

Centre for Veterinary Epidemiological Research Annual General Meeting AVC 280N, 11 March 2020, 1:30 – 3:00 p.m.

Attendees:

Dr. Henrik Stryhn
Dr. Jaewoon Jeong
Dr. Javier Sanchez
Dr. João Romero
Dr. Krishna Thakur
Landon Warder
Dr. Shawn McKenna
Dr. Thitiwan Patanasatienkul

Jenny Yu (note-taker)

Dr. J T McClure

Dr. Jason Stull Dr. Jeff Davidson

Dr. John VanLeeuwen

Dr. Katy Proudfoot

Dr. Passawat Thammahakin

Dr. Sonja Saksida

Dr. Thitiwich Changtes

Welcome:

The CVER Director, H. Stryhn, welcomed attendees and offered to chair the meeting unless someone else wanted to do that. There were no objections to H. Stryhn chairing the meeting.

1 Approval

1.1 Agenda and Minutes

The agenda was unanimously approved, as were the minutes from the previous AGM (11 March 2019).

1.2 Business arising from the minutes/last meeting

The CVER Biennial Report 2017 – 2018 was sent to the Interim Vice-President Academic and Research in June 2019, and its receipt was acknowledged. All other business would be covered by the current agenda.

2 New Business

2.1 Faculty members in epidemiology

Continuing last year's discussion on Epi related faculty members: 1) The search for a Tier 2 Canada Research Chair (CRC) in Quantitative Veterinary Epidemiology was undertaken in August 2019; the application by the selected candidate was submitted last October; we expect notification from CRC this spring. 2) The search for a faculty Position in Aquaculture Population Health was also undertaken in August; Sonja Saksida started in this position in December 2019. 3) The position for Research Chair in Risk Analysis was discussed with the Dean of AVC and CFIA; however, the prospects are not promising, and the idea has been put on hold. 4) The development of a proposed Research Chair in Dairy Science has been delayed by discussions with the industry, but seems ready to move forward again. 5) The

announcement of a search for an Aquatic Epi Faculty Position (replacement for Raphael Vanderstichel's position) will be posted soon; the search committee has been established. 6) A proposed Faculty Position in Veterinary Infection Control & Public Health was brought up for discussion within the College. However, it does not seem to have received much support at Dean's Council.

2.2 Recruitment of graduate students in epidemiology

The new AVC Policy on Distribution of Overheads from Research Contracts, that was supposed to help with re-establishing the graduate student scholarships, is in effect. As explained by Larry Hammell after the meeting, many contracts are still governed by old rules; once a transition period is over, more funds will be generated from the policy. The new cohort of epi graduate students is quite sizable (e.g. 6 local students in VHM 812), thanks to funded programs in dairy research and antimicrobial resistance (among others). For the coming September, we know so far that one or two students are expected to start a program under the supervision of K. Thakur, and one student under J. Sanchez.

2.3 Epi on the Island in 2020

This year we have put up a more ambitious program with three 5-day courses (Multilevel Modelling, Questionnaire Design and Measurement Scales, Health Economics). Two of the course schedules are posted on the website already, and the last one will follow soon. Online registration is available, and the announcement has been sent to the Epivet mailing list. There are just a few registrants so far, and we hope to also get some local participants. The usual message about how to register for local participants will be posted on the over e-mail list soon. We will monitor the developments with the coronavirus, but at this point there is no indication that it will affect the plans for our (small) event three months out.

2.4 ISVEE 2021 – update

ISVEE 16 will be held in Halifax (9-13 August 2021) and is organized by CVER together with a conference company. Many of our CVER members sit on the local organization committee. Some parts of the conference program are close to being finalized (plenary talks, special sessions). Planning of the pre- and post-conference workshops is underway. The current plan is for workshops of 1 or 2 days in Halifax prior to ISVEE and workshops of 1-5 days' duration after ISVEE at the AVC. Registration for the conference is expected to open by the end of this summer or early fall.

2.5 Governance

2.5.1 Operations guidelines and steering committee

There was no real progress made since last year's AGM; as the term for the current director is set for three years, H. Stryhn will make sure a proposal for operations guidelines, and including rules for the steering committee, is brought forward at the next AGM.

2.5.2 Membership rules/categories

The rules approved at last year's AGM have been implemented both with regard to our membership lists and invitation of new members to CVER.

2.5.3 Meetings

Three CVER Research Seminars were held in 2019 (McIsaac, Nødtvedt, Dohoo & Sanchez). An invitation is out for a spring Research Seminar this year, but no reply yet. CVER welcomes its members to suggest external researchers to give a research seminar for the group when possible and relevant.

2.5.4 Activities

CVER webpages are being continuously updated with news items; two e-mail distribution lists hosted by CVER (cver; epivet) are running smoothly – all thanks to Jenny. As an example of smaller webpage updates, CVER's Resources and Links page has been simplified. As with all web page development/maintenance, the best results are achieved with an active group, so please contact us if you have ideas or see needs for improvement.

2.5.5 CVER vision

The last developed (informal) vision document is about two years old, and the core CVER group recently met to discuss an update of it. We think its general vision is still valid but should be expanded to include new additions in both personnel and research areas to our group. Work is also underway to align our core course offerings (Epi I-II, Stats I) in order to fit better with the increasing number of graduate students in applied epidemiology (e.g. residents). This will be incorporated into the vision document and hopefully implemented from the fall semester. We believe a better integration between courses will solve some of the concerns that in the past led to considerations about restructuring the Epi-II course.

2.6 Other Activities

2.6.1 CAVEPM lifetime achievement award

The CAVEPM committee is looking for nominations across Canada for people who have made strong contributions to epidemiology in teaching and research. Two people have already been nominated for CAVEPM 2020, but some more names are expected.

2.6.2 CVER banner

J. VanLeeuwen suggested purchasing a new banner for CVER and displaying it within the Department to show we are the Centre for Veterinary Epidemiological Research. It was suggested to acquire it for this year's Epi on the Island summer courses.

3 Updates on Centres, Groups, and Projects

3.1 OFI – presented by K. Thakur and S. Saksida

There are two phases of funding under OFI. Phase 1 projects are led by I. Gardner, H. Stryhn and C. Revie. I. Gardner's projects will end in 2020. Phase 2 projects were funded last month with \$1.3M in total for UPEI. These projects will last 3 to 4 years. K. Thakur is working with Epizootic shell disease in lobster with the aim to understand the microbiome and transcriptome profile of diseased and healthy lobsters and predict the risk of the disease in Canadian lobster fishing areas based on different scenarios of climate change for next several decades. S. Saksida and J. McClure are working on antibiotics usage in aquaculture. This is intended to compare the effects of different administrations of antibiotics treatments at farms on fish (salmon) tissue. The project will also involve antimicrobial resistance.

3.2 CAHS – presented by K. Thakur on behalf of Larry Hammell

There are two current projects in Indonesia related to shrimp diseases. The objectives are to understand the bioscecurity practices of shrimp farms and identify risk factors associated with two most important infectious diseases. Two postdocs are working on these projects. Another postdoc is needed and expected to work until the end of 2020. CAHS is also involved in understanding the spatiotemporal pattern of infectious salmon anemia virus (ISAv) strains distribution in Newfoundland and evaluation of diagnostic test performance of ISAv.

3.3 Dairy Research Groups – presented by S. McKenna, J. Sanchez and J McClure

The primary activity is disease monitoring for Johne's, BVD, and BLV in Atlantic herds. Johne's monitoring has been ongoing in Atlantic regions for many years and will be continued. Detection of BVD at the herd level using novel consumption services swabs will be further examined. The BLV project aims to facilitate suggestions for structural changes of management to identify PVL and BLV-infected cattle.

Continuing the dairy cluster projects initiated in 2018, the Canadian on-farm dairy antimicrobial resistance and antimicrobial use surveillance program involves 150 farms in 5 Canadian regions. The project is progressing well. Three more years are left to collect data from those farms and apply treatments to the samples. Another source of funding from the PEI government is for a similar project for 30 farms in PEI. The farms have been recruited. The samples collected from these farms will also be used in an antimicrobial resistance project funded by NSERC. That funding will end in March 2023. Another project is to evaluate the effects of intervention treatment on farms in terms of coaching, mentoring and understanding the behaviors of farmers.

A calf longevity project aims to investigate how genetic profiles and management practices relates with the milk production and calf longevity in milking herds. We are also working on the same data from the project funded from PEI government, but we will be focusing on the study of animal welfare. Another study in animal welfare led by S. McKenna focuses on udder pain and discomfort in cows at drying-off.

3.4 Shellfish Research Group – presented by Jeff Davidson

The Shellfish Research group continues to liaise with the PEI Aquaculture Alliance, the PEI Shellfish Association, and aquatic farmers and fishers to identify and conduct projects relevant to their needs. Projects during this time frame continue to focus on shellfish productivity and health. Specific projects include the continuation of a multi-year project evaluating oyster enhancement on public fishing grounds, field sampling of estuaries to identify ancestral populations of oysters, the continuation of a project exploring Irish moss – green crab interactions, verifying oyster farming losses due to Hurricane Dorian, a project identifying biogeographical patterns of tunicates utilizing eelgrass as substrate in the western North Atlantic, and a project currently under development designed to control *Vibrio parahemolyticus* in harvested oysters. A lack of field personnel support in our group, particularly the loss of access to a full time shellfish technician, has limited the number and scope of field-based studies conducted in the last year.

3.5 Sir James Dunn Animal Welfare Centre – by Katy Proudfoot

Dr. Kathryn (Katy) Proudfoot started as the new director of the Centre on October 1, 2019. The Centre also hired a new administrator Sherry Pineau, who will start the work in April 2020. The Centre offers

grants every year in the fall. The funds are somewhere between \$130k and \$150k for research and service. This year, the Centre has four research projects and two service projects. S. McKenna was awarded a research project (mentioned under 3.3). J. VanLeeuwen received one research project and one service project, the latter involving veterinary services in northern Canada, in collaboration with Vets without Borders. There are also scholarships for students; however, the funds for this ran out last year, but are hoped to be secured in the future. The Centre funded J. Sanchez's PhD student Mariana Fonseca for one and a half year.

3.6 Smallholder Dairy Research Group – by John VanLeeuwen

We have now finished the 4-year \$1.2M interdisciplinary project funded by the Community Foundations of Canada (CFC). There were 6 graduate students involved in this project (known as Queen Elizabeth II Scholars – QES), and additionally 14 UPEI student interns (8 veterinary students and 6 nutrition students) and many UPEI professors. In 2018, phase 2 of this project started with another 4 years of funding (\$0.75M) for research involving smallholder dairy farmers in central Kenya through the QES program. This second phase will have another 3 Kenyans coming to UPEI for a Ph.D. and 2 M.Sc. degrees, and another 13 UPEI veterinary and nutrition undergraduate students going to Kenya for 3 month internships. Topics researched through the phase 2 program include mastitis control (Edward Kariuki), bovine viral diarrhea virus control (Daniel Muasya), and enhanced nutrition of farm families and school-aged children (Julie Oyoo). Peter Kimeli's calf comfort project funded by SJDAWC is winding down, with a defense planned for August 2020. There are 3 other Kenyan graduate students registered at Kenyan universities who will piggy-back onto these projects: a dry cow antibiotic and teat sealant trial; ketosis epidemiology; and a project evaluation project. Smallholder dairy farm projects were completed by graduate students in Thailand, Colombia and Ethiopia in the last year. New projects are being considered, including one in Ethiopia on economics of animal disease.

Two Canadian partners have been involved in these research projects: Farmers Helping Farmers (FHF) and Veterinarians without Borders-Canada (VWB). VWB is about to renew its Volunteer Cooperation Partnership program with a 7-year \$9M project in six countries with Global Affairs Canada: Kenya, Ghana and Senegal in Africa, and Laos, Vietnam and Cambodia in SE Asia. FHF has also just signed a 4-year \$1.7M project in Kenya, funded through Global Affairs Canada. There will be an evaluation component for both of these projects. During 2019-20, there was another VWB student internship group of 3 veterinary students providing knowledge translation training and services to animal health professionals and smallholder dairy farmers in Kenya. There was also another FHF rotation of 3 UPEI veterinary students and 6 Nairobi veterinary students providing knowledge translation training and services to animal health professionals and smallholder dairy farmers in Kenya.

3.7 Antimicrobial Resistance and Risk Analysis Groups – by Javier Sanchez

The AMR group strives to strengthen the risk assessment on AMR research and hopes to get funding from NSERC for a post doc (submitted proposal led by Marya Ahmed from Chemistry, granted after the meeting). The Risk Analysis group has several projects: 1) The group is finishing a joint project funded by Marine Harvest and CERC on the risk of development of tolerance to freshwater treatments in sea lice. Crawford Revie and Maya Groner are also part of this project. As a post-doc, Emilie Laurin has been working on the second part of this project on the development of a risk assessment framework. 2) The group finished work related to the risk assessment of Cryptosporidiosis in the human population on PEI by the consumption of raw oyster (T. Patanasatienkul). 3) Funding was received from the Canadian Animal Health Surveillance System to develop a framework for case definitions for outbreak surveillance

under different criteria (E. Laurin). 4) A risk ranking project is being discussed with the Government of PEI to develop a methodology to prioritize resources for animal diseases within PEI. 5) The group is also collaborating with ILRI to assess the impact of aflatoxin in milk on human health in Burkina Faso. A PhD student based in Switzerland is developing the model.

3.8 Other

J. McClure mentioned joint projects with J. Stull on antimicrobial resistance in small animals, using data from AVC's diagnostic lab. Additionally, a graduate student project surveys the attitudes towards antimicrobial resistance and the use of antibiotics among veterinarians in practice.

4. Other Business

No businesses not covered in the previous items were brought up at this point.

Adjournment

The meeting was adjourned at 2:41 p.m.