



Professional Development Seminar: Transdisciplinary Approaches to Integrating Policy and Science for Sustainability

Calgary/Banff, Canada, 3-7 October 2017

Program (VERSION 30 Sept. 2017)

Time	Activity	Learning outcomes	Speaker/Facilitator	Location
Day 1 – Tuesday – October 3rd, 2017				
08:30 – 08:40	Welcome		Marcella Ohira (IAI) and Gabriela Alonso, University of Calgary, Werklund School of Education	University of Calgary Rozsa Center
08:40 – 09:00	Brief review of the Professional Development Seminar (PDS) part I in Puerto Plata		Kathy Halvorsen, Michigan Technological University and Valentin Picasso, University of Wisconsin All participants	
09:00 – 10:00	Canada, host country presentation Environmental Urban Lab Presentation: Linking policy to Sustainable Cities	Building capacity to COMMUNICATE SCIENCE to various audiences.	Francisco Alaniz Uribe, University of Calgary, Faculty of Environmental Design – Urban Lab	
10:00 – 10:15	Coffee Break			
10:15 – 11:15	COMMUNICATE SCIENCE to non-technical audiences - Video conference	Building capacity to communicate science to various audiences.	Allison Mills, Michigan Technological University	

11:15 – 12:15	<p>Act your Science - Science and improvisation</p> <p>Hands-on exercise – Part 1</p>	<p>Building capacity to COMMUNICATE SCIENCE to various audiences.</p>	<p>Jeff Dunn, University of Calgary, Department of Clinical Neuroscience, Department of Physiology and Pharmacology; Department of Radiology; and Experimental Imaging Centre PDS teams</p>	
12:15 – 14:30	<p>Welcome Lunch</p> <p>Teams will present their TD research proposals to a wider audience (University of Calgary faculty, local authorities and representatives from the civil society and PDS organizers) 15 minutes each team</p>	<p>Strengthening communication skills.</p> <p>Building capacity to COMMUNICATE SCIENCE ideas to various audiences.</p>	<p>Anita Eaglebear, Welcome Ceremony - Indigenous elder, Janaka Ruwanpura, vice-provost, International at the University of Calgary.</p> <p>Sharon Friesen, University of Calgary, Werklund School of Education</p> <p>Vice-Dean to welcome PDS participants</p>	<p>University of Calgary Rozsa Center</p>
14:30 – 15:15	<p>TD research proposals: Reviewers feedback</p>		<p>PDS Teams and mentors</p>	
15:15 – 16:15	<p>TEAMWORK & TD PROCESSES and discussion</p> <p>Doing great TD work, lessons learned (12 minutes each team, 5 slides)</p> <p>Each team should prepare an image/drawing/poster to illustrate its teams' work. What is important about your team, how to illustrate the work done, obstacles faced and overcome.</p> <p>Also, a list of top 5 elements of how to do TD work</p>	<p>TEAMWORK & TD PROCESSES</p> <p>Lessons learned and experienced by each team in building their teams and working on a TD proposal.</p>	<p>Four PDS teams</p>	

16:15 – 16:45	Coffee Break			
16:45 – 18:00	TEAMWORK SKILLS	TEAMWORK SKILLS Strengthen ability to create and develop an effective research team	Kathy/Erin Pischke, Michigan Technological University	
	Teams meet to work on their project proposal, work plan and press release		Participants	
Day 2 – Wednesday – October 4th, 2017				
08:30 – 09:00	ID and TD research proposals evaluation criteria		Gabriela Alonso, University of Calgary Lily House-Peters, California State University, Long Beach	
09:00 – 09:10	Reflections of Day 1 and brief discussion		Participants (team established previous day)	
09:10 – 10:10	TRANSDISCIPLINARY (TD) METHODS: Social science methods and hands-on exercises Development of interview questions to scientific and NGO/industry/government/community goals, their interview topic will be related to Valentin's natural science methods exercise	Participants will learn about the range of social science methods and specific skills in conducting qualitative interviews, including how to develop interview questions, interview people and analyze data – volunteers and site confirmation	Kathy/Erin	
10:10 – 10:30	Coffee Break			
10:30 – 12:00	Interviewing (about 1.5 hours: have groups of 2 interview people asking the questions they designed, 10 min. of interviewing per interviewee, then rotate to next interviewee, may continue into lunch if necessary)		Kathy/Erin	
12:00 – 13:00	Lunch. Wrap up data analysis, prepare brief presentation on findings (30 min.: have participants look over their findings over lunch)			

13:00 –13:30	TRANSDISCIPLINARY (TD) METHODS: Present interview findings (20-30 min.: present findings to entire group (2 min per pair to talk about findings)		Kathy/Erin	
13:30-14:30	Background on natural science methods		Valentin	
14:30 –15:30	TRANSDISCIPLINARY (TD) METHODS: Hands-on exercise: data collection on grasslands in a nearby field with Valentin (simple agronomic experiment, with replications, treatments, randomization, blocks)	Participants will be able to make distinctions between the “treatment” stocking rates of grazing cattle or different levels of Nitrogen fertilizer, etc.	Valentin	
15:30 –16:00	Coffee Break			
16:00 –16:30	TRANSDISCIPLINARY (TD) METHODS: Participants integrate interview and grasslands findings, prep. one minute presentation scientific implications, diverse organization implications		Participants	
16:30 – 17:30	TRANSDISCIPLINARY (TD) METHODS: Participants present TD findings, one minute per pair, discussion of challenges		Kathy/Erin/Valentin	
17:30 – 18:00	Teams meet with mentors to work on their project proposal, work plan and press release		PDS Participants and mentors	
18:00 – 19:00	Meet and Greet: Interactions with University of Calgary faculty, graduate students, and Members of Calgary Chamber of Commerce			
	Teams meet to work on their project proposal, work plan and press release			
Day 3 – Thursday – October 5th, 2017				
09:00 – 09:10	Reflections of Day 2 and brief discussion		Participants (team established previous day)	
09:10 – 10:00	SCIENCE-POLICY How scientists work with stakeholders		Dawn Bazely, Former Director of the Institute for Research and Innovation in Sustainability,	University of Calgary Rozsa Center

			University Professor, York University	
10:00 – 10:45	Act your Science - Science and improvisation Hands-on exercise - part 2		Jeff Dunn, University of Calgary, Department of Clinical Neuroscience, Department of Physiology and Pharmacology; Department of Radiology; and Experimental Imaging Centre PDS teams	
10:45 – 11:00	Coffee Break			
11:00 – 11:30	Introduction to the Field Trip on October 6 th : Canada's First Nations sacred sites Introduction to Banff and BIRS		Gabriela Alonso, University of Calgary Naomi Krogman, University of Alberta Banff National Park	
11:30 – 12:30	Teams meet to work on their project proposal, work plan and press release			
12:30 – 14:00	Lunch			
14:00 – 15:00	SCIENCE DIPLOMACY		Marga Gual Soler, American Association for the Advancement of Science, USA Caitlin Quarrington, Mindfuel Canada Jessica Duchicela, Universidad de las Fuerzas Armadas, Ecuador	
15:00 – 16:00	Panel: PROPOSAL DEVELOPMENT AND PROJECT MANAGEMENT -Project proposal development -Project funding, applying for grants -Project management		- Kathy: National Science Foundation (NSF) PIRE and IAI/Collaborative Research Network experiences - Edwin Castellanos, University del	

	-Project reporting		Valle of Guatemala: managing and coordinating regional networks - Carol Franco, the Green Climate Fund - Lily House-Peters, University of California: IAI Seed Grants and TD processes	
16:00 – 16:30	Coffee Break			
16:30 – 17:30	FINANCING: Simulation game on the Green Climate Fund		Carol Franco, Marga Gual	
17:30 – 18:30	Teams meet to work on their project proposal and work plan			
18:30 – 19:00	Transportation to Calgary Public Library – John Dutton- common area			
19:00 – 21:00	<p>Throwing away the Lab Coat: COMMUNICATING SCIENCE across borders – Canada’s Panel Dialogue</p> <ul style="list-style-type: none"> - Representative from the Indigenous Communities and Energy and Mining Sectors - Representative from Government/Legislative - Representative from Private Sector - Representative from Academia 	<p>University of Calgary’s Latin American Research Center Director Pablo Policzer and the Werklund School of Education host Jay Ingram & expert guests to explore innovative ways to communicate science across sectors, borders, and cultures in order to face global challenges</p>	<p>Jay Ingram, Discovery Channel Canada & expert guests</p> <ul style="list-style-type: none"> - Cheryl Cardinal, President and Chief Executive Officer, Indigenous Center of Energy - Karen McPherson, Legislative Assembly of Alberta, Calgary-Mackay-Nose Hill - Mel Wilson, MJ Wilson and Associates Inc., PwC Canada - Dawn Bazely, Former Director of the Institute for Research and Innovation in Sustainability, University Professor, York University 	<p>Calgary Public Library John Dutton common area</p>

21:00 – 23:00	Group dinner in Calgary			
Day 4 – Friday – October 6th, 2017-				
07:30 – 18:00	<p>Field Trip</p> <p>Hosts:</p> <p>Ramona Big Head – Blackfoot Nation, principal of Kainai High School – PhD candidate University of British Columbia</p> <p>Dwayne Donald, Cree First Nation, University of Alberta, Curriculum Studies and Indigenous Perspectives</p> <p>First site to visit: Sundial medicine wheel http://wayback.archive-it.org/2217/20101208164612/http://www.abheritage.ca/alberta/en/archaeology/facts_finds_sundial_hill_med_wheel.html</p> <p>Second site to visit: Women Buffalo Jump https://hermis.alberta.ca/ARHP/Details.aspx?DeptID=1&ObjectID=4665-0079</p>			
18:00	<p>Arrival at Banff International Research Center (BIRS)</p> <p>Check in</p>			
18:30	Dinner at BIRS			
	Teams meet to work on their project proposal, work plan and press release			BIRS

Day 5 – Saturday – October 7th, 2017				
09:00 – 09:30	Making highways safe for people and wildlife crossing		Lynda Holleman, Banff Parks Canada	
09:30 – 09:50	Reflections of Days 3 and 4 and brief discussion		Participants (teams established previous days)	BIRS
09:50 – 10:10	Reflection and discussion of the Field Trip		Gabriela Alonso and Dawn Bazely	
10:10 – 10:30	Coffee Break			
10:30 – 11:30	Indigenous Knowledge and Socioecological systems		Dwayne Donald and Ramona Big Head	
11:30 – 13:00	Lunch			
13:00 – 14:00	Teams present the final version of their project proposal and press release (12 minutes each) Final reviewers feedback		PDS teams and reviewers	
14:00 – 15:00	Integrating Research and Innovation into Sustainability Science and Policy Connecting the dots: Inter and Transdisciplinary Research and Communicating Science to Society		Dawn Bazely	
15:00 – 16:00	Evaluation of PDS Canada Adjourn		Gabriela, Lily and Marcella	
16:00 – 16:30	Coffee Break			
Day 6 – Sunday – October 8th, 2017				
Travel day Departure to Calgary International Airport A table with time schedule for departure from BIRS to Calgary International Airport for the Seminar group will be available				