Swine Seminar Series Live Broadcast to Veterinary Student Network

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INTRODUCTION:

Addressing the challenge of providing swine training to interested swine focused students at all colleges is critical to the successful exposure, engagement and recruitment of future swine veterinarians. Many students will not pursue a career in food animal medicine, but providing awareness of swine medicine and an accurate impression of the industry may garner future connections and allies for the industry. To broaden the access of swine medicine resources across veterinary schools, this project aims to create a network of student lead swine/production animal clubs and to facilitate the live broadcast of a swine focused seminar series to this network.

The objectives were:

- Create a database of contact information from swine or production medicine student clubs across veterinary colleges willing to participate in a live stream seminar series hosted by ISU AASV Student Chapter
- Create standard operating procedures on the technologies (ZoomTM, microphone and webcam) required for the live stream and distribute these materials to participating colleges
- Broadcast three swine focused seminars hosted live at Iowa State University College of Veterinary Medicine (ISU CVM) to the student network of participating veterinary colleges

CHANGES MADE FROM ORIGINAL PROPOSAL:

1. ZoomTM was used instead of Adobe ConnectTM. ZoomTM is more user friendly and has greater flexibility for webinars. Iowa State University provided strong technical support for Zoom and has less expertise with Adobe Connect.

TANGIBLES PRODUCED:

- 1. An AASV Announcement for the newsletter was drafted and sent out. It ran the following weeks:
 - September 1, 2015
 - September 7, 2015
- 2. An e-mail was sent to AASV faculty members employed at veterinary schools across North America notifying them about the broadcast series. Both the advertisement and e-mails received a large amount of responses for the lecture series.
- 3. Personalized emails were sent to the students and faculty members that responded to the advertisement. The e-mail asked for one representative per school to be the communication liaison for that school. However, individuals from schools were also allowed to enroll in the series. The email asked for the following information from the students in order to establish an accommodating time to hold the lecture series:
 - Class start and end time
 - Lunch time

Individuals were asked to give additional information, such as:

- Veterinary school year
- Range of swine experience

This information was collected before the first lecture series to establish an appropriate time to hold the lecture series.

- 4. A database on Microsoft Excel was created with a list of veterinary schools and contacts that wanted to enroll in the broadcast series. The schools on this database were considered to be enrolled in the series. This database was used to notify schools of the date, time and topic for the second and third lecture series. One representative per school was responsible for room bookings, setting up the ZoomTM application at their school, help recruit other students at their school to watch the lecture series, and order meals for the students at their school.
- 5. Instructions on how to use the ZoomTM application were made with Microsoft PowerPoint. The instructions were sent to participating schools as a PDF file before the first lecture and before the second lecture to the participating schools that had not tuned in live for the first lecture.
- 6. Three lectures were held at ISU CVM for the 2015-2016 school year and broadcasted to veterinary schools across the United States and Canada. Two lectures were held in the fall of 2015 and one was held in the spring 2016. Lecture topics included pet pigs, emerging diseases and regulation of antimicrobial use.
 - a. Lecture 1: "Case Reports from Senecavirus A" Speaker: Dr. Christopher Rademacher
 - i. The first lecture was held on Tuesday, October 27th at 5:30 PM central time (CT) and was presented by Dr. Christopher Rademacher, an ISU CVM swine extension veterinarian. The presentation was "Case Reports from Senecavirus A"
 - b. **Lecture 2:** "Medical Procedures and Clinical Skills for Pet and Pot-bellied Pigs" Speaker: Dr. Brina Lopez
 - i. The second lecture was held on Thursday, November 19th at 5:30 PM CT and presented by Dr. Brina Lopez, a large animal internal medicine resident at the University of Georgia College of Veterinary Medicine. The topic discussed the top medical procedures and clinical skills applied to pet and pot-bellied pigs.
 - c. **Lecture 3:** "The Veterinary Feed Directive and its Impact on Swine Medicine." Speaker: Dr. Sam Holst
 - The third lecture of the Swine Medicine Talks was held on February 11, 2016 at 5:30 PM CT and presented by Dr. Sam Holst, a former graduate from University of Minnesota College of Veterinary Medicine and now a veterinarian employed by the Swine Vet Center in St. Peter, Minnesota.
- 7. Three unique surveys were created using SurveyMonkey.com to distribute after each lecture to the participating schools. These surveys were filled out by the student liaisons and results were compiled into a summary report for each survey.
- 8. The first three schools to fill out each survey were awarded \$150.00 to go towards a meal for the following lecture. There were a total of nine winners throughout the lecture series. Speakers were paid a stipend as described in the original proposal.

SUMMARY OF OUTCOMES

Participation

There was a great amount of participation from veterinary schools around North America. Twenty of 24 invited veterinary schools participated and about 100 students attended each event. Approximately 25 to 35 students from ISU CVM were present at each lecture.

For the first lecture, 20 schools participated. Twelve schools were able to tune in live to the lecture and eight schools requested a recording of the lecture to watch at a later date. The second lecture had 12 North American veterinary schools tune in live, as well and nine other schools that requested a recording. The third lecture had nine schools tune in live and 10 schools that requested a recording of the lecture. Below is a table showing what schools were invited, which school participated in each lecture, the number of participants from each school, and if they tuned in live or requested a recording to watch a later date.

Table 1: Participation results from all three lectures										
School	Responded and Enrolled	How They Tuned In for each lecture? (Recorded or Live)		Filled in Survey	Total number of participants					
		1	2	3		1	2	3		
Washington State University	Yes	R	R	R	No	NA	NA	NA		
University of Pennsylvania	Yes	L	R	R	Yes	1	NA	NA		
University of Florida	Yes	R	R	R	Yes	NA	NA	13		
University of Wisconsin	Yes	R	R	R	No	NA	NA	NA		
Kansas State University	Yes	L	L	L	Yes	6	NA	3		
University of Missouri	Yes	L	N/A	L	No	NA	NA	NA		
Auburn University	Yes	R	R	R	No	NA	NA	NA		
Cornell University	Yes	L	R	R	No	NA	NA	NA		
University of Georgia	Yes	L	L	L	Yes	5	6	5		
University of California	Yes	R	R	R	No	NA	NA	NA		
Davis										
Virginia Maryland College	Yes	L	L	R	Yes	8	NA	NA		
of Veterinary Medicine										
Tufts University	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Lincoln Memorial University	Yes	L	L	L	Yes	NA	5	1		
University of Illinois	Yes	L	L	R	Yes	15	23	30		
The Ohio State University	Yes	L	L	L	Yes	30	35	10		
Purdue University	Yes	R	L	L	Yes	NA	NA	1		
Michigan State University	Yes	L	L	R	No	NA	10	NA		
North Carolina State	Yes	L	R	L	No	5	NA	NA		
University										
St. George's University	Yes	L	R	R	Yes	7	NA	NA		
University of Minnesota	Yes	N/A	L	L	Yes	NA	5	8		
Guelph University	Yes	L	L	R	Yes	2	10	NA		
Midwestern University	Yes	N/A	R	R	No	NA	NA	NA		
Texas A&M University	Yes	L	NA	L	Yes	20	NA	49		

Survey Outcomes:

Many of the student liaisons from the participating veterinary schools gave positive feedback and helpful suggestions for improvement on the surveys that were distributed after each lecture. Each survey asked about participation numbers, topics for future lectures, technical issues, dates for future lectures, and improvements for the lecture series. The last survey included an inquiry as to student interest in continuing the lecture series next year. We received very positive feedback from all schools that responded to the survey; a confirmation that they would like the lecture series to continue. The table below summarizes questions asked in the survey and responses from student liaisons. One survey was completed per school per lecture.

Table 2	Table 2: Survey results summarized for all three lectures. Each response represents one school.				
Q1:	What topic would you like to learn more about?	Number of Responses:			
A1:	Changes to the Veterinary Feed Directive and Its Effect on Swine Practice	8			
	Show Pig Practices - Focus on Common Veterinary Services and Techniques	0			
	Requested by Show Pig Producers	8			
	Animal Welfare Issue in the Swine Industry "Pet Pigs, Pot Bellies, and Hobby Farms" - Top 3 Presenting Complaints and	7			
	Clinical Techniques Every Grad Should Know	7			
	Infectious and/or Emerging Diseases in Swine	7			
	other	1			
		Number of			
Q2:	Did you have any technical difficulties?	Responses:			
A2:	One school had the picture freeze for about 10 seconds and then it reconvened	1			
	Another school's internet connection dropped for a minute and then reconnected	1			
	All other schools that participated in the survey reported a smooth broadcast	-			
	and that Zoom worked well	10			
		Number of			
Q3:	What did you like best about the series?	Responses:			
A3:	The live audio/video worked well	10			
	The topic was really good	8			
	Being able to connect with other fellow swine enthusiasts around North America	8			
	Having the opportunity to get education on swine when resources are not	0			
	available in the school's curriculum	1			
	We had lots of participation	2			
	Learning about the Swine Medicine Education Center	1			
		Number of			
Q4:	How should the series be improved?	Responses:			
A4:	Another topic	2			
	More advanced notice on when the talk will be	3			
	Have other schools host a lecture	4			
1	More clear directions on how to use the Zoom Application	0			

	Perhaps have an announcement at the end of the lecture before questions when the next lecture will be	1
	Have a schedule of the lectures available	1
	Everything went well!	1
	Lots of noise/feedback before the lecture started	1
Q5:	What changes and improvements could be made to the broadcast?	Number of Responses:
A5:	More variation in the time talks were held so other schools can tune in live Thought Zoom Application did not work well and use another source of broadcasting the lecture	4 0
	Our school would love to host a future lecture and broadcast it to other Other: The Zoom application worked well for us. Club members enjoyed being able	2
	to listen to the recordings	1
	Have more lectures!	1
	None or no major suggestions, we enjoyed it	1
	More time to reserve rooms for the lecture	1
	They could not see some of the videos through Zoom.	1

Continuation of the Broadcast:

To see if the broadcast should be continued next year, the survey asked the participating schools if the lecture series should be continued in the future. Unanimously, all 11 schools that filled out the survey responded that they would like the broadcast to continue.

IMPROVEMENTS:

Overall, the lecture series was successful. One technical issue was video compatibility between the presenters and host institution. In the second lecture, our guest speaker had two videos that would not work in the PowerPoint presentation mode on ISU CVM's PC computer. The presenter alternatively used a personal laptop for the students at ISU CVM to view the videos. This caused a minor interruption to the presentation.

One aspect that was improved between the first and the following lectures is advertisement of the series at ISU CVM. For the first lecture, only a few e-mail announcements were sent to the student body. For the second lecture, advertisements were created and sent to the faculty, multiple advertisements were sent via e-mail to the student body, as well as, advertised around the school's hallways on electronic screens.

CONCLUSION:

The broadcast was very successful and well received by students. It expanded student knowledge of swine medicine and helped to build student interest within the industry. After the broadcast, there were more veterinary students than ever before that applied for swine focused internships, including the Swine Medicine Applied Research Internship (SMARI) through SMEC and the Swine Veterinary Internship Program (SVIP) through ISU CVM. The broadcast is clearly creating interest in swine medicine and AASV. The broadcast will be continued next year with the intention to grow and include more students and schools.

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