

AAVP Newsletter

American Association of Veterinary Parasitologists

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AAVP Mission Statement

The mission of the AAVP is to lead and partner with our members in advancing veterinary parasitology education, research, practice and service to improve human and animal health. AAVP members are practitioners, educators, and scientists from academia, industry, and government. We will accomplish this mission by providing:

- An annual conference for sharing research and educational advances
- Support to students interested in veterinary parasitology
- A bi-annual educators symposium
- Electronic discussion forums
- Veterinary publications
- Speakers and programs to veterinary professional meetings

From the President



Mason Reichard
AAVP President

Dear AAVP members and colleagues,

For the first time in 65 consecutive annual meetings, AAVP will not be able to meet in-person for our summer academic conference. While we all will miss the conversations and collegiality of an in-person meeting, switching to a virtual platform was unavoidable due to the COVID-19 pandemic and social distancing restrictions. Despite having to deviate from the norm, we are very excited to continue our tradition of providing a platform for AAVP members to present original research and exchange ideas on all aspects of veterinary parasitology. At the time of this writing, the number of people registered for the meeting is more than we anticipated and interest in the virtual meeting has exceeded our expectations. It appears that by providing an online forum, we have gained the interest of a few international colleagues that normally would not attend the meeting due to overseas travel costs. We are beyond pleased to welcome our international colleagues and hope we pique their interest and participation for years to come.

The upcoming virtual meeting would not be possible without the dedication, commitment, and diligence of the program committee. Chaired by Dr. Doug Carithers and supported in all aspects by Drs.

Adriano Vatta, Al Marchiondo, John Gilleard, Martin Nielsen, Grace Van Hoy, and Kathryn Duncan, the program committee has pulled together all AAVP's resources to bring a virtual meeting to fruition. We greatly appreciate all your support, understanding, patience, and flexibility while we converted the conference to a virtual platform. While none of us anticipated a virtual meeting at the start of the year, we are excited at the prospects a virtual platform offers.

We are also extremely grateful to our sponsors: Bayer, Boehringer Ingelheim, Elanco, Merck Animal Health, Vetoquinol, Zoetis, Clinglobal, Companion Animal Parasite Council, and the National Center for Veterinary Parasitology. They have been by our side since the idea of a virtual meeting was conceived. Without them and their significant financial support, our annual conferences (in-person or virtual) would not be possible. Our approach to the virtual meeting has been to keep as many aspects of the meeting as close to normal as possible, just delivered in an online format. As you will see in the program, there will be a plenary session, keynote addresses from award winners, regular scientific sessions, a student presentation competition, a business meeting, and the AAVP-NCVP clinical cases clicker session. While presentations will be pre-recorded, there will be a few live sessions each day.

Prior to the pandemic, the AAVP Executive Committee had been working on several initiatives important to the membership. Based upon recommendations from the *ad hoc* committee formed last year, the 65th Annual Meeting was to be the first where newly formed guidelines regarding how the Young Investigator Travel Grant (YITG) were to be administered. These guidelines can be found in the [Documents page](#) of the AAVP website. Since there is no student travel this year, the new YITG guidelines will go into effect next year at the 66th Annual Meeting in Lexington, KY. The Executive Committee had been ready to propose changes to our constitution that would clarify language enabling only AAVP members current on dues to vote on elections for Vice President, Nominating Committee members, and Secretary/Treasurer. Based upon a recommendation from the Constitution and By-Laws committee, these changes have been tabled for the virtual meeting and will be proposed next year when the membership can discuss and vote in-person.

We very much hope to return to meeting in-person next year and continue to make plans for the 66th Annual Meeting of AAVP in Lexington, KY, June 19–22, 2021. I am also pleased to let you all know that we have re-booked with the resort in Snowbird, Utah for the 67th Annual Meeting of AAVP in June 2022.

As I get ready to step down as AAVP President, I am truly thankful for the opportunity to fulfil this critical role. Like most everything else in life, nothing is accomplished without the support, energy, and dedication of

everyone committed toward reaching the same goals. I am in debt to all members of the executive committee, past, present, and future. It is the activity of the Executive Committee together with the elected, appointed, and standing committees, all of which are composed by volunteers, that keep AAVP afloat. In the spirit of making a difference, please consider getting involved and volunteer for an AAVP committee. To learn more about AAVP committees and what they do, please see reports from the current committee chairs later in this newsletter. To join a committee, simply email a committee chair directly to let them know your interest or join through the AAVP website (members only section, "[Volunteer for an AAVP Committee](#)" page).

Respectfully submitted by:
Dr. Mason V. Reichard

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From the Secretary/Treasurer



Adriano Vatta
Secretary/Treasurer

Dear AAVP Members,

Our membership numbers stand at 192 Regular, 53 Student, and 22 Emeritus Members, for a total of 267 Members. These numbers are similar to those at this time last year where we had 212 Regular, 56 Student, and 23 Emeritus Members, for a total of 291 Members.

Fortunately, we were able to re-negotiate our contract with Snowbird, without loss to the AAVP, and we look forward to holding our meeting in Utah in 2022. Under the guidance of our Program Chair, Dr. Doug Carithers, and our Program Administrator/Executive Secretary, Dr. Al Marchiondo, and with the excellent support of Omnipress and Pat Riley, our webmaster, we are very pleased that we will be hosting the annual meeting virtually this year.

The Executive Committee is delighted that our corporate sponsors have again also agreed to support the AAVP-Boehringer-Ingelheim Distinguished Veterinary Parasitologist Award, the AAVP-Merck Outstanding Graduate Student Award, the AAVP-CAPC Graduate Student Award in Zoonotic Disease, the Bayer Best Student Oral Presentations, and the Elanco Best Student Poster Presentations. The student awards will be adjudicated from all students who enter the competition in a special session during the annual meeting. All monetary awards will be mailed to the recipients after the meeting.

The full AAVP Board Meeting (including the Committee Chairs) will be held on Friday, June 19, 2020 starting at 11.00 AM Eastern Daylight Saving Time, via Zoom, prior to the official start of the 2020 Annual Meeting on Saturday, June 20. The AAVP Business Meeting will be held during a session of the AAVP Annual Meeting on Sunday, June 21, starting at 2.40 PM Eastern Daylight Saving Time. All members are encouraged to attend the Business Meeting and Committee Chairs or a designate are required to attend the Board Meeting. Our President, Dr. Mason Reichard, has emailed the agenda for the Board Meeting to the Executive Committee members and the Committee Chairs.

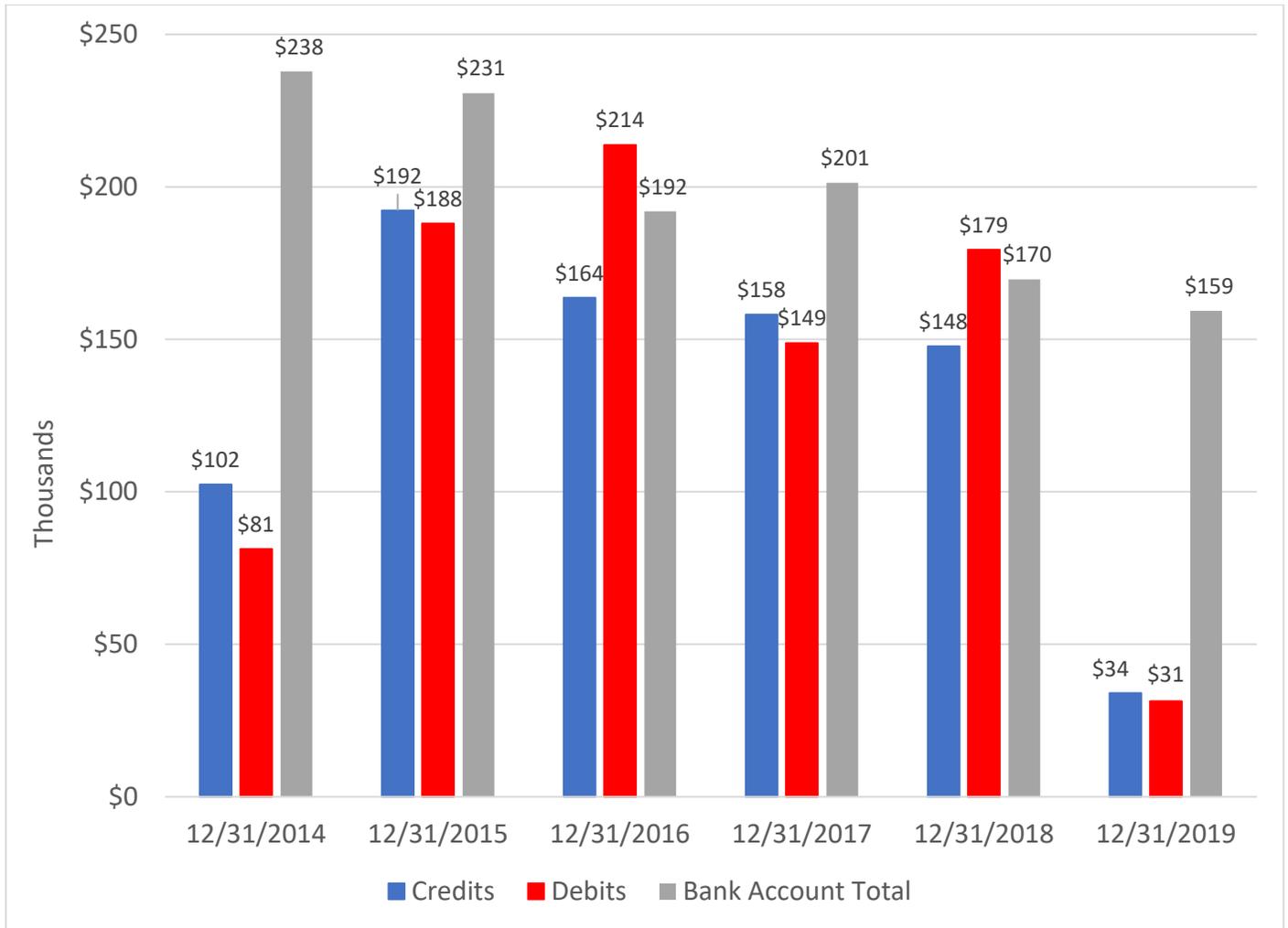
In regard to the finances of the organization, the balance in the AAVP bank account was approximately \$10,000 lower on December 31, 2019 (see graph below) compared with December 31, 2018. The income and expenditure for the year were similar. The reduced amount in the account was mainly due to a large portion of the costs associated with the Educators' Symposium being paid before the end of the year, but only invoiced to CAPC in 2020. We again thank CAPC for their generosity in supporting the Educators' Symposium.

Two other important decisions that affect the finances of the organization were taken. These decisions stemmed from discussions at last year's Business Meeting in Madison, Wisconsin, and internal discussions of the Executive Committee. The first is that the Executive Committee has elected to set aside \$3,500 each year towards the Educators' Symposium. This will provide a contribution of \$7,000 towards the Symposium, with the hope and trust that additional funds would continue to be provided by CAPC.

The second matter concerns the Young Investigator Travel Grants. As discussed in the President's message, an *ad hoc* committee under the leadership of Dr. Susan Little, Oklahoma State University, proposed new guidelines for the administration of the grants. These guidelines were reviewed and accepted by the Executive Committee with some modifications and will now serve to guide us in the allocation of funds towards student travel to future meetings, the first meeting being that to be held in Lexington, Kentucky, in 2021. One of the major changes is the increase in funding per student to allow for re-imbusement of 50% of expenses, up to \$700.

I would like to thank the Finances Committee, under the Chair of Dr. Andy Moorhead, for its review of the financial statements of the organization. We do also continue to welcome the Members inputs on how best the finances of the AAVP can be used for the betterment of parasitology research, education, and outreach.

Thank you for your support of the AAVP!



Respectfully submitted by:
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65th Annual Meeting of the AAVP – Conference Information

Message from the Program Committee



Doug Carithers
President-elect and
Program Chair

The American Association of Veterinary Parasitologists (AAVP) will hold its 65th Annual Meeting virtually on June 20th – 23rd in your location of preference! Unfortunately, we won't all be able to physically meet and greet, but we will be getting access to some great information. Of course, there will be fascinating information on parasitology, but in addition, we'll be able to learn about teaching in the face of challenging times, the legal implications of parasites, and the ramifications associated with movement of both domestic and wild animals on each other, and on us. Amazing stuff!

Drs. Adriano Vatta and Alan Marchiondo have put forth a yeoman's effort in assisting in transitioning this event from an on-site event to a virtual event. Unbelievable as it may sound, an on-site meeting is actually much easier to coordinate. Especially, since we have had 64 years of experience with on-site meetings. Now, with the shift to a virtual meeting, we have to do our best to anticipate every need and possibility in order to pull off a smooth flowing meeting! Our entire program committee, Drs. John Gilleard, Mason Reichard, Martin Nielsen, Adriano

Vatta, Grace VanHoy, Kathryn Duncan, Al Marchiondo and I have been asking and working to address hundreds of questions to allow this meeting to best serve everyone. We realize the potential for issues remain, but with our team's preparation, we feel the issues will be minimized.

On Friday, June 19th, 2020, the Executive Board and all of the committee chairs will meet virtually, to celebrate our association's achievements, address issues and prepare for a successful coming year.

Then on Saturday, June 20th, beginning at 12:00 PM Eastern Daylight time, the big event begins! We will start the webinar, using recorded presentations (to minimize issues), and each presentation will be followed by a live Q&A period (see the schedule in this newsletter). Small breaks will follow each Q&A period to allow you to stretch your legs, with a longer mid-way break built in. We have an outstanding scientific program. The theme of this year's meeting is "Progressive Solutions for Age-Old Problems". The plenary talks on Saturday will provide practical solutions for dealing with known-resistant populations. Dr. Ray Kaplan will provide an update about the rapidly developing issue of triple-resistant hookworms, originating from racing Greyhounds. He'll discuss how the issue came about, and the best recommendations for control. Dr. Susan Little will be addressing vector-borne diseases in re-homed dogs during the Bayer sponsored presentation. Then, Dr. John Gilleard will discuss the ever-growing problem of anthelmintic resistance in gastrointestinal parasites of grazing livestock including best practices for sustainable control and management. These discussions should be beneficial for all the attendees, as it is very likely most will have to address related questions from practitioners in their geographies. Then Dr. Ashley Steuer, the AAVP-Merck Outstanding graduate student will present on her life as a grad student, followed by a sponsor presentation by Zoetis.

On Sunday, June 21st, at noon (EDT) the session will start off with a presentation by Dr. Sharon Patton, the AAVP-BI Distinguished Veterinary Parasitologist, followed by the Boehringer Ingelheim sponsored speaker, Dr. Sarah Babcock, DVM, JD, speaking on legal issues associated with parasites. Following the 'lunch' break, the AAVP business meeting will take place. This will be followed by the Elanco sponsored presentation, again by Dr. Little, on GI parasite contamination in dog parks.

The President's symposium on Monday, June 22nd will cover some fascinating emerging wildlife parasite issues that are making their way into the domestic animal population. Dr. Emily Jenkins will be addressing *Echinococcus multilocularis*, a new threat, and Dr. Grace VanHoy will be addressing case studies on cerebrospinal nematodiasis in ruminants and camelids in the US. Following a brief 'lunch' break, the ever popular AAVP-NCVP Clicker session will begin! This two-hour action-packed session will be hosted by both your favorites: Drs. Andrew Peregrine and Dwight Bowman! Following this session, the student members are all invited to a separate webinar for their meeting. For any details on the student member meeting, or if you don't receive an expected invite by Monday morning, contact Dr. Grace VanHoy (grace.vanhoy@gmail.com), or Dr. Kathryn Duncan (katdunc@ostateemail.okstate.edu).

On Tuesday, those involved in the student competition will participate in judging rounds for their event. The Awards Committee will contact students separately with logistics.

In addition to all this, as a registrant, you will have access to replay submitted presentations, read the abstracts, and peruse the over 120 ADDITIONAL scientific presentations that come with this year's meeting. With just a click, you will be able to pull up and read an abstract of interest, then if you are intrigued, you'll be able to click on a video icon, and actually see the recorded presentation that accompanies that abstract. For poster abstracts, in addition to the abstract and the poster-background presentation video, you'll be able to open and look at a protected pdf-file of the poster for as long as you wish! Should you have questions for any of the abstracts or presentation, you will have the capability to post questions for the presenter right on the Omnipress website, during and following the meeting.

Updates to the program, as it continues to develop, can be found at the AAVP web site ([AAVP](#)). Please note that the final program for the conference will be posted on the AAVP web site, and in this Issue of the Newsletter.

Sincerely,



Doug Carithers, Program Chair and President-Elect

doug.carithers@boehringer-ingelheim.com

Annual Meeting Daily Program

2020 AAVP PROGRAM VIRTUAL MEETING (All times US Eastern Daylight Saving Time)

CONFERENCE PROGRAM	
Friday Jun 19, 2020	
11:00-16:00	AAVP Executive Committee Meeting <i>All AAVP officers and committee chairs please plan to attend</i>
Saturday Jun 20, 2020	
12:00 -12:15	Opening remarks AAVP President: Mason V. Reichard AAVP President-Elect and Program Chair: Doug Carithers
12:15-15:10	PLENARY SESSION and Bayer Symposium Moderator: Doug Carithers
12:15-13:00	1st Plenary Presentation: 1. <i>Exploring the factors involved with the emergence of multiple anthelmintic resistance in Ancylostoma caninum: Why in greyhounds and what is the risk to pet dogs?</i> Ray Kaplan University of Georgia
13:00-13:10	_____
	Question period
13:10-13:15	5 Minute Stretch Period
13:15-14:00	Bayer Sponsored Presentation: 2. <i>CVBD: Parasite and vector-borne disease concerns in rehomed dogs.</i> Susan Little,¹ Andrew Peregrine,² and Ian Wright³ ¹ Oklahoma State University, ² University of Guelph, and ³ Mount Veterinary Practice, Fleetwood, UK
14:00-14:10	_____
	Question period
14:10-14:15	5 Minute Stretch Period
14:15-15:00	2nd Plenary Presentation: 3. <i>Improving and using molecular diagnostics for more targeted, effective and sustainable parasitic helminth control.</i> John Gilleard University of Calgary
15:00-15:10	_____
	Question period
15:10-15:40	½ Hour BREAK
15:40-17:10	OGS and Zoetis Presentation
15:40-16:10	2020 AAVP-Merck Animal Health Outstanding Graduate Student presentation: Moderator: Lindsay Starkey 4. <i>Cyathostomins: Their interaction with the equine host and my life.</i> Awarded to Ashley Steuer
	5 Minute Stretch Period
16:15-17:00	Zoetis Sponsor Presentation: <i>Maximizing moxidectin in a worsening heartworm disease landscape.</i> Chris Adolph, Jessica Rodriguez, Yoko Nagamori Zoetis
17:00-17:10	_____
	Question Period
17:10-17:15	Wrap up for the Day Doug Carithers

Sunday June 21, 2020	
12:00-12:10	<p align="center">Opening remarks President-Elect and Program Chair: Doug Carithers</p>
12:00-14:10	<p>DVP and Boehringer Ingelheim Sponsored Presentation</p>
12:10-13:10	<p>2020 AAVP Boehringer Ingelheim Distinguished Veterinary Parasitologist Moderator: Doug Carithers <i>Awarded to Sharon Patton</i> <i>Emeritus Professor, University of Tennessee</i></p>
13:10-13:15	<p>5 Minute Stretch Period</p>
13:15-14:00	<p>Boehringer Ingelheim Sponsored Presentation: 5. Risks Beyond Parasites: zoonoses, drug resistance, telehealth tools and you.</p> <p align="center">Sarah L. Babcock, DVM, JD Animal & Veterinary Legal Services PLLC</p> <hr/> <p align="center">Question Period</p>
14:00-14:10	
14:10-14:40	<p>½ Hour BREAK</p>
14:40-17:10	<p>AAVP Business Meeting and Elanco Sponsored Presentation</p>
14:40-15:40	<p>AAVP Business Meeting Moderator: Mason Reichard, President All members please plan to attend</p>
15:40-15:45	<p>5 Minute Stretch Period</p>
15:45-16:30	<p>Elanco Sponsored Presentation: 6. <i>The DOG PARCS Study: Detection of Gastrointestinal Parasites at Recreational Canine Sites in the United States</i></p> <p align="center">Susan Little Oklahoma State University</p> <hr/> <p align="center">Question Period</p>
16:30-16:40	
16:40-16:45	<p>Wrap up for the day Doug Carithers</p>

Monday June 22, 2020	
12:00-12:10	Opening Remarks and Intro for Presidents Symposium: AAVP Past-President: Mason Reichard
12:10-14:00	PRESIDENTS SYMPOSIUM Moderator: Mason Reichard
12:10-12:55	7. <i>Echinococcus multilocularis</i> in North America: new threats and new tools Emily Jenkins <i>University of Saskatoon</i>
12:55-13:05	_____ Question Period
13:05-13:10	5 Minute Stretch Period
13:10-13:55	8. <i>Clinical outcomes of ruminants and camelids with Parelaphostrongylus tenuis-associated cerebrospinal nematodiasis presenting to two university teaching hospitals over a ten-year period</i> Grace VanHoy <i>Ohio State University</i>
13:55-14:05	_____ Question Period
14:05-14:35	½ Hour BREAK
14:35-16:35	AAVP-NCVP Parasite Clicker-Session Case Discussions Moderators: Dwight Bowman and Andrew Peregrine
16:35-16:45	Wrap up for the day and Live Virtual Meeting Ends Doug Carithers
	Students: Please remember to join Grace and Kathryn via Zoom (invite sent by email) for the annual student meeting starting at 16:45!

Tuesday June 23, 2020	
All Day	Student Judging Awards Committee and Student Competition Participants

Note: All other oral and poster presentations are accessible for viewing in your own time.

Oral Sessions Listing

ORAL SESSIONS	
(Student Competition)	Cestodes
9. Evaluation of the prevalence of <i>Echinococcus multilocularis</i> in dogs that visit off-leash dog parks in southern Ontario, Canada.	Andrew Peregrine Ontario Veterinary College
10. Alveolar echinococcosis in dogs in Western Canada.	Temitope Kolopo Western College of Vet Med
11. Canine peritoneal larval cestodiasis by <i>Mesocestoides</i> spp.: Two clinical cases.	Silvia Carta Universita' degli Studi di Sassari, Italy
12. Retrospective investigation of <i>Echinococcus granulosus</i> : Emergence in translocated elk (<i>Cervus canadensis</i>) in Tennessee (USA) and examination of canid definitive hosts.	BreeAnna Dell University of Tennessee
13. Deep amplicon sequencing as a new tool to investigate the intraspecific diversity and the distribution of <i>Echinococcus multilocularis</i> in foxes and coyotes in western Canada.	Maria Alejandra Santa University of Calgary
Nematodes	
Cattle Nematodes	
14. Monepantel in cattle: Pharmacokinetics and nematocidal efficacy.	Candela Canton National University of the Center of the Buenos Aires Province, Argentina
15. Seasonal epidemiology of major gastrointestinal nematodes in the northern semi-arid climatic zones of western Canada using the ITS-2 nemabiome barcoding approach.	Tong Wang University of Calgary
Dog/Cat Nematodes	
16. Improving the accuracy of anthelmintic studies with certain nematode parasites of dogs and cats.	Craig R. Reinemeyer East Tennessee Clinical Research, Inc.
17. Efficacy and safety of a novel, oral chewable tablet containing sarolaner, moxidectin and pyrantel (Simparica Trio™) against immature and mature <i>Toxocara canis</i> in laboratory dogs and in veterinary patients in the USA.	Susan Holzmer Zoetis
18. Preventive efficacy of Bravecto Plus spot-on solution for cats (280 mg/ml fluralaner and 14 mg/ml moxidectin) against Aelurostrongylosis in experimentally infected cats.	Katharina Raue University of Hannover, Germany
19. Simparica Trio™: Heartworm (<i>Dirofilaria immitis</i>) prevention in dogs using an optimized oral dose of moxidectin.	Tom McTier Zoetis
20. Field efficacy and safety of a novel, orally administered combination product containing sarolaner, moxidectin and pyrantel (Simparica Trio™) for the prevention of heartworm disease (<i>Dirofilaria immitis</i>) in dogs presented as veterinary patients in Australia, Japan and the USA.	Kristina Kryda Zoetis

(Student Competition)	Dog/Cat Nematodes (cont)
21. Characterization of the prevalence of intestinal parasites in dogs in southern Ontario, Canada using sucrose double centrifugation, Fecal Dx® and <i>Giardia</i> antigen tests.	<p style="text-align: center;">Andrew Peregrine Ontario Veterinary College</p>
22. Detection of heartworm antigen using heat treatment of serum without loss of specificity in dogs infected by gastrointestinal helminths and protozoa.	<p style="text-align: center;">Jeff Gruntmeir University of Florida</p>
23. Characterizing microRNA populations of <i>Dirofilaria immitis</i> <i>in vitro</i> as potential diagnostic markers for early-detection of infection.	<p style="text-align: center;">Gui Verocai Texas A&M University</p>
24. Evaluation of the effectiveness of fluralaner 280 mg/mL plus moxidectin 14 mg/mL spot-on solution for cats for prevention of <i>Dirofilaria immitis</i> infection (heartworm disease) in cats.	<p style="text-align: center;">Byron Blagburn Auburn University</p>
25. Retrospective occurrence of canine endoparasites across veterinary parasitology diagnostic laboratories, United States, 2018.	<p style="text-align: center;">Gui Verocai Texas A&M University</p>
26. Comparison of development of JYD-27 and Missouri (MO) strains of <i>Dirofilaria immitis</i> in laboratory-reared <i>Aedes aegypti</i> .	<p style="text-align: center;">Doyeon Park Auburn University</p>
27. Molecular and morphological characterization of <i>Thelazia californiensis</i> in dogs from New Mexico, USA.	<p style="text-align: center;">Caroline Sobotyk Texas A&M University</p>
28. Microfilariae counts and antigen levels of macrocyclic lactone resistant <i>Dirofilaria immitis</i> during treatment with melarsomine dihydrochloride.	<p style="text-align: center;">Rachel Beam Oklahoma State University</p>
29. Molecular detection of <i>Cercopithifilaria bairnei</i> in brown dog ticks from across the southern United States.	<p style="text-align: center;">Megan Lineberry Oklahoma State University</p>
30. Surveillance for pyrantel pamoate resistance in <i>Ancylostoma caninum</i> in north Florida shelter dogs.	<p style="text-align: center;">Morgan Weldon University of Florida</p>
31. Comparative preventive efficacy of ProHeart® 12, Heartgard® Plus and Interceptor® Plus against a macrocyclic lactone-resistant strain (JYD-34) of heartworm (<i>Dirofilaria immitis</i>) in dogs.	<p style="text-align: center;">Tom McTier Zoetis</p>
32. Efficacy evaluation of anthelmintic products against an infection with the canine hookworm (<i>Ancylostoma caninum</i>) isolate Worthy 4.1F3P in dogs.	<p style="text-align: center;">Pablo Jimenez Castro University of Georgia</p>

(Student Competition)	Dog/Cat Nematodes (cont)
33. Retrospective analysis of canine endoparasites in 2019 with a focus on retired racing greyhounds.	Heather Yee Ohio State University
Horse Nematodes	
34. Are we beating a dead horse? Modelling a failed anthelmintic in combination.	Jessica Scare Kenealy University of Kentucky
35. Equine parasite control protocols: An evaluation of health parameters.	Martin Nielsen University of Kentucky
36. Looking at the spectrum of cyathostomin disease through the lens of clinical cases.	Nicola Walshe University College Dublin, Ireland
37. Age, sex, and parasites: Is there an unusual predilection in foals?	Ashley Steuer University of Kentucky
38. Prevalence and relative abundance of cyathostomin species in domestic horses from 1975-current: Meta-analysis of geographic region and specimen collection method.	Jennifer Bellaw University of Kentucky
39. Longitudinal survey of intestinal nematodes of Thoroughbred horses in Australia	Ghazanfar Abbas University of Melbourne, Australia
40. The local and systemic inflammatory response to anthelmintic therapy: Does killing encysted cyathostomins increase inflammation?	Ashley Steuer University of Kentucky
41. The microbiome of <i>Parascaris</i> spp.: A pilot study.	Jennifer Cain University of Kentucky
42. Multiple resistance in horses naturally infected by Cyathostomins in Mato Grosso do Sul, Brazil.	Mariana Green de Freitas University Federal of Mato Grosso do Sul, Brazil
Nematodes (Probiotic and Fecal Sample Storage)	
43. Development of a paraprobiotic cure for gastrointestinal nematode parasites.	Raffi Aroian University of Massachusetts
44. Storage methods of cattle and horse faecal samples for egg-hatch test.	Mariana Green de Freitas University Federal of Mato Grosso do Sul, Brazil

(Student Competition)	Swine Nematodes
45. Microsatellite analysis – the useful tool to track transmission of <i>Trichinella</i> spp.	Ewa Bilska-Zajac USDA
46. Complete mitochondrial genomes and ribosomal DNA sequences of <i>Trichinella spiralis</i> indicate that the split between Asian and European populations happened prior to the rise of agriculture.	Peter Thompson USDA
47. <i>Ascaris suum</i> intestine: A new target site for cholinergic anthelmintic therapy.	Mark McHugh Iowa State University
Poultry Nematodes	
48. <i>Ascaridia</i> spp. of poultry provide an optimal model for evaluating the efficacy of anthelmintics and for studying the biology and genetics of anthelmintic resistance in ascarid nematodes.	James Collins University of Georgia
Small Ruminant Nematodes	
49. Effect of inactivated <i>Bacillus thuringiensis</i> with cytosolic Cry5B protein on <i>Haemonchus contortus</i> in experimentally infected sheep.	John Sanders Virginia-Maryland College of Veterinary Medicine
50. Molecular characterization and immune-reactivity patterns of two novel <i>Haemonchus contortus</i> cathepsin Bs.	Mariam Bakshi USDA-Agricultural Research Service
51. The use of deep amplicon sequencing in molecular diagnostics and molecular epidemiology of anthelmintic resistance.	Camila Queiroz University of Calgary
52. Molecular epidemiological evidence for the spread benzimidazole resistance in the sheep parasitic nematode <i>Nematodirus battus</i> from a single source in NW England.	Rebecca Chen University of Calgary
53. Evidence for wild cervids as transmission vectors of small ruminant drug resistant gastrointestinal nematode parasites.	Libby Redman University of Calgary
Wildlife Nematodes	
54. Detection of <i>Trichinella murrelli</i> and <i>T. pseudospiralis</i> in bobcats (<i>Lynx rufus</i>) from Oklahoma.	Tiana Sanders Oklahoma State University
55. Phylogenetic relationships within the nematode subfamily Phascolostrongylinae (Nematoda; Strongyloidea) from Australian macropodid and vombatid marsupials.	Tanapan Sukee University of Melbourne, Australia
Education	
56. The future of Veterinary Parasitology in the classroom: Take-aways from the 2019 AAVP Educators Meeting.	Heather Walden University of Florida
57. COVID 19-induced changes to teaching veterinary diagnostic parasitology.	Antoinette Marsh Ohio State University

(Student Competition)	Other (Fish and Reptiles)
58. Fish Host Susceptibility Influences Myxozoan Community Composition In Proliferative Gill Disease Of Catfish Aquaculture. Justin Stilwell University of Georgia	
59. <i>Raillietiella orientalis</i> , an invasive pentastome, in a banded water snake (<i>Nerodia fasciata</i>) in north central Florida. Heather Walden University of Florida	
Protozoa	
Cattle Protozoa	
60. Retrospective Analysis of Bovine <i>Eimeria</i> Cases Detected During 2010-19 at the Animal Health Diagnostic Center, New York State, USA. Manigandan Lejeune Cornell University	
61. Arthropod surveillance and the detection of <i>Theileria orientalis</i> in host-seeking <i>Haemaphysalis longicornis</i> in Virginia, USA. Alec Thompson University of Georgia	
Dog/Cat Protozoa	
62. Dinotefuran, pyriproxyfen and permethrin combination abrogates <i>Leishmania</i> infectiousness by sick dogs: a potential leishmaniasis control tool. Gioia Bongiorno Istituto Superiore di Sanità, Italy	
63. Examining the relationship between dogs with overt clinical leishmaniasis, infectiousness to <i>Phlebotomus perniciosus</i> and its infectivity. Manuela Gizzarelli University of Naples, Italy	
Horse Protozoa	
64. Predicting surface antigen variation in <i>Sarcocystis neurona</i> isolates Jamie Kaj Norris University of Kentucky	
65. Transplacental transmission of <i>Babesia caballi</i> from carrier mares to foals. Yang Hu Heilongjiang Bayi Agricultural University, China	
(Student Competition)	Protozoa Environmental Survival
66. Battening down in times of stress and adversity – how Apicomplexa survive hostile environments. Perryn Kruth University of Guelph	
Poultry Protozoa	
67. Back to basics: Genome replication dynamics in exogenous stages of <i>Eimeria tenella</i> . Taylor Lane University of Guelph	
68. Who's killing the Partridge Family? <i>Eimeria</i> species and clinical coccidiosis in commercial poultry. Jessica Rotolo University of Guelph	
69. Macroscopic and microscopic lesions explain the pathogenicity of a 'minor' pathogen of turkeys, <i>Eimeria innocua</i> . Rachel Imai University of Guelph	

Wildlife Protozoa

70. *Toxoplasma gondii* prevalence and partial genotypes in North American river otters (*Lontra canadensis*) from the upper peninsula of Michigan.

Stacey Cotey

Michigan Technological University

71. Species diversity and geographic variation of piroplasms in striped skunks (*Mephitis mephitis*) and spotted skunks (*Spilogale* spp.) in the United States.

Michael Yabsley

University of Georgia

72. Prevalence of *Sarcocystis* spp. in North American river otters (*Lontra canadensis*) collected in Michigan.

Ruth Scimeca

Oklahoma State University

73. *Trypanosoma cruzi* infection in two meerkats (*Suricata suricatta*) at the Dallas Zoo.

Brian Nguyen

Oklahoma State University

74. *Enterocytozoon* sp. and *Ceratonova shasta* in the intestines of adult Chinook salmon.

Michael Kent

Oregon State University

75. Prevalence and partial genetic characterization of *Toxoplasma gondii* strains from 31 passerine species collected in north central Oklahoma.

Alexis Hawton

Oklahoma State University

Ticks/Mites/Insects

Cattle Ticks/Mites/Insects

76. Genetic characterization and high-throughput screening of ticks and tick-borne pathogens infecting bovines in Pakistan.

Abdul Ghafar

University of Melbourne, Australia

(Student Competition)	Dog/Cat Ticks/Mites/Insects
77. Evaluation of a topical sarolaner-selamectin combination to control flea populations on naturally infested cats in private residences in West Central Florida.	Mike Dryden Kansas State University
78. Laboratory and field efficacy of a novel, orally administered combination product containing sarolaner, moxidectin and pyrantel (Simparica Trio™) against experimentally and naturally acquired flea infestations in dogs.	Tammy Inskip Zoetis
79. Efficacy and speed of kill of a combination product containing sarolaner, moxidectin and pyrantel (Simparica Trio™) against five common tick species infesting dogs in the USA.	Sarah Chapin Zoetis
80. Seasonality of <i>Ixodes</i> species and stages infesting dogs and cats in the USA.	Parna Ghosh Oklahoma State University
81. Geographic diversity of ticks collected from dogs and cats throughout the United States.	Meriam Saleh Oklahoma State University
82. Has COVID-19 stay-at-home orders changed the risk of tick exposure for dogs?	Michael Yabsley University of Georgia
83. Serologic evidence of select vector-borne pathogens in unowned dogs in the Southeastern United States.	Ali Perregrino Auburn University
84. Do blacklegged ticks collected from domestic cats feed on feline blood and transmit Lyme disease.	Amira Ahmed Cornell University
85. Diversity of <i>Rickettsia</i> spp. in <i>Dermacentor</i> spp. from across the United States.	Kathryn Duncan Oklahoma State University
86. Sequential histologic comparisons of naïve and subsequent <i>Amblyomma americanum</i> bite lesions from induced infestations on dogs and cats.	Jennifer Thomas Oklahoma State University
Horse Ticks/Mites/Insects	
87. Initiation of the National Equine Tick Survey as a novel method for tracking ticks on horses in the US.	Jana Gigliotti Kansas State University
Wildlife Ticks/Mites/Insects	
88. Studies on sarcoptic mange in black bears (<i>Ursus americanus</i>) in Pennsylvania.	Michael Yabsley University of Georgia

Poster Sessions Listing

POSTER SESSIONS	
(Student Competition)	Acanthocephala
89. <i>Oncicola canis</i> (Acanthocephala) in a rescued dog (Texas to Pennsylvania). Thomas Nolan University of Pennsylvania	
Cestodes	
90. <i>Echinococcus multilocularis</i> infections in domestic dogs and implications for wildlife and public health. Emilie Toews University of Calgary	
91. Polyomics of the neglected equine tapeworm <i>Anoplocephala perfoliata</i> . Boontarikaan Witikornkul Aberystwyth University, Wales	
Nematodes	
Cattle Nematodes	
92. Gastrointestinal nematode fecal egg shedding intensity, prevalence, and predominant species in western Canadian cow-calf operations. Eranga De Seram University of Saskatchewan	
93. Assessing the production impacts of gastrointestinal nematode parasites in stocker cattle in Western Canada. Daniel Merchan University of Saskatchewan	
Dog/Cat Nematodes	
94. Updates on serological diagnosis in heartworm infection in dogs. Lavinia Ciuca University of Naples, Italy	
95. Evaluation of canine fecal samples using a <i>Toxocara</i> species-specific real-time PCR. Todd Bezold IDEXX	
96. The difference of <i>Dirofilaria immitis</i> microfilaria concentrations in blood collected from the jugular and cephalic veins of dogs. Elyssa Campbell University of Georgia	
97. The prevalence of <i>Ancylostoma</i> spp. in dogs in the Caribbean. Jenny Kim Ross University	
98. P-glycoproteins are potential drugable targets in <i>Toxocara canis</i> . Jeba Jesudoss Chelladurai Iowa State University	

(Student Competition) Horse Nematodes	
99. Analyst variability at the counting step for McMaster, Wisconsin, and automated equine fecal egg count methods.	Jennifer Cain University of Kentucky
100. Pooled fecal samples for diagnosis of <i>Strongylus vulgaris</i> .	Chelsea Facison Lincoln Memorial University
101. Spatial Variation of Cyathostomin Mucosal Larval Counts.	Avery Martin University of Kentucky
102. According to mitochondrial DNA evidence, <i>Triodontophorus</i> species belongs to the Cyathostominae.	Yuan Gao Heilongjiang Bayi Agricultural University, China
103. The prevalence of cyathostomin anthelmintic resistance on horse farms in Prince Edward Island, Canada.	Jaimie Butler University of Prince Edward Island
Other (Molecular) Nematodes	
104. Using <i>C. elegans</i> to identify genes that affect ivermectin sensitivity of the filarial worm <i>B. malayi</i> .	Natalie Wilson University of Georgia
105. Parasitic nematode beta-tubulin alleles cause benzimidazole resistance and affect organismal fitness.	Clayton Dilks Northwestern University
Small Ruminant Nematodes	
106. Carvone modulates <i>in vitro</i> and <i>in vivo</i> the kinetic behaviour and efficacy of abamectin.	Candela Canton UNICEN University, Argentina
107. Developing the nemabiome as an alternative to fecal egg counting: Absolute quantitation of parasitic nematode DNA in fecal samples.	Eleonore Charrier University of Calgary
108. Detection of levamisole resistance in <i>Haemonchus contortus</i> populations from the United States.	Jomar Patricio Monteiro Centro Universitário UNINTA, Brazil
109. 17 years of the FAMACHA© program in the United States.	Leonor Sicalo Gianechini University of Georgia
(Student Competition) Wildlife Nematodes	
110. Naturally acquired <i>Dracunculus</i> infection in a Virginia opossum (<i>Didelphis virginiana</i>) from upstate New York.	Araceli Lucio-Forster Cornell University
Cattle Protozoa	
111. Compounds with <i>in vitro</i> activity against <i>Trichostrongylus axei</i> .	Katy A. Martin Iowa State University
112. Long read metabarcoding of bovine <i>Eimeria</i> , <i>Neobalantidium</i> and <i>Buxtonella</i> communities.	Venkateswara Rao Parimisetti University of Calgary

<p>113. Research progress of Bovine <i>Neospora caninum</i> in China. Hao-Xian Wang Heilongjiang Bayi Agricultural University, China</p>
Horse Protozoa
<p>114. A molecular comparison of North American and South American <i>Klossiella equi</i> samples: One species spans the Americas? Elizabeth Zeldenrust University of Guelph</p>
Other Protozoa
<p>115. An <i>in vitro</i> evaluation of ozonated water on cyst viability of the protozoon <i>Giardia duodenalis</i>. Maria Elena Morgoglione University of Naples, Italy</p>
<p>116. Mitochondrial mix-up: How mitochondrial genome organization reflects evolutionary relationships of eimeriorinid coccidia. Perryn Kruth University of Guelph</p>
Wildlife Protozoa
<p>117. Molecular and morphological characterization of an undescribed <i>Isospora</i> species infecting the introduced European starling (<i>Sturnus vulgaris</i>) in Ontario, Canada. Evelin Rejman University of Guelph</p>

(Student Competition)	Dog/Cat Ticks/Mites/Insects
118. Acaricidal efficacy of dinotefuran-pyriproxyfen-permethrin (Vectra® 3D)-treated dog hair against adult <i>Ixodes scapularis</i> and <i>Ixodes ricinus</i> ticks using an <i>in vitro</i> feeding assay.	Djamel Tahir Clinvet Morocco
119. Seasonality of questing ticks in Claiborne County, TN: understudied risks associated with Ixodid ticks in rural Appalachia.	Barbara Shock Lincoln Memorial University
120. Flea-borne bacterial pathogens in fleas and tissues from free roaming domestic cats.	Charlotte Manvell North Carolina State University
Horse Ticks/Mites/Insects	
121. Equine tick infestation in fall and winter in northeastern Oklahoma: Diversity, seasonality, and attachment site preferences.	Kellee Sundstrom Oklahoma State University
Wildlife Ticks/Mites/Insects	
122. Tracking an invader: Wildlife surveillance for <i>Haemaphysalis longicornis</i> in the Eastern U.S.	Alec Thompson University of Georgia
123. Identification and molecular analysis of Ixodid ticks (Acari: Ixodidae) infesting wild boars (<i>Sus scrofa</i>) and tick-borne pathogens at the Meihua mountain of southwestern Fujian, China.	Xin Wang Longyan University, China
TREMATODES	
124. Proteomic analysis of <i>Clonorchis sinensis</i> ESPs interacting with serum of different periods by shotgun LC-MS/MS.	Xiao-Xiao Ma Heilongjiang Bayi Agricultural University, China
125. Prevalence of <i>Clonorchis sinensis</i> infections in Southeast Asian fish: a systematic review and meta-analysis from 1976 to 2020.	Ying Zhang Heilongjiang Bayi Agricultural University, China
126. Complete mitochondrial genome of <i>Prosthogonimus cuneatus</i> (Trematoda: Prosthogonimidae), as the first representative from the Superfamily Microphalloidea.	Xinru Guo Heilongjiang Bayi Agricultural University, China
127. Repurposing oxfendazole as a potential flukicidal compound.	Candela Canton UNICEN University, Argentina

Educator's Corner

Emergency remote or on-line teaching

While on-line courses have increased in popularity and become the norm for many programs, medical and veterinary education has remained primarily classroom and laboratory based. Some reasons for this are outlined by O'Doherty et al. (2018) and include time constraints, inadequate infrastructure, absence of institutional strategies and support and negative attitudes toward on-line courses. Many of us also might state that there is no on-line substitute for being in the laboratory and performing a fecal flotation! Now, with COVID-19, many of us are faced with presenting lectures and even laboratories on-line. Frequently, this is being referred to as on-line teaching or on-line courses.

On-line courses are conceived from the start to be delivered via the internet with a focus on the types of students that enroll and their specific needs. The courses often include pre-recorded lectures, synchronous or asynchronous discussions, and an in-class or in-lab component to provide hands-on experiences that are not deliverable via the internet. Projects and exercises often are carefully selected to promote certain skill sets required in an "on-line" world, such as remote team building. Several technologies and methods are used to maximize the student learning experience and interaction with the instructor without overwhelming the instructor. In contrast to on-line courses, the temporary delivery of lectures or labs remotely in response to COVID-19 neither addresses the barriers to on-line courses in medical and veterinary education nor addresses the specific needs of the on-line student.

Are we moving toward on-line courses or are we responding to COVID-19? Answering this question is instrumental in deciding how to approach courses this summer and fall. If, for example, huge time investment is required to produce on-line laboratories and these will not be used again, is the investment wise? Can focus be placed on areas that might be applied in the future, after COVID-19? Are resources available to develop high quality on-line courses including laboratories? Many of us are having to quickly decide whether to delay laboratory exercises or incorporate them in an on-line format, determine what this format will look like, which skills students can achieve virtually and what technologies (e.g., virtual microscopes) are available to achieve these goals. First year veterinary competencies must be considered in these decisions and sharing of ideas and resources can assist in this decision process. The AAVP Education Committee will be arranging on-line discussions, so if interested, please look out for e-mails from Dr. Heather Stockdale Walden.

O'Doherty D, et al. Barriers and solutions to online learning in medical education – an integrative review. BMC Medical Education (2018) 18:130 <https://doi.org/10.1186/s12909-018-1240-0>

Hodges C., et al. 2020. The Difference Between Emergency Remote Teaching and Online Learning. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>

Mafuso LG. 2020. From Emergency Remote Teaching to Rigorous Online Learning. <https://edtechmagazine.com/higher/article/2020/05/emergency-remote-teaching-rigorous-online-learning-perfcon>

Boettcher JV, Conrad R-M. 2016. The Online Teaching Survival Guide, 2nd edition.

Johnson A. 2013. Excellent! Online Teaching, effective strategies for a successful semester on line. Available on Amazon and free via Kindle Prime.

Respectfully submitted by:

Dr. Jennifer Ketzis

jketzis@rossvet.edu.kn

869.465.4161

Student Delegates Update

Hi everyone! We are getting excited about the upcoming virtual meeting (please reach out to us if you have any questions or concerns while you record and upload your presentation or poster.)! Even though student lunch meetings won't occur this year, we plan to meet as a group on Monday, June 22nd at 16:45ET following the NCVP-AAVP Annual Clicker Session. We hope to share updates from the student chapters, brainstorm future student lunch meeting activities, and elect a new student representative! As a reminder, student chapter leaders should send us your annual report prior to the start of the summer meeting. Let us know if you have any questions! We look forward to watching your presentations and catching up soon!

Respectfully submitted by:

Dr. Grace VanHoy (nematode enthusiast) grace.vanhoy@gmail.com and *Dr. Kathryn Duncan* (arachnid wrangler) katdunc@ostatemail.okstate.edu



Grace VanHoy



Kathryn Duncan

AAVP Committee Reports

Nominating Committee Report and Election Results



Yoko Nagamori, Chair
Nominating Committee

The Nominating Committee is made up of 6 members with 3-year staggered membership. The current committee consists of:

Term Ends	Committee Members	
2020	Joyce Login	Ashley McGrew
2021	Lindsay Starkey	Yoko Nagamori
2022	Alice Lee	Andrew Moorhead

The committee is charged with developing the ballot for election of officers and members of the Nominating Committee. Each year a

new Vice President and 2 new Nominating Committee members are elected, and every 2 years a new Secretary/Treasurer is elected. The ballot consisted of two nominees for Vice President, five nominees for the Nominating Committee and one for Secretary/Treasurer.

The nominees were:

Vice President
Chris Adolph
Antoinette Marsh

Secretary/Treasurer
Adriano Vatta

Nominating Committee
Kelly Allen
Brian Herrin
Manigandan Lejeune
Joyce Login
Jessica Rodrigues

A total of 1,086 AAVP members had the opportunity to vote at the time of the election with 211 ballots returned.

The 2019 Election Results

VICE PRESIDENT



Antoinette Marsh

Secretary / Treasurer



Adriano Vatta

NOMINATING COMMITTEE



Brian Herrin



Jessica Rodriguez

Congratulations to each of you!

Respectfully submitted by Dr. Yoko Nagamori, Chair, Nominating Committee

Awards Committee Report

I would like to begin by expressing my sincerest gratitude to several folks:

- The members of the awards committee this year for their many efforts prior to the meeting in selecting awards recipients as the field of qualified nominees this year made for some difficult choices.
- The nominators and those who took the time to submit letters of support for all of the nominees in 2020.
- Committee members and willing ad-hoc judges in attendance who will be participating in the judging of the student competition.
- The executive committee, especially the student reps Grace and Kathryn, for all of their hard work that ensures the smooth operation of this committee.
- Sponsors of the named awards and student oral and poster presentation awards: Bayer, Boehringer Ingelheim, CAPC, Elanco, and Merck. Thank you for your continued support of the various AAVP awards.



Lindsay Starkey

There were 22 members on the Awards committee this past year, up from 20 last year. A huge thanks to those continuing to serve on and those willing to serve on this committee. Substantial committee membership aids in voting on award recipients and in the judging of the best student paper and poster competitions at the annual meeting, especially with the continued increase in student involvement.

This year there will be a virtual student competition sponsored by Bayer and Elanco. Presentations will be evaluated by AAVP awards committee members and any willing ad-hoc judges with feedback provided to the participating students. Bayer and Elanco have continued to offer their support by providing awards for the top-placing students in the Best student presentation and poster competitions, respectively.

2020 AAVP Awards Committee members: *Lindsay Starkey, Chair*; Joe Camp, Alice Lee, Jim Miller, Gui Verocai, Lora Ballweber, Anne Zajac, Jan Liotta, Javier Garza, Kelly Allen, Lisa Young, Molly Savadelis, Rachel Imai, Mani Lejeune, Scott Bowdridge, Christian Epe, Frank Guerino, Peter Thompson, Bonnie Bragdon, Dean Dailey, Shelly Michalski, and Susan Little.

AAVP-Boehringer Ingelheim Distinguished Veterinary Parasitologist Award



Sharon Patton

Dr. Sharon Patton, Professor Emeritus at the University of Tennessee College of Veterinary Medicine, has been selected as the 2020 Distinguished Veterinary Parasitologist. This prestigious award recognizes and honors the outstanding contributions of an AAVP member to the advancement of veterinary parasitology. Dr. Patton's full biography will be featured in the annual meeting's proceedings, and her Distinguished Veterinary Parasitologist presentation will take place during a special awards session of the virtual 2020 meeting. In addition to the honor this award brings, Dr. Patton will receive a plaque and a \$1,500 monetary award provided by Boehringer Ingelheim.

Congratulations to Dr. Patton on receiving this award!

AAVP Distinguished Service Award

Dr. Tom Kennedy, Managing Principal with Eleven Bravo LLC and partner in Covenant Animal Health Partners, has been selected as the recipient of the AAVP Distinguished Service Award. This prestigious award recognizes a member who has shown an extraordinary level of service and long-term commitment to the AAVP. Dr. Kennedy's full biography will be featured in the annual meeting's proceedings. In addition to the honor this award brings, Dr. Kennedy will receive an engraved plaque from the AAVP.

Congratulations to Dr. Kennedy on being nominated and selected for this award!



Tom Kennedy

AAVP-Merck Outstanding Graduate Student Award



Ashley Steuer

Dr. Ashley Steuer, of the University of Kentucky, has been selected as the recipient of the 2020 AAVP-Merck Outstanding Graduate Student Award. Under the supervision of Dr. Martin Nielsen, Ashley's Ph.D. work has focused on the host-parasite interactions of cyathostomins in horses. Ashley is also currently a resident finishing her training through the National Center for Veterinary Parasitology. She will receive an engraved plaque and a monetary award of \$1000 provided by Merck Animal Health. Ashley's presentation will take place during a special awards session at the virtual 2020 meeting and is titled, "Cyathostomins: Their interaction with the equine host and with my life." Congratulations to **Dr. Steuer!**

Congratulations to Dr. Steuer!

AAVP-CAPC Graduate Student Award in Zoonotic Disease

Dr. Pablo David Jimenez Castro has been selected as the recipient of the 2020 AAVP-CAPC Graduate Student Award in Zoonotic Disease for his work on *Ancylostoma caninum*. He is currently enrolled in the dual PhD/Veterinary clinical parasitology residency program of the Department of Infectious Diseases at the University of Georgia, College of Veterinary Medicine. His doctoral research has focused on investigating the biology, epidemiology and genetics of multiple drug resistance in *Ancylostoma caninum*. He will be presenting his talk is entitled, "Efficacy evaluation of anthelmintic products against an infection with canine hookworm (*Ancylostoma caninum*) isolate Worth 4.1F3P in dogs," at the 2020 virtual meeting. He will receive an engraved plaque and a monetary award of \$1000 provided by CAPC.



**Pablo David
Jimenez Castro**

Congratulations to Dr. Jimenez Castro!

Best Student Paper and Poster Competitions

The Best Student Paper competition is sponsored by Bayer and the Best Student Poster competition is sponsored by Elanco. There will be 1st, 2nd, and 3rd place awards given in each category with \$500, \$300, and \$150 honoraria, respectively.

Any member who wishes to participate in the judging of the student competition is encouraged to contact Lindsay Starkey (Lindsay.Starkey@auburn.edu) as arrangements are currently being prepared for the upcoming meeting.

Respectfully submitted by Dr. Lindsay Starkey, Chair, Awards Committee

Education Committee Report

Education Committee members (Updated February 3, 2020)

Heather Stockdale Walden, Chair (2022)	hstockdale@ufl.edu
Antoinette Marsh (2022)	marsh.2061@osu.edu
Andy Moorhead (2021)	amoorhed@uga.edu
Araceli Lucio-Forster (2021)	al33@cornell.edu
Ashley McGrew (2021)	ashley.mcgrew@colostate.edu
Jennifer Ketzis (2021)	jketzis@rossu.edu
Richard Martin (2021)	rjmartin@iastate.edu
Matt Brewer (2021)	brewermt@iastate.edu
Grace VanHoy (2021)	vanhoy.2@osu.edu
Roger Ramirez-Barrios (2022)	arapuey@gmail.com
Lauren Camp (2022)	lcamp@ucdavis.edu
Sriveny Dangoudoubiyam (2022)	sdangoud@purdue.edu
Tejbir Sandhu (2022)	tejbirsandhu@yahoo.com
Gui Verocai (2022)	gverocai@cvm.tamu.edu

Activities for 2019 – 2020:

1. Elect new committee chair, Heather Walden
2. 2019 Educators Meeting – University of Florida College of Veterinary Medicine
December 19-21, 2019 at UFCVM in Gainesville, FL
Theme: ‘*The Future of Veterinary Parasitology Education: Maximizing Significant Learning*’
There were 30 participant faculty, as well as 4 additional facilitators, representing 22 universities from the US, Canada and Caribbean.
3. Current agenda items include planning 2021 Educators Meeting and create an online platform for educators to discuss plans for converting courses to an online format for Fall 2020 due to COVID-19.

Respectfully submitted by Dr. Heather Stockdale Walden, Chair, AAVP Education Committee

Constitution and By-Laws Committee Report

Committee Members: *Joe Camp* (2020, Chair), *Andy DeRosa* (2020), *Ryan Avery* (2020), *Sriveny Dangoudoubiyam* (2021), and *Roberto Cortinas* (2022)

At the 2019 joint meeting with the WAAVP, proposed changes to the Constitution and By-Laws were passed by the AAVP membership. The proposed changes included:

- 1) Abolishing the Past Presidents Committee and reassigning the duties to the Outreach, Publications and Research Committee and the Executive Committee.
- 2) Dissolving the Newsletter/Editorial Board Committee and adding the Editor and Assistant Editor as named positions in the Electronic Media Committee.
- 3) Adding authorization for the Executive Committee, working with the Secretary Treasurer and, when possible, an event planner, to identify sites/venues for the annual AAVP meeting.

These changes were also distributed to the AAVP membership via the Fall 2019 Newsletter.

Following a recent request from the Executive Committee, the Constitution and By-laws Committee members considered changes to the membership description in the Constitution as follows:

Every year we have an issue with the online voting for Vice President, members of the Nominating Committee, and the Secretary Treasurer because we do not have a way of telling who has been a member within the past two years or not. The following clause in the AAVP Constitution determines that members are still members even if they have not paid their dues in the past two years:

Article III. Section 5. Forfeiture of membership will occur when dues are not paid for at least two consecutive years, a letter of notification has been sent, and neither back dues nor current dues have been paid within 60 days of the date of mailing the notification. A member who has forfeited membership by nonpayment of dues must reapply for membership.

Consequently, we are forced to send ballots for voting to all members who have not paid in the past two years and indeed to anyone who has not paid beyond that if they have not been notified of their delinquency by the Secretary-Treasurer. With online registration, we can only tell if a member is a member today but not whether the member was a member last year or before that. We do not retain these historic records. Therefore, the Secretary-Treasurer cannot send out letters demanding members pay up and consequently cannot terminate their membership. This means that every year we send ballots to approximately 1,000 people who at one stage were members, while only about 350 are actually paid up.

The Executive Committee would like voting members to be current on dues and active in the association. Therefore, the Executive Committee has proposed that the above clause in the constitution be amended to resolve the issue we have.

With the cancellation of the in-person AAVP meeting at Snowbird UT, the committee members voted unanimously to postpone consideration of these changes until the next in-person meeting.

Roberto Cortinas from the University of Nebraska-Lincoln joined as a member of the committee through 2022. Finally, as three members' terms end this year, the AAVP will need to recruit additional members and a new Chair of the committee will also need to be chosen.

Respectfully submitted by Dr. Joe Camp, Chair, AAVP Constitution and By-Laws Committee

Outreach, Publication and Research Committee Report

The Outreach/Publication/Research members were tasked in-committee to determine the interest for a joint conference with the American Society of Parasitology and developing a relationship with CAB index. An informal poll was distributed to the committee membership, results forwarded to the Executive Board. These tasks were, in addition, to the mandates of the committee: reaching out to members of professional associations, identifying topical publications of interest to the Association and contemporary research. On several occasions, requests were forwarded to the committee for identification of recovered parasites, details of parasite transmission and pathology associated with specific parasites. These requests were forwarded to members of the association with particular expertise. The committee continues to reach out to individuals, organizations and/or institution throughout the Americas whose interests correlate to mission statement of the AAVP. Committee members emphasize the mission of the AAVP, networking potentials and inclusion of faculty, graduate students into the AAVP. The goal is to initiate lines of dialogue.

Associations Approached during 2019 -2020:

1. Asociacion Mexicanos de Parasitologous Veterinarios, AC (AMPAVE, Mexico)
2. Colegio Brasileiro de Parasitologia Veterinaria (Cbpv.org. br; Brasil)
3. Sociedad de Medicina Veterinaria (Argentina)
4. CaribVet Network; Caribbean Research Center (CRVC)
5. Intern. Assoc. of Food & Waterborne Parasites (WAFWP); Dr. Gajadhar
6. National College of Tropical Medicine, Baylor College of Medicine, Houston, Texas, Peter Hotez, PhD., Dean.
7. Members of One Health.
8. Contact with Caribbean Veterinary Association, Ross University and St. George University.
9. James Steele Diseases in Nature Transmissible to Man (DIN) Conference.
10. AVMA International Veterinary Exchange.

The committee is an advisory group. Names and contact information are forwarded to the President and Executive Board. As the chair, I will continue to follow-up with contacts to the various associations in 2020 - 2021.

In light of the current COVID19 pandemic, the response may be less than anticipated, but we will continue to reach out to contemporary Associations and fulfill requests from the President and Executive Board.

Respectfully submitted by Miguel Suderman, Chair, Outreach/Publications/Research Committee

AAVP 2021 Conference Committee Report

We look forward to having an old-fashioned in-person yearly meeting next year. We invite you all to the Bluegrass of Kentucky, where we can offer a plentitude of horses, bourbon, and parasites. The dates will be June 19-22, 2021 and our venue will be the downtown Hilton Hotel in Lexington, Kentucky.

Respectfully submitted by Dr. Martin K. Nielsen, Chair, AAVP 2021 Conference Committee

Electronic Media Committee Report



Jessica Rodriguez

Objectives: The Electronic Media Committee (EMC) shall be responsible for providing material to update the AAVP social media accounts (e.g. Facebook and Twitter); a member of the EM Committee will be tasked with posting/updating the social media accounts for the organization. Social media posts can consist of interesting news articles, press releases, and AAVP announcements. All posted material should be in accordance with AAVP policies; the moderator will use discretion over postings. In addition, the EM Committee will assist with providing resources and content that can be posted on the AAVP website. For example, the EM Committee will assist the Newsletter Editorial Board Committee in publishing the AAVP Newsletter electronically.

Request for feedback: If you have any feedback or suggestions about the website please let us know. We plan to continue improving and updating the website to make it both a good representation of AAVP and a member resource.

Monitoring social media usage: We have recently focused on growing our Twitter presence including sharing job postings, posts from AAVP members, and new publications from AAVP members. As of May 2020, we have 623 followers, up from 290 in late 2018! If you'd like AAVP to share one of your posts or a post of interest, please tag @AAVParasit in your post or retweet, or slide into our DMs. Our Facebook page (American Association of Veterinary Parasitologists) currently has 2,423 "likes" and 2,635 following. Please inbox the page if you'd like us to share any posts of interest.

Mobile App: This year there will not be a mobile app for the virtual conference but to feel more connected during the conference, follow @AAVParasit on Twitter and feel free to post on Twitter just like you would if you were at an in-person AAVP meeting. Tweet during the live sessions as well as about presentations that you view at your leisure to increase awareness of the excellent research done by our members.

Committee members: *Jessica Rodriguez* -Chair, Frank Hurtig – Newsletter editor, Brian Herrin – Newsletter assistant editor, Meriam Saleh, Alice-Houk Miles, Tim Geary, John Gilleard, Saurabh Verma, Nathan Crilly, Flavia Ferrari, Ashley Steuer, Elizabeth Shepherd, Dean Dailey, Shelly Michalski, Roberto Cortinas, Tejbir Sandhu

Respectfully submitted by Dr. Jessica Rodriguez, Chair, Electronic Media Committee

Finances Committee Report

Andy Moorhead (Chair), Jim Miller, Chris Adolph, Pete Hann, Ashley McGrew

The Finance Committee has reviewed the Financial Statement prepared by the current Secretary/Treasurer Dr. Adriano Vatta for FY 2019. Based on the financial information supplied to the Finance Committee, the committee finds the balance sheets for FY 2019 to be in order and an accurate accounting of the financial status of AAVP.

Summary for Jan. 1-Dec. 31, 2019

Total Credits:	\$33,962.62
Total Disbursements:	\$44,275.25
Total income minus expenses for the 12-month period:	-\$10,312.63
-Cash Balance-Checking Account with PNC Bank, Kalamazoo, Michigan as of 31 December 2019:	\$5,613.89
-Cash Balance-Money Market (Savings) Account with PNC Bank, Kalamazoo, Michigan as of 31 December 2019:	\$132,186.26
TOTAL CASH BALANCE AS OF 31 December 2019:	\$137,800.15

Currently all AAVP assets are held in a checking and savings account at PNC Bank, Kalamazoo, Michigan.

For additional specific information, see FY 2019 Financial Statement.

Respectfully submitted by Dr. Andrew Moorhead, Chair, Finances Committee

Archive Committee Report

The AAVP archive continues to be held at Iowa State University (ISU) and an inventory of its contents is accessible via the following link to the Special Collections Department: <https://n2t.net/ark:/87292/w9d48f>. This gives a folder-level listing of the physical documents in the collection. It does not include electronic records yet. ISU is still working on getting the systems in place to provide access to electronic records.

All records through Spring of 2020, including meeting proceedings, annual reports, corporate license renewals, meeting minutes, member lists, and newsletters have been sent for archiving. Thus, we are current on all archiving requirements.

The Iowa State University Special Collections Department is also archiving our web site (currently from 2009 to Apr 2020): http://wayback.archive-it.org/1501/*/https://www.aavp.org.

Dates of items captured are listed here but specific items cannot be accessed through this site.

We have forwarded electronic copies of the following to Iowa State for archiving in the AAVP archive: MS-475:

1. Three issues of our Newsletter: Summer 2019, Vol. 41,2; Fall 2019, Vol. 41, 3; Spring 2020, Vol. 42, 1.
2. Proceedings of the 2019 WAAVP/AAVP Annual Meeting
3. The list of the 2019-2020 AAVP committees and current members
4. The 2020 AAVP State of Illinois Annual Statement of Good Standing Certificate – good through April 2021
5. Minutes of the 2019 AAVP Annual Board Meeting
6. Minutes of the 2019 AAVP Business Meeting
7. AAVP 2019 Business Meeting Power Point Presentation
8. AAVP Constitution Revisions - approved July 2019
9. AAVP Bylaws Revisions - approved July 2019

The Archive Committee is still seeking any proceedings prior to 1978 (the first year on the web site). Amy Bishop at Iowa State informed us that we have no archived abstracts from Proceedings of meetings from the 1970s. If anyone has knowledge of other Proceedings from the 1970s, please inform a member of the committee.

Also, note that the Iowa State archivist may change from year to year, so contact the archivist prior to sending materials to ensure that the correct person is in place to receive the materials.

Amy Bishop, AAVP Archivist

Phone: 515-294-8807

Email: aebishop@iastate.edu

Rare Books and Manuscripts Archivist, Special Collections and University Archives

403 Parks Library, 701 Morrill Road

Iowa State University Library

Ames, IA 50011-2140

If anyone has photos of AAVP events that they think should be in the archive, they can scan the photos (at 300 to 400 dpi) and send them to Tom McTier (tom.mctier@zoetis.com). Include the names of those in the photograph and when and where it was taken. I will make a hard copy of the photo and information and forward it to the archive. If anyone has copies of the missing issues of the newsletter (Vol 4 #2, Vol 6 #2, or Vol 11 #1) please make a copy of it and send it to the archive committee chairperson.

Respectfully Submitted by Dr. Tom L. McTier, Chair, AAVP Archives Committee

AAVP Awards Committee members for 2019-2020: Tom McTier, Chair, Tom Nolan, Miguel Suderman, Anne Donaghue, Heather Stockdale Walden

History Committee Report

Sue Howell (chair) (2020) iscb@uga.edu
Alan Marchiondo (2021) amkj46@aol.com
Tom Nolan (2021) parasit@vet.upenn.edu
Ryan H. Avery (2020) ravery2@lsu.edu
Amy Biddle (2021) asbiddle@udel.edu
Ashley McGrew (2021) ashley.mcgrew@colostate.edu ashlinton98@hotmail.com

The committee is tasked with reporting on deaths of members from the parasitology community. Also, the committee was tasked with identifying and adding historically important “landmark” papers/manuscripts related to parasitology to our website. Several papers are now available in a “members only” section where only AAVP members (students and regular members) have access. This was started under the suggestion of Dr. Tom Nolan, who has been instrumental in submitting the first 4 historical papers to this newly formed tab on the website. Many thanks to Meriam Saleh for her assistance in getting this started. Any member of AAVP can make suggestions for adding “landmark” papers to this section. Just make your suggestion to one of the committee members and they will bring it before the committee for discussion.

As for reported deaths of past AAVP members, I have only been made aware of one death of an AAVP member at this time. We are very saddened to learn of the passing of Dr. Raffaele Roncalli Amici on September 11, 2018. I believe this was overlooked in 2019 due to AAVP being sidelined a little bit because of WAAVP in Madison last year.

One other thing I should report on is this is my last year to be on and chair the history committee. I will be retiring this summer and moving to my “hometown” in Rome in northwest Georgia. I have enjoyed being chair and have appreciated the opportunity to serve the AAVP organization. Ryan Avery is also up to finish on this committee. This is a really a great committee and I highly recommend being on this committee for both students and longtime members.

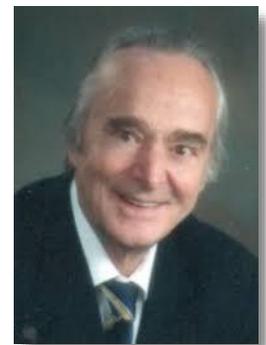
Respectfully submitted by Sue Howell, Chair, AAVP Awards Committee

In Memoriam—Dr. Raffaele Roncalli

Dr. Roncalli began recording the historical importance of AAVP. The link below provides a beautiful write-up about Dr. Roncalli.

<https://rezemfh.com/tribute/details/1586/Raffaele-Roncalli-Amici/obituary.html>

I wanted to highlight a very special thing Dr. Roncalli was responsible for. He was the archivist for the American Association of Veterinary Parasitology, and had looked for an appropriate repository to preserve the special documents associated with AAVP for access. According to a write up by Dr. Ann Donoghue in a WAAVP newsletter, he learned of the Iowa State University Library and found the ISU Library to be the perfect spot for the repository. With this in mind, he contacted them and learned that, free of charge, they would house the AAVP documents and records in archival folders, under climate controlled conditions, maintain an index, accept additional donations forever and provide access to the documents. Because of the importance of these documents, the Executive Committee decided it would be best to hand deliver them, rather than shipping and worry about loss. Therefore, in December 2009 Dr. Roncalli drove to Ames, Iowa, with his car loaded down with historical documents. These were deposited in the Iowa State University (ISU, Ames, Iowa, USA) Special Collections Archive. He was also “The History Committee” for many years and was still listed on the History Committee until his death in 2018. AAVP will forever owe Dr. Roncalli a debt of gratitude for knowing the significance of these special documents and taking care to preserve our past for future generations. What an amazing LEGACY!!



Announcements & Future Parasitology Meetings

Future Meetings of the AAVP

66th Annual Meeting: 19-22 June 2021 – Lexington, KY

67th Annual Meeting: 25-28 June 2022 – Snowbird, UT

American Society of Parasitologists 2020

The 95th annual meeting of the American Society of Parasitologists scheduled to be held 16-19 July 2020 has been canceled. [American Society of Parasitologists](#)

Conference of Research Workers in Animal Diseases (CRWAD) 2020

The 101st Annual CRWAD Conference will be held 4 – 8 December 2020 at the Chicago Marriott, Downtown Magnificent Mile, Chicago, Illinois, USA. AAVP continues to support the best student competition in the parasitology section of the CRWAD meeting. [CRWAD](#)

World Association for the Advancement of Veterinary Parasitology 2021

The 28th International Conference of the World Association for the Advancement of Veterinary Parasitology will be held at the Convention Center Dublin, Ireland, 18-22 July 2021. [WAAVP](#)

International Equine Infectious Disease Conference 2021

The 11th IEIDC will be held in Deauville, France on September 27 - October 1, 2021. This meeting has a large parasitology component and will feature Dr. Georg von Samson-Himmelstjerna and Dr. Guillaume Salle as plenary speakers. [EIDC](#)

International Congress of Parasitology (ICOPA) 2022

The XIV International Congress of Parasitology will be held August 21 – 26, 2022, at the Bella Center Copenhagen in Copenhagen, Denmark. [ICOPA](#)

Receiving AAVP Listserv Messages

The AAVP listserv is our primary means of contacting the membership. These emails are sent from "support@aavp.org." To ensure you receive these messages, please whitelist "support@aavp.org" by adding it to your approved senders list. All you need to do is open an email message and verify the sender can be trusted. However, the exact procedure to whitelist a sender will depend on your email client. In addition to adding the AAVP address to your "Approved Senders List", other commonly used options among email clients are "Add Contact, Add to VIPs, Add Sender to Safe Senders List, or add to Primary," among others. If you are not receiving messages from support@aavp.org at all, contact your IT department for assistance.



The American Association of Veterinary Parasitologists

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The American Association of Veterinary Parasitologists Newsletter is published three times each year with issues in Spring, Summer and Fall. Contributions to the Newsletter are highly encouraged and should be submitted by the dates listed below.

AAVP Newsletter Deadline for Submissions

<u>Newsletter</u>	<u>Deadline</u>
Fall 2020	October 20, 2020
Spring 2021	February 18, 2021
Summer 2021	May 20, 2021

Please contact the editor with questions regarding the Newsletter.