EVENT SUMMARY REPORT

UC Davis One Health Symposium: Collaboration in the Face of a Changing Environment
Hosted by the UC Davis SVM Students for One Health and the One Health Institute

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1. Team Leaders:
   a. The Team has at least one ecology / environmental, one human medical, one veterinary medical, and one additional non-medical related student
      
      ● Ecology/Environment: Risa Pesapane
      ● Veterinary Medicine: Nathan Brown and Marlene Haggblade
      ● Human Medicine: Brandon Scott
      ● Non-medical: Benjamin Plourde (Comparative Pathology) and Nick Booster (Entomology)
   
   b. The Team has submitted proof of ‘students in good standing’ letters for each team member on their respective University’s letterhead from a faculty member or Department Head.
      
      ● Documents for each student are attached in a separate PDF. One student had a difficult time obtaining a letter from his particular department coordinator. In lieu of a letter, for the time being students he has submitted transcripts as proof of enrollment and good standing.
   
   c. The Team has included its designated point of contact information to whom any award check will be written and how the award money will be shared by the group.
      
      ● Award check should be made out to "Students for One Health" and mailed to the Treasurer of the UC Davis School of Veterinary Medicine Students for One Health at STUDENTS FOR ONE HEALTH PO Box 1296 Davis, CA 95617.
      
      ● All funds received from this student competition will be reincorporated into the UC Davis SVM Students for One Health organization. Specifically, the team has decided that these funds should be used to cover expenses associated with bringing together the many student groups within UC Davis practicing One Health. Currently, students studying different disciplines are geographically isolated on different campuses. Human medical students are on the medical campus in Sacramento, veterinary medicine students are on the health science campus in Davis, and all other students are on the ‘main’ campus in Davis. Despite our common interest, it is an ongoing challenge to facilitate regular communication and collaboration between our respective groups. Even if we collaborate on academic events, students from different disciplines lack opportunities to form the type of long-term, fruitful professional relationships encouraged under the One Health concept. The Board of the SVM Students for One Health has targeted a bold goal: every SOH member will have forged a long-term, professional relationship with a student in another discipline before graduating. This is a critical step in abolishing barriers to cross-disciplinary collaboration early, before students become locked in professional silos. As the most active SOH group within UC Davis, the SVM SOH is well-suited to lead this initiative.
and build bridges between these groups. With this award money, we plan to cover the cost of transportation of students from Davis main and health science campuses to the monthly Global Health Night events hosted on Sacramento medical campus. The Director of the Global Health program, Dr. Michael Wilkes, has already agreed to partner with us on parking costs and logistics. Furthermore, the award money will be used to host several integrated social events on all three campuses uniting these graduate groups, and the SOH undergraduate groups, in common conversation and mentorship. At these events, we plan to facilitate the involvement of people outside of UC Davis as well, such as community members and interested students at neighboring institutions.

2. The Event Summary Report should include:
   a. Event Concept, Objectives, Description, and Contribution to Advancing One Health

   ● Event concept: Although the UC Davis One Health Day 2016 event was a one-day symposium held on a university campus, it was a divergence from the typical academic event where there is only a one-way flow of information from professionals to the audience (see appendix for event photos). Instead, we chose 5 timely topics in One Health that related to this year’s theme “Collaboration in the Face of a Changing Environment” and invited multiple professionals representing different disciplines (within and beyond academia) to serve on panels. These “presenters” were required to meet before the event, collaborate on a unified message about the topic, and then split their panel presentation to allow 50% time for offering information and 50% time for interactive discussion with the audience. The student planning committee provided the presenters with learning objectives for each topic to ensure that the human, animal, environmental, and social aspects of each realm were adequately communicated. Additionally, presenters were tasked with highlighting the collaborative challenges and opportunities within these topics as opposed to promoting their own research or simply disseminating current knowledge on these topics. Student planning committee members served as moderators for each panel to drive stimulating conversation in 3 dimensions: among panelists, among audience members, and between the panelists and the audience.

   ● Event objectives: Our goals were to:

     ○ engage multiple experts from different disciplines in conversation about a singular topic to showcase how multifaceted these wicked problems are.
     ○ have continuous two-way interactions between the experts and the audience.
     ○ facilitate networking opportunities between individuals from diverse disciplines and career stages.
     ○ inform the audience about the diversity of topics that fall within One Health and what each discipline brings to the table to find solutions.

   ● Event description: The following description was widely distributed. “Individuals and groups from around the world, from academic to corporate and non-profit, students
to established professionals, will come together to celebrate “One Health Day” on November 3rd. Here at UC Davis, the activities will extend through November 5th, with a Students for One Health Panel at lunch on Friday the 4th and an all-day symposium on Saturday the 5th. The Students for One Health and the UCD One Health Institute will be hosting several interactive panels in keeping with this year’s theme \textit{Collaboration in the Face of a Changing Environment}. Discussion topics include Zika virus and the distribution of mosquitos and other vectors, sustainable agriculture, planetary health, respiratory disease caused by environmental particulates, and disaster preparedness and response. The Deans of the UC Davis Schools of Nursing, Medicine and Veterinary Medicine will give the day’s capstone address. We will follow the program with a networking reception.”

- Contribution to Advancing One Health: This event was designed to be an enlightening journey into One Health for both the audience and the expert presenters. Presenters were chosen based on their experience related to a particular field but may not have worked with each other before. For this event they were required to create a common vision for their message about the assigned topic by integrating their respective perspectives \textit{before} the event. During the panel they also often engaged in supporting and contrasting discussions with one another in response to audience questions. By doing so, our event in itself presented an opportunity for established professionals with common causes to network and collaborate. Presentations included reflections on the challenges presented by collaborative, cross-disciplinary work and how they overcame these challenges. The audience was able to actively learn from, and engage in, open discussion about challenging topics in One Health with panel experts and other audience members. The event included a social lunch and a social reception which allowed undergraduate students, graduate students, professionals, and university Deans to mingle and share their thoughts about the day’s discussions. Since the most difficult challenge with advancing One Health is a lack of communication and mutual understanding between disciplines, the focus on opportunities for educational and casual communication among health professionals is a major contribution to advancing One Health.

b. The Team’s promotional Plan
- Our event was advertised on at least 30 mailing lists, 9 social media groups, and 3 news outlets. Please refer to the promotional plan submitted prior to our event for more details. Our promotional flyer is provided in the appendix.

c. The Team’s metrics for measuring success and results /data for those measures
- Please refer to the metrics for measuring success document which proposed 3 levels of assessment: A) attendance data, B) post-event survey, and C) net cost of the event. Results are as follows:

A) Attendance data: We had a total of 134 attendees of which 84 were physically present and the remaining 50 attended via webinar. Webinar attendance was as far
as Cambodia! Live attendees included 13 undergraduates, 15 professional/graduate students, 50 general admission and 6 continuing education.

We successfully attracted a variety of disciplines including veterinary medicine, human medicine, public health (including epidemiology), and environment/ecology (including entomology). However, these disciplines were not represented equally and the event was majority veterinary medicine. This information allows us to critically evaluate which groups we successfully pitched the event to as well as those groups that need improvement. Future planning committees can focus their efforts on more effective marketing to those groups.

B) Post-event survey: We received 18 responses to our post-event survey out of 84 registrants who attended live (21% survey participation). While participation in the survey evaluation was low, those who responded did complete the entire survey and 16 provided commentary. 100% of survey respondents said they were satisfied
or very satisfied with the event overall. 15 respondents (83%) stated that their understanding of One Health was improved by attending our event. Out of the 3 respondents who answered "No" to that question, one commented that their answer should not reflect the quality of the event but rather reflected their expertise in One Health already.

Below are a few excerpts from noteworthy participant comments. Although we found it difficult to recruit participants from the human medical community, there were two medical students in particular that elaborated on how powerful this event was for them personally.

“This was my first exposure [to One Health] directly and it was fascinating to see different perspectives and [I am] impressed with the degree of collaboration among scientists.” - human medicine participant #1

“I see that One Health is more inclusive than I previously thought, and that there are efforts to include representation from the social sciences and earth sciences as well. This is our future.” - human medicine participant #2

“I am happy to get behind the idea of incorporating planet/human/animal health. It seems so obviously relevant after this event.” - veterinary medicine participant #1

“I feel I understand more about the agricultural aspect of One Health than I did before the symposium.” - public health participant

“There was good discussion on the challenges facing the One Health community and the scientific community as a whole, and I think that was some of the most useful and insightful discussions to come out of the symposium. I had a good understanding already of how to use a One Health approach and what that entailed, even if I wasn't familiar with all the specific examples presented, but the challenges that the presenters and attendees brought up were more new to me.” - veterinary medicine participant #2

“The program extended the breadth of One Health was very appropriate and the inclusion of the agricultural disciplines was very important.” - veterinary medicine participant #3

Requests for future event topics or suggested improvements from survey respondents:
- 4 asked to include topics on the sociological aspects of One Health
- 2 asked to include the cultural (or cross-culture) aspects of One Health
The UC Davis One Health Day event **Collaboration in the Face of a Changing Environment** held on 5 November 2016 was successful in meeting all of its objectives. The event began with a call to action about the environment and One Health to emphasize climate change as this year’s theme. The rest of the day included five panels comprised of 2-5 experts (see agenda in the appendix) interspersed with coffee breaks, lunch, and concluded with a social reception. The audience did hear about new multifaceted projects within One Health, they engaged in conversation with those in other disciplines, and they had interactive conversations with experts during the panel sessions. Therefore, our event met all of the objectives we had hoped to achieve.

Attendees did adequately represent a diversity of disciplines within One Health and a wide range of career stages (see section 2c) which satisfied our promotional plan goals. As discussed in section 2a of this report, our event both showcased and fostered collaborations across professional communities which furthered the goals of the One Health Commission’s One Health Day agenda. Furthermore, the event attracted many undergraduates and even numerous professionals outside of academia. Since undergraduates are only just beginning to learn about the One Health concept and many professionals do not currently practice One Health, we feel our event generated awareness about the benefits of a One Health approach to a broader audience than many other graduate-student-centric events in academia. Additionally, we recruited volunteers from the undergraduate SOH club to assist with logistics on the day of the event. For their service, these students were granted a free, all-access pass to the symposium exposing them to both the seminars of the day and the inner workings of planning a collaborative event. This type of exposure is critical to their professional growth and getting them engaged in One Health events early in their careers.
Our event was relevant to our audience on many levels providing not just information on current wicked problems, but also offered continuing education credits for existing professionals, examples of how to collaborate successfully across disciplines, how collaborative projects are formed, who needs to be included, and some research opportunities that are currently available at UC Davis for students. In conjunction with our event, members of our expert panels also served on a career panel the day before to allow students to ask questions specifically about how their current path could lead to future career opportunities. An important point to note about our event is the caliber of experts we were able to recruit as expert panelists. We cannot stress enough that these were not just faculty members, but many individuals practicing applied science in high-level positions (see the agenda in the appendix).

**Collaboration in the Face of a Changing Environment** was **specific** in that the entire event revolved around a singular theme, the influence of climate change. The Zika virus panel explored how a changing environment influences the distribution of mosquito vectors and how projected increased temperature and drought can accelerate vector distribution. Specific points of discussion included the history, lifecycle, and pathogenesis of Zica virus, the geographic distribution of susceptible vectors, and the surveillance and control measures put into action in at the state level in California. The emergency preparedness and response panel addressed our increased risk of forest fire and extreme weather due to climate change. The audience directed the conversation to the importance of strategic public health communication in the face of environmental disasters. The food animals and sustainable agriculture panel highlighted the impact food animals have on greenhouse gas emissions, how food system waste/byproducts are used as feed in the dairy industry, and how managed grazing of livestock can actually induce carbon sequestration and water holding capacity in soil.

**Collaboration in the Face of a Changing Environment** had **measurable** success because of our three-tiered approach to assessment. We were able to successfully quantify the demographics of our attendees based on discipline and career stage. Beyond demographics, we quantified our audiences satisfaction with each panel, the execution of the event overall, and whether people felt they deepened their understanding of One Health. We collected qualitative feedback by offering short-answer questions about suggestions for next year’s event and technical difficulties associated with the webinar.

**Collaboration in the Face of a Changing Environment** was **achievable** in that we had an active planning committee who secured sponsorship and began planning 11 months in advance. Duties were assigned to each planning member and monthly meetings with our sponsoring partner organization, the One Health Institute, were held throughout the planning process. Duties were realistic and achieved without burden on the student’s educational progress. One Health volunteers helped with logistics on the day of the event. All correspondence to invited experts was standardized and given as templates to the planning committee to ensure that we communicated a united, professional message. The planning committee constructed detailed learning objectives,
maintained oversight during the panelists planning meetings, and sent timely reminders to all experts to ensure that all participants had a clear understanding of what was expected.

*Collaboration in the Face of a Changing Environment* had realistic goals that could be attained. Originally, the planning team had dreamed up the idea of having a multi-day event with breakout sessions and wet labs available. However, the team quickly realized that as students with limited time and an audience who commonly has equally limited time, an event that intense was probably unrealistic. Instead we chose to target an innovative and stimulating single-day event. We used the framework of a standard academic symposium and, in the spirit of One Health, injected that framework with multi-dimensional exchanges of information and collaboration among experts. To bring this event to life, we partnered with an organization that was able to provide sponsorship and assistance with marketing, webinar support, venue acquisition, and logistics.

*Collaboration in the Face of a Changing Environment* on Saturday, November 4th was time-specific, or timely, in that our event coincided with the same week as the world’s first One Health Day and was one of several One Health activities on UC Davis campus that week, including the One Health Day Career Panel on Friday. We focused on current wicked problems that the modern world is wrestling with today. These issues were both global and local. For example, emergency preparedness and response had elements of preparing for pandemics as well as elements specific to California which is disproportionately affected by drought and forest fires. We chose to devote a panel to the current Zika virus outbreak because of the great demand for more scientific information about this disease in California. Furthermore, we used this timely issue to teach deeper lessons about vector-borne diseases, particularly how they can be influenced by our changing climate. We also dedicated one of our panels to educating the audience about a new concept, planetary health, which is complementary to One Health and embraces the One Health approach.

Overall our event was a success, however that does not mean it was without its hurdles and surprises. Our planning team has taken a critical look at what could be improved for future events and noted the challenges we faced so that other student planning groups can avoid these same pitfalls. Below is a list of our hurdles or areas for improvement:

1. Some experts did not remain faithful to their commitments. This issue was unexpected as we sent regular reminders and updates to all of our panelists during the planning process. Five expert participants backed out just two weeks before our event forcing us to scramble for replacements. Luckily, many of our panels had multiple experts so we were able to recover by either a) simply going with fewer panelists, b) asking the delinquent panelist to recommend and recruit a replacement, or c) referring back to our list of possible panelists which contained “second choice” panelists which we did not initially invite to speak.

2. Charging an entrance fee was prohibitive to attendance. This issue was a challenge from the start of planning. Admission was charged for two reasons: 1) because we offered continuing education credits and 2) to cover the exorbitant costs of a full-day
event providing coffee breaks, a full lunch, and a social reception. Furthermore, a nominal fee has been shown to reduce the margin of registrants who sign up but then don’t show up. For future events, we think a better approach will be to only charge those individuals who are seeking continuing education credits. To accomplish this, we suggest that either the catering services (drinks, lunch, etc.) should be limited, purchased by attendees, encourage a brown-bag-lunch approach, or additional sponsors should be sought to offset these costs.

3. Recruiting reliable planning committee members from all relevant disciplines proved more challenging than we had anticipated. We started with a solid base of veterinary medicine students and one ecologist who began the search for additional members representing other disciplines early on. Two additional non-medical representatives were recruited fairly easily. However, the task of finding a human medical participant was astounding. We reached out to our fellow medical One Health clubs repeatedly, our collaborators at the dual human-animal health clinic at UC Davis, and eventually to the director of the Global Health program in the medical school with no success. Luckily we were able to secure a medical student from a neighboring university through a close personal friendship of one of our planning committee members. The enormity of this challenge really highlighted the severity of the division between the veterinary and medical communities at UC Davis. A wonderful outcome of this hurdle is the new SVM SOH initiative to work tirelessly to unify these two organizations (discussed in section 1c).

4. The post-event survey should be discussed during the opening remarks, during lunch, and again in the closing remarks. Instead we only circulated an email to registrants after the event and our survey participation was low. This was disappointing because we used the survey to collect some information on participant demographics in addition to getting feedback for improvement.

5. The registration page should capture each registrants discipline instead of relying on the survey to do this. Our registration page allowed us to quantify attendees based on career stage, but it was only in our survey that we asked participants about their respective disciplines. Since this information is rather crucial to assessing impact, we recommend that it always be included in the registration process in the future.

6. Advertising should include more local media outlets and be done well in advance of the event.

Given that our event met all of its objectives and we satisfied two out of three metrics for success, our event did in fact have an immediate impact benefitting the One Health community. Our event showcased topics in One Health that go beyond infectious disease and it fostered a learning environment that went beyond the traditional one-dimensional mode of communicating information. 134 people attended our event this year and we advertised across 30 listservs (see promotional plan) so the message that this type of event is available in our community was broadcast further than ever before. We feel confident that with more advanced advertising and
removal of the cost barrier that we’ll attract even more attendees from numerous disciplines in future years.

APPENDIX

Image 1: Contrary to the stand-and-preach style of many academic events, our expert panel was comfortably seated to communicate in a warm, relaxing setting. This allowed for a less formal, but deeper dialogue among panelists and between panelists and the audience.

Image 2: Our event topics covered a wide breadth of One Health issues beyond infectious diseases. Dr. Mitloehner, one of our experts on the agriculture panel, fuels the interactive discussion with contentious tidbits about livestock and climate change.

Image 3: A few of our amazing undergraduate and graduate student volunteers.
Image 4: Audience members actively engaged in discussion with panelists and each other throughout the day. Instead of leaving just a few minutes for audience questions, our event built in half of the “presentation time” for interactive dialogue.

Image 5: In the spirit of One Health, we even had furry non-human attendees.
3rd Annual UC Davis One Health Symposium

Saturday
November 5
8:00 AM - 6:00 PM

UC Davis School of Veterinary Medicine
1020 Gladys Valley Hall
Davis, CA 95616

DISCUSSION TOPICS:
- Zika virus and vector distribution
- Planetary health and economics
- Disaster preparedness & response

The Deans of the UC Davis Schools of Nursing, Medicine, and Veterinary Medicine will give the day's capstone address.

This symposium has been approved for 6 AMA PRA Category 1 Credits™ and 4.5 CE Credits. Full details of continuing education credits can be found on our website at:
http://events.onehealth.institute

Continuing education sponsored by:

UC DAVIS VETERINARY MEDICINE
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Join us for several interactive panels hosted by the Students for One Health & the UC Davis One Health Institute!

For more information:
onehealth@ucdavis.edu
530.752.7526

Tickets now available on Eventbrite!