

SATURDAY, SEPTEMBER 7

4:00 - 8:00 PM Registration / Check-in

Maison Foyer

SUNDAY, SEPTEMBER 8


7:00 AM Breakfast

Canal St. Foyer

7:45 Welcome / Introductions / Announcements *Dr. Chris Rehm*
Heartworm Life Cycle Video Preview Grand Ballroom

TIME	SESSION / TITLE	SPEAKER	LOCATION
8:00-9:35 AM	Session 1: Epidemiology and Prevalence of <i>D. immitis</i> • Moderator: Rehm		
8:00	Overview on canine dirofilariosis in the Americas, with notes on other filarial worms infecting dogs	<i>Dr. Filipe Dantas Torres</i>	Grand Ballroom
9:00	The prevalence of <i>Dirofilaria immitis</i> and <i>D. repens</i> in the Old World	<i>Dr. Claudio Genchi</i>	Grand Ballroom
9:35 - 10:00 AM	Break		Foyer
10:00 AM - 12:30 PM	Session 2: Mosquito Vectors • Moderator: Duke		
10:00	Effect of 2016 severe flooding on prevalence of <i>D. immitis</i> infection in dogs in Baton Rouge, Louisiana	<i>Dr. Clarke Atkins</i>	Grand Ballroom
10:30	Potential mosquito vectors of <i>Dirofilaria immitis</i> from residential entryways	<i>Dr. Tanja McKay</i>	Grand Ballroom
10:55	Anti-feeding and insecticidal efficacy of Vectra 3D® (dinotefuran, permethrin, pyriproxyfen) in dogs against <i>Aedes aegypti</i> mosquitoes over 8 weeks	<i>Dr. Marie Varloud</i>	Grand Ballroom
11:20	Do <i>Dirofilaria immitis</i> infections in <i>Aedes aegypti</i> affect wing beat frequencies?	<i>Doyeon Park</i>	Grand Ballroom
11:45	Resistance is futile: Activation of the <i>Aedes aegypti</i> mosquito toll immune signaling pathway blocks development of transmission-stage <i>Dirofilaria immitis</i>	<i>Dr. Michael Povelones</i>	Grand Ballroom
12:05	Do canids infected with <i>Dirofilaria immitis</i> release unique volatile organic compounds in their breath?	<i>Dr. Sarah Zohdy</i>	Grand Ballroom
12:30-2:00 PM	LUNCH - Meet the Professors Heartworm Conundrums and Solutions: Your Questions Answered – Part One	<i>Dr. Clarke Atkins</i> <i>Dr. Marisa Ames</i>	


PRELIMINARY PROGRAM

TIME	SESSION / TITLE	SPEAKER	LOCATION
2:00	Microclimates and the mosquito as the required vector for transmission of <i>Dirofilaria immitis</i>	<i>Dr. Tanja McKay, Dr. Stephen Jones</i>	Grand Ballroom
3:00 PM	Open Time - Free Afternoon		
7:30-9:30 PM	Opening Reception sponsored by Boehringer-Ingelheim		Grand Ballroom
	 Boehringer Ingelheim		

MONDAY, SEPTEMBER 9

7:00 AM	Breakfast		Canal St. Foyer
7:45	Welcome / Introductions / Announcements	<i>Dr. Chris Rehm</i>	Grand Ballroom
8:00-10:00 AM	Session 3: Prevention • Moderator: Payne		
8:00	The efficacy of topical formulations of selamectin plus sarolaner in preventing the development of <i>Dirofilaria immitis</i> in cats	<i>Aleah Pullins</i>	Grand Ballroom
8:25	Laboratory and field studies to investigate the efficacy of a novel, orally administered combination product containing sarolaner, moxidectin, and pyrantel for the prevention of heartworm disease (<i>Dirofilaria immitis</i>) in dogs in the USA	<i>Dr. Kristina Kryda</i>	Grand Ballroom
8:50	Preventive efficacy of various doses and dosage regimens of oral moxidectin against resistant heartworm (<i>Dirofilaria immitis</i>) strains in dogs	<i>Dr. Steven Maeder</i>	Grand Ballroom
9:20	Efficacy of ProHeart® 12, a moxidectin extended-release injectable, for prevention of heartworm disease caused by <i>Dirofilaria immitis</i> in dogs for one year in laboratory and field studies in the USA	<i>Dr. Tom McTier</i>	Grand Ballroom
9:40	Laboratory safety of ProHeart® 12, a moxidectin extended-release injectable for preventing heartworm (<i>Dirofilaria immitis</i>) disease in dogs for one year	<i>Dr. Matthew Krautmann</i>	Grand Ballroom
10:00 - 10:30 AM	Break		Foyer

TIME	SESSION / TITLE	SPEAKER	LOCATION
10:30 AM - 12:30 PM	Session 4: Diagnostics • Moderator: Atkins		
10:30	<i>Dracunculus</i> sp. infection in a native US (MA) dog associated with false-positive heartworm antigen and heat-treated antigen test results	<i>Dr. Clarke Atkins</i>	Grand Ballroom
10:55	Heat treatment: Improved detection of male-only <i>Dirofilaria immitis</i> infection and overall assessment of antigen detection of necropsy positive and negative sheltered dogs in Florida, USA	<i>Jeff Gruntmeir</i>	Grand Ballroom
11:20	Comparison of acid- versus heat-treatment for immune complex dissociation and detection of <i>Dirofilaria immitis</i> antigen in canine plasma	<i>Dr. Lindsay Starkey</i>	Grand Ballroom
11:45	Comparative evaluation on field samples of two in-clinic assays for heartworm antigen detection in dogs	<i>Dr. Cassan Pulaski</i>	Grand Ballroom
12:10	The DiroScope: A novel cell-phone-based video microscope for quantitative diagnosis of canine heartworm infection	<i>Dr. Gui Verocai</i>	Grand Ballroom
12:30 - 2:00 PM	LUNCH - Meet the Professors Heartworm Conundrums and Solutions: Your Questions Answered – Part Two	<i>Dr. Clarke Atkins</i> <i>Dr. Marisa Ames</i>	
2:00 - 3:00 PM	Session 4: Diagnostics (cont.) • Moderator: Atkins		
2:00	Diagnostic testing in heartworm-infected pets: what, when, and where?	<i>Dr. Clarke Atkins</i>	Grand Ballroom
2:35	Panel Discussion Heat Treatment: Hot Hints and Helpful Tips	Panel: <i>Drs. Atkins, Pulaski, Starkey, Verocai</i>	Grand Ballroom
3:00 - 3:30 PM	Break		Foyer
3:30 - 6:25 PM	Session 5: Pathology • Moderator: Carithers		
3:30	Early detection of renal damage in heartworm-infected dogs	<i>Dr. Elena Carretón</i>	Grand Ballroom

TIME	SESSION / TITLE	SPEAKER	LOCATION
3:50	Effect of <i>Wolbachia</i> surface protein on the production of angiogenic factors in canine microvascular endothelial cells	<i>Dr. Rodrigo Morchon</i>	Grand Ballroom
4:05	Angiogenic response in canine microvascular endothelial cells stimulated with antigenic extracts from <i>Dirofilaria immitis</i> adult worms	<i>Dr. Rodrigo Morchon</i>	Grand Ballroom
4:20	Clinical and diagnostic imaging findings in 37 rescue dogs with heartworm disease in Germany	<i>Dr. Imke Maerz</i>	Grand Ballroom
4:35	Clinical pathological changes in animals with heartworm infections	<i>Dr. Rick Alleman</i>	Grand Ballroom
5:15	Pathology of the lung during heartworm disease and treatment: Are we looking in the right place?	<i>Dr. Kaori Sakamoto,</i> <i>Dr. Steve Jones</i>	Grand Ballroom
6:00	One-minute Poster Pitches		Grand Ballroom
6:30 - 7:30 PM	Poster Session - sponsored by Merck		Grand Ballroom
			

TUESDAY, SEPTEMBER 10

7:00 AM	Breakfast		Canal St. Foyer
7:45	Welcome / Introductions / Announcements	<i>Dr. Chris Rehm</i>	Grand Ballroom
8:00 - 10:00 AM Session 6: Resistance in <i>D. immitis</i> • Moderator: Atkins			
8:00	Clinical validation of molecular markers of macrocyclic lactone resistance in heartworm	<i>Dr. Timothy Geary</i>	Grand Ballroom
8:20	Understanding the genetic basis of macrocyclic lactone resistance in <i>Dirofilaria immitis</i> : Progress towards defining changes in the heartworm genome underlying resistance	<i>Dr. Roger Prichard</i>	Grand Ballroom

TIME	SESSION / TITLE	SPEAKER	LOCATION
8:50	Using predictive statistical models to gain further insights into the factors underlying the measurement of efficacy and to improve the design of studies for heartworm preventive drugs	<i>Dr. Anand Vidyashankar</i>	Grand Ballroom
9:10	Using population genetics to examine relationships of <i>Dirofilaria immitis</i> based on both macrocyclic lactone-resistance status and geography	<i>Dr. Ray Kaplan</i>	Grand Ballroom
9:25	Panel Discussion Resistance Realities	Panel: <i>Drs. Atkins, Geary, Kaplan, Prichard, Vidyashankar</i>	Grand Ballroom
10:00-10:30	Break		Foyer
10:30 AM - 12:00 PM	Session 7: <i>Wolbachia</i> Control / Implications • Moderator: Rumschlag		
10:30	Evaluation of different dosages of doxycycline during the adulticide treatment of <i>Dirofilaria immitis</i> in dogs	<i>Dr. Elena Carretón</i>	Grand Ballroom
10:55	Efficacy and side effects of doxycycline versus minocycline in the three-dose melarsomine canine adulticidal heartworm treatment protocol	<i>Dr. Molly Savadelis</i>	Grand Ballroom
11:15	Research and development of short-course anti- <i>Wolbachia</i> macrofilaricides: Opportunities for repurposing as heartworm indications	<i>Dr. Joseph Turner</i>	Grand Ballroom
11:40	Heartworm control in Grenada, West Indies: Results of a field study using imidacloprid 10% + moxidectin 2.5% (Advantage Multi®, Advocate®) and doxycycline for naturally acquired <i>Dirofilaria immitis</i> infections	<i>Dr. Tara Paterson</i>	Grand Ballroom
12:00 - 1:30 PM	Luncheon and Business Meeting		Grand Ballroom



TIME	SESSION / TITLE	SPEAKER	LOCATION
1:30 - 3:30 PM	Session 8: Immunology • Moderator: Carithers		
1:30	Discussion of the microfilarial and larval immune response of <i>Dirofilaria immitis</i>	<i>Dr. Doug Carithers</i>	Grand Ballroom
1:50	Extracellular vesicles and their involvement in antifilarial drug mode of action	<i>Dr. Michael Kimber</i>	Grand Ballroom
2:15	Unraveling the structure and function of the filarial nematode excretory-secretory system	<i>Dr. Mostafa Zamanian</i>	Grand Ballroom
2:40	Macrocyclic lactone anthelmintic-induced leukocyte binding to <i>Dirofilaria immitis</i> microfilariae: Influence of the drug resistance status of the parasite	<i>Dr. Adrian Wolstenholme</i>	Grand Ballroom
3:05	Panel Discussion Heartworm Preventives and the Immune System	Panel: <i>Drs. Carithers, Kimber, Wolstenholme, Zamanian</i>	Grand Ballroom
3:30 - 4:00 PM	Break		Foyer
4:00 - 5:30 PM	Session 9: Treatment • Moderator: Ames		
4:00	Can the adulticide protocol for canine heartworm be shorter?	<i>Dr. Elena Carretón</i>	Grand Ballroom
4:20	Treatment of dogs with severe heartworm disease	<i>Dr. Marisa Ames</i>	Grand Ballroom
4:55	Heartworm treatment: Dog in a box, but not bored	<i>Dr. Debra Horwitz</i>	Grand Ballroom

TIME	SESSION / TITLE	SPEAKER	LOCATION
WEDNESDAY, SEPTEMBER 11			
7:00 AM	Breakfast		Canal St. Foyer
7:45	Welcome / Introductions / Announcements	<i>Dr. Chris Duke</i>	Grand Ballroom
8:00 - 9:10 AM	Session 10: Heartworm Disease in the Shelter Setting • Moderator: DiGangi		
8:00	Colorado dog importation and increases in heartworm prevalence	<i>Dr. Jason Drake</i>	Grand Ballroom
8:20	Transferring and treating heartworm-positive dogs in a low-prevalence setting: A Canadian sheltering perspective	<i>Dr. Karen Ward</i>	Grand Ballroom
8:40	TBA	<i>Dr. Brian DiGangi</i>	Grand Ballroom
9:10 - 10:30 AM	Session 11: Feline Heartworm Disease / HARD • Moderator: Miller		
9:10	Comparison of <i>Dirofilaria immitis</i> antigen and antibody test results to gross necropsy, histopathology, and radiographic findings in adult shelter cats in northeast Alabama	<i>Dr. Tom Nelson</i>	Grand Ballroom
9:40	Prevention of feline heartworm infection and treatment of symptomatic cats	<i>Dr. Matt Miller</i>	Grand Ballroom
10:10	Panel Discussion Atypical Hosts: Feline Heartworm Infection	Panel: <i>Drs. Cousins, Miller, Nelson</i>	Grand Ballroom
10:30 - 11:00	Break		Foyer
11:00 AM - 12:00 PM	Session 12: Compliance • Moderator: Nelson		
11:00	Heartworm prevention: The dog owner perspective	<i>Dr. Karen Padgett</i>	Grand Ballroom
11:25	Panel Discussion Championing Compliance	<i>Drs. Ames, Atkins, Duke, Jones, Nelson, Padgett, Rehm</i>	Grand Ballroom

Session sponsored by



- Characterization of circulating heartworm antigen in canine serum using size exclusion, rapid immunochromatographic assay, and gel-free Western analysis
Dr. Enqing Tan
- Declarative distribution and evolution of canine heartworm prevalence in Hungary: From 2010 to today
Dr. Marie Varloud
- An in vitro larval growth model of *Dirofilaria immitis* for drug evaluation against veterinary heartworm
Dr. Amy Marriott
- Field assessment of a multimodal prophylactic strategy (dinotefuran-permethrin-pyriproxyfen and milbemycine oxime-praziquantel) against canine vector-borne diseases in Corsica
Dr. Marie Varloud
- Acetic acid as an alternative reagent in the modified Knott test
Dr. Christopher Evans
- Comparison of ABC transporter gene expression in adult *Dirofilaria immitis* worms following 24 and 48 hours of in vitro treatment with ivermectin, doxycycline, or a combination of both
Dr. Chiara Lucchetti
- A rapid, parasite-dependent cellular response to *Dirofilaria immitis* in the jird (*Meriones unguiculatus*)
Katie Day
- Macrocyclic lactone (ML) anthelmintics lack meaningful in vitro activity against L3 and L4 stages of both ML-susceptible and ML-resistant *Dirofilaria immitis*
Dr. Pablo Jimenez Castro
- The emergence and spread of multiple-drug resistance in the canine hookworm, *Ancylostoma caninum*: How will this impact recommendations for use of heartworm preventives?
Dr. Ray Kaplan
- Use of a subcutaneously implanted in vivo chamber system cannot reproduce the high therapeutic in vivo efficacy of ivermectin against L3/L4 stage larvae of a highly susceptible strain (Missouri) of *Dirofilaria immitis*
Dr. Ray Kaplan
- Genome sequence comparisons of drug-resistant and susceptible strains of *Dirofilaria immitis*
Dr. Adrian Wolstenholme
- Prevalence of canine and human dirofilariasis in Puebla, Mexico
Dr. Rodrigo Morchon
- Dirofilariasis could be a risk factor for the development of allergies in humans
Dr. Elena Carretón
- Implementation of a novel heartworm prevention strategy through community engagement in low-income urban neighborhoods
Genie Goldring
- Melarsomine is expensive - What treatment options are successful or not in low income communities?
Dr. Tammy Hornak
- Wellness clinics slow the spread of heartworm disease in socially depressed areas
Dr. Tammy Hornak