



## One Health Retreat

March 25, 2014  
Wanuskewin Heritage Park

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### Retreat Summary

#### Welcome and Retreat Goals:

Dr. Bruce Reeder

On behalf of the two co-leaders of the One Health Initiative, Dr. Bruce Reeder (College of Medicine) and Dr. Hugh Townsend (WCVM), Dr. Reeder welcomed the attendees (Appendix A) and thanked them for their participation in the two day event and commitment to the One Health Initiative.

In light of time management for the afternoon, participant introductions occurred within small discussion groups. Bruce introduced Laura Zinc, Director, Special Projects and Operations, Office of Vice President - Research who will be facilitating the retreat and Leane King, who will be capturing our group discussions and decisions to create a report from the retreat.

There are three goals for the afternoon:

1. To receive updates from our 4 research themes and two training programs,
2. Discuss the challenges and opportunities to date and potential solutions with students, guests and faculty participants in small group discussions,
3. In light of the above, consider refining our future direction and approach.

Bruce then asked Laura Zinc to facilitate the session.

#### Plans for the retreat:

Laura Zinc

Laura has had some previous involvement with the One Health initiative through Bruce and Hugh, but not the entire group. Part of the retreat was aimed at expanding connections. The retreat had a substantial agenda. There are many One Health activities occurring at the U of S: the One Health Workshop (Dec 2011) led to college initiatives, institutional initiatives and one health research and training group initiatives. The plan for the retreat was to review the four research themes through updates on activities, and address challenges and opportunities in small group discussions. A similar format was used to review the two training programs. The small group work focused on:

- What opportunities (at the UofS, nationally, internationally) are emerging in the field of One Health?

- What can and should be done to capitalize on opportunities and to address challenges faced by research themes and teaching initiatives (short and long term)?
- Should any changes in the research themes be considered?
- Are there other people, disciplines, units that should be engaged in the theme? How can their engagement be facilitated?
- Are there expectations of participants and groups that are not being met?

## **Keeping Ahead of the Curve: National and International One Health Opportunities**

Dr. Bruce Reeder

### *U of S Developments*

A visual depiction of the U of S One Health initiative and activities can be found in Appendix B.

The U of S One Health initiative has launched a Research Development Grant Program to stimulate research and interdisciplinary team development in the field of One Health. Sixteen proposals were received by the February 28, 2014 deadline, of which four will be funded. A second Call for Proposals, for a further four grants, will be issued in the fall of 2014.

Dr. Baljit Singh is leading a national team that is developing a full proposal for a Network of Centres of Excellence of Canada (NCE) in One Health. The successful proposals in this competition will be announced by the end of 2014. If funded, the One Health NCE will itself fund a range of relevant research projects via a call for proposal and peer review process.

Under the leadership of Dr. Beth Horsburgh, Associate VP Research, the U of S submitted an application for a Canada Excellence Research Chair (CERC) in Integrated Infectious Disease Mitigation on February 28, 2014. The decision regarding this application is expected June 30, 2014. If awarded, this grant would provide multi-year funding for the Chair and 4-5 associated faculty positions, as well as support for their research programs.

Collaborations within the U of S and internationally continue to be developed. Particular attention has been paid to partnerships with the Freie Universität, Berlin, GADVAS University, India, Makerere University, Uganda and the University of San Paolo.

### *The international landscape*

Several universities are leaders in One Health: University of Florida, University of Minnesota, Ohio State University, and University of California - Davis. Canadian leaders are the University of Montreal, University of Guelph, University of Calgary and the University of Saskatchewan.

Several large international One Health initiatives deserve mention:

1. One Health Initiative is led by several US professional organizations including the American Medical Association and the American Veterinary Medical Association ([www.onehealthinitiative.com](http://www.onehealthinitiative.com)).
2. One Health Global Network which brings together organizations in North America, Europe, Africa and Asia ([www.onehealthglobal.net](http://www.onehealthglobal.net)).
3. One health commission: [www.onehealthcommission.org](http://www.onehealthcommission.org)
4. [www.onehealthcommission.org/en/why\\_one\\_health/](http://www.onehealthcommission.org/en/why_one_health/)
5. One health forum: [www.onehealth.grforum.org/home](http://www.onehealth.grforum.org/home)

### *Funding Opportunities*

There are a range of National and International One Health funding opportunities. Funding opportunities for One Health exist in the regular and special competitions of the national Tri-council agencies. CDC (Center for Disease Control and Prevention) has been increasing its investment in One Health during the past 15 years. The Grand Challenges program regularly sponsors competitions relevant to One Health; International Development Research Centre (IDRC) sponsors ecosystem and human health program of funding. The U.S. Agency for International Development (USAID) sponsors an Emerging Pandemic Threats (EPT) program. The EPT program emphasizes "early identification of and response to dangerous pathogens in animals before they can become significant threats to human health". Phase 2 initiatives are being discussed, linking North American centers with "hot spots", where new disease threats have emerged in the past in developing countries. It was noted that within emerging zoonosis research there is US funding available to Canadian researchers with international collaborations.

### *Upcoming One Health Meetings*

- International Conference on One Medicine One Science (iCOMOS): April 2014 University of Minnesota, College of Veterinary Medicine  
<http://www.cvm.umn.edu/events/icomos/index.htm>
- Global Risk Forum (GRF) One Health Summit: Oct 2014 Davos, Switzerland  
<http://www.grforum.org/home/>

## **Four Research Themes: Progress and Challenges**

### • ***One Health Community Needs and Services:***

Co-Leaders: Dr. Tasha Epp (WCVM) and Dr. Phil Woods (Nursing)

Update on activities:

The current work of this group has been related to engaging the community as this is considered an emerging strength at the U of S. The group has held 2-3 meetings. The primary goal is to examine an integrated One Health approach to community health assessment, health provision, and animal-assisted support and therapy in selected communities. The work is divided into 3 subareas:

1. *Integrated community health assessment:* develop new methods for community health needs assessment that integrate human-animal-environmental dimensions. (Nursing - Phil Woods and Donna Rennie; Medicine - Cory Neudorf)
2. *Integrated health service delivery:* develop and evaluate an integrated inter-professional human and animal health service delivery model in selected communities, including rural, remote and Aboriginal communities; examine the professional and legal implications of such a health service delivery model. (Nursing - Phil Woods; Medicine - Cory Neudorf and Bruce Reeder; WCVM/SPH - Tasha Epp)
3. *Animal-assisted therapy:* develop and evaluate a pilot program of animal-assisted therapy for individuals with selected health conditions (Sociology/SPH - Colleen Dell; WCVM/SPH - Tasha Epp; WCVM – Claire Card.)

There is a specific pilot project underdevelopment to provide veterinary services to a northern Saskatchewan community (La Ronge) by means of a mobile clinic van. Integration with human health services in the community is being sought through Northern Medical Services. The group will focus on learning and teaching through a combined service model. A proposal was submitted to the U of S One Health call for proposals. As this is an emerging research theme the goals are long term.

#### Challenges:

The special challenges are engaging colleagues and finding opportunities for One Health approach. One example of One Health approach is the mobile veterinary service to the north as an entry point into to the field of direct human health and social services. Incorporating a research component into programs is an important factor to consider.

#### Moving Forward - Small Group Discussion and Feedback:

Initial conversations in this group reiterated the need to support the education groups – both undergraduate and graduate training opportunities and certificate programs for One Health. It is key to develop the future leaders who will sustain combined service delivery models.

It was also noted that while we often focus on the service component that there needs to be focus on research to evaluate new models of service delivery. The WCVN Service learning initiative that will start in spring for the area of La Ronge, SK. will bring an opportunity to trial experiential learning for veterinary students as well as a possible format to trial a One Health service delivery model. While the veterinary clinics will start this year and there are components already in place to assess the impact of these clinics on the dogs and the population control aspects for the community, there will also be a segment of research assessing how this opportunity alters the learning, understanding and practice of One Health for the veterinary students. As the initiative progresses, there will be opportunities to combine with Public Health, Family Medicine, Nursing and Psychiatry through already established networks or soon to be established networks.

The group discussion also focused on the need to develop a mechanism to bring all of the theme groups back together. It was felt that an umbrella over One Health would be necessary to ensure that the research themes do not become four silos within One Health. This was especially important as the group members were all torn between wanting to contribute to the community needs and services group but also the desire to be involved in the other session for which they are also members. The community needs and services group could be considered a common theme within the other three research themes: food, water and zoonoses. The commonalities are communities, assessment methods, tools and delivery.

Additionally, communication and information sharing across themes is vital. It was noted that we are often working in the same communities doing different research projects but these could benefit from broad scale coordination of research projects within these communities. For example, the CCHSA group is conducting surveys of their 28,000 farm families already and other groups wanting information from farm families could collaborate on a combined survey. Three different groups identified that they were working in the same northern community – on issues related to water quality, dogs, and respiratory disease – this demonstrates that currently information sharing across themes is not occurring and requires future networking improvement. We need to continue to break down the silo mentality which requires individuals

to make efforts to connect and for mechanisms to be in place for those connections to be fostered.

- ***Infection diseases shared by animals & humans***

Co-Leaders: Dr. Emily Jenkins (WCVM) & Dr. Shelley Kirychuk (Medicine)

Current strengths at the U of S and on this team exist in the fields of veterinary infectious diseases, human infectious diseases, epidemiology and environment health. The primary goal for the group is to develop evidence on which to base research priorities and public health policy.

Update on activities:

A SHRF Phase 1 application was successfully funded; "Assessing and Mitigating Risks of Infectious Disease (AMRID) (in SK)". The AMRID group is an inter-professional group from U of S colleges, including senior and junior researchers, and collaborators from across Canada (wildlife health, environment, agriculture, public health, veterinary microbiology, human infectious diseases, law and government). The SHRF Phase 1 grant is a networking grant designed to build the research group (breakfast meetings), as well as, provide funding for hosting the present workshop and retreat. The AMRID Phase 1 overall objective is to assess risks, risk perception and prioritize zoonoses from a public health perspective in Saskatchewan. This is especially relevant since the 2005-08 national notifiable zoonotic disease data indicates that Saskatchewan rates are higher than the Canadian average.

Next steps:

- *Risk assessment*: incorporate the results of an expert opinion disease prioritization exercise and key informant and community interviews
- *Risk perception*: design and conduct interviews with public health and community leaders in rural and remote areas of Saskatchewan
- *Risk management*: conduct cost-benefit analyses weighing the inherent risks and costs of management, as well as the nutritional, socio-economic, and cultural benefits of intact relationships among people, domestic animals, wildlife, and the environment (potentially Phase 2 activity)
- *Risk communication*: share knowledge translation materials with stakeholders

Year 2 (April 2014-March 2015) plans: hire another MPH student (for key informant interviews), submit proposals to hold a One Health workshop and breakout session at the 7th International Symposium on Safety and Health In Agriculture and Rural Populations: Global Perspectives at the UofS in October 2014, and work with the larger One Health group to develop and update a One Health website. We will apply for SHRF Phase 2 funding in fall of 2015.

The Canadian Centre for Health and Safety in Agriculture (CCHSA) continues One Health initiatives. Dr. Shelley Kirychuk and Dr. John Gordon are Co-PIs on a CIHR training program entitled: Public Health and the Agricultural Rural Ecosystem (PHARE). The project began in 2002 and has funded 96 Masters, PhD and Post-doctoral trainees across 14 disciplines. Trainee research must have a health outcome/focus and relate to public health, agricultural health, rural health and/or ecosystem health. There is a foundational class, seminar series, and annual conference which provide the structure and incorporate one health issues. The CIHR funding

concludes in 2016 and some students will cross over to CREATE.

CCHSA has a Saskatchewan Rural Health network comprised of 28,000 farm families. These families' rural municipalities (RM's) subscribe as members and their farm families receive support in the way of health and safety training and advice. CCHSA currently has 200 of Saskatchewan's RMs enrolled in the program. Farmers are potentially one of the highest risk groups for potential zoonotic impacts. The network regularly communicates with these families, and hosts a website, Facebook and twitter account. The network may be a good avenue for communicating to risk populations.

#### Challenges:

Current challenges include the cessation of PHARE funding in 2016, the requirement that faculty members can only serve as co-investigators on a single SHRF group grant, a silo mentality between U of S One Health research themes, incorporation of a One Health framework in individual research programs, continuous buy-in from existing group members, and growing the group.

#### Moving Forward - Small Group Discussion and Feedback:

Opportunities for this research theme include the fact that emerging environmental and vector-borne zoonoses will only become more important from a public health perspective in the future. We need to identify vulnerabilities, and focus on increasing resilience and preparedness in Canada. We need to broaden our focus nationally and internationally, where zoonoses and livestock diseases remain an important problem for food security, poverty, and public health, possibly through ITRAP training program links to India and Brazil, and EU funding.

At the U of S, we have opportunities to collaborate with federal agencies and NGOs including Environment Canada, Canadian Food Inspection Agency, the Canadian Wildlife Health Cooperative, and industry partners. We can capitalize on expertise in health economics, wildlife health, rural health, 'country food' safety, and First Nations health. We need to invest in surveillance science and public assurance. Emerging challenges include the fact that we are losing some of our One Health champions at the federal level - this does create an opportunity for academia to take up the torch, and for veterinary colleges in particular to take a leadership role, in collaboration with federal partners (i.e. from Public Health Agency of Canada). We need to continue to work to engage people from a broad array of disciplines, including but not limited to, wildlife biology and ecology, agriculture, environment, and social science. Several workshop participants were interested in joining this infectious disease working group.

Funding opportunities exist through the U of S One Health Development Grants and the NCE development. Proposals have been submitted by the research theme members.

- ***Water and Health***

Co-Leaders: Dr. Lalita Bharadwaj (Public Health) & Dr. Cheryl Waldner (WCVM)

This group consists of a wide range of members (public health, veterinary medicine, VIDO, SENS, arts and science) and was established on campus prior to the One Health Initiative. The group has established broad goals: To ensure the sustainable provision of a healthy water supply for all life forms through research on water supply, sanitation and health; impacts of land use, hydrological change and resource development; and policy assessment. The Safe Water for

Health Research team has established partnerships with the Water Security Agency, FSIN, International Centre for Northern Governance and Development, First Nations Inuit Health Branch and Water Economics, Policy and Governance Network (WEPGN).

Projects to date:

- The group is currently working on a CIHR funded project: Water Regulations: Impact on First Nations health equity and promotion. Which utilizes in home surveys; partnering with a community member who connects with people in the community.
- The group also has a Phase 2 Health Research Group Grant from the Saskatchewan Health Research Funding: Safe Water for Health Research Team which investigates the geographic distribution of drinking water quality and the association with chronic disease. This project involves a PhD student (WCVM) who recently completed the CREATE iTrap program. The project also includes a community based risk assessment conducted by MSc student (SENS)
- This group also involved local health regions and the Ministry of Health (MOH) by analyzing water quality data from semiprivate wells.
- Funded by Health Canada, the group is also working with the Federation of Saskatchewan Indian Nations (FSIN) analyzing data collected in First Nations communities in 2006 and 2010.
- There are several other grad student projects underway with MSc (Geography and Planning and SENS) and PhD (SENS & CH&E) students.

Challenges:

It takes time to build strong relationships with communities and complete cooperative community-driven research. Access to appropriate health outcomes data is not readily accessible or in some cases not available, and there are limited options for additional funding for community based work.

Moving Forward - Small Group Discussion and Feedback:

The combined Water and Health/Food Safety session discussion included 3 scientists from VIDO, 1 from PHAC, and 1 from SENS (for the water part of the discussion). There were several group members absent who were unable to make this workshop due to the timing. The time for the water discussion was very limited, but focused on the fact there are currently a large number of projects and students interested in this area, but limited number of faculty who have actually initiated or taken the lead on research initiatives. There is a very real need to get more faculty members involved in this work. The group has been successful in incorporating people from the social sciences through to laboratory innovations. The group would benefit from stronger linkages with the GIWS and toxicologists in SENS. Another identified limitation is the challenge involved in gaining access to appropriate health outcomes data for infectious enteric disease.

- **Food Safety**

Co-Leaders: Dr. Cheryl Waldner (WCVM) & Dr. Volker Gerdtts (VIDO)

Specific goal: To improve food safety in Canada through research on enteric disease; food production contamination; and antimicrobial resistance (AMR). This group has recently lost a strong leader in AMR (Dr. O. Larios, Medicine, left the U of S).

#### Projects to date:

- MSc student in epidemiology completed a project in collaboration with the Public Health Agency of Canada & Canadian Regulatory Veterinary Epidemiology Network examining microbial levels in Saskatchewan ground beef from different packaging and processing environments
- PhD student in public policy using agent-based models of food safety systems involving the interaction of consumers, inspectors and retail outlets (in progress)
- PhD student in epidemiology (co-supervised by Jo Anne Dillon) is looking at factors associated with antimicrobial resistance in gonorrhoea infections (in progress)

#### Projects under development:

- Application of dynamic modeling and risk assessment methodologies to expand the application of AMR surveillance data in decision making in collaboration with PHAC Canadian Integrated Program for Antimicrobial Resistance (CIPARS) group
- Antimicrobial use in collaboration with the Beef Cattle Research Council. 3<sup>rd</sup> year research elective project to develop questionnaire. MSc student to start summer 2014
- Application of iEpi cell phone application for reporting and investigating enteric disease
- Location sensing technology and AMR in facility-acquired infections
- CFI application from College of Agriculture and Bioresources that includes an objective reducing the prevalence of antimicrobial-resistant bacteria in cattle by integrating antimicrobial stewardship, infectious disease control and receiving protocols

#### Other progress in the area of food safety:

- Enhanced laboratory capacity for AMR research at the WCVM: Dr. Joe Rubin and links to AMR in humans in primary care settings.
- Student practicum experience with PHAC outbreak management group through the ITrap program
- Substantial enhancement of food safety curriculum in PBL ITrap class, Infectious Disease Epidemiology, and Environmental Health courses in the SPH
- Visit by Dr. Nigel French – attention to growing interest in application of bioinformatics, molecular/genomic epi, network analysis and spatial epi to food safety issues

#### Challenges:

There are few funding opportunities available for food safety and food borne disease research in Saskatchewan. The SHRF policy of limiting membership to one team grant poses a challenge when team members are involved in multiple projects. Enteric infectious disease crosses both food and water therefore the same people are involved. There is a need for additional lab support in food borne disease on campus and in SK. To date the Global Institute of Food Security has expressed little interest in food safety research.

#### Moving Forward - Small Group Discussion and Feedback:

The discussion related to AMR and food safety focused on trying to find a common theme on which to move forward based on the current areas of focus of the participants. The activities of the participants could be characterized as developing and/or optimizing the surveillance strategies and new diagnostic tests as well as the development and application of intervention strategies. There was recognition by the group members of the opportunity to leverage the strength at the UofS in complex systems science and model building to move forward on both

objectives. While there was recognition that we have done a lot more work together since the start of the One Health program than we did before, we are still missing important opportunities to work together. For example, members from VIDO expressed interest in developing stronger ties with the rest of the campus community. There was also recognition of the need to revisit the opportunities to link with Phyllis Shand and others within the food processing unit on campus to see if there are opportunities for collaboration. The overall message was the need to continue to improve communication across research groups within this theme.

## **Two Training Initiatives: Progress and Challenges**

- ***Undergraduate***

Leader: Dr. Patricia Farnese (Law)

A proposal was put forward to the Council of Health Sciences Deans for an undergraduate certificate in One Health. The proposal has been developed with the support of the Gwenna Moss Centre for Teaching Effectiveness (GMCTE) through a Curriculum Innovation Grant. Enrollment will be open to 30-40 students in 3<sup>rd</sup> or 4<sup>th</sup> year of a direct entry undergraduate degree and 2<sup>nd</sup> and 3<sup>rd</sup> year students enrolled in a professional college. Students will be awarded a Certificate of Proficiency in One Health after completing 12 credit units that satisfy the following requirements:

- One Health Foundations course (3 cu)
- One Health experiential learning course (2 cu)
- One Health capstone course (1 cu)
- 6 cu from identified list of existing One Health-relevant courses available at the U of S

And

- Attendance at a minimum of 8 One Health seminars (non-credit)

As this is an undergraduate program the goals are to expose students to the concepts of One Health, to apply critical thinking, and to improve Interprofessional communication skills. The next steps involve hiring a PhD student for the task of designing the curriculum, then submitting it for administrative approval in the fall 2014.

Challenges:

Finding a home for the course was extremely challenging. It has now been approved to be housed within WCVM. Timetable and scheduling to fit various colleges is difficult. Some students (vetmed/med) could join for modules.

Moving Forward - Small Group Discussion and Feedback:

The undergraduate education working group sought feedback regarding two issues:

1. The recruitment of students
2. The design of the 2 credit experiential learning course

The working group was encouraged to link with existing programs and to explore ways that the core courses developed for the One Health Undergraduate Certificate of Proficiency can be recognized as electives in other programs. In programs, such as medicine and veterinary medicine, where experiential learning requirements already exist, it is important to design our courses to align ourselves with those program requirements. Participants felt that an immersion

experience rather than a research project would be most suitable given the truncated timeframe in which this course is expected to be delivered (i.e. as a one week course during the mid-term break) and the skill level of the targeted students. The participants also thought that, where possible, experiential learning opportunities be linked with offerings to graduate students or existing opportunities such as SWITCH and the northern experience in Veterinary Medicine. There was also discussion of using the "flipped classroom" approach with lectures given online and discussion and problem solving in class, or by offering a summer school program.

Next steps:

The group needs to determine how to best means to attract and accommodate students from various colleges into the program (such as vetmed 3rd year students in the Eco health elective)

- **Graduate**

Leader: Dr. Vikram Misra (WCVM)

The Graduate program in One Health is entitled: Interdisciplinary training program in Infectious Diseases, Food Safety and Public Policy (ITRAP) funded by the NSERC-CREATE (Collaborative Research and Training Experience) Program. Instead of developing a free standing program, ITRAP was developed as an add-on program; enrolled students are completing Masters or PhD degrees in their own departments. The program objective is to help an international group of graduate students train themselves to solve complex health-related problems using a holistic approach and come up with implementable solutions. The components of the program are an:

- Interdisciplinary Approach to Mitigating Disease (Case Based) (13 weeks)
- Seminars in One Health (8 weeks)
- Summer School – Communication skills, Career development, Science Symposium (1 week)
- Internship (3-6 months)

Typical completion is 1 year and the program aims for continue student involvement thereafter.

The program is now in its second year. Most of the students in the first cohort began the program in January 2013 and have now completed the required courses, attended the Summer School on One Health (Berlin June 2013) and the communication and career development workshop (Saskatoon, November 2013). Some of the students have completed their internship as well.

It is hoped that students would continue their involvement with the program after completing their training and also develop interdisciplinary collaborations. We were very encouraged to see that indeed most of the first cohort of students is still participating in the training program by contributing to the courses and discussions, and helping with recruitment. In addition, two of the students who are in PhD programs in the Department of Veterinary Microbiology and the School of Public Policy have initiated a research project on decision-making regarding the allocation of public resources for mitigating diseases.

Our second cohort includes students from the University of Saskatchewan, McGill University, University of Prince Edward Island, Free University of Berlin, the Indian National Virology Institute and GADVAS University in Ludhiana, India. They are currently participating in the case-based course on Interdisciplinary approaches to mitigating disease. This year the summer

school, planned for June in Waskesiu and Saskatoon locations, will highlight communication skills and career development and include scientific sessions on the emergence of coronavirus diseases and the One Health impact of the Athabasca oil sands development.

The ITRAP program will form the basis of a formal graduate Certificate Program in One Health currently being developed with the assistance of a Curriculum Innovation Grant from the Gwenna Moss Centre for Teaching Excellence.

#### Challenges:

The feedback received from the first cohort of students indicated communication using WebEx was a barrier to effective learning. Students also identified the need for training in a framework suitable for addressing complex One Health problems. In its second year, the first case was presented to students as a training case to present the Policy Sciences Framework and its application. It is a challenge to entice and recruit students from a diversity of colleges, currently the majority of students are from the veterinary medicine field.

#### Moving Forward - Small Group Discussion and Feedback:

The group discussions were extremely helpful and the group came up with suggestions on more effective recruitment of students from a wider background as well as how students may be able to retain the Interprofessional education experience and use that in successful collaborative practice careers.

A student from the program's first cohort suggested that in her experience we had "undersold" the program and that we could do a better job of highlighting its advantages and potential career prospects available to its graduates. Portraying the program as an exclusive experience might also attract more top quality graduate students. In keeping with the program's interdisciplinary goals we might also try to attract students considering beginning a graduate program and encourage them to select co-supervisors in complementary fields and an interdisciplinary project.

To apply concepts learned in the program to their own areas of research, students could be encouraged to include in their graduate theses an appendix describing how their unique discoveries fit into the One Health framework or how, viewing their work through an interdisciplinary lens, their research might further benefit society.

#### **Research Theme discussion**

Discussion questions: Are the current research themes appropriate? Do they need adjustment? How do we achieve the balance between strengthening theme research groups and enhancing cross theme interactions and research?

Participants noted that communication between themes is lacking and needs to be improved; it is important to breakdown silos and collaborate between one health themes, we need to develop an overarching One Health umbrella, we need the "Network" in one health network, we need "super connector" individual(s) to promote collaborative research and coordinate projects. (At the workshop, during the theme updates it was realized that 3 initiatives, unknown to each other, were approaching the same community. It is crucial to know what each other is doing and where.) Collaborative teams tend to be more successful. The Office of the Vice-President Research currently has a mapping project of research grants occurring in

specific areas. This may serve the One Health coordination activities. The proposed oversight role is essential to the success of the One Health Initiative and the coordination of multiple projects. Additionally, having an individual assist with grant writing would be beneficial.

One method for improved communication is the development of the One Health website. One Health co-leads, Bruce Reeder and Hugh Townsend, have met with EMAP regarding the structure and design of the website. A staff member would need to be responsible for the website as it must be kept current and be updated with activities occurring in each theme. A comprehensive One Health communications strategy needs to be developed and implemented.

At this time, it was felt that the research themes do not need adjustment, but the members of the themes need to connect more, and a reporting structure from each theme needs to be developed. Suggestions on how to connect members included: seminar series, wine and cheese social events with project highlights, newsletter, and website blog. The seminar series was not viewed favorably as there are already an excess of such events. There was an expressed interest to "get away from individual jargon and Power Point presentations". SENS has recently conducted a "speed dating" event which may be an approach that we consider with One Health projects. There was favorable response to proposed informal/casual events as opportunities to connect often foster successful collaborations. Regarding the One Health website, there were suggestions to have students blog about their experiences, or create short (two minute) videos once a week that highlights an interesting One Health update.

### **Summary and Closing Comments**

Dr. Doug Freeman

Dr. Freeman noted that One Health is a global imperative and commended the attendees' efforts and their time commitment for the workshop and retreat. He highlighted that at the recent meeting of the American Association of Veterinary Medical Colleges meeting One Health had been a primary focus. He sees students as the change agents for advancing collaborative practice. There are One Health initiatives happening worldwide with which we can and must connect.

Adjournment

**Appendix A**  
**List of One Health Workshop and Retreat Registrants**  
**March 24th & 25th, 2014**  
**Wanuskewin Heritage Park**

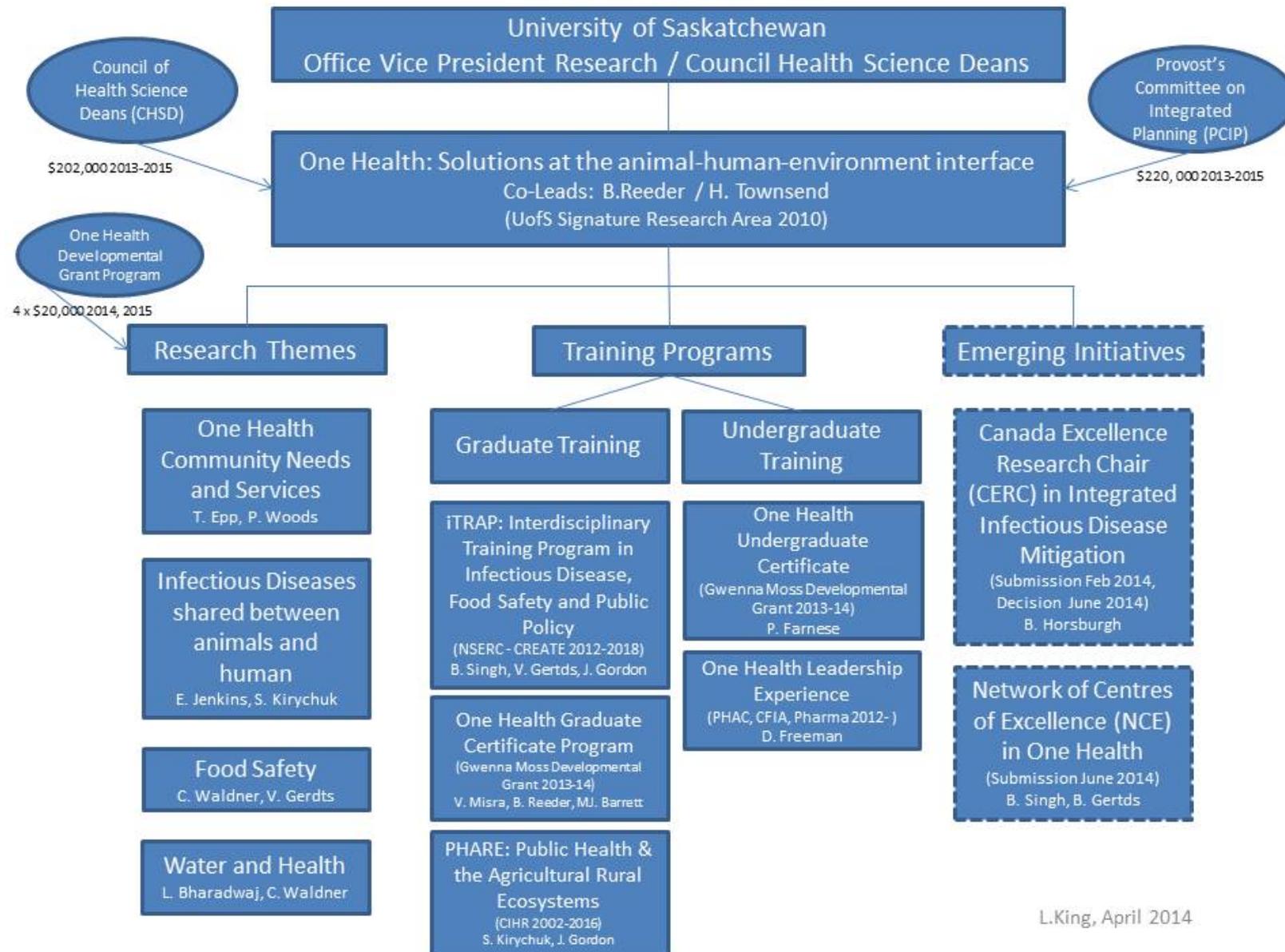
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**Appendix B**  
**University of Saskatchewan One Health Initiative**



L.King, April 2014