



Sunday, 4 August

- 6:30am **Breakfast**
Garden Deck/Mountain Deck/Granhall
- 8:30am **AAWV Free-ranging Wildlife Health, Disease and Mortality Investigations — from Outbreaks to Surveillance**
NDOW Animal Disease Lab
- 8:30am **Leadership for Wildlife Health Professionals**
Big Pine
- 9am **JWD Editorial Board Meeting**
Ponderosa Room
- 12pm **Lunch**
Garden Deck/Mountain Deck/Granhall
- 1pm **WDA Council Meeting**
Alder Room
- 1pm **Conference Registration**
Cedar House
- 5pm **WDA Officers Meeting (Closed)**
Alder Room
- 5:30pm **Dinner**
Garden Deck/Mountain Deck/Granhall

- 7pm **Icebreaker Reception**
Big Pine Lawn

Monday, 5 August

- 7am **Breakfast**
Garden Deck/Mountain Deck/Granhall
- 7am **Conference Registration**
Cedar House
- 8:30am **Welcome Address**
Mountain Ballroom
Chaired by: Dr. Debra Miller
- 8:30am **WDA 2019 Conference Opening Welcome Address**
» [Dr. Debra Miller](#)
- 8:45am **Invited Keynote Presentations**
Mountain Ballroom
Chaired by: Dr. Debra Miller
- 8:45am **Carlton Hermann Speaker: Why disease biology needs community ecology: linking biodiversity changes with parasite transmission**
» [Dr. Pieter Johnson](#)
- 9:30am **Wildlife health professionals shifting the paradigm for addressing emerging infectious diseases: Respect or responsibility?**
» [Dr. Jonna A.K. Mazet](#)
- 10:15am **Morning Break**
Pre-Function Area



Continued from **Monday, 5 August**

10:45am **Morning Plenary - Global Emerging Diseases**

Mountain Ballroom

Chaired by: Dr. Jonna A.K. Mazet

10:45am **Are we ready for African swine fever?**

» Prof. Christian Gortazar, Dr. Joaquin Vicente, Dr. Radim Plhal

11am **Simple Solutions, Complex Path: Utilizing participatory epidemiology to halt the PPR virus epidemic in livestock and endangered wildlife on the Mongolian Steppe**

» Dr. Amanda Fine, Dr. Enkhtuvshin Shiilegdamba, Dr. Jeffrey Mariner, Dr. Richard Kock, Dr. Mathieu Pruvot, Dr. Batsaikhan Sodnom, Mr. Jamyankhuu Narmandakh, Dr. Veronique Chevalier, Dr. Andrew Dobson, Dr. Felix Njeumi

11:15am **Detection of Marburg Virus in Rousette Bats in Sierra Leone**

» Dr. Brian Amman, Dr. Brian Bird, Mr. Ibrahim Bakarr, Mr. James Bangura, Mr. Emmanuel Amara, Mr. Abdulai Bangura, Dr. Aiah Gbakima, Dr. Alexandre Tremeau-Bravard, Dr. Manjunatha Belaganahalli, Ms. Jasjeet Dhanota, Mr. Andrew Chow, Prof. Joseph Turay, Mr. Alusine Koroma, Dr. Amy Schuh, Mr. Jonathan Johnny, Mrs. Tara Sealy, Mrs. Immah Conteh, Mr. Ibrahim Foday, Dr. Ketan Patel, Mr. James Graziano, Ms. Camilla Bangura, Mr. Emmanuel Sahr Kamanda, Mr. Augustus Osborne, Mr. Emmanuel Saidu, Mr. Jonathan Musa, Ms. Doris Bangura, Mr. Samuel Maxwell Tom Williams, Dr. Richard Wadsworth, Dr. Tracey Goldstein, Dr. Jonna A.K. Mazet, Dr. Stuart Nichol, Dr. Jonathan Towner, Dr. Aiah Lebbie

11:30am **Discovery of an ebolavirus in bats adds further support for bats as hosts of ebolaviruses**

» Dr. Tracey Goldstein, Dr. Simon Anthony, Dr. Aiah Gbakima, Dr. Brian Bird, Mr. James Bangura, Dr. Alexandre Tremeau-Bravard, Dr. Manjunatha Belaganahalli, Ms. Heather Wells, Ms. Jasjeet Dhanota, Ms. Eliza Liang, Mr. Michael Grodus, Dr. Rohit Jangra, Ms. Veronica DeJesus, Dr. Gorka Lasso, Mr. Brett Smith, Dr. Amara Jambai, Dr. Brima Kamara, Dr. Sorie Kamara, Dr. William Bangura, Dr. Corina Monagin, Dr. Sagi Shapira, Dr. Christine K. Johnson, Dr. Karen Saylor, Dr. Eddy Rubin, Dr. Kartik Chandran, Dr. Ian Lipkin, Dr. Jonna A.K. Mazet

11:45am

Spillover: A New Tool for Viral Risk Ranking Incorporating Wildlife Data

» Dr. Zoe Grange, Dr. Tracey Goldstein, Dr. Christine K. Johnson, Dr. Simon Anthony, Dr. Kirsten Gilardi, Dr. Peter Daszak, Dr. Kevin Olival, Ms. Tammie O'Rourke, Dr. Suzan Murray, Ms. PREDICT Consortium, Dr. Jonna A.K. Mazet

12pm

Lunch

Garden/Mountain Deck

12:30pm

WDA Business Luncheon 1

Granhall

1:30pm

Afternoon Plenary - Aquatic Emerging Diseases

Mountain Ballroom

Chaired by: Dr. Tracey Goldstein

1:30pm

Phocine distemper outbreak and the 2018-2019 Northeast United States Pinniped Unusual Mortality Event

» Dr. Deborah Fauquier, Ms. Lynda Doughty, Dr. Tracey Goldstein, Dr. Kathleen Colegrove, Dr. David Rotstein, Dr. Jeremiah T. Saliki, Dr. Susan Sanchez, Dr. Wendy Puryear, Dr. Mainity Batista-Linhares, Dr. Jonathan Runstadler, Dr. Kaitlin Sawatzki, Dr. Joan Smyth, Dr. Inga Sidor, Ms. Lindsey Jones, Ms. Ashley Stokes, Ms. Misty Niemeyer, Dr. Andrea Bogomolni, Ms. Janelle Schuh, Ms. Lisa Becker, Ms. Maxine Montello, Mr. Robert A. DiGiovanni Jr., Mr. Jay Pagel, Ms. Kate Shaffer, Ms. Amanda Weschler, Ms. Suzanne Thurman, Dr. Alex Costidis, Ms. Kimberly Murray, Ms. Ainsley Smith, Dr. Denise Greig, Dr. Teresa K. Rowles

1:45pm

Harmful algal blooms in northern waters: An emerging issue for Alaskan seabirds?

» Dr. Caroline Van Hemert, Mr. Matthew M. Smith, Ms. Sarah Schoen, Mr. Robert J. Dusek, Dr. John F. Piatt, Dr. Mayumi L. Arimitsu, Dr. R. Wayne Litaker, Dr. John Pearce

2pm

Widespread mortality of gulls, terns, and auklets in the United States linked to the bacterium *Bisgaardia* Taxon 40

» Dr. Jeff Lorch, Dr. Jason Ladner, Ms. Barbara Bodenstein, Dr. Susan Knowles, Mr. Andrew Hubble, Ms. Brenda Berlowski-Zier, Dr. Gustavo Palacios



Continued from Monday, 5 August

2:15pm **Characterization of a Novel Bunyavirus Isolated From Moribund Farmed and Free-Ranging Freshwater Turtles in Florida**
» Dr. Thomas B. Waltzek, Dr. Brian A. Stacy, Dr. Robert Ossiboff, Dr. Nicole Stacy, Mr. William Fraser, Dr. Annie Yan, Dr. Shipra Mohan, Dr. Thais Rodrigues, Dr. Kuttichantran Subramaniam, Ms. Veronica Guzman-Vargas, Dr. Lisa Shender

2:30pm **Distribution and pathology of a freshwater turtle mortality event in Florida caused by a novel bunyavirus**
» Dr. Lisa Shender, Ms. Veronica Guzman-Vargas, Dr. Brian Stacy, Dr. Robert Ossiboff, Dr. Nicole Stacy, Dr. Kuttichantran Subramaniam, Dr. Thais Rodrigues, Mr. William Fraser, Dr. Annie Yan, Dr. Shipra Mohan, Dr. Thomas B. Waltzek

2:45pm **Thiamine deficiency in nature and its biological consequences**
» Dr. Torsten Mörner

3pm **Afternoon Break**
Pre-Function Area

3:30pm **Afternoon Plenary - Terrestrial Emerging Diseases**
Mountain Ballroom
Chaired by: Dr. Christine K. Johnson

3:30pm **Distribution of Crimean-Congo hemorrhagic fever in the Iberian Peninsula in red deer (*Cervus elaphus*) populations**
» Dr. Francisco Ruiz-Fons, Dr. Miriam Andrada Sas, Prof. Ignacio García-Bocanegra, Dr. Isabel García Fernández de Mera, Dr. Isolda Schuster, Dr. Sven Reiche, Dr. Marc Mertens, Dr. David Cano-Terriza, Ms. Laia Casades-Martí, Mr. Saúl Jiménez-Ruiz, Dr. Martin Groschup

3:45pm **Wildlife as sentinels for emerging zoonotic diseases: Hepatitis E and tick-borne encephalitis in cervids in Norway**
» Prof. Carlos das Neves, Dr. Knut Madslien, Ms. Katrine Mørk Paulsen, Prof. Åshild Kristine Andreassen, Dr. Carlos Sacristán Yagüe

4pm **Emergence & molecular characterization of Pigeon Paramyxovirus-1 in free-ranging columbids in California**
» Ms. Krysta Rogers, Dr. Asli Mete, Dr. Hon Ip, Dr. Mia Torchetti, Dr. Mary Killian, Dr. Beate Crossley

4:15pm **Novel orthoreovirus associated with epizootic necrotizing enteritis and splenic necrosis in American crows (*Corvus brachyrhynchos*)**
» Dr. María Forzán, Dr. Randall Renshaw, Dr. Elizabeth Bunting, Dr. Elizabeth Buckles, Mr. Joseph Okoniewski, Mr. Kevin Hynes, Ms. Richalce Melendez, Ms. Ashley Ableman, Ms. Melissa Laverack, Ms. Melissa Fadden, Dr. Akbar Dastjerdi, Dr. Krysten Schuler, Dr. Edward Dubovi

4:30pm **Anticoagulant rodenticide exposure in bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) in the United States**
» Dr. Kevin Niedringhaus, Dr. Nicole Nemeth, Dr. Samantha Gibbs, Mr. Jared Zimmerman, Dr. Lisa Shender, Ms. Kate Slankard, Dr. Heather Fenton, Dr. Charlie Bahnson, Dr. Martha Frances-Dalton, Dr. Betsy Elsmo, Dr. Bob Poppenga, Dr. Mark Ruder

4:45pm **Further inquiry into the etiology of hoof disease in elk using bacterial metagenomics analysis**
» Dr. Margaret Wild, Dr. Kim Chiok, Dr. Devendra Shah, Dr. Jennifer Wilson-Welder, Dr. Kyle Taylor, Dr. Kristin Mansfield, Dr. Sushan Han

5:30pm **Student/Mentor Event**
Big Pine Lawn

7pm **Picnic Dinner**
Garden Deck/Mountain Deck/Granhall

7:30pm **WDA Strategic Planning Mtg (Closed)**
Cedar House



Tuesday, 6 August

- 6:30am **Breakfast**
Garden Deck/Mountain Deck/Granhall
- 7am **AFWA Fish and Wildlife Health Committee Members Meeting**
Alder Room
- 7am **Conference Registration**
Cedar House
- 8:30am **WDA SRRA Presentation**
Mountain Ballroom
Chaired by: Dr. Tiggy Grillo
- 8:30am **The wild world of Guinea Worms: transmission dynamics and phylogenetics of African and North American Guinea worms in wildlife, domestic animals, and humans.**
» [Dr. Christopher Cleveland](#), Dr. Mark Eberhard, Mr. Alec Thompson, Mrs. Kayla Garrett, Ms. Erin Box, Dr. Hubert Zirimwabagabo, Mr. Mario Romero, Mr. Adam Weiss, Dr. Ernesto Ruiz-tiben, Dr. Michael Yabsley
- 9am **Morning Plenary - Student Presentations I**
Mountain Ballroom
Chaired by: Dr. Tiggy Grillo
- 9am **Risk assessment for the incursion and establishment of orbiviruses in Ontario, Canada: Serosurveillance in wildlife and livestock and characterization of current vector composition and distribution**
» [Dr. Samantha E. Allen](#), Dr. Claire Jardine, Ms. Nicole Colucci, Mrs. Tara Furukawa-Stoffer, Dr. Aruna Ambagala, Dr. Kathleen Hooper-McGrevy, Dr. Mark Ruder, Dr. Nicole Nemeth
- 9:15am **Pitfalls of telemetry-derived contact networks of wildlife**
» [Dr. Marie Gilbertson](#), Dr. Lauren White, Dr. Meggan Craft

- 9:30am **Fruit bats in flight: how they inform conservation and disease surveillance in Tanzania**
» [Dr. Nistara Randhawa](#), Dr. Brian Bird, Dr. Elizabeth Van Wormer, Dr. Zikankuba Sijali, Dr. Chris Kilonzo, Mr. Alphonse Msigwa, Dr. Abel Ekiri, Ms. Aziza Samson, Mr. David Wolking, Dr. Woutrina Smith, Dr. Beatriz Martínez-López, Prof. Rudovick Kazwala, Dr. Jonna A.K. Mazet

- 9:45am **Morning Break**
Pavillion

- 9:45am **Student Poster Session I**
Pavillion
Chaired by: Dr. Tiggy Grillo

- Prevalence and Transmission of Cryptosporidium and Giardia Infections Amongst Lemurs, Humans, Domestic Mammals and Invasive Rats in Tsinjoarivo, Madagascar**
» [Ms. Laurie Spencer](#), Dr. Mitchell Irwin

- Development of a diagnostic assay for detection and differentiation of Theileria spp. in white-tailed deer**
» [Mr. Alec Thompson](#), Mrs. Kayla Garrett, Dr. Michael Yabsley

- The New Rat Lungworms: the occurrence of Physaloptera hispid and a Mastophorus sp. in pulmonary vessels of the hispid cotton rat (Sigmodon hispidus) from Georgia, U.S.A.**
» [Mr. Alec Thompson](#), Dr. Christopher Cleveland, Mr. Troy Koser, Mr. Seth Wyckoff, Dr. Michael Yabsley

- Assessing the effects of competition and seasonality on stress, immunity, and number of scars in deermice**
» [Dr. Andreas Eleftheriou](#), Dr. Amy Kuenzi, Dr. Angela Luis

- Assessment of the stress response in deermice: Validation of immunoassays for fecal corticosterone metabolites**
» [Dr. Andreas Eleftheriou](#), Dr. Catharine Pritchard, Dr. Rupert Palme, Dr. Rudy Boonstra



Continued from Tuesday, 6 August

Pharmacokinetics and pharmacodynamics of alfaxalone after a single intramuscular or intravascular administration in mallard ducks (*Anas platyrhynchos*)

» Dr. Tamara Kruse, Dr. Mark Flint, Dr. Kristen Messenger, Dr. Andrew Bowman, Dr. Turi Aarnes, Dr. Thomas Wittum

Wild felids may be more susceptible to feline leukemia virus (FeLV) infection due to a lack of endogenous feline leukemia virus (enFeLV)

» Mr. Elliott Chiu, Dr. Sue VandeWoude

Wild birds presence, movements and interactions with Houbara bustards assessed in conservation breeding sites in the United Arab Emirates

» Dr. Julien Hirschinger, Mr. Yves Hingrat, Dr. Jean Luc Guerin, Dr. Guillaume Le Loc'h

Revealing virus diversity in urban wild birds with neurological symptoms using meta-transcriptomics

» Ms. Wei-Shan Chang, Dr. John-Sebastian Eden, Dr. Karrie Rose, Dr. Mang Shi, Prof. Edward Holmes

Outbreak of avian paramyxovirus 1 (APMV-1) in juvenile double-crested cormorants (*Phalacrocorax auritus*) in New York State: diagnosed by histopathology but missed by matrix protein rRT-PCR testing

» Mr. Carmen Smith, Dr. Edward Dubovi, Dr. Randall Renshaw, Dr. Laura Goodman, Dr. Amy Glaser, Dr. Cynthia Hopf, Dr. Sara Childs-Sanford, Dr. Maria Forzán

Avian Influenza Virus Detection via Remote Sensing and Size Exclusion Chromatography

» Ms. Madeline McCuen, Dr. Maurice Pitesky

Histopathology associated with *Demodex* sp. infestation in Southern Sea Otters (*Enhydra lutris nereis*)

» Ms. Nadia Javeed, Dr. Arturo Oliver-Guimerá, Ms. Angelina Reed, Ms. Risa Pesapane, Dr. Kevin Keel, Dr. Verena K. Affolter, Dr. Janet Foley, Dr. Melissa Miller

Using Rat Relatedness to Understand Heterogeneous Pathogen Prevalence in an Urban Environment

» Ms. Kaylee A. Byers, Dr. Tom R. Booker, Mr. Matthew Combs, Dr. Chelsea G. Himsworth, Dr. Jason Munshi-South, Dr. David M. Patrick, Dr. Michael C. Whitlock

A retrospective summary of cervid mortality in Ontario and Nunavut regions of Canada (1991-2017)

» Dr. Samantha E. Allen, Dr. Nadine A. Vogt, Dr. Claire Jardine, Dr. Nicole Nemeth

Molecular characterization and prevalence of *Halarachne halichoeri* in threatened southern sea otters (*Enhydra lutris nereis*)

» Ms. Risa Pesapane, Ms. Erin M. Dodd, Ms. Nadia Javeed, Dr. Melissa Miller, Dr. Janet Foley

A polyomavirus detected in American black bear (*Ursus americanus*)

» Dr. Arturo Oliver-Guimerá, Mrs. Alžběta Hejtmankova, Mr. Kenneth Jackson, Dr. Patricia Pesavento

Evaluation of flumethrin-impregnated collars for prevention of sarcoptic mange in an urban population of endangered San Joaquin kit foxes (*Vulpes macrotis mutica*)

» Ms. Jaime Rudd, Dr. Brian Cypher, Dr. Deana Clifford, Dr. Janet Foley

Colonization patterns of chronic hemo-parasite infections in African buffalo (*Syncerus caffer*): Evidence for the competition - colonization trade-off?

» Ms. Caroline Glidden, Ms. Chenyang Duan, Dr. Yuan Jiang, Dr. Jan Medlock, Dr. Brianna Beechler, Dr. Anna Jolles

Pathogen prevalence and gene diversity in an endangered passerine, the Florida Grasshopper Sparrow (*Ammodramus savannarum floridanus*)

» Ms. Jennifer Eells, Dr. James Austin, Ms. Adele Pietras, Dr. Nicole Stacy, Dr. James Wellehan, Ms. Julia Loeb



Continued from Tuesday, 6 August

Trypanosoma cruzi (agent of Chagas disease) and Sarcocystis spp. in endangered South Texas ocelots (Leopardus pardalis)

» [Mr. Italo Zecca](#), Dr. Carolyn Hodo, Mrs. Heather Prestridge, Dr. Thomas deMaar, Dr. Hilary Swarts, Dr. Jessica Light, Dr. Sarah Hamer

Microcystin-LR Toxicity in Mallard Ducks

» [Dr. Yih Tyng Bong](#), Prof. Swee Teh, Dr. Melissa Miller, Dr. Woutrina Smith

The impact of sampling interval on Salmonella serotypes and susceptibility patterns of Salmonella and Escherichia coli: a longitudinal study of raccoons (Procyon lotor) in southern Ontario, Canada (2011-2013)

» [Dr. Nadine A. Vogt](#), Dr. David L. Pearl, Ms. Nicol Janecko, Dr. Richard J. Reid-Smith, Dr. Kristin Bondo, Dr. Samantha E. Allen, Dr. Claire Jardine

PCR surveillance for Leptospira interrogans in Alaskan caribou (Rangifer tarandus granti) and reindeer (Rangifer tarandus tarandus)

» [Ms. Melissa Clark](#), Dr. Cristina Hansen

Hepatocystis malarial infection and antiviral immune gene expression in African fruit bats - important zoonotic reservoirs.

» [Ms. Jordan Simpson](#), Dr. DeeAnn Reeder, Dr. Kenneth Field, Mr. Imran Ejotre, Dr. Julianne Schaer

Initiating surveillance for the pathogenic fungus, Batrachochytrium salamandrivorans, in highland Costa Rican salamander populations

» [Mr. Henry Adams](#), Dr. Sonia M. Hernandez, Dr. Michael Yabsley, Dr. Matthew Gray, Dr. Scott Connolly

Re-emergence of Leptospirosis in California sea lions (Zalophus californianus) after a four-year hiatus: Demographics, survival, and clinical features of the 2017-2018 epizootic.

» [Dr. Emily Whitmer](#), Dr. Pádraig Duignan, Dr. Frances Gulland, Dr. Shawn Johnson, Dr. Abby McClain, Mr. Carlos Rios, Dr. Dane Whitaker, Dr. Sophie Whoriskey, Dr. James Lloyd-Smith, Dr. Katherine Prager, Dr. Cara Field

Using Agent-based Modeling to Improve our Understanding of Chronic Wasting Disease

» [Ms. Noelle Thompson](#), Dr. Sonja Christensen, Dr. David Williams, Dr. William Porter

Effects of Snake Fungal Disease on Epidermal Microbiome Community Dynamics

» [Mr. Alexander Romer](#), Dr. Donald Walker

Assessing influenza A virus infection and exposure in a breeding seabird colony on Middleton Island, Alaska

» [Mrs. Brianna Williams](#), Dr. Andrew Ramey, Mr. Scott Hatch, Dr. David Stallknecht, Dr. Michael Yabsley

Bridging the gap between science and practice: protocols to facilitate best practices for ecological niche modeling to map disease risk

» [Ms. Erica Johnson](#), Dr. Luis Escobar, Dr. Jamie Kass, Mr. Gonzalo Pinilla-Buitrago, Dr. Bruno Vilela, Dr. Cory Merow, Dr. Robert Anderson, Dr. Carlos Zambrana-Torrel

Baylisascaris larval migrans in wild rodents and lagomorphs in Ontario: A 30-year retrospective analysis

» [Dr. Shannon French](#), Dr. David L. Pearl, Dr. Andrew Peregrine, Dr. Claire Jardine

Spatial clustering of Baylisascaris procyonis infection in Ontario raccoons

» [Dr. Shannon French](#), Dr. David L. Pearl, Dr. Andrew Peregrine, Dr. Claire Jardine



Continued from Tuesday, 6 August

Detection of ophidiomycosis in free-ranging snakes in Georgia, 2016-2018

» [Dr. Ellen Haynes](#), Mr. Houston Chandler, Dr. Matthew Allender, Mr. Benjamin Stegenga, Mx. Emilie Ospina, Mr. Dirk Stevenson

Estimates of Roosevelt elk calf survival and factors influencing mortality in northwestern California

» [Ms. Erin Nigon](#), Dr. Richard Brown, Prof. Micaela Szykman Gunther, Prof. Tim Bean, Mrs. Carrington Hilson

Deer atadenovirus A detected in perinatal samples from apparently healthy dams prior to and after parturition

» [Ms. Kayla Kauffman](#), Dr. Todd Cornish, Ms. Samantha Dwinnell, Mr. Matthew Hayes, Ms. Katey Huggler, Ms. Tayler LaSharr, Dr. Kevin Monteith, Dr. Brant Schumaker, Dr. Myrna Miller

Longitudinal assessment of domoic acid exposure and relative hazard of death due to cardiomyopathy in southern sea otters (*Enhydra lutris nereis*)

» [Dr. Megan E. Moriarty](#), Dr. Melissa Miller, Dr. M. Tim Tinker, Dr. Raphael M. Kudela, Ms. Vanessa Zubkousky-White, Mr. Joseph A. Tomoleoni, Ms. Jessica A. Fujii, Ms. Michelle M. Staedler, Ms. Katherine Greenwald, Ms. Francesca Batac, Ms. Erin M. Dodd, Ms. Kendra H. Negrey, Dr. Christine K. Johnson

Implementing environmental sampling for avian influenza surveillance: determining which ecological factors predict matrix-gene positive samples from wetlands in British Columbia, Canada

» [Dr. Michelle Coombe](#), Dr. Waren Baticados, Mr. Gord Gadsden, Dr. David M. Patrick, Dr. Natalie Prystajek, Dr. William Hsiao, Dr. Chelsea G. Himsworth

Using multivariate analyses to predict stage of infection

» [Dr. Rachel Ruden](#), Dr. James Adelman

Disease Surveillance of Invasive Nutria (*Myocastor coypus*) Inhabiting Wetlands in California's Central Valley

» [Ms. Jane Riner](#), Dr. Deana Clifford, Dr. Leslie Woods, Mr. Greg Gerstenberg, Dr. Janet Foley

Population genomics of the invasive tick, *Haemaphysalis longicornis*

» [Mr. Alec Thompson](#), Ms. Julia Frederick, Ms. Natalia Bayona-Vásquez, Dr. Travis Glenn, Dr. Michael Yabsley

Prevalence and clinicopathologic findings of a novel *Chlamydiales* organism in free-ranging raptors admitted to a veterinary teaching hospital in Northern California: 2000-2018

» [Ms. Molly Horgan](#), Dr. Michelle G. Hawkins, Ms. Brittany A. Seibert, Mr. Finistere Macfarland, Dr. Terra Kelly, Dr. Branson W. Ritchie, Dr. Kevin Keel

Associations among Climate, Stress, and Avian Influenza Virus Infection in Migratory Waterfowl

» [Dr. Ajaypal Singh Kahlon](#), Dr. Yohannes Berhane, Dr. Karen Machin, Dr. Catherine Soos

Defining pathogens and disease of muskrats (*Ondatra zibethicus*) in Pennsylvania

» [Ms. Laken Gano](#), Dr. Justin Brown, Dr. Matthew Lovallo, Dr. Michael Yabsley, Dr. Mark Ruder, Dr. W. David Walter

The nasal microbiome of farmed White-tailed deer (*Odocoileus virginianus*) in Florida

» [Ms. Hannah Barber](#), Dr. Diego Gomez, Dr. Samantha M. Wisely, Dr. Juan M. Campos Krauer

High vector-borne Haemosporidia prevalence in Eastern Sandhill Cranes (*Antigone canadensis*) over two decades

» [Ms. Skye Sneed](#), Mrs. Lisa Auckland, Dr. Barry K Hartup, Dr. Sarah Hamer, Dr. Gabe Hamer

Cause of Death in Florida Farmed White-Tailed Deer (*Odocoileus virginianus*) during 2017 - 2018

» [Ms. Sydney Cottingham](#), Ms. Hannah Barber, Ms. Olivia Goodfriend, Dr. Katherine A. Saylor, Dr. Heather Stockdale Walden, Dr. Thomas B. Waltzek, Dr. John A. Lednický, Dr. Jason Blackburn, Dr. Samantha M. Wisely, Dr. Juan M. Campos Krauer



Continued from Tuesday, 6 August

A scoping review of wildlife health and disease surveillance literature in Canada

» [Dr. Jolene Giacinti](#), Dr. Jane Parmley, Mr. Mark Reist, Dr. Claire Jardine

Leptospirosis in the Channel Island Fox: A long-Term Study to Assess the Origin, Spread and Impact of Leptospirosis in the Channel Island Fox

» [Ms. Angela Guglielmino](#), Ms. Riley Mummah, Dr. Benny Borremans, Dr. Renee Galloway, Dr. Katherine Prager, Mr. Timothy Coonan, Dr. James Lloyd-Smith

Characterization of a novel Orthoreovirus isolated from dead stranded harbor seals in Washington state, USA

» [Dr. Thais Rodrigues](#), Dr. Ole Nielsen, Ms. Dyanna Lambourn, Dr. Vsevolod Popov, Dr. Stephen Raverty, Dr. Kuttichantran Subramaniam, Dr. Thomas B. Waltzek

Do free range chickens equal free-range pathogens?

» [Ms. Andrea Ayala](#), Ms. Lora K. Haas, Ms. Summer S. Fink, Mr. James I. Dornbush, Mr. Benjamin M. Williams, Ms. Josie L. Crane, Ms. Courtney A. Camp, Ms. Carly M. Crow, Ms. Sarah M. Schappaugh, Ms. Alexia J. Goodman, Mr. Seth M. Cook, Ms. Lauren J. Head, Ms. Kathryn M. Thompson, Mr. Timothy L. Olivier, Dr. Michael Yabsley, Dr. Sonia M. Hernandez

Notoedric mange in small Indian mongoose (*Urva auropunctata*) from Hawaii

» [Ms. Kelsey Clark](#), Ms. Jaime Rudd, Dr. Janet Foley, Dr. James Mertins, Dr. Travis Heskett

Climate change and intensifying wildfires: Exploring integrative approaches to treating burned wildlife in California

» [Dr. Andrew Di Salvo](#), Dr. Jamie Peyton, Dr. Deana Clifford

Evaluating the use of guide and outfitter knowledge and sampling to inform woodland caribou (*Rangifer tarandus caribou*) conservation

» [Dr. Naima Iutha](#), Dr. Craig Gerlach, Mr. Bill Oestreich, Dr. Karin Orsel, Dr. Helen Schwantje, Prof. Susan Kutz

Characterization of *Pseudogymnoascus destructans* conidial adherence to extracellular matrix and its association with fungal secreted proteases in white-nose syndrome of bats

» [Dr. Piyaporn Eiamcharoen](#), Dr. Kevin Keel

10:30am WDA/IAAAM Aquatic Award Presentation

Mountain Ballroom

Chaired by: Dr. Frances Gulland

10:30am

Development and validation of quantitative PCR assays to measure cytokine transcript levels in the Florida manatee (*Trichechus manatus latirostris*)

» [Dr. Jason Ferrante](#), Dr. Margaret Hunter, Dr. James Wellehan

10:45am Morning Plenary - Student Presentations II

Mountain Ballroom

Chaired by: Dr. Javier Millán

10:45am

Effects of incubation temperature on intestinal length in loggerhead sea turtle (*Caretta caretta*) hatchlings from Boca Raton, Florida

» [Dr. Ashley Reeves](#), Mr. Jeremy McKeever, Ms. Alexandra Lolavar, Dr. Jeanette Wyneken, Dr. Debra Miller

11am

North vs. South: Depleted airway microbiota of Southern humpback whales at the end of migration may suggest compromised health

» [Ms. Catharina Vendl](#), Dr. Eve Slavich, Dr. Tiffanie Nelson, Prof. Belinda Ferrari, Prof. Torsten Thomas, Prof. Tracey Rogers



Continued from Tuesday, 6 August

- 11:15am **Antibiotic resistance genes as indicators of anthropogenic impact in wild guigna (*Leopardus guigna*) habitat, Chile: the first detection of *mecA* in South American wild felids**
» Ms. Irene Sacristan, Dr. Fernando Esperón-Fajardo, Ms. Francisca Acuña, Mr. Emilio Aguilar, Mr. Sebastián García, Ms. María José López, Mr. Aitor Cevdanes, Dr. Javier Cabello, Mr. Ezequiel Hidalgo-Hermoso, Dr. Elie Poulin, Dr. Javier Millán, Dr. Constanza Napolitano
- 11:30am **Establishing Tissue Culture Cell Lines from Reptiles and Amphibians**
» Ms. Tracey Logan, Ms. Tesla Richards, Dr. Robert Ossiboff
- 11:45am **Generation of antibody response following oral vaccination with microencapsulated *Bacillus anthracis* Sterne strain 34F2**
» Ms. Jamie Benn, Dr. Sankar Chaki, Dr. Thomas Ficht, Dr. Allison Ficht, Dr. Walt Cook
- 12pm **Lunch**
Garden/Mountain Deck
- 12pm **WDA Business Lunch 2**
Granhall
- 1pm **Afternoon Plenary - Student Presentations III**
Mountain Ballroom
Chaired by: Dr. Justin Brown
- 1pm **Prevalence of multi-drug resistant *Escherichia coli* in free-ranging California condors (*Gymnogyps californianus*)**
» Dr. Peter Sebastian, Dr. Terra Kelly, Dr. Barbara A. Byrne, Ms. Alacia Welch, Mr. Joseph Brandt, Mr. L Joseph Burnett, Mr. Kelly T Sorenson, Dr. Christine K. Johnson

- 1:15pm **The effect of dexamethasone on hematological profiles and histological appearance of immune system organs in house finches (*Haemorhous mexicanus*) infected with *Mycoplasma gallisepticum***
» Dr. Esther Crouch, Ms. Maria Teresa Reinoso-Perez, Dr. José Daniel Cruz Otero, Dr. Keila Dhondt, Dr. André Dhondt, Dr. María Forzán
- 1:30pm **Chlamydia in Australian parrots and free-range poultry**
» Ms. Helena Stokes, Ms. Johanne Martens, Dr. Anthony Chamings, Prof. Ken Walder, Dr. Mathew Berg, Dr. Yonatan Segal, Prof. Andrew Bennett
- 1:45pm **Urbanization predicts infection risk by a protozoan parasite in non-migratory populations of monarch butterflies from the southern coastal U.S. and Hawaii**
» Ms. Ania Majewska, Dr. Dara Satterfield, Dr. Rebecca Harrison, Dr. Sonia Altizer, Dr. Jeffrey Hepinstall-Cymerman
- 2pm ***Batrachochytrium* salamandrivorans in the Cuban treefrog (*Osteopilus septentrionalis*)**
» Ms. Anastasia Towe, Dr. Matthew Gray, Mr. E. Davis Carter, Mr. Kurt Ash, Mr. Markese Bohanon, Ms. Brittany Bajo, Dr. Debra Miller
- 2:15pm **Pathology in snakes naturally and experimentally infected with *Ophidiomyces ophiodiicola***
» Dr. Christina McKenzie, Dr. Claire Jardine, Dr. Doug Campbell, Dr. Brian Stevens, Dr. Paul Oesterle, Dr. Lenny Shirose, Dr. Christina Davy, Dr. Brandon Lillie, Dr. Nicole Nemeth
- 2:30pm **Outbreak of severe dermatomycosis in free-living Eastern water dragons in Brisbane, Australia associated with *Nannizziopsis barbata*-like fungal pathogen**
» Ms. Nicola Peterson, Dr. Stephanie Shaw, Dr. Karrie Rose, Dr. Tim Hyndman, Prof. Lynne Sigler, Dr. Celine Frere
- 2:45pm **Afternoon Break**
Pavillion



Continued from Tuesday, 6 August

2:45pm

Student Poster Session II

Pavillion

Chaired by: Dr. Tiggy Grillo

Prevalence and Transmission of Cryptosporidium and Giardia Infections Amongst Lemurs, Humans, Domestic Mammals and Invasive Rats in Tsinjoarivo, Madagascar

» [Ms. Laurie Spencer](#), Dr. Mitchell Irwin

Development of a diagnostic assay for detection and differentiation of Theileria spp. in white-tailed deer

» [Mr. Alec Thompson](#), Mrs. Kayla Garrett, Dr. Michael Yabsley

The New Rat Lungworms: the occurrence of Physaloptera hispida and a Mastophorus sp. in pulmonary vessels of the hispid cotton rat (Sigmodon hispidus) from Georgia, U.S.A.

» [Mr. Alec Thompson](#), Dr. Christopher Cleveland, Mr. Troy Koser, Mr. Seth Wyckoff, Dr. Michael Yabsley

Assessing the effects of competition and seasonality on stress, immunity, and number of scars in deermice

» [Dr. Andreas Eleftheriou](#), Dr. Amy Kuenzi, Dr. Angela Luis

Assessment of the stress response in deermice: Validation of immunoassays for fecal corticosterone metabolites

» [Dr. Andreas Eleftheriou](#), Dr. Catharine Pritchard, Dr. Rupert Palme, Dr. Rudy Boonstra

Pharmacokinetics and pharmacodynamics of alfaxalone after a single intramuscular or intravascular administration in mallard ducks (Anas platyrhynchos)

» [Dr. Tamara Kruse](#), Dr. Mark Flint, Dr. Kristen Messenger, Dr. Andrew Bowman, Dr. Turi Aarnes, Dr. Thomas Wittum

Wild felids may be more susceptible to feline leukemia virus (FeLV) infection due to a lack of endogenous feline leukemia virus (enFeLV)

» [Mr. Elliott Chiu](#), Dr. Sue VandeWoude

Wild birds presence, movements and interactions with Houbara bustards assessed in conservation breeding sites in the United Arab Emirates

» [Dr. Julien Hirschinger](#), Mr. Yves Hingrat, Dr. Jean Luc Guerin, Dr. Guillaume Le Loc'h

Revealing virus diversity in urban wild birds with neurological symptoms using meta-transcriptomics

» [Ms. Wei-Shan Chang](#), Dr. John-Sebastian Eden, Dr. Karrie Rose, Dr. Mang Shi, Prof. Edward Holmes

Outbreak of avian paramyxovirus 1 (APMV-1) in juvenile double-crested cormorants (Phalacrocorax auritus) in New York State: diagnosed by histopathology but missed by matrix protein rRT-PCR testing

» [Mr. Carmen Smith](#), Dr. Edward Dubovi, Dr. Randall Renshaw, Dr. Laura Goodman, Dr. Amy Glaser, Dr. Cynthia Hopf, Dr. Sara Childs-Sanford, Dr. María Forzán

Avian Influenza Virus Detection via Remote Sensing and Size Exclusion Chromatography

» [Ms. Madeline McCuen](#), Dr. Maurice Pitesky

Histopathology associated with Demodex sp. infestation in Southern Sea Otters (Enhydra lutris nereis)

» [Ms. Nadia Javeed](#), Dr. Arturo Oliver-Guimerá, Ms. Angelina Reed, Ms. Risa Pesapane, Dr. Kevin Keel, Dr. Verena K. Affolter, Dr. Janet Foley, Dr. Melissa Miller

Using Rat Relatedness to Understand Heterogeneous Pathogen Prevalence in an Urban Environment

» [Ms. Kaylee A. Byers](#), Dr. Tom R. Booker, Mr. Matthew Combs, Dr. Chelsea G. Himsworth, Dr. Jason Munshi-South, Dr. David M. Patrick, Dr. Michael C. Whitlock

A retrospective summary of cervid mortality in Ontario and Nunavut regions of Canada (1991-2017)

» [Dr. Samantha E. Allen](#), Dr. Nadine A. Vogt, Dr. Claire Jardine, Dr. Nicole Nemeth



Continued from Tuesday, 6 August

Molecular characterization and prevalence of *Halarachne halichoeri* in threatened southern sea otters (*Enhydra lutris nereis*)

» Ms. Risa Pesapane, Ms. Erin M. Dodd, Ms. Nadia Javeed, Dr. Melissa Miller, Dr. Janet Foley

A polyomavirus detected in American black bear (*Ursus americanus*)

» Dr. Arturo Oliver-Guimerá, Mrs. Alžběta Hejtmankova, Mr. Kenneth Jackson, Dr. Patricia Pesavento

Evaluation of flumethrin-impregnated collars for prevention of sarcoptic mange in an urban population of endangered San Joaquin kit foxes (*Vulpes macrotis mutica*)

» Ms. Jaime Rudd, Dr. Brian Cypher, Dr. Deana Clifford, Dr. Janet Foley

Colonization patterns of chronic hemo-parasite infections in African buffalo (*Syncerus caffer*): Evidence for the competition - colonization trade-off?

» Ms. Caroline Glidden, Ms. Chenyang Duan, Dr. Yuan Jiang, Dr. Jan Medlock, Dr. Brianna Beechler, Dr. Anna Jolles

Pathogen prevalence and gene diversity in an endangered passerine, the Florida Grasshopper Sparrow (*Ammodramus savannarum floridanus*)

» Ms. Jennifer Eells, Dr. James Austin, Ms. Adele Pietras, Dr. Nicole Stacy, Dr. James Wellehan, Ms. Julia Loeb

***Trypanosoma cruzi* (agent of Chagas disease) and *Sarcocystis* spp. in endangered South Texas ocelots (*Leopardus pardalis*)**

» Mr. Italo Zecca, Dr. Carolyn Hodo, Mrs. Heather Prestridge, Dr. Thomas deMaar, Dr. Hilary Swarts, Dr. Jessica Light, Dr. Sarah Hamer

Microcystin-LR Toxicity in Mallard Ducks

» Dr. Yih Tyng Bong, Prof. Swee Teh, Dr. Melissa Miller, Dr. Woutrina Smith

The impact of sampling interval on *Salmonella* serotypes and susceptibility patterns of *Salmonella* and *Escherichia coli*: a longitudinal study of raccoons (*Procyon lotor*) in southern Ontario, Canada (2011-2013)

» Dr. Nadine A. Vogt, Dr. David L. Pearl, Ms. Nicol Janecko, Dr. Richard J. Reid-Smith, Dr. Kristin Bondo, Dr. Samantha E. Allen, Dr. Claire Jardine

PCR surveillance for *Leptospira interrogans* in Alaskan caribou (*Rangifer tarandus granti*) and reindeer (*Rangifer tarandus tarandus*)

» Ms. Melissa Clark, Dr. Cristina Hansen

Hepatocystis malarial infection and antiviral immune gene expression in African fruit bats - important zoonotic reservoirs.

» Ms. Jordan Simpson, Dr. DeeAnn Reeder, Dr. Kenneth Field, Mr. Imran Ejotre, Dr. Julianne Schaefer

Initiating surveillance for the pathogenic fungus, *Batrachochytrium salamandrivorans*, in highland Costa Rican salamander populations

» Mr. Henry Adams, Dr. Sonia M. Hernandez, Dr. Michael Yabsley, Dr. Matthew Gray, Dr. Scott Connelly

Re-emergence of *Leptospirosis* in California sea lions (*Zalophus californianus*) after a four-year hiatus: Demographics, survival, and clinical features of the 2017-2018 epizootic.

» Dr. Emily Whitmer, Dr. Pádraig Duignan, Dr. Frances Gulland, Dr. Shawn Johnson, Dr. Abby McClain, Mr. Carlos Rios, Dr. Dane Whitaker, Dr. Sophie Whoriskey, Dr. James Lloyd-Smith, Dr. Katherine Prager, Dr. Cara Field

Using Agent-based Modeling to Improve our Understanding of Chronic Wasting Disease

» Ms. Noelle Thompson, Dr. Sonja Christensen, Dr. David Williams, Dr. William Porter

Effects of Snake Fungal Disease on Epidermal Microbiome Community Dynamics

» Mr. Alexander Romer, Dr. Donald Walker



Continued from Tuesday, 6 August

Assessing influenza A virus infection and exposure in a breeding seabird colony on Middleton Island, Alaska

» [Mrs. Brianna Williams](#), Dr. Andrew Ramey, Mr. Scott Hatch, Dr. David Stallknecht, Dr. Michael Yabsley

Bridging the gap between science and practice: protocols to facilitate best practices for ecological niche modeling to map disease risk

» [Ms. Erica Johnson](#), Dr. Luis Escobar, Dr. Jamie Kass, Mr. Gonzalo Pinilla-Buitrago, Dr. Bruno Vilela, Dr. Cory Merow, Dr. Robert Anderson, Dr. Carlos Zambrana-Torrel

Baylisascaris larval migrans in wild rodents and lagomorphs in Ontario: A 30-year retrospective analysis

» [Dr. Shannon French](#), Dr. David L. Pearl, Dr. Andrew Peregrine, Dr. Claire Jardine

Spatial clustering of Baylisascaris procyonis infection in Ontario raccoons

» [Dr. Shannon French](#), Dr. David L. Pearl, Dr. Andrew Peregrine, Dr. Claire Jardine

Detection of ophidiomycosis in free-ranging snakes in Georgia, 2016-2018

» [Dr. Ellen Haynes](#), Mr. Houston Chandler, Dr. Matthew Allender, Mr. Benjamin Stegenga, Mx. Emilie Ospina, Mr. Dirk Stevenson

Estimates of Roosevelt elk calf survival and factors influencing mortality in northwestern California

» [Ms. Erin Nigon](#), Dr. Richard Brown, Prof. Micaela Szykman Gunther, Prof. Tim Bean, Mrs. Carrington Hilson

Deer atadenovirus A detected in perinatal samples from apparently healthy dams prior to and after parturition

» [Ms. Kayla Kauffman](#), Dr. Todd Cornish, Ms. Samantha Dwinnell, Mr. Matthew Hayes, Ms. Katey Huggler, Ms. Tayler LaSharr, Dr. Kevin Monteith, Dr. Brant Schumaker, Dr. Myrna Miller

Longitudinal assessment of domoic acid exposure and relative hazard of death due to cardiomyopathy in southern sea otters (*Enhydra lutris nereis*)

» [Dr. Megan E. Moriarty](#), Dr. Melissa Miller, Dr. M. Tim Tinker, Dr. Raphael M. Kudela, Ms. Vanessa Zubkowsky-White, Mr. Joseph A. Tomoleoni, Ms. Jessica A. Fujii, Ms. Michelle M. Staedler, Ms. Katherine Greenwald, Ms. Francesca Batac, Ms. Erin M. Dodd, Ms. Kendra H. Negrey, Dr. Christine K. Johnson

Implementing environmental sampling for avian influenza surveillance: determining which ecological factors predict matrix-gene positive samples from wetlands in British Columbia, Canada

» [Dr. Michelle Coombe](#), Dr. Warren Baticados, Mr. Gord Gadsden, Dr. David M. Patrick, Dr. Natalie Prystajecy, Dr. William Hsiao, Dr. Chelsea G. Himsworth

Using multivariate analyses to predict stage of infection

» [Dr. Rachel Ruden](#), Dr. James Adelman

Disease Surveillance of Invasive Nutria (*Myocastor coypus*) Inhabiting Wetlands in California's Central Valley

» [Ms. Jane Riner](#), Dr. Deana Clifford, Dr. Leslie Woods, Mr. Greg Gerstenberg, Dr. Janet Foley

Population genomics of the invasive tick, *Haemaphysalis longicornis*

» [Mr. Alec Thompson](#), Ms. Julia Frederick, Ms. Natalia Bayona-Vásquez, Dr. Travis Glenn, Dr. Michael Yabsley

Prevalence and clinicopathologic findings of a novel *Chlamydiales* organism in free-ranging raptors admitted to a veterinary teaching hospital in Northern California: 2000-2018

» [Ms. Molly Horgan](#), Dr. Michelle G. Hawkins, Ms. Brittany A. Seibert, Mr. Finistere Macfarland, Dr. Terra Kelly, Dr. Branson W. Ritchie, Dr. Kevin Keel

Associations among Climate, Stress, and Avian Influenza Virus Infection in Migratory Waterfowl

» [Dr. Ajaypal Singh Kahlon](#), Dr. Yohannes Berhane, Dr. Karen Machin, Dr. Catherine Soos



Continued from Tuesday, 6 August

Defining pathogens and disease of muskrats (*Ondatra zibethicus*) in Pennsylvania

» Ms. Laken Ganoë, Dr. Justin Brown, Dr. Matthew Lovallo, Dr. Michael Yabsley, Dr. Mark Ruder, Dr. W. David Walter

The nasal microbiome of farmed White-tailed deer (*Odocoileus virginianus*) in Florida

» Ms. Hannah Barber, Dr. Diego Gomez, Dr. Samantha M. Wisely, Dr. Juan M. Campos Krauer

High vector-borne Haemosporidia prevalence in Eastern Sandhill Cranes (*Antigone canadensis*) over two decades

» Ms. Skye Sneed, Mrs. Lisa Auckland, Dr. Barry K Hartup, Dr. Sarah Hamer, Dr. Gabe Hamer

Cause of Death in Florida Farmed White-Tailed Deer (*Odocoileus virginianus*) during 2017 - 2018

» Ms. Sydney Cottingham, Ms. Hannah Barber, Ms. Olivia Goodfriend, Dr. Katherine A. Sayler, Dr. Heather Stockdale Walden, Dr. Thomas B. Waltzek, Dr. John A. Lednický, Dr. Jason Blackburn, Dr. Samantha M. Wisely, Dr. Juan M. Campos Krauer

A scoping review of wildlife health and disease surveillance literature in Canada

» Dr. Jolene Giacinti, Dr. Jane Parmley, Mr. Mark Reist, Dr. Claire Jardine

Leptospirosis in the Channel Island Fox: A long-Term Study to Assess the Origin, Spread and Impact of Leptospirosis in the Channel Island Fox

» Ms. Angela Guglielmino, Ms. Riley Mummah, Dr. Benny Borremans, Dr. Renee Galloway, Dr. Katherine Prager, Mr. Timothy Coonan, Dr. James Lloyd-Smith

Characterization of a novel Orthoreovirus isolated from dead stranded harbor seals in Washington state, USA

» Dr. Thais Rodrigues, Dr. Ole Nielsen, Ms. Dyanna Lambourn, Dr. Vsevolod Popov, Dr. Stephen Raverty, Dr. Kuttichantran Subramaniam, Dr. Thomas B. Waltzek

Do free range chickens equal free-range pathogens?

» Ms. Andrea Ayala, Ms. Lora K. Haas, Ms. Summer S. Fink, Mr. James I. Dornbush, Mr. Benjamin M. Williams, Ms. Josie L. Crane, Ms. Courtney A. Camp, Ms. Carly M. Crow, Ms. Sarah M. Schappagh, Ms. Alexia J. Goodman, Mr. Seth M. Cook, Ms. Lauren J. Head, Ms. Kathryn M. Thompson, Mr. Timothy L. Olivier, Dr. Michael Yabsley, Dr. Sonia M. Hernandez

Notoedric mange in small Indian mongoose (*Urva auropunctata*) from Hawaii

» Ms. Kelsey Clark, Ms. Jaime Rudd, Dr. Janet Foley, Dr. James Mertins, Dr. Travis Heskett

Climate change and intensifying wildfires: Exploring integrative approaches to treating burned wildlife in California

» Dr. Andrew Di Salvo, Dr. Jamie Peyton, Dr. Deana Clifford

Evaluating the use of guide and outfitter knowledge and sampling to inform woodland caribou (*Rangifer tarandus caribou*) conservation

» Dr. Naima Iutha, Dr. Craig Gerlach, Mr. Bill Oestreich, Dr. Karin Orsel, Dr. Helen Schwantje, Prof. Susan Kutz

Characterization of *Pseudogymnoascus destructans* conidial adherence to extracellular matrix and its association with fungal secreted proteases in white-nose syndrome of bats

» Dr. Piyaporn Eiamcharoen, Dr. Kevin Keel

3:30pm

Afternoon Plenary - Student Presentations IV

Mountain Ballroom

Chaired by: Dr. Megan Jones

3:30pm

Spatial Analysis of Hemorrhagic Disease and Physiographic Region in the Eastern United States.

» Dr. Christine Casey, Dr. Mark Ruder, Dr. Stephen Rathbun, Dr. David Stallknecht



Continued from **Tuesday, 6 August**

- 3:45pm **Making a mountain out of a rat hole: Could current rat control practices have unintended consequences?**
» Ms. Kaylee A. Byers, Mr. Michael J. Lee, Ms. Laura Speerin, Ms. Champika Fernando, Ms. Christina Donovan, Ms. Julie Bidulka, Mrs. Erin Zabek, Dr. David M. Patrick, Dr. Janet E. Hill, Dr. Chelsea G. Himsworth
- 4pm **Pathogens of zoonotic and conservation concern in Los Angeles County, California**
» Dr. Sarah Helman, Dr. Katherine Prager, Ms. Amanda Tokuyama, Prof. Anthony Friscia, Prof. Chris Kelty, Prof. Jessica Lynch-Alfaro, Dr. James Lloyd-Smith
- 4:15pm **Seasonal shedding of coronaviruses in urban colonies of straw-colored fruit bats**
» Mr. Diego Montecino, Dr. Terra Kelly, Mr. David Wolking, Dr. Richard Suu-Ire, Dr. Rudovick Kazwala, Mr. Samuel Bel-Nono, Mr. Adam Kindunda, Mr. Godphrey Kongo, Dr. Tracey Goldstein, Dr. Jonna A.K. Mazet
- 4:30pm **Climatic Suitability of San Joaquin Kit Fox (*Vulpes macrotis mutica*) Dens for Sarcoptic Mange (*Sarcoptes scabiei*) Transmission**
» Dr. Ariel Loredó, Ms. Jaime Rudd, Dr. Brian Cypher, Dr. Deana Clifford, Dr. Janet Foley
- 4:45pm **Molecular epidemiology of a fatal sarcoptic mange epidemic in endangered San Joaquin kit foxes (*Vulpes macrotis mutica*)**
» Ms. Jaime Rudd, Dr. Deana Clifford, Dr. Brian Cypher, Dr. Janet Foley

5pm **WDA 2020 Conference Meeting (Closed)**
Alder Room

5:30pm **Dinner**
Garden Deck/Mountain Deck/Granhall

7pm **WDA Silent/Live Auction**
Pavillion

Wednesday, 7 August

6:30am **Breakfast**
Garden/Mountain Deck

7am **Conference Registration**
Cedar House

8am **Morning Concurrent - Wildlife Rehabilitation, Translocation, and Reintroduction**
Lake/Bay Rooms
Chaired by: Peregrine Wolff

8am **A retrospective study on admission trends of hummingbirds from California-based rehabilitation centers over a period of 26 years (1991-2016).**
» Dr. Ruta Bandivadekar, Dr. Pranav Pandit, Dr. Christine K. Johnson, Ms. Michelle Mah, Dr. Nicole Mikoni, Dr. Guthrum Purdin, Ms. Elaine Ibarra, Dr. Duane Tom, Dr. Allison Daugherty, Mr. Max Lipman, Dr. Krystal Woo, Dr. Lisa Tell

8:15am **Chlamydial infections in birds of prey presented to rehabilitation facilities in California**
» Dr. Michelle G. Hawkins, Ms. Brittany A. Seibert, Dr. Terra Kelly, Dr. Kevin Keel, Dr. Branson Ritchie

8:30am **Early detection of health events through temporal anomalies in wildlife admissions at rehabilitation centers.**
» Dr. Pranav Pandit, Dr. Terra Kelly, Mr. Devin Dombrowski, Ms. Nicole Carion, Ms. Krysta Rogers, Ms. Stella McMillin, Dr. Deana Clifford, Mr. Anthony Riberi, Dr. Michael Ziccardi, Dr. Christine K. Johnson



Continued from **Wednesday, 7 August**

- 8:45am **Disease Risk Analysis for Re-introduction of Wolves to Isle Royale National Park, USA.**
» [Dr. Michelle Verant](#), Dr. Tiffany Wolf, Dr. Seth Moore, Dr. Mark Romanski
- 9am **High prevalence of heart anomalies of suspected genetic origin in a reintroduced Eurasian lynx (*Lynx lynx*) population, Switzerland**
» [Prof. Marie-Pierre Ryser-Degiorgis](#), Dr. Christine Breitenmoser-Würsten, Dr. Iris Marti, Mr. Simone Pisano, Dr. Beatriz Vidondo, Dr. Mirjam Pewsner, Dr. Urs Breitenmoser, Dr. Alan Kovacevic
- 9:15am **Herpesvirus infections in Lumholtz's tree-kangaroo (*Dendrolagus lumholtzi*): the natural and the unnatural**
» [Dr. Amy Shima](#), Dr. Paola K. Vaz, Dr. Linda Johnson, Dr. Lee F. Skerratt, Dr. Joanne M. Devlin
- 9:30am **Assessment of Mojave Desert Tortoise health inside and outside the large-scale translocation site**
» [Dr. Tristan Burgess](#), Dr. Josephine Braun, Dr. Carmel Witte, Dr. Nadine Lamberski, Dr. Roy Averill-Murray, Ms. Kimberleigh Field, Ms. Linda Allison, Dr. Bruce Rideout
- 9:45am **Captive Breeding of Greater Sage Grouse (*Centrocercus urophasianus*) for Reintroduction: Challenges and Successes 2014-2019**
» Dr. Sandie Black, Dr. Douglas Whiteside, Dr. Adriana Pastor, [Dr. Emma Vaasjo](#)
- 8am **Morning Concurrent - Arctic Wildlife**
Mountain Room
Chaired by: Dr. Melissa Miller
- 8am **The Pan-Canadian Approach to Wildlife Health**
» [Dr. Craig Stephen](#)

- 8:15am **Hair element profile as an indicator of wildlife population health and demographics**
» [Dr. Jesper Mosbacher](#), Dr. Anders Michelsen, Mr. Mikkel Stelvig, Dr. Jean-Pierre Desforges, Dr. Igor Eulaers, Dr. Christian Sonne, Dr. Rune Dietz, Dr. Bjørn Munro Jenssen, Dr. Tomasz Ciesielski, Mr. Syverin Lierhagen, Dr. Trond Peder Flaten, Ms. Marie Rønne Aggerbeck, Dr. Gaël Le Roux, Dr. Sophia Hansson, Mr. Mike Sutor, Dr. Steeve Cote, Dr. Stephane Lair, Dr. Joelle Taillon, Mr. Vincent Brodeur, Dr. Niels Martin Schmidt, Prof. Susan Kutz
- 8:30am **A health baseline for narwhals (*Monodon monoceros*) from the eastern Canadian Arctic**
» [Dr. Sandie Black](#), Mr. Jack Orr, Dr. Matilde Tomaselli, Mr. James Simonee, Ms. Natasha Simonee, Dr. Pádraig Duignan
- 8:45am **Leptospirosis in Alaskan caribou (*Rangifer tarandus granti*) and reindeer (*Rangifer tarandus tarandus*)**
» [Dr. Cristina Hansen](#), Mr. Kendrick Hautala, Ms. Kelly Walker, Ms. Melissa Clark
- 9am **Understanding health challenges and drivers for the declining Dolphin and Union Caribou**
» [Dr. Xavier Fernandez Aguilar](#), Ms. Lisa-Marie Leclerc, Dr. Anja Carlsson, Ms. Andrea Hanke, Dr. Juliette Di Francesco, Dr. Fabien Mavrot, Dr. Gabriela Mastromonaco, Dr. David W. Kinniburgh, Prof. Susan Kutz
- 9:15am **Detection of *Bartonella* spp. in cervid blood and ectoparasite pools from Norway**
» Dr. Carlos Sacristán Yagüe, Prof. Carlos das Neves, [Dr. Knut Madslien](#)
- 9:30am **Stejneger's Beaked Whale Strandings in Alaska, 1995 - 2018: History, Distribution, and Necropsy Findings**
» [Dr. Kathy Burek-Huntington](#), Dr. Kate Savage, Ms. Anna Bryan, Dr. Pam Tuomi, Dr. Raphaela Stimmelmayer, Dr. Martha Delaney, Mr. Marc Webber, Ms. Gay Sheffield
- 9:45am **Mycoplasma spp. discoveries in Alaskan wildlife**
» [Dr. Kimberlee Beckmen](#), Dr. Camilla Lieske, Dr. Robert Gerlach, Mr. David Herndon, Dr. Maggie Highland



Continued from **Wednesday, 7 August**

- 10am **Morning Break**
Pre-Function Area
- 10:30am **Morning Concurrent - Wildlife Population Health Assessment**
Lake/Bay Rooms
Chaired by: Dr. Joseph Gaydos
- 10:30am **Is there a due diligence standard for wildlife health surveillance**
» Dr. Craig Stephen, Mr. Patrick Zimmer
- 10:45am **Freshwater mussel die-off response development and One Health assessment**
» Dr. Nancy Boedeker, Mr. Brant Fisher
- 11am **Characterizing the wellness of wildlife: A comprehensive assessment of health, pathogen presence, immune function, and population viability in eastern box turtles (*Terrapene carolina carolina*)**
» Dr. Laura Adamovicz, Dr. Sarah Baker, Dr. Mark Merchant, Dr. Matthew Allender
- 11:15am **Development of a killer whale health database to assess individual and population health of southern resident killer whales (*Orcinus orca*)**
» Dr. Forrest Gomez, Dr. Betsy Lutmerding, Mrs. Lisa Clowers, Ms. Risa Daniels, Dr. Cynthia Smith, Ms. Lynne Barre, Dr. Kirsten Gilardi, Dr. Stephanie Venn-Watson, Dr. Joseph Gaydos
- 11:30am **Foot-and-mouth-disease epidemiology in a herd of its natural reservoir host, African buffalo (*Syncerus caffer*)**
» Dr. Brian Dugovich, Dr. Bryan Charleston, Dr. Francois Maree, Dr. Eva Perez-Martin, Dr. Katherine Scott, Dr. Brianna Beechler, Dr. Anna Jolles

- 11:45am **Integration of Wildlife and Environmental Health into a One Health Approach**
» Dr. Jonathan Sleeman, Dr. Katherine Richgels, Dr. C. LeAnn White, Dr. Craig Stephen

- 10:30am **Morning Concurrent - New Tools & Approaches**
Mountain Room
Chaired by: Dr. Brian Bird

- 10:30am **Development of a loop-mediated isothermal amplification method for rapid detection of respiratory pathogens in bighorn sheep**
» Ms. Connie Brewster, Dr. Karen Fox, Ms. Jessica Jennings-Gaines, Mr. William Edwards, Ms. Halcyon Killion, Dr. Mary Wood, Dr. Sandra Quackenbush
- 10:45am **Validation of a field-portable, hand-held qPCR system for detecting *Pseudogymnoascus destructans*, the causative agent of White-nose Syndrome in Bats**
» Dr. Kevin Keel, Dr. Sybil Amelon, Mr. Greg Turner, Dr. Tracy Drazenovich, Dr. Maria Chacon-Heszele, Dr. John Huckabee, Dr. Jean Leonhardt, Mr. Jesse vanWestrienen, Mr. Max Perelman, Ms. Patricia Thompson, Dr. Katie Haman
- 11am **Wildlife Morbidity and Mortality Event Alert System: Integrating Wildlife Rehabilitation Center Data for Early and Enhanced Detection of Threats to Wildlife Health and Survival**
» Dr. Terra Kelly, Ms. Nicole Carion, Ms. Krysta Rogers, Ms. Stella McMillin, Dr. Deana Clifford, Mr. Devin Dombrowski, Mr. Anthony Riberi, Dr. Pranav Pandit, Dr. Christine K. Johnson, Dr. Michael Ziccardi
- 11:15am **Virally-vectored vaccine candidates against white-nose syndrome induce anti-fungal immune response in little brown bats (*Myotis lucifugus*)**
» Dr. Tonie Rocke, Dr. Jorge Osorio, Dr. Bruce Klein



Continued from Wednesday, 7 August

11:30am **Preliminary evaluation of a baculovirus-expressed VP2 subunit vaccine for the protection of white-tailed deer (*Odocoileus virginianus*) from epizootic hemorrhagic disease**
 » [Dr. Leela Noronha](#), Dr. Sun Young Sunwoo, Dr. Igor Morozov, Dr. Jessie Trujillo, Dr. Bonto Faburay, Dr. Erin Schirtzinger, Dr. In Joong Kim, Dr. Barbara Drolet, Dr. D. Scott McVey, Dr. Kinga Urbaniak, Dr. David Meekins, Dr. Mitchell Palmer, Dr. Velmurugan Balaraman, Dr. William Wilson, Dr. Juergen Richt

11:30am **Lunch**
Garden Deck/Mountain Deck/Granhall

12:30pm **Tahoe Gal Emerald Bay Cruise**

1pm **USGS/SCWDS Meeting (Closed)**
Alder Room

1pm **Tahoe Treetop Adventure Park at Granlibakken**

5:30pm **Dinner**
Garden/Mountain Deck

7pm **AAWV Business Meeting**
Granhall

Thursday, 8 August

6:30am **Breakfast**
Garden/Mountain Deck

7am **WDA WVS Meeting**
Granhall

7am **Conference Registration**
Cedar House

8am **Invited Keynote Presentations II**
Mountain Ballroom
 Chaired by: Dr. Mark Drew

8am **Al Franzmann Speaker: Challenges facing wildlife in Africa and how veterinarians can help**
 » [Dr. Pete Morkel](#)

8:45am **That was then; this is now**
 » [Dr. David Jessup](#)

9:30am **Morning Break**
Pavillion

9:30am **General Poster Session**
Pavillion
 Chaired by: Dr. Melissa Miller

Use of Fluralaner as an Acaricide to Treat Sarcoptic Mange Infestation in a Red Fox (*Vulpes vulpes*)
 » [Dr. Robert Adamski](#), Dr. Lynn Miller

Wild in the City: Injury and Disease in Wild Urban Psittacines
 » [Dr. Patricia Latas](#), Ms. Brooke Durham

Wild Psittacine Rehabilitation
 » [Dr. Patricia Latas](#)

Bayesian phylogenetic analysis of avipoxviruses from North American wild birds demonstrates new insights into host-specificity and interspecies transmission

» [Dr. Amanda MacDonald](#), Mr. Daniel Gibson, Dr. John Barta, Dr. Rebecca Poulson, Dr. Justin Brown, Dr. Andrew Allison, Dr. Nicole Nemeth



Continued from Thursday, 8 August

The Role of the World Organisation for Animal Health (OIE) in Wildlife Disease Surveillance

» [Dr. Jonathan Sleeman](#)

Seroprevalence of West Nile Virus in Ruffed grouse (*Bonasa umbellus*) populations in Eastern Canada

» [Dr. Amanda MacDonald](#), Dr. Tadeusz Splawinski, Dr. Justin Brown, Ms. Melanie Kunkel, Dr. Nicole Nemeth, Mr. Philippe Thomas

Look and learn: Investigations into ocular anatomy and pathology in Lumholtz's tree-kangaroo (*Dendrolagus lumholtzi*)

» [Dr. Amy Shima](#), Dr. Linda Johnson, Dr. Lee F. Skerratt, Dr. Caroline Zeiss

Prevalence, genetic diversity and paratenic hosts of *Dracunculus insignis* in meso-mammals from Di-Lane Plantation, Georgia

» [Dr. Christopher Cleveland](#), Dr. Mark Eberhard, Mrs. Kayla Garrett, Mr. Alec Thompson, Ms. Liandrie Swanepoel, Ms. Elizabeth Miller, Mr. Odin Stephens, Dr. Michael Yabsley

***Rickettsia* species in ticks collected from wild pigs (*Sus scrofa*) and Philippine deer (*Rusa marianna*) on Guam, Marianna Islands, USA.**

» [Dr. Christopher Cleveland](#), Ms. Liandrie Swanepoel, Ms. Erin Box, Dr. Anthony DeNicola, Dr. Michael Yabsley

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» [Dr. Amanda MacDonald](#), Ms. Michelle McKay, Dr. John Barta, Dr. Stephane Lair, Dr. Nicole Nemeth, Dr. Neil Pople, Mr. Frank Baldwin

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» Mr. Jordan Wolfkill, [Dr. Justin Brown](#), Dr. Carolyn Mahan, Ms. Mollie Byrne, Mr. Mark Ternent, Dr. Matthew Lovallo, Mr. Kyle Van Why, Ms. Samantha Dilozenzo, Mr. Timothy Linder, Dr. Christopher Cleveland, Dr. Michael Yabsley

Challenges for keeping the critically endangered arctic fox (*Vulpes lagopus*) in Fennoscandia healthy

» [Dr. Andrea Miller](#), Dr. Bjørnar Ytrehus, Dr. Arild Landa, Dr. Nina Eide

Nerve growth factor receptor - Tropomyosin receptor kinase A: A potential therapeutic target pathway in Tasmanian devil facial tumour disease?

» [Dr. Tammy Shadbolt](#), Prof. Ken Smith, Dr. Imelda McGonnell

Ticks and tree line: Monitoring and preparing for climate change impacts on zoonoses in subarctic Canada

» [Dr. Heather Fenton](#), Dr. Brett Elkin, Ms. Stephanie Behrens, Dr. Suzanne Carriere, Mr. Dean Cluff, Dr. Heather Hannah, Dr. Emily Jenkins, Mrs. Alicia Kelly, Prof. Susan Kutz, Dr. Nic Larter, Dr. Robbin Lindsay, Mr. Brent Wagner, Dr. Carl Ribble

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Renal and Vaginal Calculi in a Free-Ranging Long-Beaked Common Dolphin (*Delphinus capensis*)

» Ms. Kerri Danil, Dr. Sophie Dennison, [Dr. Elyse Wurster](#), Dr. Michael Garner, Dr. Judy St. Leger



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Polycyclic aromatic hydrocarbons, heavy metal pollutants, and health implications for the American marten (*Martes americana*) and river otter (*Lontra canadensis*) from Alberta, Canada oil sands

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Isolation and characterization of skunk adenovirus causing severe bronchointerstitial pneumonia in rehabilitated porcupines in Nova Scotia, Canada.

» Dr. Laura Bourque, Dr. Trent Bollinger, Dr. Ole Nielsen, Dr. Betty Lockerbie, Dr. Sherri Cox, Dr. Jessica Khodadad, Dr. Hope Swinimer, Ms. Lynn Roger, Dr. Megan Jones



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Using eDNA to detect *Batrachochytrium dendrobatidis* in Yukon, Canada: Implications for Amphibian Health

» [Dr. Jane Harms](#), Mr. Bruce Bennet, Ms. Julianna Campbell, Dr. María Forzán, Ms. Alexandra Francis, Mr. Jared Hobbs, Dr. Tomy Joseph, Mrs. Randi Mulder

Pathology of cryptosporidiosis in raccoons (*Procyon lotor*)

» [Dr. Viviana Gonzalez](#), Dr. Mauricio Navarro, Dr. Matthew Sheley, Dr. Francisco Uzal

Translocation of Gambel's Quail: Implementation of WAFWA Guidelines for Health Screening and Sampling of Galliforms

» [Dr. Anne Justice-Allen](#), Ms. Callie Hartson

Re-emergence of Leptospirosis in California Sea Lions (*Zalophus californianus*) after a four-year hiatus: Pathologic features of the 2017-2018 epizootic.

» [Dr. Pádraig Duignan](#), Dr. Emily Whitmer, Ms. Barbie Halaska, Dr. Dayna Goldsmith, Dr. Esther Crouch, Dr. Michael Zabrodski, Mr. Carlos Rios, Dr. Frances Gulland, Dr. Shawn Johnson, Dr. Cara Field, Dr. Katherine Prager

Proteomic Analysis of Urine from California Sea Lions (*Zalophus californianus*) With and Without Leptospirosis

» [Dr. Katherine Prager](#), Dr. Benjamin Neely, Ms. Christine Fontaine, Dr. Frances Gulland, Dr. Michael Janech

Investigating the decline of African buffalo (*Syncerus caffer*) in Ruaha National Park, Tanzania

» [Dr. Annette Roug](#), Dr. Epaphras Alex Muse, Dr. Deana Clifford, Prof. Randy Larsen, Dr. Goodluck Paul, Dr. Jonna A.K. Mazet, Mr. George Makingi, Dr. Brian Bird, Dr. Woutrina Smith, Mr. Walter Magesa

Unexpected death of a pup in the breeding program for the critically endangered arctic fox (*Vulpes lagopus*) in Norway

» [Dr. Andrea Miller](#), Dr. Arild Landa, Mrs. Kristine Ulvund, Dr. Bjørnar Ytrehus

Rapid molecular monitoring of arboviruses in field-caught arthropods using universal primers

» Dr. Lilian S. Catenacci, Mr. Thito Yan Bezerra da Paz, Mr. Leonardo Henrique Almeida Hernández, Dr. Valéria Lima Carvalho, Dr. Samir Mansour Moraes Casseb, Dr. Joaquim Nunes Neto, Dr. Sharon L. Deem, [Ms. Kathleen Apakupakul](#), Dr. Janaina Mota de Vasconcelos Massafra, Dr. João Vianez, Dr. Elizabeth Salbé Travassos da Rosa, Dr. Hellen Thais Fuzzi, Dr. Ana Cecília Ribeiro da Cruz

***Pseudogymnoascus destructans* survives gut transit in bats**

» [Dr. Anne Ballmann](#), Ms. Elizabeth Bohuski

Next Generation Serology: integrating cross-sectional and capture-recapture approaches to infer disease dynamics

» [Dr. Amandine Gamble](#), Dr. Romain Garnier, Dr. Thierry Chambert, Dr. Olivier Gimenez, Dr. Thierry Boulonier

Rapid DNA detection and enhanced growth of tuberculosis from respiratory and tissue samples obtained from African rhinoceros (*Diceros bicornis*, *Ceratotherium simum*) and African elephants (*Loxodonta africana*).

» [Dr. Wynand Goosen](#), Ms. Josephine Chileshe, Ms. Candice de Waal, Dr. Tanya Kerr, Dr. Peter Buss, Prof. Paul van Helden, Dr. Sven Parsons, Prof. Michele Miller

Disease surveillance during the first years of the reintroduction of an apex predator in Southwestern Spain

» [Dr. Fernando Najera](#), Dr. Maria Gil-Molino, Dr. Nuria Vallverdu-Coll, Ms. Rebeca Grande-Gomez, Mr. Julian Panadero, Ms. Maria Jesus Palacios, Dr. Jose Jimenez

Analyzing the dynamics of Aujeszky's disease virus infection in wild boar (*Sus scrofa*) in enzootic scenarios

» Ms. Laia Casades-Martí, Dr. David González-Barrio, Ms. Iratxe Diez-Delgado, Dr. Isabel García Fernández de Mera, [Dr. Francisco Ruiz-Fons](#)



Continued from Thursday, 8 August

Tracking an invader: Wildlife Surveillance for *Haemaphysalis longicornis* in the Eastern U.S.

» Mr. Seth White, Ms. Kristen Dominguez, [Mr. Alec Thompson](#), Mrs. Stacey Vigil, Mr. David Shaw, Dr. Adam Randall, Dr. Sarah Bevins, Dr. James Mertins, Dr. Jeffery Alfred, Dr. Ernesto Dominguez-Villegas, Dr. Peach Van Wick, Dr. Jennifer Riley, Dr. Sabrina Garvin, Ms. Kenna Frierson, Dr. Mark Ruder, Dr. Michael Yabsley

Characterizing Landscape Factors of Two West Nile Virus Vectors in Pennsylvania, USA

» [Mrs. Dominika Dec Peevey](#), Dr. W. David Walter, Ms. Lisa Williams, Mr. Andrew Kyle

A bitter pill to swallow - examining antibiotic resistance in sentinel marine mammals of the Salish Sea

» [Dr. Stephanie A. Norman](#), Ms. Dyanna Lambourn, Ms. Jessica Huggins, Ms. Susan Berta, Ms. Sandy Dubpernell, Ms. Jennifer K. Olson, Dr. Cathy King, Ms. Victoria Souze, Ms. Alysha Elsby, Ms. Rachel Mayer

Managing reticuloendotheliosis virus in a captive breeding and release program for endangered Attwater's prairie-chickens (*Tympanuchus cupido attwateri*)

» [Dr. Holly Haefele](#), Dr. Pam Ferro, Dr. Joseph Flanagan, Ms. Kristina Borgstrom, Dr. Michael Morrow

Post-capture mortalities in Rocky Mountain mule deer associated with traumatic coccygeal injuries resulting from helicopter netgun capture: A tail of two deer

» [Mr. Nicholas Shirkey](#), Dr. Brandon Munk, Mrs. Jane McKeever, Mr. Timothy Taylor, Mr. Mike Morrison, Dr. Tom Stephenson

Genotypes of Crimean-Congo hemorrhagic fever virus in ticks from wild ungulates in Spain

» Mr. Alberto Moraga Fernández, Dr. Francisco Ruiz-Fons, Prof. Miguel A. Habela, Ms. Lara Royo, Dr. Rafael Calero Bernal, Prof. Christian Gortazar, Prof. José de la Fuente, [Dr. Isabel García Fernández de Mera](#)

Hunting pressures surrounding Myanmar's North Zamari Key Biodiversity Area: opportunities and challenges for wildlife conservation and public health in the Bago Yoma

» [Dr. Tierra Evans](#), Dr. Theingi Win Myat, Mr. Pyaephyo Aung, Dr. Min Thein Maw, Dr. Zaw Min Oo, Dr. Aung Than Toe, Mr. Tin Htun Aung, Dr. Nang Sarm Hom, Dr. Khin Thawda Shein, Dr. Kyaw Zin Thant, Dr. Kirsten Gilardi, Dr. Peter Barry, Dr. Hlaing Myat Thu, Dr. Christine K. Johnson

Infectiousness of the native rodents Degu and Darwin's Pericote in a *Trypanosoma cruzi* wild vector in semiarid Chile

» [Dr. Juana Paola Correa](#), Ms. Nicol Quiroga, Ms. Antonella Bacigalupo, Ms. Andrea Yañez-Meza, Mr. Esteban San Juan, Ms. Sophie de Bona, Mr. Rodrigo García de Cortázar, Dr. Carezza Botto-Mahan

Control of tick infestations in wild roe deer (*Capreolus capreolus*) vaccinated with the Q38 Subolesin/Akirin chimera

» Dr. Marinela Contreras, Ms. Cristina San José, Prof. Agustín Estrada-Peña, Mr. Ventura Talavera, Ms. Elena Rayas, Ms. Clara Isabel León, Mr. Juan Ortegón, [Dr. Isabel García Fernández de Mera](#), Prof. José de la Fuente

Myxoma virus in ticks from leporids, Spain, 2018

» Mr. Sergio García-Pereira, Dr. José Luis Fernández-García, Dr. David González-Barrio, [Dr. Francisco Ruiz-Fons](#), Prof. Miguel A. Habela, Dr. Rafael Calero Bernal

Phylogenomic Characterization of Novel Orbiviruses Isolated From White-tailed Deer (*Odocoileus virginianus*)

» Dr. Mohammad Shamim Ahasan, [Dr. Kuttichantran Subramaniam](#), Dr. John A. Lednicky, Mrs. Julia C. Loeb, Dr. Katherine A. Saylor, Dr. Juan M. Campos Krauer, Dr. Samantha M. Wisely, Dr. Thomas B. Waltzek

A metabolomics-based approach to assessing health in captive bighorn sheep

» [Ms. Tara Stitzlein](#)



Continued from **Thursday, 8 August**

Canine adenovirus type-1 infections in captive and free-ranging California black bears: Clinical observations, pathologic lesions, and historical exposure

» Mr. Nicholas Shirkey, Dr. Brandon Munk, Mr. Kenneth Jackson, Dr. Kevin Willitts, Dr. Patricia Pesavento, Dr. Leslie Woods

Chronic Wasting Disease in Missouri: Where are we nine years later?

» Ms. Jasmine Batten, Dr. Sherri Russell

Trichophyton equinum associated with severe dermatophytosis in American black bears from California

» Dr. Brandon Munk, Dr. Leslie Woods, Dr. Deana Clifford, Ms. Jaime Rudd, Mr. Nicholas Shirkey, Dr. Dan Famini, Dr. Federico Giannitti, Dr. Kristin Clothier

Detection of antimicrobial resistant bacteria in wild birds associated to an urban colony of sea lions in Chile

» Dr. Luis Miguel Flores Velásquez, Dr. María Paz Miró Pino, Dr. María José Navarrete Talloni

White storks (Ciconia ciconia), landfills and extended-spectrum beta-lactamases-producing Escherichia coli

» Dr. Ursula Höfle, Mrs. MariCruz Camacho, Mr. Javier De la Puente, Mr. Javier Pineda, Dr. José Ignacio Aguirre, Mr. Fernando Torres, Dr. Julio Blas, Dr. Antonio Ramis, Dr. Natalia Majo, Dr. Lourdes Migura, Mr. José Manuel Hernández

Complete genome sequencing of cetaceanpox virus from a managed Indo-Pacific bottlenose dolphin (Tursiops aduncus)

» Dr. Thais Rodrigues, Dr. Kuttichantran Subramaniam, Dr. Carlos Hipolito Romero, Dr. Thomas B. Waltzek

Patterns of pestivirus in caribou and muskoxen: does geography and ecotype matter?

» Dr. Xavier Fernandez Aguilar, Dr. Anja Carlsson, Ms. Lisa-Marie Leclerc, Dr. Brett Elkin, Dr. Helen Schwantje, Dr. Sylvia Checkley, Dr. Sara McCarthy, Dr. Naima Jutha, Dr. Fabien Mavrot, Prof. Susan Kutz

Leptospirosis and detections of Listeria monocytogenes, Toxoplasma gondii, Sarcocystis canis in a Kodiak Brown Bear

» Dr. Kathy Burek-Huntington, Dr. Kimberlee Beckmen, Mr. Nathan Svoboda, Dr. Susan Sanchez, Ms. Elizabeth Zhang, Dr. Michael Grigg

Antler deformities in mule deer bucks in the Paunsaugunt area of Utah, USA

» Dr. Annette Roug, Mr. Josh Pollock, Ms. Teresa Griffin, Mr. Kent Hersey, Mr. Justin Shannon, Prof. Arnaud Van Wettere

10:15am Morning Plenary - Threatened and Endangered Species

Mountain Ballroom

Chaired by: Dr. Deana Clifford

10:15am Emergency capture of the critically endangered vaquita (Phocoena sinus)

» Dr. Frances Gulland, Dr. Lorenzo Rojas Bracho, Dr. Cynthia Smith, Dr. Kathleen Colegrove

10:30am Retrospective study of Channel Island Fox mortality: 2010-2018

» Dr. Leslie Woods, Dr. Patricia Gaffney, Dr. Winston Vickers, Mr. Jesse Maestas, Mr. David Garcelon, Ms. Angela Guglielmino, Ms. Laura Shaskey, Ms. Julie King, Ms. Lara Brenner, Ms. Francesca Ferrara, Ms. Christina Boser

10:45am Evidence for Sea Turtle Cold-Stunning along the Pacific Coast of the United States and Canada

» Dr. Heather Harris, Ms. Erin LaCasella, Dr. Tomo Eguchi, Dr. Brian Stacy, Ms. Deana Strunk, Dr. Cara Field, Dr. Lance Adams, Dr. Martin Haulena, Mr. James Burke, Dr. Todd Schmitt, Dr. Catherine Hadfield, Mr. Jim Rice, Ms. Lisa Spaven, Ms. Robin LeRoux, Mr. Justin Greenman, Ms. Kristin Wilkinson, Dr. Jeffrey Seminoff

11am Pathology and epidemiology of nasopulmonary acariasis (Halarachne sp.) in southern sea otters (Enhydra lutris nereis)

» Dr. Colleen Shockling, Dr. Melissa Miller, Ms. Francesca Batac, Ms. Erin M. Dodd, Dr. Woutrina Smith, Ms. Risa Pesapane, Dr. Janet Foley



Continued from **Thursday, 8 August**

11:15am **Investigating Southern Sea Otter (*Enhydra lutris nereis*) Mortality Patterns (1998-2012)**
» [Dr. Melissa Miller](#), Dr. Megan E. Moriarty, Ms. Erin M. Dodd, Dr. Tristan Burgess, Dr. M. Tim Tinker, Ms. Francesca Batac, Mr. Laird A. Henkel, Ms. Colleen Young, Mr. Mike Harris, Dr. Frances Gulland, Dr. Pádraig Duignan, Dr. Raphael M. Kudela, Dr. Christine K. Johnson

11:30am **White Abalone (*Haliotis sorenseni*) resilience in the face of extinction: mitigating disease impacts on endangered abalone in a captive breeding program**
» [Ms. Blythe Marshman](#), Dr. Jim Moore, Ms. Malina Loeher, Dr. Kristin Aquilino

11:45am **Lunch**
Garden/Mountain Deck

1pm **Afternoon Concurrent - Wildlife Disease Modeling**
Lake/Bay Rooms
Chaired by: Dr. Terra Kelly

1pm **Where to look for Flaviviruses in Wildlife? Machine learning to inform large scale surveillance of wildlife for emerging Flaviviruses.**
» [Dr. Pranav Pandit](#), Ms. Megan Doyle, Mrs. Cristin Young, Dr. Christine K. Johnson

1:15pm **Modeling land-sea transmission of *Toxoplasma gondii***
» [Dr. Tristan Burgess](#), Dr. John Largier, Dr. M. Tim Tinker, Dr. Nicholas Nidzieko, Dr. Elizabeth Van Wormer, Dr. Karen Shapiro, Dr. L. Maxine Tarjan, Dr. Jonna A.K. Mazet, Dr. Patricia Conrad, Dr. Christine K. Johnson

1:30pm **Satellite tracking of gulls and whole genome sequencing of *E. coli* provides inference on the epidemiology of antimicrobial resistant bacteria in wild birds in Alaska**
» [Dr. Christina Ahlstrom](#), Dr. Jonas Bonnedahl, Dr. Hanna Woksepp, Dr. David Douglas, Dr. Andrew Ramey

1:45pm **Influenza virus transmission in a multispecies barnyard model**

» [Dr. Angela Bosco-Lauth](#), Dr. Jeff Root, Dr. Richard Bowen

2pm **Modeling *Bacillus anthracis* in Texas and estimating deer risk in the enzootic zone**

» [Dr. Jason Blackburn](#), Dr. Anni Yang

2:15pm **Rethinking the wildlife health research enterprise with a focus on solutions**

» [Dr. Andrew Peters](#)

1pm **Afternoon Concurrent - Avian Disease**
Granhall
Chaired by: Dr. Michelle G. Hawkins

1pm ***Borrelia burgdorferi* in upland game birds from Pennsylvania, USA**

» [Dr. Christopher Cleveland](#), Ms. Liandrie Swanepoel, Dr. Justin Brown, Ms. Mary Jo Casalena, Ms. Lisa Williams, Dr. Michael Yabsley

1:15pm **West Nile virus infection in ruffed grouse (*Bonasa umbellus*) in Michigan, USA**

» [Mrs. Julie Melotti](#), Mr. Thomas Cooley, Dr. Kelly Straka, Mr. Al Stewart, Dr. Matti Kiupel, Dr. Steven Bolin, Dr. Scott Fitzgerald

1:30pm **Mortality event in Canada geese in Colorado associated with *Riemerella anatipestifer*, and presenting as visceral gout.**

» [Dr. Karen Fox](#), Dr. Josh Daniels

1:45pm **West Nile Virus and *Toxoplasma* serology, hemoparasite PCR, and necropsy results from wild turkey (*Meleagris gallopavo*) in middle Tennessee**

» [Prof. Rick Gerhold](#)

2pm **Previous Usutu virus exposure partially protects magpies (*Pica pica*) against West Nile Virus**

» [Dr. Ursula Höfle](#), Dr. Estela Escribano, Dr. Nereida Jimenez de Oya, Mrs. MariCruz Camacho, Dr. Ana-Belen Blazquez, Dr. Miguel Angel Martin, Dr. Juan Carlos Saiz



Continued from **Thursday, 8 August**

2:15pm **An Investigation of lethal and non-lethal domoic acid exposure in loons in California**
» [Dr. Corinne Gible](#), Dr. Melissa Miller, Dr. Rebecca Duerr, Ms. Katherine Greenwald, Dr. Raphael M. Kudela

2:30pm **Afternoon Break**
Pavillion

2:30pm **General Poster Session**
Pavillion
Chaired by: Dr. Melissa Miller

Use of Fluralaner as an Acaricide to Treat Sarcoptic Mange Infestation in a Red Fox (*Vulpes vulpes*)
» [Dr. Robert Adamski](#), Dr. Lynn Miller

Wild in the City: Injury and Disease in Wild Urban Psittacines
» [Dr. Patricia Latas](#), Ms. Brooke Durham

Wild Psittacine Rehabilitation
» [Dr. Patricia Latas](#)

Bayesian phylogenetic analysis of avipoxviruses from North American wild birds demonstrates new insights into host-specificity and interspecies transmission
» [Dr. Amanda MacDonald](#), Mr. Daniel Gibson, Dr. John Barta, Dr. Rebecca Poulson, Dr. Justin Brown, Dr. Andrew Allison, Dr. Nicole Nemeth

The Role of the World Organisation for Animal Health (OIE) in Wildlife Disease Surveillance
» [Dr. Jonathan Sleeman](#)

Seroprevalence of West Nile Virus in Ruffed grouse (*Bonasa umbellus*) populations in Eastern Canada
» [Dr. Amanda MacDonald](#), Dr. Tadeusz Splawinski, Dr. Justin Brown, Ms. Melanie Kunkel, Dr. Nicole Nemeth, Mr. Philippe Thomas

Look and learn: Investigations into ocular anatomy and pathology in Lumholtz's tree-kangaroo (*Dendrolagus lumholtzi*)

» [Dr. Amy Shima](#), Dr. Linda Johnson, Dr. Lee F. Skerratt, Dr. Caroline Zeiss

Prevalence, genetic diversity and paratenic hosts of *Dracunculus insignis* in meso-mammals from Di-Lane Plantation, Georgia

» [Dr. Christopher Cleveland](#), Dr. Mark Eberhard, Mrs. Kayla Garrett, Mr. Alec Thompson, Ms. Liandrie Swanepoel, Ms. Elizabeth Miller, Mr. Odin Stephens, Dr. Michael Yabsley

***Rickettsia* species in ticks collected from wild pigs (*Sus scrofa*) and Philippine deer (*Rusa marianna*) on Guam, Marianna Islands, USA.**

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Challenges for keeping the critically endangered arctic fox (*Vulpes lagopus*) in Fennoscandia healthy

» [Dr. Andrea Miller](#), Dr. Bjørnar Ytrehus, Dr. Arild Landa, Dr. Nina Eide

Nerve growth factor receptor - Tropomyosin receptor kinase A: A potential therapeutic target pathway in Tasmanian devil facial tumour disease?

» [Dr. Tammy Shadbolt](#), Prof. Ken Smith, Dr. Imelda McGonnell



Continued from **Thursday, 8 August**

Ticks and tree line: Monitoring and preparing for climate change impacts on zoonoses in subarctic Canada

» [Dr. Heather Fenton](#), Dr. Brett Elkin, Ms. Stephanie Behrens, Dr. Suzanne Carriere, Mr. Dean Cluff, Dr. Heather Hannah, Dr. Emily Jenkins, Mrs. Alicia Kelly, Prof. Susan Kutz, Dr. Nic Larter, Dr. Robbin Lindsay, Mr. Brent Wagner, Dr. Carl Ribble

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» [Dr. Javier Millán](#), Mr. Aitor Cevitanes, Mrs. Sophia Di Cataldo, Mrs. Claudia Ulloa, Ms. Andrea D Chirife, Mr. Diego Peñaloza, Mrs. Nicole Sallaberry, Dr. Constanza Napolitano, Dr. Daniel Gonzalez-Acuña, Dr. Karen Terio, Dr. Rosa Casais

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Polycyclic aromatic hydrocarbons, heavy metal pollutants, and health implications for the American marten (*Martes americana*) and river otter (*Lontra canadensis*) from Alberta, Canada oil sands

» Dr. Amanda MacDonald, Mr. Philippe Thomas, Ms. Kristin Eccles, Dr. Claire Jardine

Isolation and characterization of skunk adenovirus causing severe bronchointerstitial pneumonia in rehabilitated porcupines in Nova Scotia, Canada.

» Dr. Laura Bourque, Dr. Trent Bollinger, Dr. Ole Nielsen, Dr. Betty Lockerbie, Dr. Sherri Cox, Dr. Jessica Khodadad, Dr. Hope Swinimer, Ms. Lynn Roger, Dr. Megan Jones

Using eDNA to detect *Batrachochytrium dendrobatidis* in Yukon, Canada: Implications for Amphibian Health

» Dr. Jane Harms, Mr. Bruce Bennet, Ms. Julianna Campbell, Dr. María Forzán, Ms. Alexandra Francis, Mr. Jared Hobbs, Dr. Tomy Joseph, Mrs. Randi Mulder

Pathology of cryptosporidiosis in raccoons (*Procyon lotor*)

» Dr. Viviana Gonzalez, Dr. Mauricio Navarro, Dr. Matthew Sheley, Dr. Francisco Uzal

Translocation of Gambel's Quail: Implementation of WAFWA Guidelines for Health Screening and Sampling of Galliforms

» Dr. Anne Justice-Allen, Ms. Callie Hartson

Re-emergence of Leptospirosis in California Sea Lions (*Zalophus californianus*) after a four-year hiatus: Pathologic features of the 2017-2018 epizootic.

» Dr. Pádraig Duignan, Dr. Emily Whitmer, Ms. Barbie Halaska, Dr. Dayna Goldsmith, Dr. Esther Crouch, Dr. Michael Zabrodski, Mr. Carlos Rios, Dr. Frances Gulland, Dr. Shawn Johnson, Dr. Cara Field, Dr. Katherine Prager

Proteomic Analysis of Urine from California Sea Lions (*Zalophus californianus*) With and Without Leptospirosis

» Dr. Katherine Prager, Dr. Benjamin Neely, Ms. Christine Fontaine, Dr. Frances Gulland, Dr. Michael Janech

Investigating the decline of African buffalo (*Syncerus caffer*) in Ruaha National Park, Tanzania

» Dr. Annette Roug, Dr. Epaphras Alex Muse, Dr. Deana Clifford, Prof. Randy Larsen, Dr. Goodluck Paul, Dr. Jonna A.K. Mazet, Mr. George Makingi, Dr. Brian Bird, Dr. Woutrina Smith, Mr. Walter Magesa

Unexpected death of a pup in the breeding program for the critically endangered arctic fox (*Vulpes lagopus*) in Norway

» Dr. Andrea Miller, Dr. Arild Landa, Mrs. Kristine Ulvund, Dr. Bjørnar Ytrehus

Rapid molecular monitoring of arboviruses in field-caught arthropods using universal primers

» Dr. Lilian S. Catenacci, Mr. Thito Yan Bezerra da Paz, Mr. Leonardo Henrique Almeida Hernández, Dr. Valéria Lima Carvalho, Dr. Samir Mansour Moraes Casseb, Dr. Joaquim Nunes Neto, Dr. Sharon L. Deem, Ms. Kathleen Apakupakul, Dr. Janaina Mota de Vasconcelos Massafra, Dr. João Vianez, Dr. Elizabeth Salbê Travassos da Rosa, Dr. Hellen Thais Fuzzi, Dr. Ana Cecília Ribeiro da Cruz

Pseudogymnoascus destructans survives gut transit in bats

» Dr. Anne Ballmann, Ms. Elizabeth Bohuski

Next Generation Serology: integrating cross-sectional and capture-recapture approaches to infer disease dynamics

» Dr. Amandine Gamble, Dr. Romain Garnier, Dr. Thierry Chambert, Dr. Olivier Gimenez, Dr. Thierry Boulonier



Continued from Thursday, 8 August

Rapid DNA detection and enhanced growth of tuberculosis from respiratory and tissue samples obtained from African rhinoceros (*Diceros bicornis*, *Ceratotherium simum*) and African elephants (*Loxodonta africana*).

» [Dr. Wynand Goosen](#), Ms. Josephine Chileshe, Ms. Candice de Waal, Dr. Tanya Kerr, Dr. Peter Buss, Prof. Paul van Helden, Dr. Sven Parsons, Prof. Michele Miller

Disease surveillance during the first years of the reintroduction of an apex predator in Southwestern Spain

» [Dr. Fernando Najera](#), Dr. Maria Gil-Molino, Dr. Nuria Vallverdu-Coll, Ms. Rebeca Grande-Gomez, Mr. Julian Panadero, Ms. Maria Jesus Palacios, Dr. Jose Jimenez

Analyzing the dynamics of Aujeszky's disease virus infection in wild boar (*Sus scrofa*) in enzootic scenarios

» Ms. Laia Casades-Martí, Dr. David González-Barrio, Ms. Iratxe Diez-Delgado, Dr. Isabel García Fernández de Mera, [Dr. Francisco Ruiz-Fons](#)

Tracking an invader: Wildlife Surveillance for *Haemaphysalis longicornis* in the Eastern U.S.

» Mr. Seth White, Ms. Kristen Dominguez, [Mr. Alec Thompson](#), Mrs. Stacey Vigil, Mr. David Shaw, Dr. Adam Randall, Dr. Sarah Bevins, Dr. James Mertins, Dr. Jeffery Alfred, Dr. Ernesto Dominguez-Villegas, Dr. Peach Van Wick, Dr. Jennifer Riley, Dr. Sabrina Garvin, Ms. Kenna Frierson, Dr. Mark Ruder, Dr. Michael Yabsley

Characterizing Landscape Factors of Two West Nile Virus Vectors in Pennsylvania, USA

» [Mrs. Dominika Dec Peevey](#), Dr. W. David Walter, Ms. Lisa Williams, Mr. Andrew Kyle

A bitter pill to swallow - examining antibiotic resistance in sentinel marine mammals of the Salish Sea

» [Dr. Stephanie A. Norman](#), Ms. Dyanna Lambourn, Ms. Jessica Huggins, Ms. Susan Berta, Ms. Sandy Dubpernell, Ms. Jennifer K. Olson, Dr. Cathy King, Ms. Victoria Souze, Ms. Alysha Elsby, Ms. Rachel Mayer

Managing reticuloendotheliosis virus in a captive breeding and release program for endangered Attwater's prairie-chickens (*Tympanuchus cupido attwateri*)

» [Dr. Holly Haefele](#), Dr. Pam Ferro, Dr. Joseph Flanagan, Ms. Kristina Borgstrom, Dr. Michael Morrow

Post-capture mortalities in Rocky Mountain mule deer associated with traumatic coccygeal injuries resulting from helicopter netgun capture: A tail of two deer

» [Mr. Nicholas Shirkey](#), Dr. Brandon Munk, Mrs. Jane McKeever, Mr. Timothy Taylor, Mr. Mike Morrison, Dr. Tom Stephenson

Genotypes of Crimean-Congo hemorrhagic fever virus in ticks from wild ungulates in Spain

» Mr. Alberto Moraga Fernández, Dr. Francisco Ruiz-Fons, Prof. Miguel A. Habela, Ms. Lara Royo, Dr. Rafael Calero Bernal, Prof. Christian Gortazar, Prof. José de la Fuente, [Dr. Isabel García Fernández de Mera](#)

Hunting pressures surrounding Myanmar's North Zamari Key Biodiversity Area: opportunities and challenges for wildlife conservation and public health in the Bago Yoma

» [Dr. Tierra Evans](#), Dr. Theingi Win Myat, Mr. Pyaephyo Aung, Dr. Min Thein Maw, Dr. Zaw Min Oo, Dr. Aung Than Toe, Mr. Tin Htun Aung, Dr. Nang Sarm Hom, Dr. Khin Thawda Shein, Dr. Kyaw Zin Thant, Dr. Kirsten Gilardi, Dr. Peter Barry, Dr. Hlaing Myat Thu, Dr. Christine K. Johnson

Infectiousness of the native rodents *Degu* and *Darwin's Pericote* in a *Trypanosoma cruzi* wild vector in semiarid Chile

» [Dr. Juana Paola Correa](#), Ms. Nicol Quiroga, Ms. Antonella Bacigalupo, Ms. Andrea Yañez-Meza, Mr. Esteban San Juan, Ms. Sophie de Bona, Mr. Rodrigo García de Cortázar, Dr. Carezza Botto-Mahan

Control of tick infestations in wild roe deer (*Capreolus capreolus*) vaccinated with the Q38 Subolesin/Akirin chimera

» Dr. Marinela Contreras, Ms. Cristina San José, Prof. Agustín Estrada-Peña, Mr. Ventura Talavera, Ms. Elena Rayas, Ms. Clara Isabel León, Mr. Juan Ortégón, [Dr. Isabel García Fernández de Mera](#), Prof. José de la Fuente



Continued from Thursday, 8 August

Myxoma virus in ticks from leporids, Spain, 2018

» Mr. Sergio García-Pereira, Dr. José Luis Fernández-García, Dr. David González-Barrio, Dr. Francisco Ruiz-Fons, Prof. Miguel A. Habela, Dr. Rafael Calero Bernal

Phylogenomic Characterization of Novel Orbiviruses Isolated From White-tailed Deer (*Odocoileus virginianus*)

» Dr. Mohammad Shamim Ahasan, Dr. Kuttichantran Subramaniam, Dr. John A. Lednicky, Mrs. Julia C. Loeb, Dr. Katherine A. Sayler, Dr. Juan M. Campos Krauer, Dr. Samantha M. Wisely, Dr. Thomas B. Waltzek

A metabolomics-based approach to assessing health in captive bighorn sheep

» Ms. Tara Stitzlein

Canine adenovirus type-1 infections in captive and free-ranging California black bears: Clinical observations, pathologic lesions, and historical exposure

» Mr. Nicholas Shirkey, Dr. Brandon Munk, Mr. Kenneth Jackson, Dr. Kevin Willitts, Dr. Patricia Pesavento, Dr. Leslie Woods

Chronic Wasting Disease in Missouri: Where are we nine years later?

» Ms. Jasmine Batten, Dr. Sherri Russell

Trichophyton equinum associated with severe dermatophytosis in American black bears from California

» Dr. Brandon Munk, Dr. Leslie Woods, Dr. Deana Clifford, Ms. Jaime Rudd, Mr. Nicholas Shirkey, Dr. Dan Famini, Dr. Federico Giannitti, Dr. Kristin Clothier

Detection of antimicrobial resistant bacteria in wild birds associated to an urban colony of sea lions in Chile

» Dr. Luis Miguel Flores Velásquez, Dr. María Paz Miró Pino, Dr. María José Navarrete Talloni

White storks (*Ciconia ciconia*), landfills and extended-spectrum beta-lactamases-producing *Escherichia coli*

» Dr. Ursula Höfle, Mrs. MariCruz Camacho, Mr. Javier De la Puente, Mr. Javier Pineda, Dr. José Ignacio Aguirre, Mr. Fernando Torres, Dr. Julio Blas, Dr. Antonio Ramis, Dr. Natalia Majo, Dr. Lourdes Migura, Mr. José Manuel Hernández

Complete genome sequencing of cetaceanpox virus from a managed Indo-Pacific bottlenose dolphin (*Tursiops aduncus*)

» Dr. Thais Rodrigues, Dr. Kuttichantran Subramaniam, Dr. Carlos Hipolito Romero, Dr. Thomas B. Waltzek

Patterns of pestivirus in caribou and muskoxen: does geography and ecotype matter?

» Dr. Xavier Fernandez Aguilar, Dr. Anja Carlsson, Ms. Lisa-Marie Leclerc, Dr. Brett Elkin, Dr. Helen Schwantje, Dr. Sylvia Checkley, Dr. Sara McCarthy, Dr. Naima Jutha, Dr. Fabien Mavrot, Prof. Susan Kutz

Leptospirosis and detections of *Listeria monocytogenes*, *Toxoplasma gondii*, *Sarcocystis canis* in a Kodiak Brown Bear

» Dr. Kathy Burek-Huntington, Dr. Kimberlee Beckmen, Mr. Nathan Svoboda, Dr. Susan Sanchez, Ms. Elizabeth Zhang, Dr. Michael Grigg

Antler deformities in mule deer bucks in the Paunsaugunt area of Utah, USA

» Dr. Annette Roug, Mr. Josh Pollock, Ms. Teresa Griffin, Mr. Kent Hersey, Mr. Justin Shannon, Prof. Arnaud Van Wettere

3:15pm

Afternoon Concurrent - Experimental Approaches

Lake/Bay Rooms

Chaired by: Dr. Kevin Keel

3:15pm

Species differences between bison, cattle, and elk in susceptibility to *Brucella abortus*

» Dr. Steven Olsen, Dr. Paola Boggiatto, Dr. Pauline Nol, Dr. Jack Rhyan



Continued from **Thursday, 8 August**

3:30pm **Maternal antibody persistence in nestlings: from comparative immunology to the conservation of albatrosses**
» Dr. Thierry Boulinier, Dr. Amandine Gamble, Mr. Jeremy Tornos, Dr. Raul Ramos, Dr. Romain Garnier

3:45pm **Clinicopathologic Findings in White-tailed Deer Fawns Infected with Rift Valley Fever Virus**
» Dr. Buffy Howerth, Dr. Nicole Nemeth, Dr. Mark Ruder, Dr. Lorelei Clarke, Dr. Daniel Mead

4pm **How the addition of nesting platforms influence nest parasitism by (*Protocalliphora parorum*) on Cordilleran Flycatchers (*Empidonax occidentalis*): Consequences of a newly introduced parasite**
» Dr. Charles van Riper III

4:15pm **Associating anatomic and clinical pathology with Bsal chytridiomycosis in the rough-skinned newt (*Taricha granulosa*)**
» Dr. Agata Grzelak, Mr. Rajeev Kumar, Mr. Kurt Ash, Mr. E. Davis Carter, Ms. Brittany Bajo, Mr. Markese Bohanon, Dr. Anna Peterson, Ms. Anastasia Towe, Dr. Matthew Gray, Dr. Debra Miller

4:30pm **Evidence of accumulation and elimination of inorganic contaminants from the lachrymal salt glands of leatherback sea turtles (*Dermochelys coriacea*)**
» Dr. Annie Page-Karjian, Dr. Andreas Lehner, Dr. John Buchweitz, Dr. Justin Perrault

4:45pm **Synergy of genetics and diffusion dynamics in white-tailed deer to understand epidemiology of chronic wasting disease**
» Dr. W. David Walter, Dr. Farshid Ahrestani, Dr. William Miller

3:15pm **Afternoon Concurrent - Wildlife Disease Management**
Granhall
Chaired by: Dr. Brandon Munk

3:15pm **Neurological clinical signs associated with infectious keratoconjunctivitis in Pyrenean chamois**
» Dr. Xavier Fernandez Aguilar, Dr. Johan Espunyes, Dr. Roser Velarde, Dr. Virginia Aragón, Prof. Jorge Ramón López Olvera, Ms. Judit Verdés, Prof. Yvonne Espada, Dr. Oscar Cabezón

3:30pm **Changes in chronic wasting disease ecology at elk at Rocky Mountain National Park**
» Dr. Nathan Galloway, Dr. Jenny Powers, Dr. Ryan Monello, Dr. Margaret Wild

3:45pm **Chronic Wasting Disease: Wisconsin's Perspective on Continuing Surveillance and Monitoring Efforts in a World of Electronic Deer Harvest Registration**
» Mrs. Mandy Kamps, Mr. Tim Marien, Mrs. Tami Ryan

4pm **Deer movement in Minnesota and the potential to spread chronic wasting disease**
» Ms. Kelsie LaSharr, Mr. Chris Jennelle, Mrs. Michelle Carstensen, Mr. Lou Cornicelli

4:15pm **Brucellosis in elk in Idaho, 1998-2018**
» Dr. Mark Drew

4:30pm **A high mortality outbreak of *Mycoplasma bovis* in Wyoming pronghorn (*Antilocapra americana*)**
» Dr. Jennifer Malmberg, Mr. Terry Creekmore, Ms. Erika Peckham, Ms. Marguerite Johnson, Ms. Halcyon Killion, Ms. Madison Vance, Dr. Donal O'Toole, Dr. Kerry Sondgeroth

4:45pm **Rabies viruses originated among diverse New World wildlife**
» Dr. Charles Rupprecht, Prof. Anthony Fooks

5pm **WDA Business Meeting**
Granhall

6:30pm **Banquet Reception**
Garden Deck/Mountain Deck/Granhall



Continued from **Thursday, 8 August**

7:30pm Banquet Dinner/Awards Presentations
Mountain Ballroom

Friday, 9 August

7am Breakfast
Garden Deck/Mountain Deck/Granhall

8:30am Morning Plenary - Changing World for Wildlife
Mountain Ballroom
Chaired by: Dr. Woutrina Smith

8:30am "They're always there": Characterizing rat exposure and its consequences among residents of an impoverished, inner-city neighborhood in Vancouver, Canada
» Dr. Chelsea G. Himsworth, Ms. Kaylee A. Byers, Dr. David McVea, Dr. David M. Patrick, Dr. Robbin Lindsay, Dr. Michael Kosoy, Dr. Thomas Kerr, Mr. Raymond Lam, Dr. Susan Cox

8:45am Urban muskrats as an intermediate host of *Echinococcus multilocularis* in Alberta, Canada
» Dr. Jamie Rothenburger, Ms. Marian Trudeau, Mr. Collin Lelain, Ms. Samantha Stamler, Dr. Alessandro Massolo

9am Red foxes (*Vulpes vulpes*) and coyotes (*Canis latrans*) in an urban landscape: prevalence and risk factors for heartworm
» Ms. Meghan Pluemer, Dr. Shelli Dubay, Dr. David Drake, Dr. Shawn Crimmins, Ms. Tessa Veverka, Dr. Holly Hovanec, Dr. Miranda Torkelson, Mr. Marcus Mueller

9:15am Assessing the health of California's mountain lion population
» Ms. Jaime Rudd, Dr. Leslie Woods, Dr. Bob Poppenga, Dr. Justin Dellinger, Dr. Deana Clifford

9:30am Raccoons, feral cats and humans: Urbanization effects on wildlife health and zoonoses
» Dr. Sonia M. Hernandez, Mr. Sebastian Ortiz, Dr. Erin Lipp, Ms. Andrea Ayala, Dr. Christopher Cleveland, Mr. Ethan Cooper, Dr. Shannon Curry, Ms. Taylor Ellison, Mrs. Kayla Garrett, Mr. Troy Koser, Mr. Ralph Scott Rozier, Mr. Alec Thompson, Dr. Michael Yabsley

9:45am Elucidating the ecology of *Leptospira interrogans* in urban Norway Rats (*Rattus norvegicus*)
» Dr. Chelsea G. Himsworth, Dr. Amanda Minter, Ms. Kaylee A. Byers, Mr. Michael J. Lee, Ms. Christina Donovan, Dr. David M. Patrick, Dr. James Childs, Dr. Albert Ko, Ms. Julie Bidulka, Dr. Federico Costa

10am Morning Break
Pre-Function Area

10:30am Morning Plenary - Changing World for Wildlife II
Mountain Ballroom
Chaired by: Mrs. Marcela Uhart

10:30am Endemic Skunk Amdoparvovirus in free-ranging striped skunks (*Mephitis mephitis*) in California
» Dr. Elle Glueckert, Dr. Deana Clifford, Dr. Maris Brenn-White, Dr. Jennine Ochoa, Dr. Mourad gabriel, Dr. Greta Wengert, Dr. Janet Foley

10:45am Cases of Suspected and Confirmed Carbofuran Toxicosis in Raptors in the Mid-Atlantic United States
» Dr. Erica Miller, Dr. Lisa Murphy, Dr. Cristin Kelley

11am Investigation of factors associated with persistence of avian influenza viruses in the environment
» Dr. Andrew Ramey, Mr. Andrew Reeves, Dr. Josh Ackerman, Dr. Susan De La Cruz, Dr. Judith Drexler, Dr. Andrew Lang, Mr. Paul Link, Dr. Diann Prosser, Dr. Gregory Robertson, Dr. Christine Densmore, Dr. Erica Spackman, Dr. Mary Pantin-jackwood, Dr. David Swayne, Dr. Jeffrey Hall, Dr. Rebecca Poulson, Dr. David Stallknecht



Continued from **Friday, 9 August**

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| 11:15am | The chicken or the egg? The interplay of disease and climate change on wildlife populations
» <u>Dr. Danielle Buttke</u> , Dr. Margaret Wild |
| 11:30am | Sarcoptic mange in Chilean mammals. The importance of assessing emerging threats in wildlife at adequate temporal and spatial scales to promote action
» <u>Mr. Diego Montecino</u> , Dr. Constanza Napolitano, Dr. Cristobal Briceno, Mrs. Marcela Uhart |
| 11:45am | WDA 2019 Closing Remarks
<i>Mountain Ballroom</i>
Chaired by: Prof. Carlos das Neves |
| 12pm | Lunch
<i>Garden Deck/Mountain Deck/Granhall</i> |