

Centre for Veterinary Epidemiological Research Annual General Meeting (Hybrid in-person and Zoom virtual meeting) 21 March 2022, 10:00 - 11:30 a.m.

Attendees:

Dr. Beibei Jia Dr. Anna Costa Dr. Caroline Ritter Dr. Crawford Revie Dr. Emily John Dr. Elizah McFarland Dr. Henrik Stryhn Dr. Ian Dohoo Dr. Jeff Davidson Dr. Ibrahim Elsohaby Dr. Katy Proudfoot Dr. John VanLeeuwen Dr. Larry Hammell Dr. Krishna Thakur Dr. Mariana Fonseca Dr. Kristen Reynolds Dr. Shawn McKenna Dr. Rasaq Ojasanya Jenny Yu (Recorder) Dr. Sonja Saksida

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 Approvals

1.1 Agenda and Minutes

The agenda was unanimously approved, as were the minutes from the previous AGM (8 March 2021).

1.2 Business arising from the minutes/last meeting

- Section 1.2 of the minutes mentions the purchase of a CVER banner. Because the Epi on the Island event in 2021 was held entirely online, no purchase was done. A purchase will be considered for the ISVEE post-conference workshops in 2022.
- Section 2.5.3 mentions a planned update of the CVER vision document, but this has been postponed until the (impending) arrival of our new faculty member in aquatic epidemiology.

2 Director's Report

A general CVER update for the past year had been provided in the Director's report (Appendix). The discussion focused on specific points from the report, in part identified in the agenda.

2.1 Faculty members in epidemiology

Although CVER has added new positions in aquatic epidemiology (as a result of the CERC program) and a Canada Research Chair, the group has not been successful in growing its faculty membership through the departmental and AVC process. All tenure-track positions recently brought forward by the department have received insufficient support at the college level to be funded; we share the

frustration over the lack of success for our proposals with the clinical large-animal section of the department. This has happened also for positions currently filled by contract faculty, where the added financial commitment would seem minor. It was suggested that CVER engages more directly in the process and proactively (well in advance of the staffing prioritization deadlines, typically in the fall) engages in discussions within and across departments to elicit support for their proposal(s). It was noted that *ii*) proposed positions need to be seen as assets for teaching, research and generation of revenue, and that *ii*) it could be an option to arrange with the clinical section of the department to only bring forward one proposal for each call for positions. As an addendum, it was later mentioned (item 4.3) that the planned Dairy Research Chair position is still up in the air and needs further discussion.

2.2 CVER sponsorship for the ISVEE 16 conference

CVER can only sponsor the conference by the contributions from individual CVER members because CVER does not have funds of its own. Some members have agreed to sponsor on behalf of CVER from their accounts, and these contributions are being tallied. The potential areas that CVER would want to sponsor include: Lanyard Partner Sponsor, USB Sticks Abstracts, Volunteer Sponsor and Hotel Room Key Sponsor, with a preference for the former two. Although we have high expectations for the conference dinner, it was not seen as so attractive to sponsor this specific event.

2.3 CVER Twitter account

The AGM expressed broad support for the CVER twitter account (https://twitter.com/CVER avc); it was considered very useful to help promote the CVER brand worldwide, and CVER should (if possible) continue with this effort. Currently, there are 33 followers for the account, and it was believed that this number will grow gradually. Activities related to the ISVEE conference should offer good additional exposure for the account. It was suggested to contact AVC's External Engagement Officer, Rachel Cutcliffe, to discuss the account and receive suggestions on how to increase its impact.

2.4 Operating Procedures Manual for CVER

The Operating Procedures Manual for CVER was adopted and approved unanimously. Because a concern was raised that some members may not have noted the document when it was circulated, an additional consultation of one week after the document is circulated (again) at the over e-mail list will be offered before the document is considered as final. This consultation will also cover the insertion of an extra sentence related to dealing with a situation where the CVER Director steps down, in which it will be suggested that an Extraordinary General Meeting can be called to elect a new Director.

3 CVER Elections

3.1 CVER Director

The current director, H. Stryhn, recommended Javier Sanchez as the new CVER Director, and offered to continue as Interim Director until J. Sanchez returns from his current sick leave. The focus of CVER activities in the coming six months will be on the ISVEE conference in August, and the delayed accession of the new Director should not cause any major problems. The AGM vote showed unanimous support for the new Director (and the interim arrangement).

3.2 CVER Steering Committee

A discussion around the desirability of increasing diversity in CVER's leadership resulted in a slightly modified proposed roster for the CVER Steering Committee. The AGM vote showed unanimous support for the new CVER Steering Committee being composed of: Shawn McKenna for Dairy science; Krishna Thakur for Aquatic science; Caroline Ritter for Epidemiology; and the two ex officio members (Health

Management Department Chair and Associate Dean Graduate Studies & Research).

4 Updates on Centres, Groups, and Projects

4.1 Ocean Frontiers Institute (OFI) – Presented by Krishna Thakur

OFI Phase-I projects (New Models of Salmon Health Management) are going towards their end. Jaewoon Jeong has completed his post-doc centered around agent-based models on sea lice treatment strategies and development of resistance (two papers in review) and has moved to a position in the Aquaculture Regulatory Science group at Fisheries and Oceans Canada (DFO). Marianne Parent is going into her projected last year of her PhD program with research on transmission patterns of sea lice among salmon farms in the Bay of Fundy, New Brunswick (one published paper). João Romero is also working towards his PhD with work involving simulation modelling of infectious viral diseases (two published papers and one under review on Infectious salmon anemia virus (ISAV) in Newfoundland and Labrador).

Three OFI Phase-II (One Ocean Health) projects are ongoing. Svenja Köpper is well into her PhD program on epidemiological and genomic determinants of epizootic shell disease in lobsters in Canada (one paper published and another under review). Research on the impact of climate change on ecological determinants of epizootic shell disease in American lobsters in Canada is carried out by the former CERC member Maya Groner and Jeff Maynard, USA, with focus on two specific areas: the weekly projected water temperature profile created for entire Atlantic Canada, and the risk profiles being developed for epizootic shell disease. Kristen Reynolds is doing post-doc research on antibacterial use and treatment efficacy in farmed salmon, based on partly publicly available data on antimicrobial use in Canadian finfish and partly collected field data on antimicrobial use.

4.2 Centre for Aquatic Health Science (CAHS) – Presented by Larry Hammell

All aquaculture sites in NB, NS and NL are required to report sea lice data to a centralized database, and this occurs through the Fish-iTrends platform run (and continually upgraded and modernized) by CAHS and supported by the three industry associations (ACFFA, NAIA, and AANS). The data are being used by graduate students (e.g., Mark Moore, Marianne Parent). L. Hammell did a review for the New Brunswick Department of Agriculture, Aquaculture and Fisheries of their Sea Lice Monitoring Program, and further epidemiologic work using ongoing data is likely to be supported.

Recent research on infectious salmon anaemia virus (ISAV) has been primarily funded by the Newfoundland and Labrador Department of Fisheries, Forestry and Agriculture (NLFFA), with multiple projects over the last few years, examining different aspects of the virus (strain evaluation, retrospective data analysis, and most recently, a comparison of ISAV prevalence between live, moribund and freshly dead samples).

The collaboration with NLFFA also involves regular discussions on how to engage students in aquatic veterinary medicine. NLFFA supports plans to have a summer student through the VetSRA program who will conduct research in NL, and for sending students to NL for a 2-week clinical externship as part of the fourth year rotation schedule.

Our research work with IDH Sustainable Trade has recently been completed and we are in the process of finalizing publications. CAHS worked with IDH and two companies in Indonesia to study shrimp productivity and biosecurity data. This work involved K. Thakur and three post-doctoral fellows.

The OIE Collaborating Centre (CC) on Epidemiology and Risk Assessment of Aquatic Animal Diseases was established in 2010 as a combined centre with the Norwegian Veterinary Institute, and subsequently asked to split into ERAAAD (Americas) and ERAAAD (Europe) effective 2020. The centre has been fairly inactive for the past 5 years since it must run entirely as a cost-recovery model (no OIE funding, and no

financial support from the Canadian government). This means, any international projects are done because they are proposed and funded for their own merits, not because OIE requested them. We provide an annual report to OIE in January that basically reflects activities that the group has done for other purposes, but coincidentally meets the mandate of the OIE CC. AVC needs to decide if we wish to continue as an OIE collaborating centre, as it gives us no added access to funding of international projects and likely does not affect our success in international project opportunities. If we decide to continue the OIE CC, a new contact person will eventually require approval by OIE for continuation beyond the next few years.

In early March, L. Hammell was requested to be part of the OIE Aquatic Focal Points (Americas) meeting in Columbia. Prior to the meeting, L. Hammell arranged separate meetings with Canada's Chief Veterinary Officer and OIE Delegate (Dr. Mary Jane Ireland) and with OIE (Stian Johnsen) to discuss opportunities for the CC and how to generally improve interaction with OIE priorities. S. Johnsen mentioned that the new Aquatic Health Strategy is entering an implementation stage and they are considering how they will use the CCs more effectively, including how they should be supported. Dr. Ireland also indicated that they would be considering how Canadian based CCs can be optimally utilized and supported.

4.3 Dairy Research Groups (DRG) – Presented by Shawn McKenna

The four major research projects from the last year, three Dairy Cluster Fund (DCF) projects and one under the Atlantic Healthy Herd II program, are still on the continuation. AMR projects are referred to Section 4.7. The calf longevity project of DCF is wrapping up. Ibrahim Elsohaby is finishing up the DCF project of detecting penicillin and other beta-lactam resistance in *S. aureus* mastitis isolates using MALDI-TOF technology.

Among the three components of the Atlantic Healthy Herd II program, the BVD project was wrapped up just recently with the last round of bulk tank milk testing. Johne's is still a basic disease being monitored, and the BLV study is ongoing, with testing of the 32 enrolled farms on PEI.

4.4 Shellfish Research Group (SRG) – Presented by Jeff Davidson

The continuance of the SRG as a research group is questionable. The inability to support a technician on an ongoing basis from external funds only is a common Achilles heel for the SRG as well as other groups in AVC. The SRG has been fortunate to be able to fund a full-time technician from external research funds for the last 20 years. In the last 2-3 years, however, these funds have not become available, resulting in the loss of this technician to a permanent position within AVC, and therefore also the ability to successfully apply for, and conduct field research, the mainstay of the SRG. Succession efforts for a faculty member to lead the SRG have been unsuccessful. Shellfish health research can still be conducted, but could be under the direction of current faculty, whose main interest may not be shellfish. It is suggested that in the future, reporting to CVER of shellfish activities could be incorporated into the CAHS report.

The international student exchange programs between AVC and Kasetsart University, Thailand (aquatic health), and Mahidol University, Thailand (ecohealth), have been suspended since February 2020 due to COVID-19. Tentative plans were to restart the programs in 2022 for fourth year students from the two universities in Thailand, but continued restrictions have postponed this to 2023.

4.5 Sir James Dunn Animal Welfare Centre (SJDAWC) - by Katy Proudfoot

Over the past year, the SJDAWC has awarded grants to four projects: Effects of early life experiences on later problematic behaviours in homeless, rescue shelter kittens (PI Karen Overall; research); The effect of rearing in a shelved environment on behavioural and physiological markers of welfare (PI Paul

Bernard; research); The impact of volunteering with a wildlife service on empathy in veterinary students (PI Lara Cusack; integrated); and Medical and surgical care of homeless animals (PI Heather Gunn-McQuillan; service). The next call for proposals will be Fall 2022 with a funding total of \$180,000.

In collaboration with the AVC Animal Welfare Club, the SJDAWC Student Project Fund awarded two grants to support students pursuing external rotations related to animal welfare and also assisted five students in the annual Intercollegiate Animal Welfare Assessment Contest. The AVC Animal Welfare Club helped with the organization of guest lectures on the topics of cats in research, psittacine as pets (e.g., parrots), and boar studs. This year, the club spearheaded a social media campaign to provide resources to veterinarians and clients about common animal behaviour problems in companion animals.

The SJDAWC hosted an online Animal Welfare in Practice Symposium on "Animal Abuse and Neglect" in 2021. In 2022, the Annual Animal Welfare in Practice Symposium will focus on the welfare of reptiles and amphibians. The SJDAWC also hosted a series of AVC webinars in March 2022 on the topic of animal welfare concerns in dog breeding. Past webinars are currently available at: http://upei.ca/youtube/awc. Further details on all activities (including graduate students, publications, and presentations) can be found in the <a href="https://styles.com/styl

4.6 Smallholder Dairy Research Group (SDRG) – by John VanLeeuwen

The SDRG dairy research, teaching and service program currently involves 15 faculty members and 5 graduate students from both AVC and Science. Queen Elizabeth Scholars Phase II funding, partnering with Farmers Helping Farmers (FHF), has over the past years supported 3 veterinary graduate students (Edward Kariuki and Daniel Muasya, researching cow comfort and BVDV vaccination benefits; and Ron Sang at the University of Nairobi researching internal teat sealant benefits) and 1 non-veterinary graduate student (Julie Oyoo researching school-age children nutrition training). Due to COVID-19, data analysis and thesis writing were again delayed, and veterinary and nutrition research internships were again cancelled. Peter Kimeli is doing a follow-up study to his PhD thesis (which was awarded the Governor General's Award at the 2021 convocation) on the impact of calf comfort management on heifer reproduction, funded by SJDAWC. The usual senior rotation involved with FHF in January of each year to enable knowledge translation was cancelled in 2021 and 2022 due to COVID-19, but we hope it can happen in 2023.

Ongoing projects involving partner organizations, Veterinarians without Borders Canada in six countries (Kenya, Ghana and Senegal in Africa; Laos, Vietnam and Cambodia in SE Asia) and FHF in Kenya, are mostly service-oriented, but have a project evaluation research component, and they enhance logistical support for the SDRG.

FHF/UPEI is now proposing another 4-year climate change project in Kenya also funded by Global Affairs Canada, and FHF/UPEI is also proposing a 4-year One Health project in Kenya in partnership with Alinea and OVC. FHF/UPEI is also partnering with University of Guelph and other agricultural and veterinary colleges in Canada on a large-scale 7-year proposal called "Sustainable Food Systems". The prospects for the SDRG look promising.

4.7 Antimicrobial Resistance and Risk Analysis Groups – by Javier Sanchez

J. Sanchez sent his regrets for the meeting. An update may be provided at a later time.

4.8 Veterinary Epidemiology and Social Science for Animals (VESSA) Group – by Caroline Ritter

The VESSA is continuing its work on incorporating the "human factor" in (veterinary) epidemiology. The work on antimicrobial use (AMU) has resulted in a published paper on Canadian farmers' attitudes to AMU and antimicrobial resistance. A manuscript on public attitudes towards different management scenarios for surplus calves was recently accepted for publication. The veterinary clinical communication

project is currently focusing on use of the veterinary dialogue trainer in teaching bovine veterinary practitioners' clinical communication skills.

Two new graduate students started in the past year. Megan Ross, an MSc student co-supervised by K. Proudfoot, studies horse owners' decision-making related to animal welfare. Emily Morabito, a PhD student co-supervised by Andria Jones-Bitton (OVC), studies the mental well-being in early-career veterinarians. Our new lab space shared with the SJDAWC has been inaugurated in 219S (meeting space) and 212N (computer lab).

Adjournment

The meeting was adjourned at 11:50 a.m.