Ongoing SSHRC Research:

*Rebirth of the Mini-Mall* (SRG 2011-2013): This research investigates how to support environmentally and socially sustainable, local community development through the revival of already existing urban and suburban retail places, specifically the suburban strip-mall. Are there key factors which lie within the power of communities to influence? We ask what local residents imagine as an ideal retail future for their neighbourhood, using participatory design methods (i.e. charettes). *This methodology is different but related to community engagement tools and methods that the Applicant will use in the proposed PDG.*

*Global Suburbanism* (MCRI 2010-17: Co-Applicant in team led by Roger Keil, York and Pierre Hamel, U de M). This comparative international study considers the political economy and governance of peri-urban development. This involves research on urbanization in the North and the growth of Iqaluit, Nunavut (Nunavut Research Licensed). Under the 'Global Suburbanism' MCRI, governance and the role of planning, land development are specific aspects of the suburban form under research (CRSC contributions are in Years 5-7, 2015-2017, and draw on ongoing non-SSHRC funded research with residents in northern communities). *In contrast to the proposed PDG, this project is focused on urban form (sprawl) rather than community.*

### Contribution and Impact of Completed SSHRC Research:

*Workplaces and Workdays in a Small Town: Changes in the Times, Spaces and Pace of Information-Related Work* (SRG, 2003-6): This research focused on the experience of the internet and informationalized work amongst two groups, students who were teen-aged clients of a youth centre in a rural, regional centre and staff in a sponsoring local non-profit health agency. *Relevance: Legacy of community engagement methods.*

*The Impact of a Knowledge-Based Economy on Work in the Public Service: The Virtual Organization of Expertise and Knowledge.* (Strategic Grant, 2000-3: with E. Taborsky, S. Ilcan, and D. O'Connor): This research traced flows of knowledge and the mobility of knowledge professionals within, into, and out of, the Federal Public Service. Case studies focused on the diverse organizational forms in which knowledge work is conducted, including in the development of informal networks and temporary teams. *Relevance: Management of a multi-university team, legacy of research on virtualities and the social impact of the knowledge economy.*

*Innovation and the Culture of the Construction Site* (SRG, 1999-2002): This research lent support to the hypothesis that attention to the context of use was crucial to the success of innovations. The SSHRC project extended this hypothesis by examining the social context of use, including the role of experience, learning and training, job site politics of labour and the social conditions in which construction work with new innovations is done. *Relevance: Experience and a legacy of working with industry and on innovation.*

*Figures and Images of Urban Sociality in Three Cities* (SRG, 1994): The major contribution to knowledge was to reveal the non-applicability of Eurocentric concepts of social space and the public sphere to the forms of public life in Seoul. The research results throw into doubt common notions of globalization as the spread of European forms of civility by revealing a different underlying logic to social life ("flexible sociality") based on hierarchical networks. *Relevance: Research on urban form.*



Family name, Given name

Shields, Rob

## Statement of Alignment

The proposal has been identified as being relevant to one of SSHRC's priority areas. The statement addresses how the proposal meets the expected outcomes of the priority area.

## **Goal and Project Description**

### 1. Background and Purpose

We aim to develop a partnership exploring the relationships between scientific innovation, community development, and urban planning. We wish to better understand the relationship between globally-minded 'high tech' innovation and the urban localities in which economic growth takes place. In particular, we ask how urban planning, community partnerships and civic engagement can come together to contribute to the development of more socially robust development strategies for 'innovation clusters' (Spencer et al 2010; Amin et al 1994). What is the local 'stickiness' of successful innovation? We wish to develop a partnership involving academic institutions, multiple levels of government, business and community so as to inform innovation networks which recognize and engage people and place as key constituents of successful science policy and development strategies.

Edmonton has been designated as a national centre for the commercial development of nanotechnologies by both the federal and Alberta governments. The centerpiece of this strategy was the creation of the National Institute for Nanotechnology (NINT), which was founded in the Alberta Capital Region in 2001. It was the result of a financial collaboration between the National Research Council of Canada (NRC), the Government of Alberta and the University of Alberta. The Institute is imagined as a centre for scientific excellence. But as a part of national and provincial science policy NINT is also imagined as a platform for the rapid commercialization of nanotechnology and as a locus for economic development.

Edmonton has long been defined along three axis: i) its relative northerness; ii) its importance as a support / transportation centre for the natural resource sectors in northern Alberta (particularly oil); and iii) as a government centre. Nanotechnology is imagined as force of change and diversification. It is hoped that associated with the potential economic gains of participating in a high-tech global knowledge-economy are new opportunities for diversifying the city's cultural identity, improving livability and recasting the spatialization of the city and region vis a vis other locations (Ward 2004; Shields 1991).

However, caution should be taken before straightforwardly linking globally-minded state innovation policies with local benefit and development (Sundbo 2006). In a previous pilot project investigating the networks being created around nanotechnology within Edmonton (Killam Foundation, \$30,001), our research highlighted a more fragmented relationship between science, business and the community. Our analysis pointed to the isolation of nanotechnology initiatives from local development planning, from the wider regional economy and from the public. It is the identification of this practical problem – of expanding partnerships across innovation, local development agendas and communities – that motivates our proposed partnership development activities.

### 2. Theoretical Orientation:

Our proposal involves an interdisciplinary and engaged approach to the challenges stated above. The project is led by the convergence of research and theory in the fields of urban and regional planning, with work in the social studies of science, technology and citizenship (Corey 2006). Our first framing of the project relates to the theoretical positioning of urban regions as the locales of economic prosperity (Porter, 2000; Scott & Storper, 2003) within globalized networks of production and consumption (Sasken, 2006; Scott, 2004; Friedmann & Wolff, 1982). This research has revitalized an empirical approach to city-regions as sites of accumulation and as crucibles where local innovation and entrepreneurship are leveraged (Scott, 2008; Storper, 1997). Urban concentration is argued to facilitate



not only local development gains, but advantages that foster the creation of intangible consequences including knowledge (Cooke, 2004; Orderud 2007), quality of life (Florida, 1995), creativity (Bontje 2011; Collis et al), and local culture itself (Anderson 2007; Shields, 2003; Hadjimichalis 2006). Urban and regional policy has, as a consequence, been placed at the heart of economic development strategies in many OECD countries and been accompanied by a more general re-scaling of governance to the urban level (Brenner, 1999; Jonas and Pincetl, 2006). It is in this regard that studies of geographic 'innovation clusters' have risen in prominence on municipal agendas (Brachert 2001). Recent research on clustering has concluded that growth emerges from a felicitous mix of private, public and civic institutions and a density and diversity of social actors (Wolfe, forth.; Wolfe & Gertler, 2004; Doloreux & Melancon, 2007; Wolfe & Bramwell, 2008). Whether focused on firms, labour markets or on cultural aspects such as quality of life, the social networks and the hard and soft infrastructures that bring together teams and expertise are often interpreted as key factors for success.

It is in relation to these emerging theoretical and urban policy contexts where we can situate our case study and begin to understand the aspirations attached to NINT and the NRC-IRAP cluster strategy in Edmonton. However, our finding of a series of discontinuities between the innovators themselves and the Edmonton city-region are suggestive of the difficulties in top-down innovation models and policies (Wei & Xiang 2009). The smooth translation of technological and commercial advancement into economic and social well-being is a complex and uncertain process (Podgorecki et al., 1996; Sandler & Kay, 2006; Land 2006; Perry 2007). Partly, this is because innovation alone is not a sufficient means of engaging socio-economic contexts within which issues of inequality and deprivation are deeply established and multi-faceted (Amin & Thrift, 1995; Morgan, 1997; Etherington 2009). However, top-down models of innovation further risk failing to acknowledge that development is difficult to direct. It is complemented by research in regional studies showing that innovation and development is often emergent, interactive and 'embedded' or based on pre-existing social relations (Varlander 2009; Lorentzen, 2008; Jones 2008; Bair 2008; Stark & Vedres, 2006; Granovetter 1973).

Our case study begins at this tension between an idealised model of innovation policy which links global networks with local contexts and the difficulty of planning and governing emergent and synergistic communities in practice. Our second theoretical orientation addresses this problem head on. Research in the social studies of science and technology inverts casual assumptions about innovation by reframing science and technology as essentially community-driven and socially contextualised projects at a range of scales (e.g. Latour & Woolgar, 1979; Bijker & Pinch, 1984). In this sense, the failure of top-down and science driven models of innovation to link with communities is not a surprise, but should be expected, as they demand community participation in imposed scientific framings of innovation (Grint & Woolgar, 1997), as opposed to engaging communities as innovative actors themselves (Bijker, 1995; Von Hippel, 2005). The failure to account for, or engage, public perceptions of technology and social needs early in the innovation process can ostracize publics, lead to distrust of science, government and commercial institutions and leave new technologies foundering (MacKinnon, 2009). Public concerns over novel technologies are too often labelled as irrational, or ill-informed, and dismissed in order to avoid waylaying scientific and commercial progress (Irwin, 2001; Irwin & Wynne, 1996). In a context where we are more and more aware that commercial and technological development can be sources of hazard and social inequity (Beck, 1992; Fairbrother & Fairbrother, 2009) as well as benefit, science-public relations are becoming an essential aspect of innovation policy.

The first benefit of integrating a critical approach to innovation is to directly engage how innovation and publics come together. A second benefit of taking social processes of innovation seriously implies opening innovation discourse and networks to a wider range of participants than is traditionally involved in cluster exercises. Encouraging forms of 'upstream' public engagement, studies

of scientific citizenship create the basis for emergent innovation dialogues which directly address the social possibilities of nanotechnologies in the community. Publics can participate in making choices about which innovation trajectories are appropriate, and which should be treated with caution (Kearns et al., 2006; Wilsdon and Willis, 2004; Jones, 2007; Wynne, 2002; Arnaldi, 2010). The development of a research program investigating nanotechnology in the community offers the possibility of engendering a more mature and socially robust dialogue about the acceptability of risk, social needs and social aspirations affixed to innovation (Shields, 2008; Jones and Irwin, 2010; Gertler and Wolfe 2004). It is our contention that for innovation to be truly successful it must be embedded in the organic and locally specific needs of the community; and likewise, for city planning to be successful it must consider the kind of economic opportunities at hand and the development it actually wants to foster.

### 3. Summary of Objectives

To address our partnership aims we propose the following partnership objectives:

#### *a. Short Term*

- Extend current partnership networks to include a wide range of actors linking governments, science, industry and civic society across the Alberta Capital Region.
- Bring together interdisciplinary expertise across research fields to inform partnership development and activities.

#### *b. Medium Term*

- Create a stakeholder working group linking science policy and municipal planning.
- Create a forum for a wider civic engagement with nanotechnology and its role in the future development of the city-region.

#### *c. Long term*

- Create partnership and engagement models which could be employed in other contexts and in other city-regions.
- Foster community knowledge and engagement with nanotechnology.
- Inform socially robust forms of regional innovation and development policy.
- Contribute to scholarly expertise in understanding innovation and city-regions.

### 4. Activity Plan

To achieve these objectives we propose the following activities:

#### *a. Background Research and Partnership Development*

This proposal benefits from previous seed funded research into the case study, however further research is required to:

- develop a community profile of the Alberta Capital Region which specifically identifies the role of innovation and high technology in the city-region's economy and cultures;
- identify, review and evaluate previous partnership activities relating to nanotechnology in particular, and innovation strategies more widely within the city-region;
- develop a literature review and theoretical approach linking urban and regional research with social scientific studies of innovation and scientific citizenship;
- obtain ethics approval for research and engagement components of the partnership.

#### *b. Project Steering Committee*

This committee will build collaborations between government, business, the scientific community, and the regional municipalities. It will meet a minimum of twice a year.

*c. Stakeholder and Community Engagement Activities*

These activities seek to extend the benefits of partnering and collaboration to a wider range of community participants.

i. Planning Stakeholder Working Group: A planning stakeholder working group will be formed to address the problem of how communities can ‘plan for innovation’. Its membership will include representatives from the regional municipalities, planners and members from the project steering committee. It will meet a minimum of twice a year.

ii. Citizen Panel: Involving a diverse group of engaged citizens, this panel will be convened over two-days to learn and ask questions about nanotechnology innovation in the city-region. It will involve a series of workshops focused on case-study scenarios pertinent to the region. The participation of scientific experts, government officials, business leaders and civic organizations will support this process. It will contribute to:

- developing a knowledge of what communities know and think about nanotechnology and to identify topics of key public importance;
- a dialogue between community leaders, scientific experts, government officials, and business leaders;

iii. Engagement Exercise: A one-day public engagement exercise will follow the Citizen Panel and involve a wider public. This event will involve presentations on current issues around nanotechnology and development (derived from the Citizen Panel) as the basis of a series of roundtable conversations. It will involve up to 100 community participants and will be supported by members of the scientific, government and business communities. Participants from the Citizen Panel will contribute to the roundtable discussions as citizen experts. This engagement helps achieve our objectives by:

- raising awareness of nanotechnology innovation within the city-region, and by encouraging a wider public dialogue about nanotechnology and regional development.
- providing community input into nanotechnology policy in Alberta, including on topics relating to sustainability and risk; and,
- identifying synergies between innovation in Edmonton and community strengths, needs and ambitions.

*d. Researching Partnership*

Focused around our partnerships activities, a series of research activities will be conducted to build reflexive understandings of how partnering and engagement can contribute to the development of more socially robust and effective innovation strategies. This research will serve the dual aim of providing an evaluation of our partnering and engagement activities while also informing academic research on communities, innovation and development. Core research activities will include:

- a qualitative study addressing multi-sectoral framings of innovation and city-regional development, and which will further identify the network relations being constructed around nanotechnology in the city-region;
- participant observation of all partnering and engagement activities as an essential means of reflecting on the practices and values of these exercises.
- an evaluation of participant experiences in engagement exercises (survey & interview).

5. Meeting Insight and Connection Program Objectives

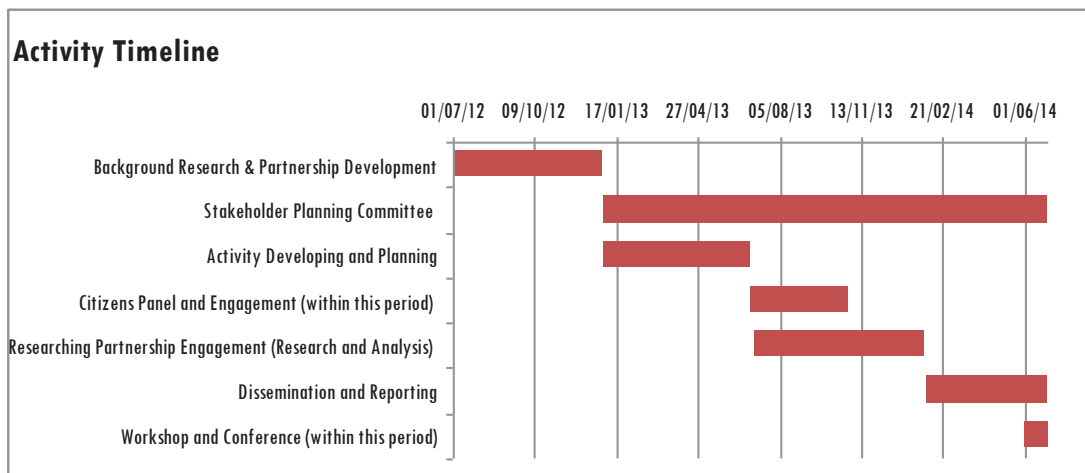
*Interdisciplinarity:* This project involves research expertise from across the sciences and social sciences to engage nanotechnology as an area of significant social and economic importance. It further brings together research on innovation, city-regions, governance and development within the social sciences to produce complementary tools for the study of innovation clusters at the interface between research, business and community.



*Knowledge Mobilization and Cross-Sectoral Learning:* This partnership enables shared learning about nanotechnology and city-regional development across communities of scientists, government officials, planners, businesses and citizens. Stakeholder and engagement activities are designed to facilitate transfers of information and afford opportunities to co-create new knowledge through shared meaning-making. This is a well-founded working practice within the CRSC which works to create a cycle of generating knowledge via reciprocal engagement between citizens and the propinquitous community of the city and region in all its forms.

*Accessibility:* This proposed project makes knowledge of innovation and city-regional development open to a wide range of stakeholder and citizen communities. We aim to provide communities access to information so as to generate a multi-sectoral dialogue about social and economic action, entrepreneurship and technology governance.

*Reciprocal Relationships:* This proposal mobilizes a unique and internationally recognized team of researchers, which will enable our partnership to be both informed by international experience, and in-turn inform interdisciplinary knowledge derived from the Edmonton case study.



## 6. Future Orientation

Most studies of innovation clusters privilege a regional level of explanation, but the case of Edmonton highlights the already-globalized character of researchers and firms dependent on very high levels of capitalization and state subsidized research facilities and equipment. So great is the importance of transnational networks of information, uniquely skilled labour, venture capital and global markets that the city-region is easily overlooked as offering potential benefits, collaborations and services right at the doorstep. This proposed partnership involves a series of experiments in practice at the level of the city-region. Our intention is that through the knowledge gained in this process, that we take ‘lessons learned’ and develop models of partnership and engagement that could be applied across other city-regions in Canada, as well as contribute to practice internationally. We consider this partnership a step towards the development of a multi-sited, cross-Canada and international Partnership Grant. In other words, we are proposing a process which moves from the local to the global and back again (Geddes, 1915).



Family name, Given name

Shields, Rob

**Intended Outcomes of Proposed Activities**

Elaborate on the potential benefits and/or outcomes of your proposed research and/or related activities.

**Scholarly Benefits**

Indicate and rank up to 3 scholarly benefits relevant to your proposal.

Rank	Benefit	If "Other", specify
1	Enhanced research collaboration	
2	Enhanced research methods	
3	Student training/skill development	

**Social Benefits**

Indicate and rank up to 3 social benefits relevant to your proposal.

Rank	Benefit	If "Other", specify
1	Enriched public discourse	
2	New or enhanced partnerships	
3	Training and skill development	

**Audiences**

Indicate and rank up to 5 potential target audiences relevant to your proposal.

Rank	Audience	If "Other", specify
1	General public	
2	NGO and community organizations	
3	Postsecondary institutions	
4	Provincial/territorial government	
5	Practitioners/professional associations	



Family name, Given name

Shields, Rob

### Expected Outcomes Summary

Describe the potential benefits/outcomes (e.g., evolution, effects, potential learning, implications) that could emerge from the proposed research and/or other partnership activities.

This project has already induced partners to come together out of interest and curiosity concerning our introduction of social research to what have been understood to be technical, economic and political issues. The proposed project will produce outcomes which contribute to the growth of scholarly knowledge, foster regional development and create publically integrated innovation strategies.

#### 1. Supporting Innovative communities

- bridge divides and discontinuities within existing sectoral networks and within existing formal networks of nano- and related technology start-ups and technology users and link traditional models of innovation and economic development with participatory planning approaches and wider communities in the region.

- increase awareness, knowledge and insight across sectors concerning the opportunities and risks involved in technology-led development in general and nanotechnology in particular.

- identify public issues and framings of nanotechnology that are currently excluded from expert knowledge on the topic.

#### 2. Generating Knowledge for planning innovation

- address the motivating question 'What can cities do?' to prosper from innovation and technology-led development in both theoretical and policy-analysis terms in the context of the Alberta Capital Region.

- identify roles for municipalities by generating guidelines for best practices and collaborations between the multiple stakeholders and jurisdictional authorities relevant to nanotechnology development.

#### 3. Fostering integrative research expertise

- bring together high calibre international expertise to integrate research and knowledge in the fields of innovation studies, city-region studies, and community participation in science & technology.

- provide unique, interdisciplinary training in an emergent area which has not been researched and support new expertise in cross-sectoral working and in integrating the research cycle from discovery to engaged citizenship.

- offer engagement events that are also the laboratory of CRSC's public research model and gain knowledge through active participation with stakeholders and communities.

- learn valuable lessons about the relationships between science, cities and communities in action.

#### 4. Core deliverables

- Profile of innovation in the Alberta Capital Region, including parallel cluster and regional development initiatives. (Year 1)

- Community Engagement Report (Year 1) in which partners and community participants will play an important role.

- Audio documentary derived from our two engagement activities (Year 2)

- Special issue of Curb Magazine (Year 2) on 'Planning for Innovation', distributed to CAOs and Chief Planning Officers across Manitoba, Saskatchewan, British Columbia, the Territories, Alaska, the US border states and Alberta.

- Policy Workshop and Conference (Year 2) linking academic research to policy and local government planning.

- Academic papers and presentations to interest other academics and students and spur further research. (Year 1 & 2)

This partnership development grant will be a platform for network problem recognition and resolution, and for coordination as well as reflection in the form of partnering in a follow-up Partnership Grant application.

## **Participants Involvement**

As an interdisciplinary research endeavor, different kinds of expertise are necessary for the success of the research and engagement activities in the project. In particular, we need partners who understand: how to coordinate with a multi-sectoral team, across academic, business, government and the wider community; how to develop a research design that includes scientists and the public in a dialogue about nanotechnology and community development; and academic expertise and research experience in a number of fields, including nanoscience, regional innovation, science and technology studies, and public understanding of science.

### Applicant

*Prof. Rob Shields* is Henry Marshall Tory Chair and Professor in Sociology / Art and Design at the University of Alberta. He is also Director of the City-Region Studies Centre (Faculty of Extension, University of Alberta), an engaged research unit that works in collaboration with planning and policy communities in the region. Prof. Shields is an internationally renowned scholar on the social aspects of space, architectural design, and regional innovation planning. He has direct expertise as Principle Investigator and Co-Investigator on several previous large-scale SSHRC projects that involved the coordination and management of a multi-disciplinary research team. Prof. Shields is responsible for leading a multi-sectoral team involving academic scholars from the natural and social sciences; as well as partners from local government, business development and the community. He is well positioned to provide leadership and management for the project based on his previous successful SSHRC experience, and current role in brokering relationships with businesses, local municipalities, and planners at the City-Region Studies Centre.

### Co-applicant

*Dr. Kevin Jones* is Senior Research Associate at the City-Region Studies Centre (Faculty of Extension, University of Alberta) and Department of Resource Economics and Environmental Sociology (Faculty of Agriculture, Life and Environmental Sciences, University of Alberta). His expertise is in science and technology studies and risk governance, with particular focus on how to open up science and innovation to include citizen knowledge. Dr. Jones brings a strong practical background in the research design and administration of citizen-science engagement exercises. As part of the previous Killam Grant project, he built cross-sectoral partnership and stakeholder activities between the City-Region Studies Centre and nanoscientists, regional planners, business, and community groups within the region. He will continue to expand and strengthen the CRSC's ties with the local community, and engage new parties in the nanotechnology conversation. In collaboration with partners and stakeholders, he will also be tasked with developing the research design, student training, and dissemination activities.

*Prof. Nils Petersen* is currently Acting Associate Dean of Research in the Faculty of Science and Professor in the Department of Chemistry, University of Alberta. As former Director General (2004-2011) of NINT for the National Research Council of Canada, he was instrumental in the early leadership and development of the new nanoscience centre at the University. Crucially, he brings internationally recognized expertise in nanoscience to a multidisciplinary social science research project. Along with strong academic credentials, Nils is very engaged in building strong ties between scientific knowledge and community needs within Edmonton. He will play a central role in bringing the natural and social science research communities together, and in particular, providing a tangible link in to the nanotechnology network. In tangible terms, Nils will contribute to the development of all partnership and engagement activities, participate in these activities as an expert in the nanoscience and will participate in student training activities.

### Collaborators

*Prof. Alan Irwin* is the Acting President and the Research Dean at the Copenhagen Business School. He is a leading international expert within science and technology studies, with a strong research record in opening up science and developing methods to include community engagements in the innovation process. Drawing from his multi-sectoral experience working with scientists, policy makers and community groups in numerous committees and research projects, Alan will be closely involved in all aspects of developing the project from research design to execution. He contributes expertise in engagement and community development, and will be a keynote speaker at the closing conference.

*Prof. Maja Horst* is Associate Professor in the Department of Organization at the Copenhagen Business School. She brings practical experience on how to translate complex society-science issues into innovative forms of public communication. In particular, her successful execution of an installation project on stem cells will be drawn from to inform our nanotechnology communication exercises. Maja will play a central role in the design elements of the engagement exercise, given her previous experience with a large-scale science installation. She will also be actively participating in all engagement activities and the nanotechnology conference.

*Prof. James Wilsdon* is Professor of Science and Democracy at the University of Sussex, and former Director, Science Policy Centre, at The Royal Society (2008-2011). With extensive experience working at the crossroads between public policy, government and academia at Demos and the UK's national academy of science, Prof. Wilsdon brings practical experience in high impact research. In particular, his previous collaboration with *Dr. Jack Stilgoe* crafting an engagement exercise for nanotechnology will be drawn from in this project. James provides leadership on the citizen engagement exercise, and along with Jack Stilgoe and Kevin Jones, will be facilitating the event. He will also be providing advice on project direction and participating in the nanotechnology conference.

*Dr. Jack Stilgoe* is now Senior Research Fellow at the University of Exeter, and former Senior Policy Advisor at The Royal Society. He has a long-standing history of engaging citizens, scientists, and policy makers in dialogues about controversial or pressing scientific matters, including nanotechnology. Together with *Prof. James Wilsdon*, Jack will facilitate the citizen engagement exercise, advise on research design, and participate in the nanotechnology conference.

*Prof. David Guston* is Professor of Politics and Global Studies, Director of the Center for Nanotechnology in Society, and Co-Director of the Consortium for Science, Policy and Outcomes at Arizona State University. He is an internationally recognized scholar on the relationship between nanotechnology and society, whose work on anticipatory governance attempts to model new ways of embedding the things communities want into emerging scientific knowledge. David provides an important connection to the academic network of scholars working on nanotechnology and innovation in America, where the Center for Nanotechnology in Society is a thriving hub for cutting-edge scholarship. In pragmatic terms, CRCS will be sending a representative for a site visit to see the research activity at Arizona State University hosted by Dr. Guston. He will also be participating in the nanotechnology conference, and participate in advising the development of partnership and engagement activities.

## **Formal Partnerships**

### Why a Partnership Approach is Appropriate:

This partnership is a response to the findings of an exploratory research project, funded by the Killam Foundation, into the networks and community relations being formed around nanotechnology. The findings of this research (Jones & Sluggett, 2011; Jones & Sluggett, forth.) suggest that, despite proactive policy decisions and significant funding of the development of a nanotechnology cluster in Edmonton (approximately \$250 million), cross-sectoral relationships have been fragmentary and largely dis-embedded from the community. This partnership is motivated by the need to build partnerships across innovation networks and the city-region, and to leverage these relationships to foster wider community engagement with nanotechnology. This partnership will:

- a. support the emergence of integrated and socially emergent innovation models, and in doing so, supporting the development of an innovation cluster which could be a significant source of development for the Alberta Capital Region and for the country as a whole;
- b. engender public participation in the development of nanotechnologies, and the institutional support systems being constructed around these technologies at the city-region scale. As the UK Royal Society (2004) notes, nanotechnologies have huge potentials for contributing to social and economic welfare, but risks and uncertainties are also attached to their development. It is essential for communities to be involved in addressing how risks and benefits will be mediated in their own communities.

Developing successful innovation and cluster strategies is not as straightforward as having good science and government policy support. Success also further depends upon the creation of durable and integrative networks of social relations at multiple levels and across multiple communities (Schrank & Whitford, 2011). Fostering these relationships at the city-region level – an increasingly important spatialisation of economic and social development (see goals and project description) – is a first step forward in meeting these aims.

### Governance Structure:

The governance structure of the project is built into the proposed partnership activities outlined in this proposal. The involvement of partners (both confirmed and future) will take place formally through their membership on a Project Steering Committee. This committee follows on from our previous Killam research and has already been convened (August & October 2011) to assist in the development of this proposal, and its aims and objectives. The committee is made up of partners from across the academic, commercial development, government and community sectors. Current members of this committee include: Dan Dujkich, Director, NanoAlberta AITF; Chris Lumb, CEO of TEC Edmonton; Rick Brommeland, Director of External Relations, NINT; Gord Jackson, Director of Sustainable Development, City of Edmonton; and Michael Phair, former city councilor and CRSC board member. In the first year of the project the committee will be extended to include wider representation from municipal government, the commercial nanotech sector and the community. The steering committee will continue to work with the project investigators to develop partnerships and to leverage the expertise and resources of the group to engage the wider Edmonton community. The committee will meet bi-annually, as well as aid the development of our engagement activities and participate as experts in these events.

In parallel, and closely integrated with the steering committee, academic co-applicants and collaborators will form an academic committee which will meet twice yearly either by teleconference, or to coincide with their participation in engagement and conference activities. This committee will operate in both an advisory capacity to the PIs, but also be a reporting centre for individual contributions to developing the theoretical framework, engagement activities and project dissemination.



### Participation, Integration and Intellectual Leadership

We are proposing a model of partnership which encourages the sharing of multi-sectoral expertise with the research team, on the one hand, and on the other, creates opportunities for transdisciplinary learning (Jones & Paramor, 2010) through engaged working practices.

In the first instance, the development of our partnership is guided by the need to incorporate different communities, perspectives and knowledges around shared project aims and objectives. Integral to this project is the need to link dominant innovation networks involving provincial & federal government, commercial businesses and science, with community development networks involving local governments, planners and engaged citizens. Together our partners bring intellectual leadership to the project across these areas. Moreover, each partner will not only bring their own experiences to the project, but also act as conduits to expertise and leadership from the sectors they are well-placed to represent.

Moreover, integration and shared learning between partners will be fostered by working together in a number of capacities related to our proposed activities. This includes:

- assisting the design of the two engagement activities;
- participating in the engagement activities as expert members of the citizens panel and key note speakers in the wider engagement exercise;
- developing case studies in nanotechnology innovation which incorporates science, business development, government policy and community synergies;
- participating in knowledge mobilization activities.

### Anticipated Challenges

The primary challenge we face relates to the extension of our current partnership to a wider array of stakeholders and civic communities. Firstly, a prerequisite for the success of this partnership is the integration of the business sector into our activities and knowledge mobilization strategies (Wolfe, forth.). We anticipate that this will be difficult as our pilot project demonstrated that links with, and between, businesses were often fragmented; for instance firms may be insecure about privacy and copy-right protection in engaging across communities. Small start-up companies can also find it difficult to dedicate staff time and resources to partnering. However, in our focus group research we also heard many positive expressions of interest in the aims of the project. To assist in recruiting further commercial partners we have received the dedicated support of both TEC Edmonton and NINT – each of whom share close links with the business community.

Secondly, our project faces a challenge in extending the partnership across the Alberta Capital Region. This city-region is currently composed of 24 different municipalities which are only loosely coordinated by a Capital Region Board (CRB). This challenge will be addressed through CRSC's close ties with the CRB, the City of Edmonton and many of the other municipalities in the city-region. CRSC has a strong reputation in community engagement established through ongoing locally-supported planning speakers series, past research work in the city and close relationships with individual municipal leaders, administrators and planners. In addition we aim to enlist the aid of the Centre for Public Involvement, a City-University partnership, already set-out in a preexisting memorandum of understanding.

Finally, a third challenge we face relates to the involvement of the wider community in our partnership activities. This is a challenge because there is little local knowledge of nanotechnology in the city-region, and few links have been made between the development of the cluster and various development projects in the city. Through our pilot research we involved many sectors of the community as participants in focus groups as a means of learning from them, but also as a means of creating relations with these actors around nanotechnology innovation. Furthermore, long time City of Edmonton

Councilor Michael Phair has been recruited as a member of our steering committee to help further citizen relations and raise the profile of the project in the community.

### Benefits to Partners

The partners identified in this proposal will share multiple benefits from their inclusion in this partnership, and by leveraging these relationships through community engagement. Firstly, partners will gain access to international expertise relevant to the management of technology and innovation clusters and networks. We feel an outstanding group of co-applicants and collaborators has been assembled around this project. They bring both intellectual excellence to the project, as well as considerable experience in bringing social scientific research with stakeholder and public communities. Additional benefits derived from this partnership include:

1. the integration of planning discussions at the level of innovation and commercial growth, with city-regional and community commitments to development and sustainability;
2. the growth of public interest, knowledge and participation in nanotechnology, and how it is being developed in the Alberta Capital Region. We believe the approach outlined in this proposal will allow for the development of interest in these developing technologies in ways which could lead to greater participation in the sector in both investment and career development.
3. the development of upstream and meaningful citizenship in nanotechnology and nanotechnology policy. This will permit citizen input into innovation agendas, and through their participation the possibility of inspiring public confidence in these processes.

To further the benefits of this project, individuals with expertise in building networks, crossing communities and engaging publics about innovation are much needed. We hope to build these capacities both within our partnerships, as well as through the unique training opportunities included in this proposal.



## **Contributions Plan**

### 1. University of Alberta Contributions

#### a. City-Region Studies Centre

The Faculty of Extension (CRSC) will contribute staff hours and office space. Included in this figure are 15 days (\$4500) of the Manager's time for project management, 15 days (\$4500) for the Event Manager's time, and two workstations (\$4000) per year for a total of \$26,000.00.

#### b. Faculty of Arts

The Department of Sociology will contribute funding towards the MA Graduate Research Assistant position at \$7,706.00 in year one and \$8,091.00 in year two of the project. In addition the Department will provide office space valued at \$5,250.00 (per year) for a total of \$10,500.00 over two years.

#### c. Faculty of Science – Chemistry

The Department of Chemistry will provide office space valued at \$7,000.00 per year (\$14,000 total) to enable students, staff and partners to access space linked to nanotechnology research at the University. This shared space is an essential aspect of integrating social scientific research within the cultures and environment of nanotechnology research at the University. It will also raise the profile of the research project and partnering activities within the Faculty of Science.

### 2. Partner Contributions

a. Each of our four confirmed partners (AITF, NINT, TEC Edmonton and NAIT) has committed to participate as a member of the project steering committee as well as in stakeholder and community engagement activities. An in-kind contribution for each partner has been calculated at the rate of \$400/day for 8 days (\$3200 per year — \$6400 over two years).

b. NanoAlberta, AITF has agreed a draft budget to finance and support the hosting of two proposed engagement activities (Citizen Panel and Citizen Engagement) for a total of \$48,808.00. Please refer to partnership evidence.

c. TEC Edmonton has agreed to fund in cash 1/3 of a one year MBA studentship (\$7647.00 – 12hrs per week), and offered in-kind support in assisting the project to raise a further 1/3 of the studentship dependent on SSHRC funding the final 1/3.

### 3. Further Support

Through our partnership we will seek to leverage further funds in the following areas:

a. Growing our partnership (see formal partnership strategy) to include commercial and municipal partners will extend the membership of our steering committee, stakeholder and engagement activities.

b. We will be seeking sponsorship for a dedicated special issue of Curb Magazine (see knowledge mobilization). \$15,000.00

c. Working with NanoAlberta we will be working to further develop our citizen engagement activities to coordinate with other public outreach activities.

e. Working with our partners we will be seeking to recruit the support of a broadcaster to aid in the development and broadcasting of our audio documentary (e.g. CKUA, CBC Edmonton).

### 4. Benefits to Partners

The shared contributions of the University of Alberta and our partners demonstrate a shared perception of mutual benefit for the activities proposed in this application. The contributions make possible the range of activities we seek to conduct, as well as the knowledge we are seeking to produce.

## **Training and Mentoring**

Student training is integral to this project. Through our proposed partnering activity we are seeking to combine unique opportunities for students to participate in a range of engagement and research activities, access to wider employment networks and to receive academic training. NINT is an environment of unique skills and understandings.

Masters Student (2 years): An MA graduate research assistant will be employed by the CRSC for the entire term of the project and will play an important role in assisting the project team facilitate partnership activities. Training will be provided in project management, community engagement and public outreach, as well as in the academic fields in which this project is situated.

Masters Student (1 year), Commercialisation and the City-Region: An MBA student will be employed in the first year of the project and be hosted by TEC Edmonton. The student will serve as a TEC Edmonton intern and be involved in researching the relationship between commercial start-ups, community and urban form. In addition this unique understudy opportunity will function as a bridge between project expertise and TEC Edmonton, with a specific role of fostering the development of socially informed approaches to science and technology within commercial innovation strategies.

Doctoral Student (2 year): A doctoral level graduate research assistant will be employed to assist in both research and engagement aspects of the project. This student will be supported by the research co-applicants and receive training in participatory research methods, data analysis and in community engagement techniques. The student will assist the research team develop a series of reflexive research activities intended to contribute to knowledge of how socially robust practices of partnering and engagement can be fostered in relation to regional innovation strategies.

Post-doctoral Fellow (2 years): A post-doctoral fellow will be engaged for two years in all aspects of the project and will be expected to provide significant, original contributions to the project in terms of research design, data collection, network analysis and dissemination. The post-doctoral fellow will receive interdisciplinary supervision and support from the project Co-Applicants, and will be expected to work closely with all of the partners involved in this project.

Students and Postdoc will assist with and co-author at least one article with the principle investigator who has outstanding experience mentoring students in the co-authoring process (e.g. Sharkey and Shields 2008; Shields and West 2003; Davidson, Park and Shields 2010) recognized by a Graduate Student Association Award (2009). Students will also be supported to craft articles and presentations at conferences (e.g. Jones and Sluggett, 2011). Mentoring capacity is extended by Dr. Jones as a co-PI who has teaching and graduate supervision experience in both Canada and the UK. Prof. Peterson has extensive cross-disciplinary supervision experience as a chemist working with nanotechnologies and as former Executive Director of NINT where he worked with scientists, students, administrators and the public. Students will also have access to international networks of expertise through our international collaborators.

The CRSC offers a collaborative shared research site in downtown Edmonton in the Faculty of Extension and in the same building as TEC Edmonton. Our (manager, events coordinator, research associates, faculty affiliates ) staff work with the communities that make up the Alberta Capital Region. CRSC's complement of researchers and visiting scholars offer expertise in digital, qualitative, participatory and engaged social research (eg. Nvivo, interviews, charettes and facilitation skills) to students working from our offices.

**Knowledge Mobilization** (Please refer to *Goal and Project Description* for timeline of activities)

To achieve partnership aims the proposed knowledge mobilization activities simultaneously inform and integrate research findings with engagement activities to contribute to policy, practice and theory. We further seek to engage in shared learning and knowledge transfer across a multitude of sectors, as well as with the wider public.

**Project Steering Committee** (Year 1&2): During a Killam-funded pilot project, a Steering Committee was established to develop collaborations with leaders from government, business, the scientific community, and the municipalities in the Alberta Capital Region. We intend to expand and maintain this Committee as an essential means of engaging our partnership network in all aspects of the project, and as a means of facilitating the communication of results back into our partner communities. This committee will meet bi-annually during the term of the project, and participate in our community engagement activities.

**Planning Working Group** (Year 1&2): This committee will be formed out of the Project Steering Committee with an expanded membership to include a wider representation of regional municipalities and city planners. It will provide essential expertise to the project in addressing how communities can ‘plan for innovation’, and also act as a means of linking project expertise and conclusions with planning practitioners and city-region communities of practice. This group will engage in a facilitated study of the process and initial results of the research in order to formulate guidelines for the city-region. It too will meet bi-annually.

**Engagement with Communities** (End of Year 1): Two overlapping citizen engagement exercises will be held to encourage shared learning between the partnership and the wider Edmonton community:

A. Citizen Panel: This panel will allow engaged citizens to learn about nanotechnology and how it can impact issues of sustainability and development in Edmonton. This weekend event will involve a mutual learning workshop for up to 24 participants including the researchers, the Project Steering Committee, Planning Working Group and key individuals from the Alberta Capital Region. We hope to increase understanding and elicit the interest and attention of professional and technical communities of practice not already engaged with nanotechnologies and regional development. This panel will be adapted from a UK exercise which was facilitated by Wilsdon, Stilgoe and Jones (Irving et al., 2006).

B. Community Engagement Exercise: A more inclusive engagement exercise will be held in conjunction with Alberta Innovates Technology Futures (AITF). Our contribution will be a one-day public learning demonstration as part of a larger set of Province-wide activities. We aim to encourage public knowledge and participation in nanotechnology development initiatives and to integrate public framings in dominant innovation discourses. We expect to attract the attention of those developing or renewing skill sets in related areas and trades in conjoint fields, local potential angel investors.

## **Dissemination:**

Community Engagement Report (Year 1): Following our engagement activities, CRSC will publish a Report (online and in paper) documenting the process and providing key observations and recommendations. Participants will play an important role in producing content for this report.

Audio Broadcasting (Year 1&2): We will be gathering material from the engagement activities for an audio documentary. This material will be available initially as audio podcasts, and later will form the basis for a radio documentary which invites audiences to join innovation debates in the Alberta Capital Region.

CURB Magazine (Year 2): Since 2010, CRSC has published Curb Magazine which is dedicated to sharing practical policy and research about cities and regions. It is distributed to all municipal, band and regional planning offices in Northern and Western North America. As part of a 2012 issue of Curb Magazine on Innovation and Community Development, CRSC will be sharing results from our previous Killam Foundation pilot project. In 2014 another issue will be published focusing on project outcomes and the work of the Planning Group in particular.

Policy Workshop and Conference (Year 2): Because there is a strong need to link academic research on innovation and community development on the one hand, and people who work in policy and government planning on the other, we will be hosting a Policy Workshop and Conference event at the completion of this project. The workshop will involve presentations and discussion groups that connect leading scholars with local Edmonton planners, creating an excellent space for knowledge mobilization between these often isolated sectors.

Website (Year 1&2): A dedicated web portal will be maintained on the CRSC's website ([www.crsc.ualberta.ca](http://www.crsc.ualberta.ca)). It will operate as a space for communication among the various partners, activities and stakeholders, as well as a public access point. CRSC has a long established record of using social media (twitter, facebook) and new media (such as podcasts and videocast interviews).

Academic Dissemination (Year 1&2): We will present and publish our findings in academic venues such as international conferences and journals. The communication of our research data and lessons learned within academic circles will ensure that our project is both theoretically and methodologically rigorous. We intend to present at the Society for the Social Studies of Science (4S); the conference of the Association of American Geographers; and at regionally focused conferences for municipal leaders and planners. We plan to publish across two main fields of research: science and technology studies (SSS; ST&HV, Science as Culture); innovation and regional planning (Regional Studies; Innovation: The European Journal of Social Sciences; Space and Culture).

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November 1, 2011

Prof. Rob Shields and Dr. Kevin Jones  
CRSC, Faculty of Extension  
2-184 Enterprise Square  
10230 Jasper Ave.  
Edmonton, AB T5J 4P6

Dear Rob and Kevin:

I am writing to confirm our support for your application to the SSHRC Partnership Development Grant Program in the area of nanotechnology and the community. I, or another representative of Alberta Innovates - Technology Futures (AITF), will be happy to participate as a partner for the entire term of the project and will support the development of the project's research and engagement activities by:

- continuing our membership on the project steering committee
- providing expertise on policy and strategy development relating to nanotechnology in the Province of Alberta
- participating in the engagement activities as representatives of AITF and in helping facilitate the development of a public dialogue around nanotechnology
- assisting the project to liaise with Alberta's emerging nanotechnology sector
- provide financial support for the development of the Citizen Panel and Community Engagement activities as outlined in the attached activity description and budget

I see this as an interesting and potentially very rewarding project and hope that through our participation we will be able to foster greater innovation and engagement with nanotechnology in the community.

Sincerely,

Dan Djukich  
Director, nanoAlberta

DD/ifm

**APPENDIX: Summary Budget for Engagement Activities (Shields - Nanotechnology in Alberta Capital Region)**

Agreed in Principle by NanoAlberta, AITF in support of SSHRC PDG application

**Draft Budget Engagement Activities**

	<b>Two-day Citizen Panel</b>	<b>One-dayEngagement Exercise</b>	<b>subtotal</b>
Facility, AV, Catering	2091.25	2405	4496.25
Speakers & Facilitators	18375	8000	26375
Output			10200
Promotion			1000
Admin & Hosting			2300
<b>TOTAL</b>			<b>44371.25</b>
Cost overrun 10%			4437.125
<b>GRAND TOTAL</b>			<b>48808.38</b>

## Nanotechnology Engagement Activities

		Citizen Panel (2 days)	Engagement Exercise (1 day)	TOTAL
<b>Facility and AV</b>				
Facility	Aurora Room - Lister Hall, U of A	\$650.00		
	Aurora Room AV	\$550.00		
	Maple Leaf Room		\$750.00	
	Maple Leaf AV		\$275.00	
<b>Catering</b>				
	Coffee (morning service, afternoon refill)	\$225.00		
	Lunch	\$550.00		
	Coffee & snacks		\$1,200.00	
	Gratuity (15%)	\$116.25	\$180.00	
		<b>\$2,091.25</b>	<b>\$2,405.00</b>	<b>\$4,496.25</b>
<b>Speakers &amp; Facilitators</b>				
	Subcontract Sussex University	\$7,000.00		
	Accommodation (5 nights)	\$900.00		
	Per Diem (5 days)	\$225.00		
	Travel	\$2,000.00		
	International experts (total 4)			
	Accommodation (5 nights)	\$1,800.00	\$1,800.00	
	Per Diem (5 days)	\$450.00	\$450.00	
	Travel	\$4,000.00	\$4,000.00	
	Citizen Participants (15)	\$1,500.00	\$750.00	
	Support experts (10 x \$50 gas cards)	\$500.00	\$500.00	
	Local travel (10 experts x \$50 gas cards)		\$500.00	
		<b>\$18,375.00</b>	<b>\$8,000.00</b>	<b>\$26,375.00</b>

**Output**

Audio program	Recording equipment & operator	\$2,200.00		
	Transcription	\$1,000.00		
	Editing	\$2,000.00		
Printed report	notetaking (student volunteers)		\$0.00	
	Copy editing (30 hours x \$50)		\$1,500.00	
	Layout (15 hours x \$50)		\$750.00	
	Printing		\$2,500.00	
	Distribution		\$250.00	
		\$5,200.00	\$5,000.00	<b>\$10,200.00</b>
<b>Promotion</b>				<b>\$1,000.00</b>
<b>Admin</b>	Delegate package/copying	\$100.00		
	Delegate package/copying		\$200.00	
	Participant Packs	\$500.00	\$500.00	
	Hosting	\$500.00	\$500.00	
		\$1,100.00	\$1,200.00	<b>\$2,300.00</b>
				<b>\$44,371.25</b>
<b>Cost Over run 10%</b>				4437.125
			<b>TOTAL</b>	<b>\$48,808.38</b>



November 18, 2011

Professor Rob Shields and Dr. Kevin Jones  
CRSC, Faculty of Extension  
2-184 Enterprise Square  
10230 Jasper Ave.  
Edmonton, AB T5J 4P6

Dear Rob and Kevin,

I am writing to confirm our support for your application to the SSHRC Partnership Development Grant Program in the area of nanotechnology and the community, and for the project's aims and objectives. I or another representative of TEC Edmonton will be happy to participate for the two-year term of the project as a partner. We will support the development of the project's research and engagement activities by:

- continuing our membership on the project steering committee;
- sharing expertise in the area of commercial innovation and business development with the research team;
- acting as a liaison between the project and the emerging nanotechnology industry in Alberta;
- participating in the project's proposed stakeholder and citizen engagement exercises as experts in innovation and business development;
- sponsoring a Masters level graduate research assistant for a period of one year, with the intent that the cost for the student (\$22,938) would be borne 1/3 by SSHRC, 1/3 by TEC Edmonton, and 1/3 from other sources that we will identify in advance of the RA's commencement on the project. In addition, we will provide expertise in mentoring this student and involve the student in our day-to-day activities. The student in turn will be expected to contribute to TEC Edmonton by bridging the expertise being developed in the project with the activities of our organization.

We see this as an interesting and potentially very rewarding project and hope that through our participation we will be able to foster greater innovation and engagement with nanotechnology and innovation in the community.

Sincerely yours,

A handwritten signature in cursive script, appearing to read 'Chris Lumb', followed by a period.

Chris Lumb, P. Eng.  
CEO, TEC Edmonton





Prof. Rob Shields and Dr. Kevin Jones  
CRSC, Faculty of Extension  
2-184 Enterprise Square  
10230 Jasper Ave.  
Edmonton, AB T5J 4P6

November 16, 2011

**RE: Your "Nanotechnology and the Community" SSHRC Partnership Development Grant Program Application**

Dear Rob and Kevin,

The National Institute for Nanotechnology is pleased to confirm our support for your application to the SSHRC Partnership Development Grant Program in the area of nanotechnology and the community. We would be happy to participate in and assist the project over its term. For instance, we offer to support the development of the project's research and engagement activities by:

- continuing our membership on the project steering committee;
- providing technical expertise on developments in nanotechnology and the role of facilities such as NINT to the project as a whole, and in the following areas in particular:
  - a) assisting the development of case studies and issues around which the citizen panel and community engagement activities would take place.
  - b) assistance in preparing learning materials for citizens participating in these exercises.
- participating in the engagement activities by contributing scientific expertise and in helping facilitate the development of a public dialogue around nanotechnology;
- assisting the project to liaise with Alberta's emerging nanotechnology sector.

We consider your proposed work to be valuable to our mission and potentially very rewarding for our community. When the community participates in such initiatives, it gains a facts-based confidence in the safety of, regulatory framework for, and societal benefits related to nanotechnology based innovation. That confidence is essential to enable NINT and its stakeholders to smoothly deploy such innovation in fulfillment of our mandate.

Sincerely yours,

Marie D'Iorio  
A/Director General



SCHOOL OF INFORMATION COMMUNICATION  
AND ENGINEERING TECHNOLOGIES

18 November 2011

Prof. Rob Shields and Dr. Kevin Jones  
CRSC, Faculty of Extension  
2-184 Enterprise Square  
10230 Jasper Ave.  
Edmonton, AB T5J 4P6

Dear Rob and Kevin,

I am writing to confirm our support for your application the SSHRC Partnership Development Grant Program in the area of nanotechnology and the community and for the project aims and objectives. I shall be pleased to participate for the entire term of the project as a partner. We will support the development of the project's research and engagement activities by:

- joining the membership of the project steering committee for the term of the project;
- lending expertise to inform the project development in areas relating to product design and the commercial development of nanotechnologies;
- participating in citizen panel and engagement activities as experts in product development and skills training;
- participate in the development of research activities relating to training and career development in the nanotechnology sector in Edmonton;
- support NAIT technology students in participating in citizen panels and engagement activities.

We see this as an interesting and potentially very rewarding project and hope that through our participation we will be able to foster greater innovation and engagement with nanotechnology in the community.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'DCCarpenter', is written over a light blue grid background.

David C. Carpenter  
Dean, School of Information Communication and Engineering Technology,  
NAIT





November 21, 2011

To: Rob Shields  
Director, City-Region Studies Centre (CRSC)

From: Katy Campbell  
Dean, Faculty of Extension

Re: Faculty of Extension support for SSHRC Partnership Development Grant application

I am writing to express the Faculty of Extension's strong support for the SSHRC Partnership Development Grant proposal "Nanotechnology and the Capital City-Region – A Case Study in Integrating Communities, Innovation, and Development" submitted by Dr. Rob Shields and Dr. Kevin Jones in the City-Region Studies Centre.

To support this project, the Faculty of Extension will make available and support existing workstations within the City-Region Studies Centre (CRSC) for three graduate research assistants for the duration of the project, as well as an office for Dr. Jones, as an in-kind contribution equivalent to approximately \$13,000 per year. In addition, the Faculty of Extension will continue to support and endorse the work of the CRSC in promoting knowledge mobilization events and disseminating the project results to its broad, community-based network.

This project has my strong support and I look forward to a future research partnership based on its findings.

Sincerely,

Katy Campbell, PhD  
Dean



UNIVERSITY OF  
ALBERTA

Department of Sociology  
Faculty of Arts

5-214-M Tory Building  
Edmonton, Alberta, Canada T6G 2E4

[www.arts.ualberta.ca/socweb](http://www.arts.ualberta.ca/socweb)

Tel: 780.492.5234  
Fax: 780.492.7196

**Date:** November 21, 2011

**To:** Rob Shields, Professor and Tory Chair  
Department of Sociology

**From:** Helen Boritch, Acting Chair  
Department of Sociology

**Re: Department of Sociology Support for SSHRC Partnership Grant Application**

---

The Department of Sociology is pleased to support your principal investigator role on the *SSHRC Partnership Development Grant* Proposal entitled, "Nanotechnology and the Alberta Capital Region – A Case Study in Integrating Communities, Innovation and Development".

Should this application be successful the Department of Sociology will contribute funding for a 6 hours per week graduate research assistantship (GRA) at the starting Master's rate of \$7,706 per year (subject to 5% increase scale adjustment per annum) in support of the University of Alberta portion of the project, for a total of \$15,797 over the two year course of the project.

Sociology will also provide the project with a standard sized office as required to accommodate students, international collaborators, etc., who are contributing to the initiative (in kind service valued at \$5,250 annually) for a total value of \$10,500 over the two years.

The total department graduate research assistantship and in kind contributions will amount to \$26,297 over the course of the project.

I encourage you to secure any type of matching support from the Faculty of Arts and the University as this will be critical to the success of your application.

Thank you.

Helen Boritch

cc Curtis Champagne, Assistant Chair



November 25, 2011

Dr. Kevin Jones and Professor Rob Shields  
CRSC, Faculty of Extension  
University of Alberta

Dear Dr. Jones and Prof Shields:

Re: Room Space in Department of Chemistry

In response to your request for space in the Chemistry Centre to Dr. Petersen, I wish to clarify a few items.

The space that you are requesting for four student desks can be offered if the grant proposal is successful, considering that Dr. Petersen is a co-applicant. Dr. Petersen has offered up his outer office located in Room W4-17, Gunning Lemieux Chemistry Centre.

It is quite feasible that the Chemistry building will undergo some renovations sometime in the next few years and it could be a possibility that the space being offered will have to be decanted during the renovation process. Chemistry will not be responsible for finding alternate space for these students should that be the case.

If these restrictions are agreeable to you, I am happy to support your request for student space. If you require further clarification, I can be contacted at 780-492-3249 or by email at [jed.harrison@ualberta.ca](mailto:jed.harrison@ualberta.ca).

Sincerely,

D. Jed Harrison  
Chair, Department of Chemistry

c.c. Dr. N Petersen



Do not photocopy this page.

Internal use	CID (if known)
204219	34862

**Identification**  
Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

Name			
Family name	Given name	Initials	Title
Shields	Rob	M	Professor

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input checked="" type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
		_____	_____	<input type="radio"/> Yes <input type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1961	<input type="radio"/> F <input checked="" type="radio"/> M	T6J0P3	<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above  
Rob Shields

**Contact Information**  
The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
1	780	4920488		1	780	4929957	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
1	780	4920627					
Primary E-mail rshields@ualberta.ca							
Secondary E-mail							

Personal information will be stored in the Personal Information Bank for the appropriate program.

Checked  
Web CV  
2011/11/29



**Do not photocopy this page.**

Family name, Given name

Shields, Rob

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address Henry Marshall Tory Chair and Director			Address City-Region Studies Centre		
City-Region Studies Centre			2-184 Enterprise Square		
Enterprise Sq., 2-184, 10230 Jasper Ave.			10230 Jasper Ave.		
City/Municipality Edmonton	Prov. / State AB	Postal/Zip code T5J4P6	City/Municipality Edmonton	Prov. / State AB	Postal/Zip code T5J4P6
Country CANADA			Country CANADA		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address 12212 39A Ave.		
City/Municipality	Prov./ State		City/Municipality Edmonton	Prov./ State AB	Postal/Zip code T6J0P3
Country			Country CANADA		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number			
		Country code	Area code	Number	Extension
Temporary E-mail					





Do not photocopy this page.

Family name, Given name

Shields, Rob

### Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

#### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	120	Communication
2	244	Innovation, Industrial and Technological Development
3	382	Youth

#### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>_____ 1600 BC AD</p> <p>_____ ○ ●</p> <p>_____ ○ ○</p>	<p>Year</p> <p>_____ 2009 BC AD</p> <p>_____ ○ ●</p> <p>_____ ○ ○</p>

#### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1140	Northern Canada
2	3000	Europe
3	6200	East Asia

#### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1	1100	CANADA	
2	1200	UNITED STATES	
3	3225	UNITED KINGDOM	
4	6205	KOREA, SOUTH	
5	2003	BRAZIL	



Family name, Given name

Shields, Rob

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Portuguese-comprehend written, spoken
French	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Full Professor				2004/7
Org. code	Full organization name			
1480111	University of Alberta			
Department/Division name				
Sociology / Dept. of Art and Design				
Position type	<input checked="" type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Director			2009/8	
Org. code	Full organization name			
1480111	University of Alberta			
Department/Division name				
City-Region Studies Centre				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Director			2009/7	2010/12
Org. code	Full organization name			
1480111	University of Alberta			
Department/division name				
Arts Intermedia Research Studio				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Visiting Professor			2002/1	2002/12
Org. code	Full organization name			
9135115	Helsinki University of Technology			
Department/Division name				
Urban and Regional Planning				

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV



Family name, Given name

Shields, Rob

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Full Professor		2000/1	2004/7
Org. code	Full organization name		
1350211	Carleton University		
Department/Division name			
Sociology and Anthropology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Editor		1997/1	2006/12
Org. code	Full organization name		
1	Sage Publications (from 2001. Independently published 1997-2001)		
Department/Division name			
Space and Culture - International Journal of Social Spaces			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Visiting Professor		1997/1	1997/12
Org. code	Full organization name		
9135111	University of Joensuu		
Department/Division name			
Finnish Cultural Studies Network Advanced School			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Lecturer		1995	1997
Org. code	Full organization name		
9121122	Lancaster University		
Department/Division name			
Sociology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Visiting Professor		1995	1995
Org. code	Full organization name		
9129103	Aalborg Universitet		
Department/Division name			
Social Organization			





Family name, Given name

Shields, Rob

**Work Experience (cont'd)**

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Associate Professor	1994	2000

Org. code	Full organization name
1350211	Carleton University

Department/Division name  
Sociology and Anthropology

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Visiting Professor	1994	1994

Org. code	Full organization name
9131102	University of Oslo

Department/Division name  
Dept. of Human Geography

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Assistant Professor	1991	1994

Org. code	Full organization name
1350211	Carleton University

Department/Division name  
Sociology and Anthropology

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Visiting Faculty Critic	1991	1991

Org. code	Full organization name
1	Banff Centre for the Arts

Department/Division name  
Arts

Position	Start date (yyyy/mm)	End date (yyyy/mm)
Part-time sessional Lecturer	1990	1991

Org. code	Full organization name
1350211	Carleton University

Department/Division name  
Sociology and Anthropology



Family name, Given name

Shields, Rob

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate		1990	1990
Org. code	Full organization name		
9156105	Université René Descartes Paris V		
Department/Division name			
Centre d'Etudes sur l'Actuel et le Quotidien			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate		1989	1989
Org. code	Full organization name		
9121122	Lancaster University		
Department/Division name			
Sociology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Part-time sessional lecturer		1987	1988
Org. code	Full organization name		
1	Brighton College of Technology, Brighton U.K.		
Department/Division name			
Adult Education - Geography			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			



Family name, Given name

Shields, Rob

<b>Academic Background</b>				
List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1986/10		1989/06
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
61400	Urban and Regional Studies, Environmental Studies	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121140	University of Sussex			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1984/05		1986/06
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63400	Sociology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1350211	Carleton University			
Country <b>CANADA</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Gen.		1979/09		1983/06
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
70000	Interdisciplinary Studies	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1350211	Carleton University			
Country <b>CANADA</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Personal information will be stored in the Personal Information Bank for the appropriate program.



Family name, Given name

Shields, Rob

### Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	Merit Award Graduate Students Assoc. U of Alberta	CANADA		2009
Academic Prize	H.M.Tory Research Chair (endowed, continuing post)	CANADA		2004
Academic Prize	Research Leader of Tomorrow - PAGSE	CANADA		2004
Non-Academic Prize	Outstanding Publication of the Year Award	CANADA		1991
Postdoctoral Fellowship	SSHRC	CANADA		1989
Graduate Scholarship	Commonwealth Scholarship	UNITED KINGDOM		1985

### Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

#### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Cultural geography, ethnography and qualitative methods, urban sociology, sociology of tourism and contemporary culture, 20th century French intellectuals and contemporary theories of social science

#### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	70000	Interdisciplinary Studies	
2	99999	Other	Cultural Studies
3	63400	Sociology	
4	61400	Urban and Regional Studies, Environmental Studies	
5	61820	Social/Cultural Geography	



Family name, Given name

Shields, Rob

**Funded Research**

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2011	Total amount (CAN\$) \$37,000
Role Applicant		Completion status <input type="checkbox"/> Complete	
Project title Re-imagining the Minimmall			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Org. code 1	Full name of funding organization Killam Foundation	Year awarded (yyyy) 2010	Total amount (CAN\$) \$30,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Community and Nanotechnology in the Edmonton Region'			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2010	Total amount (CAN\$) \$2,500,000
Role Co-applicant		Completion status <input type="checkbox"/> Complete	
Project title MCRI "Global Suburbanization"			
Applicant's family name Keil		Applicant's given name Roger	
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2003	Total amount (CAN\$) \$86,454
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Workplaces and Workdays in a Small Town: Changes in the times, spaces and place of information-related work			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV



Family name, Given name

Shields, Rob

**Funded Research (cont'd)**

Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2000	Total amount (CAN\$) \$58,000
----------------------	--	-----------------------------	----------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
-------------------	--

Project title The Culture of the Building Site: Innovation in the Canadian Construction Industry
---

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2000	Total amount (CAN\$) \$390,000
----------------------	--	-----------------------------	-----------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
-------------------	--

Project title The Impact of a Knowledge Based Economy on Work in the Public Service: The Virtual Organization of Knowledge and Expertise (Challenges and Opportunities of a Knowledge-based Economy Strategic Theme Grant)
---

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code 1	Full name of funding organization National Centre for Geographic Information Applications	Year awarded (yyyy) 1998	Total amount (CAN\$) \$3,400
----------------	--	-----------------------------	---------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
-------------------	--

Project title Community Networking and Local Identity
--

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

Org. code 1	Full name of funding organization Carleton University	Year awarded (yyyy) 1997	Total amount (CAN\$) \$4,000
----------------	--	-----------------------------	---------------------------------

Role Applicant	Completion status <input checked="" type="checkbox"/> Complete
-------------------	--

Project title Organized Research Unit on Innovation Research
---

Applicant's family name	Applicant's given name	Initials
-------------------------	------------------------	----------

## 1. Research Contributions in the Last Six Years (2005-2011)

### 1.1 Refereed Contributions

#### Edited Books

- R *Ecologies of Affect: Placing Nostalgia, Desire and Hope* Co-Editor with Tonya Davidson and Ondine Park, Waterloo: Wilfred Laurier University Press. Aid to Scholarly Publication Grant. 2011.
- R *What is a City? Rethinking the Urban After Katrina*. Co-Editor with Philip Steinberg. Athens: Georgia University Press. 2008. 233pp.
- R\* *Building Tomorrow: Innovation in Construction and Engineering*. Co-Editor with André Manseau. London: Ashgate 2005. 184pp.

#### Book Chapters (Selected)

- R 'The Tourist Affect' in T. Davidson and O. Park, R. Shields *Ecologies of Affect*. Waterloo ON: Wilfred Laurier University Press. 2011.
- R With Ignacio Farias, 'Interview with Rob Shields' in *Urban Assemblages. How Actor-Network Theory Changes Urban Studies*. London: Routledge 2009. pp. 291-301.
- R 'True North Strong and Free' in *Canadian Cultural Studies: A Reader* Sourayan Mookerjea, Imre Szeman and Fail Faurschou, eds. Durham NC: Duke University Press 2009. pp. 276-288.
- R 'Delta City' in P. Steinberg and R. Shields *What is a City? Rethinking the Urban After Katrina*, Athens: Georgia University Press. 2008. pp.78-93.
- R 'Uhåndgribeligheder og Virtualiteter' ('Intangibles and Virtualities') in A. Scott Sorensen and Zerland, M. (eds.) *Kulture uden Centre*, Aarhus, Denmark: Klim. pp. 226-48. 2006.
- R 'Cyberurbe: Virtuality in Salvador' in A. Lemos (ed.) *Ciberurbe: A cidade na sociedade da informação. Cibercidade II*. (Cyberurb - The city and society of information, Cybercity 2) Rio de Janeiro: E-Papers. pp.35-42 2005.
- R 'The Virtuality of Urban Culture: Blanks, Dark Moments and Blind Fields', *Soziale Welte: Die Wirklichkeit der Stadte* Vol. 16. H. Berking and Martina Löw, issue eds. and dirs. Baden-Baden: Nomos Verlagsgessellschaft 2005. pp. 377-386.

#### Journal Articles

- R with Barret Weber, 'The Virtual North: On the Boundaries of Sovereignty' *Ethnic and Racial Studies* 34:1. Nov. 2010. pp.103-120.
- R 'Social Spatialisation and Cultural Topology' “社会空间化与文化拓扑学” *International Cultural Studies China* (Chinese Academy of Social Sciences). Zhang Jian (trans.) 2010. Available online in Chinese: <http://www.literature.org.cn/Article.aspx?ID=52365> <http://www.docin.com/p-152929119.html> and in English: <http://culturestudy.com.s38.4bo.me/2010/0724/46.html>
- R with Gerhardt, Hannes et al. 'Contested Sovereignty in a Changing Arctic' *Annals of the Association of American Geographers* 100: 4 2010, pp.992-1002.
- R\* with Andrea Sharkey, 'Abject Citizenship – Rethinking Exclusion and Inclusion: Participation, Criminality and Community at a Small Town Youth Centre' *Childrens' Geographies* 6:3. 2008. pp.239-256.
- R 'The Urban Question as Cargo Cult: Opportunities for a New Urban Pedagogy' *International Journal of Urban and Regional Research* 32:3 2008. pp.712-718.
- R\* 'Hope and Fear in Biotechnology: The Space-Times of Regulatory Affect' *Space and Culture* 10:2. Summer. 2008. pp.125-141.
- R 'O que e que a olhadela comunica?' *Contemporanea* 5:1-2. 2008. (What does the glance communicate) In Portuguese. [www.contemporanea.poscom.ufba.br/htmls\\_ing/v5\\_1\\_2\\_dez07.html](http://www.contemporanea.poscom.ufba.br/htmls_ing/v5_1_2_dez07.html)
- R\* 'Les Sciences Sociales et les Virtualités', *Sociétés* 91 (Spring 2006/1). 2006. pp. 55-67. In French.
- R 'Flânerie for Cyborgs', *Theory Culture and Society* 23:7-8. 2006. pp. 209-220.



- R\* With Carrie Sanders 'Biotech Barbeque: A Regulatory Figuration and Policy Making'. *Fast Capitalism* 2:1. Online journal. [www.uta.edu/huma/agger/fastcapitalism/2\\_1/shields.html](http://www.uta.edu/huma/agger/fastcapitalism/2_1/shields.html) Summer 2006.
- R 'Knowing Space'. *Theory Culture and Society* 23:2-3. 2006. pp.146-49.
- R 'Virtualities'. *Theory Culture and Society* 23:2-3. 2006. pp. 284-86.
- R 'Boundary-Thinking in Theories of the Present: The Virtuality of Reflexive Modernization'. *European Journal of Social Theory* 9:2. 2006. pp.223-238.
- R with Matthew Tiessen, 'Urban Calamities' In *Space and Culture*. 9:1 (Jan-Feb). 2006.
- R 'Building the Future: Innovation, Design and the Virtual', *Nordisk Arkitekturforskning - Nordic Journal of Architectural Research*, 18:4. 2005. pp.13-20.

## **.2 Other Refereed Publications**

### **Conference Proceedings:**

- R\* 'Mobile Phone Imaging as Gesture and Momento' Martha Ladly and Philip Beesley (eds.) *Mobile Nation: Creating Methodologies for Mobile Platforms* Waterloo: Riverside Architectural Press, 2008. pp. 47-52.

Numerous conference papers, keynote and plenary papers internationally.

## **.3 Non-Refereed Contributions**

### **Magazines**

- 'Curb Appeal: Community' *Curb Magazine* 1:2. 2010. pp. 1-2.
- 'Curb Appeal: Place-based Policy' *Curb Magazine* 1:2. 2010. pp. 2.
- with Andres Kurg, 'Linn, urbanisus, virtuaalsus - Vestlus Rob Shieldsiga', *Virkerkaar* 4-5. 2004. pp. 153-159. (Place, Urbanism, Virtualism - Interview with Rob Shields). Published in Estonian.
- 'Curb Appeal: Concluding Thoughts' *Curb Magazine* 1:1. 2009. pp. 23-24.

### **Encyclopaedia Entries (Selected)**

- 'Lefebvre, Henri.' *International Encyclopedia of the Social Sciences*. Ed. William A. Darity, Jr. 2nd ed. Vol. 4. Detroit: Macmillan Reference USA. 2008. pp.400-401.

### **Major Review Essays (Selected)**

- 'Book Review: Knowing Places: The Inuinait, Landscapes and the Environment, Beatrice Collignon' July 2008. 1775 words. [www.spaceandculture.org](http://www.spaceandculture.org)
- 'Architext: A Book Series on Architecture, Design, History and Discourse'. *Space and Culture Online* Feb. 2008. 2127 words. [www.spaceandculture.org](http://www.spaceandculture.org)

### **Policy Reports (Selected)**

- with City-Region Studies Centre researchers, *Partnerships: Responding to the Changing Dynamics of Urban-Rural Interdependency*. Edmonton, CRSC. 2010.

### **Websites (Sample)**

Extensive web authoring and online contributions.

- Contributor, 'Space and Culture Online' *Space and Culture*. 2003-. <http://www.spaceandculture.org>
- Contributor, 'Intermedia blog' University of Alberta, Faculty of Arts and Dept. of Sociology Intermedia Studio. 2009-. <http://www.intermedia.ualberta.ca>

## **.4 Forthcoming Refereed Contributions**

- R *City-Regions in Prospect: Place meets Practice*. Co-Editor with Kevin Jones and Alex Lord. In progress under contract, McGill-Queen's University Press.
- R *Rewriting Lyotard*. Co-Editor with Heidi Bickis. In progress under contract, Ashgate 2012.
- R 'Foreword: The New Place of Flows', *ICTS, A New Urban Infrastructure: Surveillance, locative media and global networks*, Pittsburgh: IGI Global. In press. 2011.
- R *Cultural Topologies*. London: Sage. Forthcoming 2012. Submitted.
- R *Deleuze and Guattari Glossary* Ottawa: Red Quill. Forthcoming under contract 2012

## 2. Other Research Contributions

### Sample Community Outreach

- Board Member, Youth Centres Canada / Centres Jeneuesse Canada. National organization of street youth centres. 2011--
- City-Region Studies Centre Academic Director. University of Alberta. Overall responsibility for 9 staff, research direction, engaged research, currently on Alberta regions, budget Can\$0.5M. July 2009--
- 'The Space of the Arts' Public lecture series mobilizing faculty and community to discuss the accommodation of fine arts, humanities and social sciences at University of Alberta. Ken Hillis 2005. Thomas Gieryn 2006. Giles Lane 2008. Anthony King 2009.
- Informal seminar and training on urban design debates in the academic literature to Edmonton City Councillors. 2005.
- Member, Organizing Committee, Canadian Association of Cultural Studies Annual Conference, University of Alberta October 2005.

### Editorial Responsibilities

- *Theory Culture and Society*, Editorial Board (London and Beverley Hills: Sage). Refereed interdisciplinary journal, ISI ranked in top 10 interdisciplinary English-language academic journals globally 1995--
- *Fast Capitalism*, Advisory board. Online, refereed political economy journal. [Http://www.fastcapitalism.com](http://www.fastcapitalism.com) 2005-
- *European Journal of Higher Art Education*. Editorial Board. [www.ejhae.elia-artschools.org](http://www.ejhae.elia-artschools.org) 2004- Editor (and Founder),
- *Space and Culture*. Co-Editor, founding editor and publisher. Refereed interdisciplinary journal of social spaces 1995-- Publisher 1997-2001. Published by Sage Publications (USA). ISI Ranked.
- *Social Semiotics*, Advisory board. Refereed interdisciplinary journal. 2000-
- *CURB Magazine*, Founder, Publisher. (City Region Studies Centre). Knowledge mobilization magazine for planners. 2 issues annually Print run 5000. 2009-- .

## 3. Five Most Significant Career Research Contributions

1. Founder, *Space and Culture: International journal of social spaces* Unique experience as founding publisher and editor of a Canadian academic journal. Now published by Sage Publications and In its 13<sup>th</sup> volume. 448pp. per volume. I continue to be actively involved as part of a recently expanded global editorial team. We have innovated by being one of the first journals to embrace an online presence and have moved book reviews online: [spaceandculture.org](http://spaceandculture.org)
2. *Places on the Margin: Alternative Geographies of Modernity*. International Library of Sociology, London: Routledge Chapman Hall, 1991. 334 pp. Library Choice Outstanding Publication of the Year Award 1991. Widely referenced.
3. *Lefebvre, Love and Struggle: Spatial Dialectics*. London: Routledge, 1999. 218pp. The culmination of 14 years of research beginning with my M.A. thesis. The only complete bibliographic source and only comprehensive English language survey of Henri Lefebvre, the French Marxist philosopher and sociologist, who taught many key intellectuals of the 'Generation of '68', including Baudrillard, Cohn-Bendt and others.
4. *The Virtual* (Routledge 2003). Beyond new media and virtual spaces, a study of the cultural and economic significance of intangibles such as brands, risk, terror or community.

5. 'Social Spatialization and the Built Environment: The Case of the West Edmonton Mall', *Environment and Planning D: Society and Space*, 7:2 (Summer) 1989. pp.147-164. A widely taught case study of private property in public use which presents my theoretical position on social space.

**4. Career Interruptions** not applicable.

**5. Contributions To Training** (Involvement in publication also noted. Supervisions only).

**Doctoral Supervision** (University of Alberta unless otherwise noted. Total 8 completed since 2005)

- Andriko Lozowy, Sociology. Supervisor (in progress). SSHRC-funded Research Assistant.
- Barret Weber, Sociology. Supervisor (submitted). Tory Chair Research Assistant. Co-author.
- Ondine Park, Sociology. Supervisor (in progress). CRSC Research Assistant. Editorial Assistant, *Space and Culture*, Book co-editor.
- Ol'ga Pak, Sociology. Supervisor (in progress). Co-author.
- Petra Hroch, Sociology. Supervisor (in progress). Killam Scholar. Co-animator of Workshop.
- Tonya Davidson, Sociology. Supervisor (submitted). Editorial Assistant, *Space and Culture*, Co-author and Book co-editor.
- Ipek Oskay, Sociology. Supervisor (in progress). Editorial Assistant, *Space and Culture*.
- Laine Mandlis, Sociology. Supervisor 2011.
- Matt Tiessen, Sociology/Art and Design Co-Supervisor 2010. Killam Scholar, Co-author.
- Mickey Vallee, Sociology/Music 2010. Tory Chair RA. Co-author. Co-Editor of Website.
- Andrea Sharkey, Sociology, Carleton Univ. 2008, Co-supervisor. Interviewer, fully funded on SSHRC SRG. Co-author. Editorial Assistant *Space and Culture* 2002-05.
- Yun-Csang Ghimn, Sociology/Communication 2008, Tory Chair RA. Supervisor.
- Pablo Markin, Modern Languages and Cultural Studies 2008, Tory Chair RA. Supervisor.
- Anne Galloway, Sociology Carleton Univ. 2008. Supervisor. Funded conference travel and fieldwork. Co-editor of Website. Governor General's Medal.
- Heidi Rimke, Sociology 2005, Carleton Univ. Supervisory Committee member.

**Masters Supervision** (University of Alberta unless otherwise noted. Selected.)

- Jenna Hill, Industrial Design 2011. Co-Supervisor.
- Susan Kisilevich, Sociology 2011.
- Ipek Oskay, Sociology 2008.
- Allison Hui, Sociology 2007. Commonwealth Scholar.

**Undergraduate Supervision** (University of Alberta):

- Amy MacDonald Sociology Hons. BA 2009. Governor General's Medal, University Medal.
- Adam Kaasa Hons. BA 2005.

**Examiner for Ph.D.**

- Chris Brenan-Horsely Ph.D. Geography, University of Wollongong. External Examiner 2011.
- Michael MacDonald Ph.D., Music, University of Alberta. Internal Examiner 2010.
- Jason Wallin Ph.D., Education, University of Alberta. Internal Examiner 2009.
- James Cresswell Ph.D., Psychology, University of Alberta. Internal Examiner 2009.
- Peter Larson, Psychology Ph.D., University of Alberta. External Examiner Jan. 2009.
- Amie Matthews, Geography Ph.D., Newcastle University, Callaghan NSW Australia. External Examiner Jan. 2008.
- Jane Daniels, English Ph.D., La Trobe University, Victoria Australia. External Examiner Dec. 2007.
- Kate Moles Ph.D., School of Social Sciences, Cardiff University, Wales. External Examiner May 2007.
- Don Bosco Antony Ph.D., National University of Singapore. External Examiner April 2007.

## Relevant Experience

**Principal Investigator**, SSHRC Strategic Grant on the Knowledge Based Economy: *'The Impact of a Knowledge Based Economy on Work in the Public Service: The 'Virtual Organization' of Expertise and Knowledge (2000-03)*' considered expertise and the informational aspects of regulation of plants with novel traits (GMOs). Using ethnographic and interview techniques this research considered the ways that knowledge management approaches in the Federal Government.

Relevance: This is directly relevant to (1) my leadership role as Applicant and demonstrates (2) experience with networks of innovators, regulators and those who apply innovation for commercial and qualitative advantage and with **coordinating multi-university teams** of researchers.

Skills: I developed **team leadership, administrative and conflict management** skills beyond the usual academic range of capabilities in mentoring and training.

**Publisher and editor** of an peer refereed journal *Space and Culture*. Few Canadian academics can list founding a journal in the cv, let alone one that has continued to thrive in print and online. *Space and Culture* ISI ranked. As an entrepreneur and innovator in format and interdisciplinarity this experience was successful in constructing and nurturing a new area of academic investigation (social aspects of spatiality) between architects, geographers, social scientists and media theorists.

Relevance: This is directly relevant to a native understanding of interdisciplinarity and to the development of academic research networks.

Skills: I developed **entrepreneurial, administrative and business accounting** skills including an understanding of the challenges of **exporting** and serving a global customer or subscriber base from Canada in a sector distribution is controlled by foreign gatekeepers. In selling the journal to Sage Publications (USA) I developed skills in **negotiation, and partnering**.

**Architectural Designer and Draughtsman** as undergraduate and as a full-time job in residential and commercial construction.

Relevance: This experience in medium-sized and small private sector practices gained me an appreciation of the challenges of small businesses.

Skills: I learned **project management** in the context of construction sites and everyday conflicts with contractors and the coordination of trades and other consultants.

**Principal Investigator** *'The Culture of the Building Site: Innovation in the Canadian Construction Industry'*, an ethnography of the construction of clean-rooms for then-Nortel facilities.

Relevance: The site-based experience of the context of chip-fab and high purity piping, welding and gas supply is directly relevant to the clean facilities used in nanotechnologies. This lends an appreciation of the capital costs and contexts of work in this field.

Skills: This allowed me to hone **fieldwork skills working in enterprise-based contexts** of technical challenge, high capital investment, intellectual property and security considerations.

More broadly, being a **Co-applicant** on a SSHRC MCRI grant on *Global Suburbanism* (R. Keil York Univ. PI 2010-17) and Collaborator on a US National Science Foundation Grant on *Arctic Sovereignty* (P. Steinberg, Florida State Univ. PI 2008-11) gained me experience with **multi-stakeholder research**.

Skills: include contributions to research teams and responsiveness to opportunities generated by other team members.

Being **Director** of the engaged City Region Studies Centre in the Faculty of Extension has required me

to **work across institutions and firms with stakeholders** as an expert witness to municipal authorities, volunteer on community development projects and collaborator in Alberta's Capital Region Board economic foresight process.

Relevance: Understanding the role of the university within the context of a regional economy and the contributions that can be made within a collaborative context as groups respond to national and international opportunities.

Skills: Supporting established decision-making, regulatory and community processes and communicating to diverse groups.

**Publisher** and founder *Curb* magazine (2010--) a planning magazine for practitioners sponsored by business and government and distributed by subscription and freely to municipal offices across the North and West of the continent (print run 5000). Also freely available online.

Relevance: Understanding when digital approaches are *not* appropriate due to the environment and the need for a durable presence within the context of planning offices.

Skills: Management of a production team for print dissemination alongside CRSC's extensive online podcast, video-interview and webinar offerings. In addition, I have successfully fund-raised to finance the magazine.



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Internal use 340145	CID (if known)
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**Identification**  
Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

Name			
Family name wilsdon	Given name james	Initials	Title Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status <input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input checked="" type="radio"/> Other (country) <u>UNITED KINGDOM</u>	Have you applied for permanent residency? <input type="radio"/> Yes <input checked="" type="radio"/> No
--	---	---	--

**Statistical and Administrative Information**

Birth year	Gender <input type="radio"/> F <input checked="" type="radio"/> M	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language <input checked="" type="radio"/> English <input type="radio"/> French	Previous contact with SSHRC? (i.e. applicant, assessor, etc.) <input type="radio"/> Yes <input type="radio"/> No
Full name used during previous contact, if different from above				

**Contact Information**  
The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
+44	7535	640528					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail james.wilsdonsshrc@gmail.com							
Secondary E-mail							

Personal information will be stored in the Personal Information Bank for the appropriate program.

Checked

Web CV

2011/11/17

Identification

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Family name, Given name

wilsdon, james

<p><b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.</p>		<p><b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.</p>	
Address Carlton House Terrace		Address	
6-9 Carlton House Terrace			
		City/Municipality	Prov. / State Postal/Zip code
Country UNITED KINGDOM		Country	
<p><b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.</p>		<p><b>Permanent Address in CANADA</b></p>	
Address		Address	
City/Municipality	Prov. / State	City/Municipality	Prov. / State Postal/Zip code
Country		Country	
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number	
		Country code	Area code Number Extension
Temporary E-mail			





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Family name, Given name

wilsdon, james

**Research Expertise (optional)**

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

**Areas of Research**

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	244	Innovation, Industrial and Technological Development
2	320	Politics and government
3	360	Science and technology

**Temporal Periods**

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year				Year			
		BC	AD			BC	AD
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>

**Geographical Regions**

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

**Countries**

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1			
2			
3			
4			
5			





Family name, Given name

wilsdon, james

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)	
Full Professor				2011/11	
Org. code	Full organization name				
9121140	University of Sussex				
Department/Division name					
Science and Democracy					
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input type="radio"/> Full-time	<input type="radio"/> Part-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Non-salaried	<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Director			2008/1	2011/12	
Org. code	Full organization name				
1	The Royal Society				
Department/Division name					
Science Policy Centre					
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Senior Research Fellow			2006/1	2008/12	
Org. code	Full organization name				
9121122	Lancaster University				
Department/division name					
Institute for Advanced Studies					
Position			Start date (yyyy/mm)	End date (yyyy/mm)	
Head			2004/1	2008/12	
Org. code	Full organization name				
1	Demos				
Department/Division name					
Science and Innovation					

Personal information will be stored in the Personal Information Bank for the appropriate program.

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wilsdon, james

**Work Experience (cont'd)**

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Head		2001/1	2004/12
Org. code	Full organization name		
1	Demos		
Department/Division name			
Strategy			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Special Advisor		2000/1	2001/12
Org. code	Full organization name		
1	UK Sustainable Development Commission		
Department/Division name			
UK Sustainable Development Commission			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Senior Policy Advisor		1997/1	2001/12
Org. code	Full organization name		
1	Forum for the Future		
Department/Division name			
Forum for the Future			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			



Family name, Given name

wilsdon, james

<b>Academic Background</b>				
List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1998/01		2004/12
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
63499	Technology and Innovation Policy	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121152	Middlesex University			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1996/01		1997/12
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
62699	Professional Studies	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121152	Middlesex University			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1992/01		1996/12
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
55099	Philosophy and Theology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121236	Oxford Brookes University			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Personal information will be stored in the Personal Information Bank for the appropriate program.



Family name, Given name

wilsdon, james

### Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded

### Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

#### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

technology and innovation policy, governance, science policy

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	63400	Sociology	
2			
3			
4			
5			

## 1. Research Contributions in the Last Six Years (2005-2011)

### Refereed Contributions

#### Edited Books

R *Better Humans? The politics of human enhancement and life extension* (edited with P Miller), Demos, 2006.

#### Journal Articles

R 'Science moves East', *The World Today* Vol. 66, No.11, Chatham House, November 2010

R 'From Bio to Nano: Learning Lessons from the UK Agricultural Biotechnology Controversy' (with M Kearnes et al), *Science as Culture* Vol. 15, No. 4. 291-307, December 2006

### Non-Refereed Contributions

#### Magazines

'Galileo: master of the universe', *Financial Times*, 15 October 2010

'Building a bright continent: can prioritizing science catalyze Africa's efforts to join the global economy?' *SEED magazine*, May/June 2008

'At last, real creative spark' - comment on the white paper 'Innovation Nation', *Times Higher Education*, 27 March 2008

'Islamic innovation is finally on a rising crescent', *Financial Times*, 19 October 2007

'China can lead the world in innovation', *China Daily*, 11 September 2007

'Innovation needs some fresh ideas' *Times Higher Education*, 13 July 2007

'Asian economies herald a new dawn of technological innovation' (with C Leadbeater), *The Times*, 17 January 2007

'Who would not seize the chance to live to 150?' *Financial Times*, February 2006

'The science lobby is getting it wrong on innovation', *Financial Times*, 3 November 2006

'Artificial intelligence' (review of Stefan Collini's *Absent Minds*), *Financial Times*, 4 March 2006

'A new geography for research collaboration' (with J Adams), *Research Fortnight*, 27 September 2006

'Am I Bovered? A debate on public engagement' *Research Fortnight*, 12 October 2005

'Do not fear the rise of world-class science in Asia' (with C Leadbeater) *Financial Times*, 12 October 2005

'Scientists need to reconnect with the people', *Financial Times*, 5 September 2005

#### Review Essays

'Fine fellows' (a review of Bill Bryson's 'Seeing Further'), *Financial Times*, 1 February 2010

'Peer Review' (a review of "The March of Unreason" by Dick Taverne), *Financial Times*, 16 April 2005

'Political science' (a review of Sheila Jasanoff's *Designs on Nature*) *Financial Times*, 10 September 2005

'The way to go' (a review of books on death and aging), *Financial Times*, 23 February 2008

'Medicine Men' (a review of 'Alternative Medicine? A history' by Roberta Bivins), *Financial Times*, 20 October 2007

#### Reports

*A new golden age? The prospects for science and innovation in the Islamic world* (with N Day and E Masood), The Royal Society, June 2010

*The Scientific Century: securing our future prosperity* (co-author), The Royal Society, March 2010

*New frontiers in science diplomacy* (co-author), The Royal Society, January 2010

*The Disrupters: Lessons for low-carbon innovation from the new wave of environmental pioneers* (with R Willis and M Webb), NESTA, July 2007

*The Atlas of Ideas: How Asian innovation can benefit us all* (with C Leadbeater), Demos, 2007

*China: the next science superpower?* (with J Keeley), Demos, 2007

*The Asian Century: opportunities and challenges for the UK* (with R Harrison), Advanced Institute of Management Research, 2006

*The new geography of science: UK research and international collaboration* (with J Adams), Evidence Ltd., 2006

*Governing at the nanoscale: people, policies and emerging technologies* (with M Kearnes and P Macnaghten), Demos, 2006

*The Future of Technology Assessment* (with M Rodemeyer & D Sarewitz) Woodrow Wilson Centre, Washington DC, 2005

*The Public Value of Science: or how to ensure that science really matters* (with B Wynne and J Stilgoe), Demos, 2005

## **2. Other Research Contributions**

### **Website**

'The man who wants to live forever' (with P Miller, a profile of Aubrey de Grey) *OpenDemocracy.net*, 3 February 2006

'Small talk: new ways of democratizing science and technology' *OpenDemocracy.net*, 27 September 2005

## **3. Five Most Significant Career Research Contributions**

1. See-through Science: why public engagement needs to move upstream (with R Willis). Demos, 2004. The book is an important contribution because it shows how opening up the innovation process during the early stages of development ensures that science contributes to the common good. The book is written for an audience of policy makers, government officials and the public.

2. Digital Futures: living in a networked world (Editor). Earthscan, 2001. This book provides an important exploration of the social and environmental opportunities of the new economy by bringing together leading thinkers from the policy, business and academic world.

3. Governing at the nanoscale: people, policies and emerging technologies (with M Kearnes and P Macnaghten), Demos, 2006. This pamphlet outlines the findings from a two-year ESRC-funded project on Nanodialogues, which aimed to understand the social and scientific visions that are influencing nanotechnology research, and develop opportunities for 'upstream' dialogue between scientists and the wider public.

4. The Public Value of Science: or how to ensure that science really matters (with B Wynne and J Stilgoe). Demos, 2005. This pamphlet outlines why we need to find new ways of talking about and building 'the public value of science'.

5. China: the next science superpower? (with J Keeley). Demos, 2007. The pamphlet considers the potential future role and relationship that China's scientific program will have with other countries.

## **4. Career Interruptions and Special Circumstances: N/A**

## **5. Contributions to Training in the Last Five Years: N/A**

Dr James Wilsdon

With fifteen years of experience at the intersection between academia, government and public policy, I am an expert on science and innovation policy in the UK and internationally. Through my work at the Royal Society, the UK's national academy of science, and at Demos, an influential think tank, I have built strong networks with scientists, innovators and policymakers around the world. I am an accomplished project manager, team leader and fundraiser, with a track record of creative, entrepreneurial and high-impact research.

1. Director, Science Policy Centre, The Royal Society. I joined the Royal Society in September 2008 as the founding Director of its Science Policy Centre. My responsibilities in that role included policy direction, leadership, and budgeting roles (among other things). The Science Policy Centre is mandated with championing the role of science and innovation in creating economic prosperity, quality of life, and sustainability.
2. Head of Science and Innovation, Demos. While at Demos, I directed *The Atlas of Ideas* project, a three-year FCO-backed study of the prospects for science and innovation in Asia and Latin America, and co-authored several influential reports.
3. Special Adviser, UK Sustainable Development Commission (SDC). The SDC is the UK Government's independent advisor on sustainable development. As a special adviser, I provided relevant expertise to the commission.
4. Senior Policy Adviser, Forum for the Future. As a UK non-profit organization, Forum for the Future's mission is to promote sustainable development through partnership activities across businesses and communities.
5. *Governing at the nanoscale: people, policies and emerging technologies* (with M Kearnes and P Macnaghten), Demos, 2006. This pamphlet presents the findings of a two-year ESRC-funded project on Nanodialogues, which aimed to understand the social and scientific visions that are influencing nanotechnology research, and develop opportunities for upstream dialogue between scientists and the wider public.
6. *See-through Science: why public engagement needs to move upstream* (with R Willis). Demos, 2004. The audience for the book – policy makers, government officials, and the public – is presented with arguments for why public engagement with science should move upstream. It shows how opening up the innovation process during the early stages of development can ensure that science contributes to the common good.