

# **Washington University Team**

## **One Health Day Event Summary Report**

December 1, 2016

### **Event:**

One Health Poster Competition at the WAMCOH Inaugural One Health Conference

### **Team:**

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## **PART 1**

### **Event Concept:**

The One Health Student Poster Competition (OHSPC), held during the inaugural One Health Conference at the Saint Louis Zoo, brought together students from the fields of human medicine, veterinary medicine, ecology, environmental science, translational medicine, and public health in a friendly contest to determine the year's best One Health poster. After review by a highly qualified panel of academically diverse health science experts, a winner and runner-up were determined and prize money was awarded. To the best of our knowledge, this was the first national-scale OHSPC in which medical students, veterinary students, and graduate students all competed in the same category and for the same prizes.

### **Event Description:**

On September 30, 2016, Washington University in St. Louis, Auburn University, and the University of Missouri Consortium on One Health (WAMCOH) hosted the inaugural One Health Conference at the Saint Louis Zoo. While the faculty members and scientists associated with WAMCOH organized a remarkable conference, including two superb panels of experts and a keynote address by Barbara Natterson-Horowitz, MD and co-author of New York Times bestseller "Zoobiquity: The Astonishing Connection Between Human and Animal Health," we feared that the conference would not be well-attended by students. As such, we created the OHSPC to attract student interest in and attendance at the conference.

We designed the OHSPC as a stand-alone event to fill an hour early in the conference which was otherwise earmarked for networking. The OHSPC took place in The Living World, a round atrium that serves as one of two main entrances to the zoo. Student presenters stood at their posters for about sixty minutes, answering questions from mingling conference attendees and curious passers-by entering the zoo. At some point during the hour, two judges independently visited each student's poster and scored them using a custom-built rubric (Appendix A). The rubric was designed to reward poster aesthetics, research quality, and presentation clarity, but gave the most weight to the student's ability to justify how his or her work advanced the One Health mission. The body of five judges included a mixture of PhDs, MDs, and DVMs from each of WAMCOH's three institutions, and two of the five members of the committee were randomly assigned to evaluate each poster.

After the hour, the scores from the rubrics were standardized, averaged, and ranked to determine a winner and a runner-up. Posters were moved to the Conference's afternoon venue, where they were on display throughout the luncheon and remaining panel. Immediately after the final formal session of the conference, the winner and runner-up were announced.

### **Contribution to Advancing One Health:**

#### *Relevance to the objectives of One Health Day*

The OHSPC was designed with One Health Day in mind. The goals we set for this event (see part 2, below) correspond to the two main goals of OH Day: to stimulate collaborations across professional communities, and to create public awareness of the need for a OH approach. We believed that by building an event around amiable competition and the passion of students from many different backgrounds, we could foster interactions among all conference attendees that can begin to break down academic silos and drive home the importance of tackling complex problems in healthcare together, using One Health.

#### *Relevance of the event to the targeted audience*

The OHSPC contributed to the advancement of OH by targeting three main audiences: the general public that visited the zoo during the conference, the conference attendees, and, most significantly, the students who presented posters. For the general public, which included children and adults of all ages and educational backgrounds, the OHSPC provided a novel stimulus for curiosity. Zoo visitors explored the OHSPC as they had time and interest, with some zoo guests passing through with little more than inquisitive glances, others stopping to ask insightful questions about OH, and all leaving with at least slightly more awareness about the OH mission.

Conference attendees found the OHSPC a welcome opportunity to mingle with other OH enthusiasts from outside their academic silos and to explore together the breadth of the OH umbrella that the students' posters represented. The diversity of research displayed opened attendee's eyes to previously unseen possibilities, especially in the application of ecological science to the benefit of human and animal health. Conference attendees had quite varied academic backgrounds (ranging from high school students to deans of medical and veterinary schools) but, because of the talents of the student presenters and the casual social nature of the poster session, the OHSPC was able to meet attendees at their preferred level of engagement. In addition, interactions between students and professors from multiple disciplines

helped to stimulate conversations about how research from different fields could be applied across disciplines for potential collaborations under the OH umbrella.

The OHSPC's main target was its student presenters, who had the chance to win prize money while they gained valuable professional skills, networked with both students and non-students across the OH spectrum, and explored both career possibilities and future research directions in OH. Through the OHSPC and their attendance at the conference, the student presenters delved into OH to a depth that most had never approached before. The varied background of attendees gave the poster presenters opportunities to practice communicating their research and the mission of One Health in an accessible and concise manner to an audience outside of their discipline. One key aspect of the OHSPC was the purposeful design of the poster assessment rubric to reward a student's ability to explain why his or her work should fall under the OH umbrella. Many students, especially in human medicine and ecological science, do not typically conceptualize their research through the OH lens; the OHSPC encouraged student presenters to consider why their work should be considered OH and then gave them an opportunity to sell that argument to seasoned practitioners of OH at the conference.

## **PART 2**

### **Event Objectives:**

1. To stimulate collaborations between health professionals working in human medicine, veterinary medicine, ecology, and other disciplines, the OHSPC will:
  - a. Provide an opportunity for enlightening interdisciplinary interactions among conference attendees in a casual setting.
    - i. This goal will be measured via responses of attendees to the following question, administered in a survey (Appendix B, question 8) the day after the OHSPC: “How effective was the event in fostering interactions among people from different academic backgrounds?”
    - ii. Our goal is that attendee responses show their satisfaction with opportunities for interaction across academic silos, which we define as an average score greater than or equal to 6 out of 10.
2. To augment awareness of the importance of the OH approach, and our collective responsibility to apply it, in facing the challenges of the 21st century, the OHSPC will:
  - a. Feature diverse perspectives on OH research and application, as seen through the eyes of student presenters, which encompass a wide range of problems across a variety of scales in each domain of OH.
    - i. This goal will be measured via responses of attendees to the following questions, administered in a survey (Appendix B, questions 11-14) the day after the OHSPC:
      1. “BEFORE THIS EVENT, to what extent did you consider yourself a practitioner of OH?”,
      2. “Now that you have attended the event, to what extent do you consider yourself a practitioner of OH?”,
      3. “BEFORE THIS EVENT, how important did you consider the OH approach to be in answering the challenges our world faces in the 21st century?”, and
      4. “Now that you have attended the event, how important do you consider the OH approach to be in answering the challenges our world faces in the 21st century?”

- ii. Our goal is that attendee responses increase in scores by at least 1.5 points out of 10 on average, across both questions 11-12 and questions 13-14.
- 3. To increase student attendance at and involvement in the inaugural One Health Conference at the Saint Louis Zoo, the OHSPC will:
  - a. Draw in students from all three domains of OH (human, animal, and environmental health) for a friendly and interdisciplinary competition which caters directly to students.
    - i. This goal will be measured via both the number of students from each OH domain that enter posters in the OHSPC, and the number of students from each OH domain that attend the conference
      - 1. The former is the more direct of the two metrics.
      - 2. The latter is based on the observation that very few (<10) students were registered before we began advertising the OHSPC, and assumes that all student attendees who registered after that point would not have registered in the absence of the OHSPC.
    - ii. Our goals are for more than 10 students to present posters at the OHSPC, with at least two from each domain, and for more than 40 students to attend the conference, with at least 8 from each domain.
  - b. Attract student attendance to the entirety of the conference by holding the OHSPC early in the day and the awards ceremony for the OHSPC after the conference formally ends.
    - i. This goal will be measured via analysis of the proportion of students that registered for half-day attendance versus full-day attendance.
    - ii. Our goal is for over 75% of students to register for full-day attendance.
  - c. Serve as a nidus for stimulating interdisciplinary interaction among students.
    - i. This goal will be measured via responses of students to the following question, administered in a survey (Appendix B, question 3) the day after the OHSPC: "How satisfied were you with opportunities at the Conference to interact with other students from outside your current program of study?"

- ii. Our goal is that student responses show their satisfaction with opportunities for interdisciplinary interaction, which we define as an average score greater than or equal to 6 out of 10.
- 4. To foster public awareness of the importance of the One Health paradigm, the OHSPC will:
  - a. Be held in a prominent public location within the Saint Louis Zoo where student presenters can interact with zoo guests.
    - i. The impact of the OHSPC on the general public will be measured via the results of a survey (Appendix C, questions 2-5), administered to zoo guests leaving the OHSPC
    - ii. Our goal is to have more than 15 survey responses, and within those responses to show that knowledge about One Health (questions 2-3) increased by at least 3 points out of 10 on average, and that the perceived value of One Health (questions 4-5) increased by at least 3 points out of 10 on average.
  - b. Be advertised through a public media campaign that includes social media and mainstream media.
    - i. The effectiveness of our public media campaign will be measured by the number of public venues in which the OHSPC will be advertised, and the estimated number of viewers or readers that will be reached through those venues.
    - ii. Our goal is to have a healthy mix of advertising that includes at least two social media and two mainstream media venues, with a cumulative estimated impact of at least 10,000 people.

## **PART 3**

### **Promotion:**

#### *Reach*

Overall, we had 166 people registered for the event; however, the event was held at the Saint Louis Zoo, which provided not only exposure to the general public but also easy access for the public to participate if inclined. Our promotional plan took a four-pronged approach to outreach: through our respective universities, through partner institutions, through social media platforms, and through mainstream media outlets. For a more detailed description, please see the Promotional Plan we submitted before the OHSPC. The most intense efforts for promotion were focused within our immediate spheres of influence, mainly through our student clubs and professional relationships. To engage a broader audience, both mainstream media and social media outlets were engaged. The event was promoted through the One Health initiative website and the provost's events at Mizzou. While we encountered some resistance from mainstream media, social media was highly beneficial in helping to promote the event. On Twitter, hashtags of #OHDay and #OneHealthSTL were used by both professors and students to engage their personal networks in some of the discussions being stimulated through interactions at the conference. The event was also promoted via Facebook through the One Health Day page and the Facebook pages of different schools.

After the conference, a survey (Appendix B) was employed to assess the reach and depth of the event's advertising. The majority of respondents reported hearing about the event from a colleague at their institution (47.6%) or from the One Health interest group at their institution (24.4%). In addition, the event flyer (Appendix D) reached a large portion of attendees, with 22.2% reporting it as the means by which they heard about the event. Only a small portion of survey responses reported hearing about the event through social media or local media; however, one attendee did learn about the event through The Student Doctor Network, an online community of pre-health students, health professional students, and practicing doctors. Engagement of the media could be improved upon for outreach to a broader community in the future.

It is important to note that the survey was only sent to individuals who pre-registered for the event. While we designed a survey to gauge the participation of the general public and non-registered attendees (Appendix C), the logistics of administering the survey during the event proved more difficult than anticipated. As a result, the only data concerning how people heard



about the event came from the post-assessment survey, where respondents were more likely to have direct ties to the event and participants. This may have resulted in an underrepresentation of participants reached through these less direct methods of publicity.

### *Depth*

Based on the results of the post-event survey (Appendix B), the event did a superb job of informing people about the One Health mission and broadening the understanding of those who had prior knowledge of One Health. Participants were asked to indicate how much they knew about One Health on a scale from 1 to 10—with 1 being “No Knowledge” and 10 being “Expert on OH” —both before and after attending the event (questions 9-10). Prior to the event, respondents averaged 5.6 out of 10, with 26.7% reporting a limited understanding of OH and 22.2% reporting an advanced understanding of OH (arbitrarily defined as any score less than 4 out of 10 and any score greater than 7 out of 10, respectively). Following the event, respondents assessed their knowledge of OH on average at 7.9 out of 10, with only 2.2% reporting a limited understanding of OH and 73.3% reporting an advanced understanding of OH. Specifically, participants with a limited understanding of OH prior to the event showed the greatest change in understanding, with an average improvement of 5.3 points on the 10-point scale. For those participants with advanced prior knowledge of OH, subjective responses to the survey (question 16) suggested increased understanding of the broad scope of disciplines included in OH research, especially regarding the ecological and environmental components of OH. In addition, having concrete examples of research through a poster presentation helped to cement their understanding of the ways that the mission of One Health can be interpreted and applied. Finally, attendees indicated the benefits of exposure to the collaborative work being done across institutions and disciplines (including PhDs, MDs, and DVMs), which was implemented under the umbrella of the One Health mission. Overall, 80% of respondents reported that their understanding of One Health changed as a result of their attendance (question 15).

## **PART 4**

### **Immediate Impact:**

Overall, the OHSPC was a success. The data supporting the following results can be found below (Appendix B).

The OHSPC met its first objective, “to stimulate collaborations between health professionals working in human medicine, veterinary medicine, ecology, and other disciplines,” with flying colors. Respondents rated the event’s ability to foster interactions between people of different academic backgrounds at 7.4 out of 10 on average, with 84.4% of respondents satisfied with opportunities for interaction across academic silos. Anecdotal evidence has suggested that at least three research collaborations have already developed as a result of discussions that occurred during the poster session, with many more collaborations possible. In fact, one such interaction was career-altering for a second-year veterinary student who showed her poster at the OHSPC—since then, she has begun expanding her poster project into a masters thesis. In her words, “It [the Conference] literally changed my life! I came back so excited about my runner-up finish that my mentor asked if I wanted to turn my project into a master’s degree. I liked that idea and have since requested—and been granted—permission to take a year off from vet school in order to do just that!”

With regard to the second objective, “to augment awareness of the importance of the OH approach, and our collective responsibility to apply it, in facing the challenges of the 21st century,” it is clear from the results of survey questions 11 through 14 that the OHSPC met our goal. The extent to which attendees considered themselves OH practitioners increased 1.7 points on average, from 5.0 out of 10 to 6.7 out of 10 (questions 11-12). Attendee’s perceived value of OH increased 1.5 points on average, from 7.8 out of 10 to 9.3 out of 10 (questions 13-14). The latter finding was especially notable, since the perceived value of OH was relatively high even before the event. Importantly, these data corresponded into greater interest at club events held at our institutions, and a bump in student interest in OH-based research. Attendance increased by approximately 33% at the University of Missouri One Health Club events after the OHSPC, with all attendees of the inaugural OH conference present for at least 3 of the 4 events following the conference. Three of the first year attendees from the University of Missouri are actively trying to join a research fellowship to undergo One Health Research, based off their experiences at the conference.

The OHSPC's third objective, "to increase student attendance at and involvement in the inaugural One Health Conference at the Saint Louis Zoo," was also successfully achieved. As regards goal 3a, 14 students presented posters at the OHSPC, including 7 veterinary posters, 5 human medicine posters, and 2 environmental health posters. By multiplying the number of checked-in conference attendees (85) by the proportion of survey respondents that were students (0.587), we estimate that about 50 students attended the conference, including about 5, 17, and 28 from the fields of ecology/environmental science, human medicine, and veterinary medicine, respectively. Concerning goal 3b, approximately 45 (90%) of students registered to attend the full conference, 15% more than the goal. As for goal 3c, average student satisfaction with opportunities to interact with other students from outside their current program of study was one full point above the goal at 7.0 out of 10, with 81.5% of student respondents satisfied with opportunities for interdisciplinary interaction. Anecdotally, each of the WAMCOH student OH groups have noticed increased enthusiasm for collaboration with OH interest groups from other schools.

The fourth objective of the OHSPC, "to foster public awareness of the importance of the One Health paradigm," was the most difficult to achieve. Although the OHSPC was held at one of two public entrances to the zoo (goal 4a), its impact on the public was diminished because that entrance did not open until the OHSPC had nearly finished. What's more, no data were collected from the few zoo visitors that did stop by the OHSPC due to logistical constraints on the administration of our day-of-event survey (Appendix C). Goal 4b stated that the OHSPC will "be advertised through a public media campaign that includes social media and mainstream media." As far as social media, the OHSPC was advertised on Twitter (using #OneHealthSTL and #OHDay), Facebook (our personal pages and the OH Day's page, but not the Saint Louis Zoo's page), and the Student Doctor Network. The Saint Louis Zoo, which has over half a million followers on Twitter, tweeted about our event. As for mainstream media, while we failed to achieve press coverage from both the Record (a publication of Washington University) and the St. Louis Post Dispatch, the OH Commission Newsletter aided greatly in disseminating information about our event. Therefore, we met our goal of having at least two social media venues, but only were able to take advantage of one mainstream media venue. Technically, it is very likely that our advertising reached the eyes of 10,000 people; however, that number is nearly impossible to assess. For example, how do we know what proportion of the Zoo's 576,000 Twitter followers read the tweet? Or more importantly, how do we know whether reading that tweet actually made them aware of the importance of the OH paradigm? Therefore, the metric carries much less meaning than we had originally hoped. In summary, we effectively

employed social media as an extension of our own contacts and spheres of influence, but struggled to use both professional social media and the mainstream media to their full potential.

### **Narrative Summary:**

Overall, the OHSPC exceeded expectations. Our post-event survey data clearly showed that the event aligned with the objectives of International One Health Day to stimulate collaborations across professional communities and create awareness of the need and value of a OH approach. Since this was the first time an event like this had been executed, we considered our goal of 10 posters to be ambitious. Accordingly, we were tremendously excited to recruit 14 posters. We were further amazed by the reach of our advertising--despite some frustration with local media outlets, students came to St. Louis to present their posters in the OHSPC from as far away as Mississippi State University and the University of Florida!

One of the largest challenges we faced was reaching the general public. Although our event was free, open to the public, and at the Saint Louis Zoo, it was much more difficult than expected to engage zoo visitors for at least two reasons. First, because it had to fit into the conference's schedule, the timing of the OHSPC was inflexible, so the OHSPC was nearly finished by the time the zoo opened to the general public. Next year, the OHSPC will be a part of conference planning from the beginning and we will be sure to optimize its timing within the conference to best attract the general public. In that context, the future results of our day-of-event survey for the general public (Appendix C) should prove enlightening. Second, as student leaders our spheres of influence centered around our colleagues and institutional partners, and advertising the event to the general public was more of a challenge. While the One Health Commission's OH Day event listing was a major help, we found dead-ends when we reached out to the St. Louis Post-Dispatch and other local news organizations. Next year, we will start advertising outside our schools and institutional partners earlier to take advantage of the conference venue's ability to market its events. For example, the Saint Louis Zoo has over 576,000 followers on Twitter and its Facebook page has over 452,000 likes, but the OHSPC was not publicized on its Facebook page and the only tweet from the Saint Louis Zoo's twitter account advertising the OHSPC came out one day before the event took place. Had we been in touch with the St. Louis Zoo's public relations teams earlier, we could have taken advantage of their weighty public media presence to a much greater extent. If next year's event is at the Birmingham Zoo as it is hoped, we will work with its public relations teams to reach their typical audience in the most effective ways possible. Also, partnering with public relations teams from

the OHSPC venue will likely open doors to connecting with mainstream media. Had we reached out to the Saint Louis Zoo's public relations team earlier, for example, they could have connected us with a Post-Dispatch health sciences reporter with whom they have previously worked.

Another unexpected hurdle was the variance in scores awarded by different judges, even with the same rubric. Some judges were simply more generous, and other judges were harsher. To accommodate these differences, we were forced to normalize the scores to the mean of means by calculating a multiplier for each judge. We did not anticipate this problem, and would prefer to avoid it in the future. Next year, one judge from each domain of OH will judge all entered posters, instead having a larger number of judges that judge only a handful of posters. In order to accommodate for the increased time commitment on the part of the judges, a strict 5-minute time limit will be imposed on presentations. Next year's OHSPC will also be about 30 minutes longer.

We believe that the earlier students are involved in OH, the better. Thus, another adjustment for next year is the addition of an undergraduate category for competition in the OHSPC. With the playing field levelled, future publicity efforts could target undergraduate ecology, pre-vet, pre-med, and global health clubs more heavily.

While there is plenty of room for improvement, the OHSPC was overwhelmingly a success. It added significant value to the inaugural One Health Conference at the Saint Louis Zoo by engaging students, OH veterans, and the public in dialogue about how to work together to solve complex problems that threaten the health of our world. As one of the post-event survey respondents put it, we "can't wait for next year!"

### **Information regarding the OHC Student Event Competition prize:**

Prize money will be divided between the three One Health student groups that sponsored the OHSPC: the University of Missouri One Health Club, Students for One Health at Auburn University, and One Health at WU (Washington University's student interest group in OH).

For the University of Missouri One Health Club, the funds will be allocated to recruit speakers from outside of the University to speak to the One Health Club via reimbursement of travel funds and modest honoraria.

At Auburn University, Students for One Health will use a portion of the award to fund the One Health Week event in Fall 2017. This year was the first of its endeavor and proved successful in unifying students from the Doctor of Osteopathic Medicine School as well as Tuskegee Veterinary School together in recognizing the One Health approach. Specifically, funds would go towards facilitating speaker travel, promotional material, and outreach. The other portion of the award would go towards next year's OHSPC, with the goal of expanding the breadth and depth of both its advertising and its impact. Any remaining funds will be employed in the sponsorship of student travel to other OH conferences, and in the recruitment of OH speakers to come to Auburn.

One Health at WU will use a portion of its award allotment to reimburse the cost of this year's OHSPC. The remainder will be used to (1) expedite the construction of an online database that will help students find research opportunities that interest them from a list of OH-related projects within the WU community, (2) host an event where medical students will learn about the health threats of Missouri flora and fauna from environmental scientists at WU's ecology research station, (3) sponsor talks at WU's medical school by veterinarians and ecologists about the connections between their work and human medicine, and (4) support student travel to next year's One Health Conference and poster session at Auburn University.

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## Appendix A: Rubric used for student poster evaluation

### Grading Rubric for Posters

#### One Health Conference

September 30, 2016

Saint Louis Zoo

Note to judges: Per the One Health Commission, the OH mission is **to attain optimal health for people, domestic animals, wildlife, plants, and our environment**. The eight domains of OH include human medicine, veterinary medicine, environmental health, ecology, public health, molecular and microbiology, translational medicine, and health economics. The more domains that a project touches, the more likely the project is to fall under the OH umbrella.

Aesthetics of poster	10	9	8	7	6	5	4	3	2	1
	Content is accurate, logically ordered, and easily legible. Graphs are neat and clean. Main gist of poster is readily apparent without oral explanation. Visually appealing.		Content is accurate but some required information is missing and/or not presented logically. Main gist is still generally easy to follow without oral explanation.		Content is accurate but some required information is missing and/or not presented logically or legibly. Main gist and/or figures are difficult to follow without explanation.		Content is questionable, illogically ordered, or illegible. Main gist and/or figures are indecipherable without explanation.		Content is inaccurate, or illogically ordered and illegible. Oral presentation is required to understand the majority of the poster.	
Quality of Research	10	9	8	7	6	5	4	3	2	1
	Research is novel, complete, and presented in its appropriate context. Methods are sufficiently detailed, conclusions are supported by data, and ideas for future studies are included.		Research is nearly complete and context is given. Methods are acceptable and conclusions are justified.		Research is incomplete but sufficient context is provided to convince the viewer of the value of the research. Proposed methods are well-explained. Expected results are discussed.		Research is incomplete or is outdated, and inadequately contextualized. Methods do not provide necessary details, or conclusions are not justified.		Research is far from complete. Context is lacking. Sections of poster may be missing, or conclusions may not be supported by the data.	

Clarity of presentation	10	9	8	7	6	5	4	3	2	1
	Presenter tells story of research project within its scientific context and gives details where appropriate. Presentation is brief, but complete. Presenter answers questions lucidly and with alacrity.		Presenter provides details about research project with context and detail. Presentation is slightly too long/short. Questions are handled fairly well.		Presenter speaks about research with limited context or too much/little detail. Presentation is too long/short. Questions are answered, but answers have room for improvement.		Presenter talks about research without providing adequate context, and in too much/little detail. Presentation is inappropriately long/short. Questions are inadequately answered.		Presenter fails to provide context and gives far too much/little detail. Presentation is far too long/short. Questions are not taken, or are poorly answered.	
Presenter's justification of how the work advances the OH mission	20	18	16	14	12	10	8	6	4	2
	Presenter makes a strong case for how the research advances the OH mission, and the project is seen as a clear example of the OH paradigm.		Presenter argues effectively that his/her work advances the OH mission, and project generally falls under OH umbrella.		Presenter argues somewhat effectively that the research advances the OH mission, and project may fall under the OH umbrella.		Presenter attempts to explain why his/her work advances the OH mission, but project may not fall under the OH umbrella.		Presenter makes no effective argument why his/her work advances the OH mission or falls under the OH umbrella.	

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Name of presenter: \_\_\_\_\_

First three words of poster title: \_\_\_\_\_

Initials of judge: \_\_\_\_\_



## Appendix B: Post-event survey and data summary

Everyone who registered to attend the conference received a survey at the conclusion of the day. The survey employed before-vs-after questions to elucidate how attendees' comprehension and valuation of One Health changed during the event. It also assessed how effective the event was in connecting them with other attendees from different academic backgrounds. Additionally, the survey elucidated towards the effectiveness of our promotional plan, and estimated the value our poster competition added to the conference.

### Total number of survey respondents: 45 (52.9% of checked-in conference attendees)

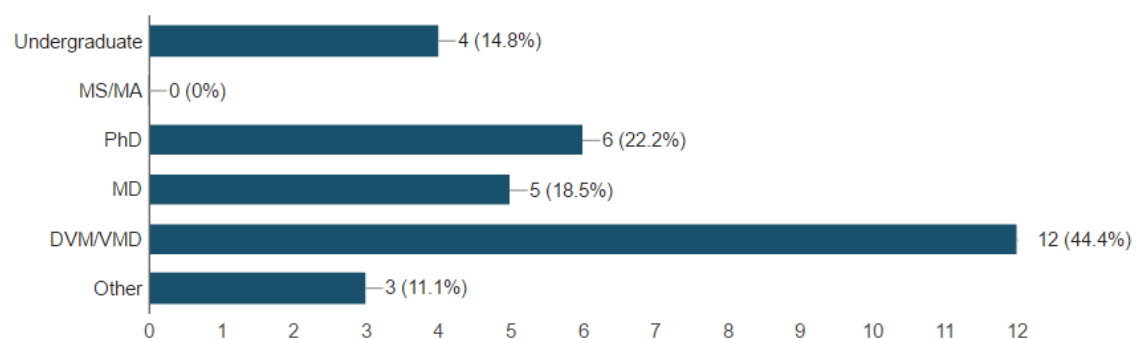
#### A. Participant Demographics

1. 60.0% of survey respondents were students from veterinary, medical, and engineering programs of study
2. 8 respondents presented a poster at the conference

#### B. The realm of One Health with which attendees most identified

1. 46.7% veterinary medicine
2. 37.8% human medicine
3. 15.6% ecology/environmental science

#### C. Student attendee current programs of study



### Pre-conference knowledge, perception, and attitude

#### A. Main reasons for attending the conference

- a. 80.0% attended to hear the keynote speaker, Barbara Natterson-Horowitz nationally renowned author of *Zoobiquity: The Astonishing Connection Between Human and Animal Health*

- b. 57.8% attended to meet One Health practitioners from around the region
  - c. 42.2% attended for the Cancer Bio-Translation and Infectious disease panel
  - d. 37.8% attended for the Ecological Context of One Health panel
  - e. 26.7% attended for the zoo tours
  - f. 22.2% attended for the Student Poster Contest
- B. The means by which attendees heard about the event
  - a. 46.7% learned about the event from colleagues at their respective universities/institutions
  - b. 24.4% learned about the event from a One Health interest group at their respective university
  - c. 22.2% learned about the event from an event flyer
  - d. Local media, social media, and the One Health Commission newsletter proved only minorly successful in reaching attendees
- C. Knowledge about OH: Attendees' self-assessment of their level of knowledge about OH before the event, from 1 (no knowledge) to 10 (expert on OH)
  - a. Overall, the average rating was 5.6 out of 10
- D. Involvement in OH: Attendees' self-assessment of the extent to which they considered themselves OH practitioners before the event, from 1 (not at all) to 10 (without a doubt)
  - a. Overall, the average rating was 5.0 out of 10
- E. Perceived value of OH: Attendees' opinion regarding the importance of the OH approach in the challenges of the 21st century before the event, from 1 (not at all important) to 10 (of utmost importance)
  - a. Overall, the average rating was 7.8 out of 10

### **Post-conference knowledge, perception, and attitude**

- A. Satisfaction with the event's effectiveness in fostering interactions among people from different backgrounds
  - a. 84.4% believed that the conference was successful in fostering interactions among people from different backgrounds, as measured by ranking their experience as 6 or higher on a scale of 1 to 10
  - b. Overall, the average rating was 7.4 out of 10

- B. Student satisfaction with the opportunity to interact with students from other programs of study
  - 1. 81.5% of student attendees were satisfied with the opportunity to interact with students outside their current program of study, as measured by ranking their experience as 6 or higher on a scale of 1 to 10
  - 2. Overall, the average rating was 7.0 out of 10
- D. Knowledge about OH: Attendees' self-assessment of their level of knowledge about OH after the event, from 1 (no knowledge) to 10 (expert on OH)
  - 1. Overall, the average rating was 7.9 out of 10
- E. Involvement in OH: Attendees' self-assessment of the extent to which they considered themselves OH practitioners after the event, from 1 (not at all) to 10 (without a doubt)
  - 1. Overall, the average rating was 6.7 out of 10
- F. Perceived value of OH: Attendees' opinion regarding the importance of the OH approach in the challenges of the 21st century before the event, from 1 (not at all important) to 10 (of utmost importance)
  - 1. Overall, the average rating was 9.3 out of 10
- G. Amount that understanding of One Health changed as a result of attending the conference
  - 1. 80.0% of respondents believed that their understanding of One Health had changed as a result of attending this conference
  - 2. Summary of various reasons attendees provided regarding how their understanding of One Health had changed after attending the conference
    - a) Better awareness and understanding of the ecological context of One Health, many individuals were unaware that this was a major aspect of One Health
    - b) Current process and understanding of the One Health model and progress that has been made in this arena
    - c) Enhanced comprehension of the broader effects of One Health based on examples from panel speakers

## Post-Conference survey

We hope you enjoyed the Inaugural One Health Conference! This survey should take no more than a few minutes. We would love to hear your thoughts on the Conference and Poster Session!

**\* Required**

### 1. Are you a student? \*

*Mark only one oval.*

- ☐ Yes      *Skip to question 2.*
- ☐ No      *Skip to question 5.*

## Inaugural One Health Conference Follow-up

For current students only.

### 2. What is your current program of study? \*

*Check all that apply.*

- ☐ Undergraduate
- ☐ MS/MA
- ☐ PhD
- ☐ MD
- ☐ DVM/VMD
- ☐ Other: \_\_\_\_\_

### 3. How satisfied were you with opportunities at the Conference to interact with other students from outside your current program of study? \*

*Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Very dissatisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very satisfied

### 4. Did you present a poster at the Conference? \*

*Mark only one oval.*

- ☐ Yes
- ☐ No

## Inaugural One Health Conference Follow-up

For all conference attendees.

**5. What were your top reasons for attending the Conference? \***

*Check all that apply.*

- ☐ Keynote speaker: Dr. Natterson-Horowitz
- ☐ Panel 2: Ecological Context of One Health
- ☐ Student Poster Contest
- ☐ Zoo tours
- ☐ Panel 1: Cancer Bio-Translation - Infectious Diseases
- ☐ Meet One Health practitioners from around the region
- ☐ Other: \_\_\_\_\_

**6. How did you hear about this event? \***

*Check all that apply.*

- ☐ Event flyer
- ☐ One Health interest group at my university
- ☐ From a colleague at my university or institution
- ☐ From a colleague at a different university or institution
- ☐ Local media
- ☐ Social media
- ☐ One Health Commission newsletter
- ☐ Other: \_\_\_\_\_

**7. With which basic realm of One Health do you most readily identify? \***

*Mark only one oval.*

- ☐ Human medicine
- ☐ Ecology/environmental science
- ☐ Veterinary medicine

**8. How effective was the event in fostering interactions among people from different academic backgrounds? \***

*Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Extremely ineffective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremely effective

**9. BEFORE THIS EVENT, how much did you know about One Health? \****Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
No knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Expert on One Health

**10. Now that you have attended the event, how much do you know about One Health? \****Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
No knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Expert on One Health

**11. BEFORE THIS EVENT, to what extent did you consider yourself a practitioner of One Health? \****Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Without a doubt

**12. Now that you have attended the event, to what extent do you consider yourself a practitioner of One Health? \****Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Without a doubt

**13. BEFORE THIS EVENT, how important did you consider the One Health approach to be in answering the challenges our world faces in the 21st century? \****Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Not at all important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Of utmost importance

14. Now that you have attended the event, how important do you consider the One Health approach to be in answering the challenges our world faces in the 21st century? \*

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
Not at all important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Of utmost importance

## Inaugural One Health Conference Follow-up

Final section!

15. Did your understanding of One Health change as a result of your attendance? \*

Mark only one oval.

☐ Yes

☐ No

16. Why, or why not?

.....

17. Do you have any comments or suggestions for improvement for next year's conference?


.....

.....

.....

.....

.....

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## Appendix C: Day-of-event survey (not employed)

In-Conference Survey

[https://docs.google.com/forms/d/1w\\_W-oTTZzgguXMTD73s-YIf...](https://docs.google.com/forms/d/1w_W-oTTZzgguXMTD73s-YIf...)

### In-Conference Survey

1. Which event is of most interest to you?

Mark only one oval.

- ☐ Keynote speaker: Dr. Natterson-Horowitz
- ☐ Panel 1: Cancer Bio-Translation - Infectious Diseases
- ☐ Panel 2: Ecological Context of One Health
- ☐ Student Poster Contest
- ☐ Zoo tours

2. BEFORE THIS EVENT, how much did you know about One Health?

Mark only one oval.

	0	1	2	3	4	5	6	7	8	9	10	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Expert on One Health

3. Now that you have attended the event, how much do you know about One Health?

Mark only one oval.

	0	1	2	3	4	5	6	7	8	9	10	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Expert on One Health

4. BEFORE THIS EVENT, how important did you consider the One Health approach to be in answering the challenges our world faces in the 21st century?

Mark only one oval.

	0	1	2	3	4	5	6	7	8	9	10	
Not at all important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Of the utmost importance



5. Now that you have attended the event, how important do you consider the One Health approach to be in answering the challenges our world faces in the 21st century?

Mark only one oval.

	0	1	2	3	4	5	6	7	8	9	10	
Not at all important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Of the utmost importance

6. In which age group do you fall?

Mark only one oval.

- ☐ <18 years old
- ☐ 18-25 years old
- ☐ 26-40 years old
- ☐ 40-65 years old
- ☐ >65 years old

7. Which basic realm of One Health is generally of most interest to you?

Mark only one oval.

- ☐ Human medicine
- ☐ Ecology/environmental science
- ☐ Veterinary medicine

8. What is your profession?

.....

9. Would you be interested in attending this and similar events again if notified in the future?

Mark only one oval.

- ☐ Yes
- ☐ No

10. Do you have any suggestions for advertising future events like this one?

.....

# SHOW YOUR POSTER

AT THE

## INAUGURAL ONE HEALTH CONFERENCE



SAINT LOUIS ZOO  
SEPTEMBER 30

8AM–1PM

DISCUSS YOUR  
WORK WITH  
**EXPERTS**  
IN THE FIELD

One Health is the **collaboration** between **human medicine**, **environmental science**, and **veterinary medicine** to advance and protect the health of the planet.

**One Planet, One Health!**

Students working on environmental health, comparative medicine, zoonotic disease, translational medicine, natural resource management, and conservation are strongly encouraged to present a poster. For submission guidelines & registration please visit:

[www.OneHealthSTL.eventbrite.com](http://www.OneHealthSTL.eventbrite.com)

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