# VETERINARY SUMMER SCHOLARS PROGRAM PROJECTS, 2017-2020

(Alpha by Mentor last name)

| 1. | Mentor: Gregory Amberg, BMS  
Scholar: Lydia Smith-Osborne, NIH Trainee  
Research Project: Visualization of calcium and oxidant signaling proteins in dopaminergic neurons |
|---|---|
| 2. | Mentor: Marisa Ames, CS  
Scholar: Kaitlyn Brunk, Boehringer Ingelheim  
Research Project: Comprehensive evaluation of the circulating renin-angiotensin-aldosterone system in normal dogs and dogs with stage B2/B3 myxomatous mitral valve disease |
| 3. | Mentor: Anne Avery, MIP  
Scholar: Shaina Brown, Canine Lymphoma Foundation  
Research Project: Differential phosphorylation between tumor and non-tumor T cells in canine T cell lymphoma |
| 4. | Mentor: Anne Avery, MIP  
Scholar: Emily Garrison, Canine Lymphoma Foundation  
Research Project: Enumerating regulatory T cells in lymphoma and leukemia |
| 5. | Mentor: Paul Avery, MIP  
Scholar: Alana Kuzmik, NIH Trainee  
Research Project: Further characterization of canine small B cell lymphomas |
| 6. | Mentor: Jessica Ayers, Lab Animal Resources  
Scholar: Ben Singh, ASLAP Fellowship  
Research Project: Analgesia and animal welfare |
| 7. | Mentor: Susan Bailey, ERHS  
Scholar: Aryn Bordman, Boehringer Ingelheim  
Research Project: Evaluating telomere length as a biomarker of reproductive stress and radiation exposure in Wild Boar and Japanese Rat Snakes |
| 8. | Mentor: Susan Bailey, ERHS  
Scholar: Meredith Scarborough, NIH Trainee  
Research Project: Telomeres and varying lifespans in a range of rodent species |
| 9. | Mentor: Angela Bosco-Lauth, BMS  
Scholar: Audrey Walker, USDA Animal Health & Disease Scholar  
Research Project: Evaluation of SARS-2 infection and transmission in domestic livestock |
| 10. | Mentor: Keara Boss, ERHS  
Scholar: Alexandra Gold, BoehringerIngelheim  
Research Project: The combined effect of radiation and an experimental therapeutic on tumor response in cell culture |
11. **Mentor:** Keara Boss, ERHS  
**Scholar:** David Perry, NIH Trainee  
**Research Project:** Measuring Tumor Oxygenation in Canine Cancer Patients Undergoing Radiotherapy using a Novel Optical Spectroscopy Device

12. **Mentor:** Keara Boss, ERHS  
**Scholar:** Remy Watts, CVMBS Dean's Office  
**Research Project:** Integrating immunotherapy with radiotherapy to improve tumor control for canine cancer patients

13. **Mentor:** Richard Bowen, BMS  
**Scholar:** Michelle Evans, NIH Trainee  
**Research Project:** Transmission of chikungunya virus between mosquitoes and ectothermic vertebrates within an artificial ecosystem

14. **Mentor:** Richard Bowen, BMS  
**Scholar:** Sneha Krishnan, NIH Trainee  
**Research Project:** Identification of ecototherm reservoir for Mayaro virus

15. **Mentor:** Richard Bowen, BMS  
**Scholar:** Lauren Guilbert, USDA Animal Health & Disease Scholar  
**Research Project:** Evaluate the susceptibility of peri-domestic rodents to infection with SARS-CoV-2

16. **Mentor:** Luciano Caixeta, CS  
**Scholar:** Samuel Scheu, USDA Animal Health & Disease Scholar  
**Research Project:** Evaluation of selective dry cow treatment on milk microbiome and post-partum udder health

17. **Mentor:** Elaine Carnevale, BMS  
**Scholar:** Caroline Foley, Agriculture Experiment Station  
**Research Project:** Viability of equine embryos produced in vitro can be determined by morphology and speed of development

18. **Mentor:** Gregg Dean, MIP  
**Scholar:** Morgan Pearson, Boehringer Ingelheim  
**Research Project:** Determining correlates of Immunity Associated with Feline Enteric Coronavirus Infection

19. **Mentor:** Gregg Dean, MIP  
**Scholar:** Sophie Epstein, NIH Trainee  
**Research Project:** Validating the specificity of candidate FIP aptamers using liquid chromatography with tandem mass spectrometry

20. **Mentor:** Gregg Dean, MIP  
**Scholar:** Mikaela Henry, CVMBS Dean's Office  
**Research Project:** Novel Vaccine for Feline Enteric Coronavirus using recombinant Lactobaccillus acidophilus

21. **Mentor:** Steve Dow, CS  
**Scholar:** Jayne Ellis, NIH Trainee  
**Research Project:** Use of psychotropic medications on intake to an animal shelter
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<thead>
<tr>
<th>Mentor:</th>
<th>Scholar:</th>
<th>Research Project:</th>
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</thead>
<tbody>
<tr>
<td>Steve Dow, CS</td>
<td>Vanessa Rozo, NIH Trainee</td>
<td>Mucosal immune effects on the macrophage BOMAC cell line when stimulated by a bacteria</td>
</tr>
<tr>
<td>Steve Dow, CS</td>
<td>Brian DeFillippo, NIH Trainee</td>
<td>Immune Modulatory Effects of Common Antibodies on Canine Adaptive and Innate Immune Responses</td>
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<tr>
<td>Steve Dow, CS</td>
<td>Grace Flynn, Boehringer Ingelheim</td>
<td>Development of a Novel Topical Ocular Immunotherapy for the Treatment of Viral Diseases of the Eye</td>
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<tr>
<td>Felix Duerr, CS</td>
<td>Jack Pierce, Boehringer Ingelheim</td>
<td>Defining Canine Tibial Long Axis</td>
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<tr>
<td>Felix Duerr, CS</td>
<td>Sydney Rosen, Morris Animal Foundation</td>
<td>Prospective Evaluation of Orthoses in Canine Patients</td>
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<tr>
<td>Colleen Duncan, MIP</td>
<td>Brian DeFillipo, Boehringer Ingelheim</td>
<td>Epidemiology of Cyanobacteria Toxicity in Pets in a Warming Climate</td>
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<tr>
<td>Colleen Duncan, MIP</td>
<td>Maria Koytcheva, One Health Initiative</td>
<td>Development of an educational program for environmentally sustainable veterinary clinics</td>
</tr>
<tr>
<td>Colleen Duncan, MIP</td>
<td>Leah Sauerwein, One Health Initiative</td>
<td>Development of an educational program for environmentally sustainable veterinary clinics</td>
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<tr>
<td>Jeremiah Easley, CS</td>
<td>Robert Hendrickx, Boehringer Ingelheim International</td>
<td>Development of a clinically relevant rotator cuff tear model</td>
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<tr>
<td>Ryan Ferris, CS</td>
<td>Lauren Eytalis, USDA Animal Health &amp; Disease Scholar</td>
<td>Incidence of uterine bacterial contamination, biofilm, and latent bacteria following breeding in the horse</td>
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<tr>
<td>Brian Foy, MIP</td>
<td>Kyrie Ivanovich, NIH Trainee</td>
<td>Control of mosquito-borne pathogens using endectocidal drugs and anti-vector vaccines</td>
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<tr>
<td>Kate Freeman, CS</td>
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</tbody>
</table>
34. **Mentor:** Laurie Goodrich, CS  
**Scholar:** Bethany Liebig, NIH Trainee  
**Research Project:** Platelet-rich plasma combined with bone marrow-derived mesenchymal stem cells to enhance long bone healing in a critical-sized defect

35. **Mentor:** Laurie Goodrich, CS  
**Scholar:** Gabi Kawahisa Piquini, USDA Animal Health & Disease Scholar  
**Research Project:** Amikacin toxicity in normal equine joint cells and mesenchymal stromal cells

36. **Mentor:** Lynn Griffin, ERHS  
**Scholar:** Sarah Deluty, PetSmart Charities  
**Research Project:** A Multi-institutional Study Comparing the Prevalence and Etiology of Rhinitis in Dogs with Sinonasal Cancers Treated with Fractionated Radiation Therapy vs. Stereotactic Radiation Therapy

37. **Mentor:** Lynn Griffin, ERHS  
**Scholar:** Patricia Marquez-DiPaulo, CVMBS Dean’s Office  
**Research Project:** Predisposing Factors of Nasal Fistulas and Osteonecrosis Development Following Stereotactic Radiation Therapy

38. **Mentor:** Daniel Gustafson, CS  
**Scholar:** Reed Schultz, NIH Trainee  
**Research Project:** Cell death following the inhibition of autophagy in cancer cells

39. **Mentor:** Amanda Gurth, CS  
**Scholar:** Haemin Park, NIH Trainee  
**Research Project:** Generation of Metabolically Viable and Replication Incompetent Whole Cell Tumor Vaccines

40. **Mentor:** Eileen Hackett, CS  
**Scholar:** Kelsea Erickson, Boehringer Ingelheim  
**Research Project:** Laser Plume Generation and its Potential Associated Risks

41. **Mentor:** Eileen Hackett, CS  
**Scholar:** Kelsea Erickson, NIH Trainee  
**Research Project:** Characterization of Plumes Generated During Surgical Diode Laser Application

42. **Mentor:** Kelly Hall-Wilke, CS  
**Scholar:** Jessica Rutten, Boehringer Ingelheim  
**Research Project:** Analysis of the 2019 Registry Summary for the ACVECC VetCOT Trauma Initiative Annual Report

43. **Mentor:** Diana Hassel, CS  
**Scholar:** Ally Creigh, USDA Animal Health & Disease Scholar  
**Research Project:** Effects of acetylcholinesterase inhibition on quality of recovery and post-operative gastrointestinal dysfunction from isoflurane and sevoflurane-induced anesthesia in horses
44. Mentor: Kevin Haussler, CS  
Scholar: Shana Wolfer, USDA Animal Health & Disease Scholar  
Research Project: Tissue heating and cooling properties of a dry-interface pneumatic sleeve applied to the equine distal limb

45. Mentor: Fred Hoerndli, BMS  
Scholar: Serena Mancha, NIH Trainee  
Research Project: Regulation of iGluR transport and synaptic function with influence from Reactive Oxygen Species

46. Mentor: Tuula Hollmen, University of Alaska  
Scholar: Jonathan Maxwell, USDA Animal Health & Disease Scholar  
Research Project: Animal Health Impacts, Responses and Needs Arising from Climate Change in Alaska

47. Mentor: Ed Hoover, MIP  
Scholar: Dave Bissinger, USDA Animal Health & Disease Scholar  
Research Project: Rapid Sensitive Detection of Chronic Wasting Disease in Cervid Muscle

48. Mentor: Ed Hoover, MIP  
Scholar: Lauren Bracchi, Foundation Funds  
Research Project: Lymphoid Cell Infection During Early Prion Disease

49. Mentor: Naomi Hoyer, CS  
Scholar: Lily Davis, Boehringer Ingelheim  
Research Project: Determining the most efficacious method of feline maxillary nerve blocks

50. Mentor: Valerie Johnson, CS  
Scholar: Kathryn Asatryan, USDA Animal Health & Disease Scholar  
Research Project: Activated mesenchymal stem cell therapy for treatment of Klebsiella pneumonia infection in a murine model

51. Mentor: Rebekah Kading, MIP  
Scholar: April Regas, USDA Animal Health & Disease Scholar  
Research Project: Landscape characteristics associated with mosquito breeding and dispersal patterns around areas of livestock production

52. Mentor: Chris Kawcak, CS  
Scholar: Megan Posukonis, Colorado Racing Commission  
Research Project: Fracture Characterization in Computed Tomography and Radiography in Equine Thoroughbreds as a Retrospective Diagnostic Approach

53. Mentor: Chris Kawcak, CS  
Scholar: Megan Posukonis Boehringer Ingelheim  
Research Project: Characterization of Bone Mineral Density Variation in Equine Third Metacarpal Bones with and Without a Radiographic Phantom

54. Mentor: Lon Kendall, Lab Animal Resources  
Scholar: Megan Ellis, ASLAP Trainee  
Research Project: Genetic monitoring of laboratory cats
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<thead>
<tr>
<th>No.</th>
<th>Mentor:</th>
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<th>Research Project:</th>
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<tbody>
<tr>
<td>55.</td>
<td>Mentor: Lon Kendall, Lab Animal Resources</td>
<td>Scholar: Jeffrey Kim, ASLAP Trainee</td>
<td>Pain management in laboratory rats</td>
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<tr>
<td>56.</td>
<td>Mentor: Lon Kendall, Lab Animal Resources</td>
<td>Scholar: Elizabeth Stietzle, ASLAP Trainee</td>
<td>Mirtazapine use in Guinea Pigs</td>
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<tr>
<td>57.</td>
<td>Mentor: Lon Kendall, Lab Animal Resources</td>
<td>Scholar: Ian Niu, ASLAP Trainee</td>
<td>Pain assessment in rats</td>
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<tr>
<td>58.</td>
<td>Mentor: Lon Kendall, Lab Animal Resources</td>
<td>Scholar: Alex Bailey, ASLAP Trainee</td>
<td>Analgesia and animal welfare</td>
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<tr>
<td>59.</td>
<td>Mentor: Seonil Kim, BMS</td>
<td>Scholar: Keira Sztukowski, AVMA/AVMF Fellowship</td>
<td>HIV induces activity-dependent cerebral hyperexcitability via cGMP-dependent protein kinase II activation in the FIV infection model</td>
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<tr>
<td>60.</td>
<td>Mentor: Seonil Kim, BMS</td>
<td>Scholar: Keira Sztukowski, NIH Trainee</td>
<td>Molecular pathways underlying Feline immunodeficiency virus (FIV)-induced neuropathology</td>
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<td>61.</td>
<td>Mentor: John Kisiday, CS</td>
<td>Scholar: Misha Harrison, Boehringer Ingelheim</td>
<td>A review of the therapeutic properties of mesenchymal stromal cells from different connective tissues</td>
</tr>
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<td>62.</td>
<td>Mentor: Gabriele Landolt, CS</td>
<td>Scholar: Carson Zweck-Bronner, USDA Animal Health &amp; Disease Scholar</td>
<td>Surveillance of Colorado Equine Rescue Populations for Infectious Disease Shedding</td>
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<tr>
<td>63.</td>
<td>Mentor: Michael Lappin, CS</td>
<td>Scholar: Sienna Drizen, PetSmart Charities</td>
<td>Use of Psychotropic Medications on Intake to an Animal Shelter to Decrease Stress Related Clinical Signs in Cats and Dogs</td>
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<td>64.</td>
<td>Mentor: Michael Lappin, CS</td>
<td>Scholar: Meighan Hawks, Nestle Purina</td>
<td>Effect of a Commercially Available Probiotic on Giardia Treatment Outcomes in Shelter Dogs</td>
</tr>
<tr>
<td>66.</td>
<td>Mentor: Michael Lappin, CS</td>
<td>Scholar: Laurel Krause, Boehringer Ingelheim</td>
<td></td>
</tr>
</tbody>
</table>
Research Project: Evaluation of an in-clinic test for detection of Leptospire spp. antibodies in cats

Mentor: Michael Lappin, CS
Scholar: Laurel Krause, Morris Animal Foundation Scholar
Research Project: Evaluation of novel causes of chronic kidney disease in cats

Mentor: Michael Lappin, CS
Scholar: Natalia Gil, Nestle Purina
Research Project: Effect of a probiotic (Enterococcus faecium SF68) on cats with CKD

Mentor: Michael Lappin, CS
Scholar: Claire Hovenga, PetSmart Charities
Research Project: Assessment of a stress relieving diet on prevalence of upper respiratory disease and diarrhea in cats housed in a shelter

Mentor: Michael Lappin, CS
Scholar: Amy Zug, PetSmart Charities
Research Project: Assessment of an immunomodulator on the duration of signs of URI in's shelter dogs and cats

Mentor: Michael Lappin, CS
Scholar: Alidia Cornelissen, Boehringer Ingelheim
Research Project: Prevalence of bloodborne pathogens in client owned cats in the Netherlands

Mentor: Michael Lappin, CS
Scholar: Hayley Clark, YIA
Research Project: Effect of a Probiotic with Psyllium on Incidence of Diarrhea in Shelter Cats

Mentor: Michael Lappin, CS
Scholar: Kelsey Dobesh, YIA
Research Project: Serologic Responses to Oral Administration of a FHV-1 and FCV Containing Vaccine

Mentor: Michael Lappin, CS
Scholar: Sienna Drizen, YIA
Research Project: Streptococcus Equi Zooepidemicus Outbreaks in Colorado Shelter Dogs

Mentor: Michael Lappin, CS
Scholar: Jeremy Kiene, YIA
Research Project: Effect of a probiotic with psyllium on clavamox diarrhea in cats

Mentor: Michael Lappin, CS
Scholar: Whitney Weaver, YIA
Research Project: Parainfluenza virus outbreaks in client-owned dogs

Mentor: Michael Lappin, CS
Scholar: Anna Winner, PetSmart Charities
Research Project: Role of Streptococcus equi var. zooepidemicus and influenza viruses in cats with URI in shelters
78. **Mentor:** Del Leary, ERHS  
    **Scholar:** Adam Mattick, Boehringer Ingelheim  
    **Research Project:** Construction of a Machine Learning Database for Computed Tomography in Veterinary Medicine

79. **Mentor:** Amy MacNeill, MIP  
    **Scholar:** Bryce Zietz, Boehringer Ingelheim  
    **Research Project:** Innate Immune Response of Canine Cells to Oncolytic Virus

80. **Mentor:** Amy MacNeill, MIP  
    **Scholar:** Holly Grams-Johnson, Boehringer Ingelheim  
    **Research Project:** Characterization of the cellular immune response of solid canine tumors to recombinant myxoma virus

81. **Mentor:** Amy MacNeill, MIP  
    **Scholar:** Jassmine McCoy, NIH Trainee  
    **Research Project:** Myxoma virus with pro-apoptotic protein producing oncolysis in canine tumor cells

82. **Mentor:** Sheryl Magzamen, ERHS  
    **Scholar:** Bonni Beaupied, USDA Animal Health & Disease Scholar  
    **Research Project:** Cows as Canaries

83. **Mentor:** Sheryl Magzamen, ERHS  
    **Scholar:** Joshua Moore, USDA Animal Health & Disease Scholar  
    **Research Project:** Small Animal Health Impacts of Ambient Air Pollution

84. **Mentor:** Sheryl Magzamen, ERHS  
    **Scholar:** Bonni Beaupied, CVMBS Dean’s Office  
    **Research Project:** Dairy Cows as Sentinels for Regional Air Quality in Colorado

85. **Mentor:** Candace Mathiason, MIP  
    **Scholar:** Shira Bleicher, Boehringer Ingelheim  
    **Research Project:** Characterization of the Placental Histostructure in Guinea Pigs

86. **Mentor:** Candace Mathiason, MIP  
    **Scholar:** Norine Ornellas-Walsh, Boehringer Ingelheim  
    **Research Project:** Developing an Immunologic Profile of Normal Mouse Placenta on Day 18.5 or Pregnancy

87. **Mentor:** Christie Mayo, MIP  
    **Scholar:** Morgan Miller, USDA Animal Health & Disease Scholar  
    **Research Project:** Monitoring levels of vector populations for Vesicular Stomatitis Virus

88. **Mentor:** Christie Mayo, MIP  
    **Scholar:** Elle Holbrook, USDA Animal Health & Disease Scholar  
    **Research Project:** Genetic characterization and comparative genome analysis of vesicular stomatitis virus isolates from Colorado

89. **Mentor:** Christie Mayo, MIP  
    **Scholar:** Rachel Conway, Mentor Funded  
    **Research Project:** Ecology of Vesicular Stomatitis Virus (VSV) in North America
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<td>90</td>
<td>Christie Mayo, MIP</td>
<td>Lauren Riggs, USDA Animal Health &amp; Disease Scholar</td>
<td>Co-infection of EHDV and BTV in Culicoides Cell Culture</td>
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<td>91</td>
<td>Christie Mayo, MIP</td>
<td>Nicole Towner, USDA Animal Health &amp; Disease Scholar</td>
<td>Comparing genetic diversity of the Bluetongue virus genome under different ecological conditions</td>
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<td>92</td>
<td>Stephanie McGrath, CS</td>
<td>Katie Redd, AKC Canine Health Foundation</td>
<td>Efficacy of Cannabidiol for the Treatment of Epilepsy in Dogs</td>
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<tr>
<td>93</td>
<td>Stephanie McGrath, CS</td>
<td>Chase Gross, NIH Trainee</td>
<td>The effect of cannabidiol on canine glioma cells</td>
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<tr>
<td>94</td>
<td>Stephanie McGrath, CS</td>
<td>Samantha Thomas, Mentor Funded</td>
<td>Cannabidiol Clinical Trials in Dogs with Epilepsy</td>
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<tr>
<td>95</td>
<td>Stephanie McGrath, CS</td>
<td>Justine Stalnaker, Boehringer Ingelheim</td>
<td>Efficacy of cannabidiol for the treatment of canine epilepsy</td>
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<td>96</td>
<td>Ashley McGrew, MIP</td>
<td>Emily McDermott, Georgia Norris Scholar</td>
<td>Exploration of the use of web-based tools in parasitology teaching and outreach</td>
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<td>97</td>
<td>Valerie Moorman, CS</td>
<td>Elizabeth Larsen, USDA Animal Health &amp; Disease Scholar</td>
<td>Determination of short- and long-term prognoses for horses with navicular bursa abnormalities treated with navicular bursoscopy and stem cell therapy</td>
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<td>98</td>
<td>Yvette Nout-Lomas, CS</td>
<td>Anthony Franceschelli, USDA Animal Health &amp; Disease Scholar</td>
<td>Using Inertial Measurement Units to Assess Gait Deficits Induced in the Horse by Blindfolding and Walking with the Head Elevated</td>
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<tr>
<td>99</td>
<td>Francisco Olea-Popelka, CS</td>
<td>Melissa Terry, USDA Animal Health &amp; Disease Scholar</td>
<td>Zoonotic Tuberculosis at the iNterface of Human, Livestock, and Wildlife Health</td>
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<tr>
<td>100</td>
<td>Christine Olver, MIP</td>
<td>Jennifer Schefski, Morris Animal Foundation</td>
<td>Interaction of canine fibrinogen with Crotalus venom/Mitigation of snake envenomation using an alternative therapy on canine whole blood exposed to hemotoxic venom</td>
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<td>101</td>
<td>Rebecca Packer, CS</td>
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<tr>
<td>Sarah Deluty, Boehringer Ingelheim</td>
<td>Identifying Correlations in MR Spectroscopy and Brain Tumor Histology</td>
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102. **Mentor:** Rushika Perera, MIP  
**Scholar:** Anna Pollard, NIH Trainee  
**Research Project:** Peroxisome proliferator-activated receptors (PPAR) pathway is utilized to control lipid metabolism during Zika virus and Dengue virus infection

103. **Mentor:** Brendan Podell, MIP  
**Scholar:** Noah Mishkin, NIH Trainee  
**Research Project:** Vitamin A Deficiency’s Role in Tuberculosis Risk

104. **Mentor:** Sandra Quackenbush, MIP  
**Scholar:** Kelly Hicks, NIH Trainee  
**Research Project:** Surveillance of Zika virus by using loop-mediated isothermal amplification (LAMP) in biofluids and insect vectors

105. **Mentor:** Sangeeta Rao, CS  
**Scholar:** Katie Murray, USDA Animal Health & Disease Scholar  
**Research Project:** Antimicrobial Resistance on Dairy Farms

106. **Mentor:** Sangeeta Rao, CS  
**Scholar:** Katie Murray, USDA Animal Health & Disease Scholar  
**Research Project:** Whole-Genome Sequencing to identify AMR determinants in Salmonella obtained from the dairy worker environment

107. **Mentor:** Dan Regan, CS  
**Scholar:** Lauren Alfino, NIH Trainee  
**Research Project:** Periostin in the Metastasis of Canine Osteosarcoma

108. **Mentor:** Dan Regan, CS  
**Scholar:** Lauren Alfino, Boehringer Ingelheim  
**Research Project:** The Effects of Integrin Inhibition on Canine and Human Osteosarcoma

109. **Mentor:** Elizabeth Ryan, ERHS  
**Scholar:** Gregor Trebillog Dam, Boehringer Ingelheim  
**Research Project:** The Complex Influences of Cancer Chemotherapy and Nutrition on the Canine Fecal Microbiome and Metabolome

110. **Mentor:** Mo Salman, CS  
**Scholar:** Brooke MacNeill, Mentor Funded  
**Research Project:** Tick Cattle Fever

111. **Mentor:** Kelly Santangelo, MIP  
**Scholar:** Sydney Bork, Boehringer Ingelheim  
**Research Project:** Dual Treatment of Sarcopenia and Osteoarthritis with a NRF2 activator

112. **Mentor:** Kelly Santangelo, MIP  
**Scholar:** Sydney Bork, AVMA/AVMF Fellowship  
**Research Project:** Efficacy of a Nrf2 agonist for disease and symptom modification of osteoarthritis
113. Mentor: Kelly Santangelo, MIP  
Scholar: Cassie Seabart, Mentor Funded  
Research Project: Contribution of Intra-Abdominal Immune Dysfunction to Musculoskeletal Inflammaging

114. Mentor: Arathi Seshradi, Soil and Crop Sciences  
Scholar: Christina Geldert, USDA Animal Health & Disease Scholar  
Research Project: Quantification of the gut microbiome of the honeybee (Apis mellifera) workers exposed to beneficial phytochemicals

115. Mentor: Mark Stenglein, MIP  
Scholar: Emily Kastendieck, USDA Animal Health & Disease Scholar  
Research Project: Compilation of a Genetic Database Utilizing Existing Data

116. Mentor: Mark Stenglein, MIP  
Scholar: Zachary Osterholz, NIH Trainee  
Research Project:Tick transmission of arenaviruses and bunyaviruses

117. Mentor: Mark Stenglein, MIP  
Scholar: Mark Parlier, Boehringer Ingelheim  
Research Project: Seroprevalence of Reptarenaviruses in Captive Snake Populations and Possible Vectors

118. Mentor: Sue VandeWoude, MIP  
Scholar: Sarah Kechejian, Foundation funded  
Research Project: Developing next generation sequencing approach for viral transmission in Florida Panthers

119. Mentor: Sue VandeWoude, MIP  
Scholar: Sarah Kechejian, Boehringer Ingelheim  
Research Project: Ecology of Feline Foamy Virus Infection in Pumas (Puma Concolor)

120. Mentor: Sue VandeWoude, MIP  
Scholar: Veronica McCann  
Research Project: Bobcat Infectious Disease Spread

121. Mentor: Sue VandeWoude, MIP  
Scholar: Cassidy Stone, Boehringer Ingelheim  
Research Project: Determination of feline hepadnavirus infections in cats in the US

122. Mentor: Allison Vilander, MIP  
Scholar: Sabrina Waugh, CVMBS Deans Office  
Research Project: Characterization of Antigen and Adjuvant Expression by Recombinant Lactobacillus acidophilus Strains for SARS-CoV-2 Vaccine Development

123. Mentor: Craig Webb, CS  
Scholar: Allysa Galloni, Boehringer Ingelheim  
Research Project: A Comparison of Microbiome Characterization Based Upon Collection Methodology and Storage Protocols

124. Mentor: Colleen Webb, Biology  
Scholar: Hazel O’Doherty, Mentor Funded  
Research Project: Spatial Distribution of Low Pathogenic Avian Influenza in Wild Migratory
Waterfowl

125. **Mentor:** Colleen Webb, Biology  
**Scholar:** Hazel O’Doherty, USDA Animal Health & Disease Scholar  
**Research Project:** Identifying spatial drivers of avian influenza virus using true prevalence estimations

126. **Mentor:** Kathryn Wotman, CS  
**Scholar:** Maura Mack, USDA Animal Health & Disease Scholar  
**Research Project:** Equine Ocular Squamous Cell Carcinoma Treatment with Interferon Alpha 2b: a pilot study

127. **Mentor:** Kathryn Wotman, CS  
**Scholar:** Alena Strnadova, USDA Animal Health & Disease Scholar  
**Research Project:** Activated Mesenchymal Stromal Cell Therapy in the Treatment of Equine Recurrent Uveitis

University of Alaska Program (currently funded through NIH)

1. **Mentor:** Karsten Huefner, University of Alaska  
**Scholar:** Olivia Reed  
**Research Project:** Biomonitoring of Environmental Contaminants via Blood Soaked neuronal nicotinic acetylcholine receptors

2. **Mentor:** Molly Murphy, University of Alaska  
**Scholar:** Jackie Rivero  
**Research Project:** Analysis of blood-soaked filter paper for environmental agents of zoonotic concern in rural Alaska

3. **Mentor:** Todd O’Hara, University of Alaska  
**Scholar:** Jennifer Anderson  
**Research Project:** Biomonitoring of Environmental Contaminants via Blood Soaked Filter Papers

4. **Mentor:** Todd O’Hara, University of Alaska  
**Scholar:** Marion Cambrelin  
**Research Project:** The Use of Blood-Soaked Papers to Measure Selenium and/or Methyl Mercury Concentrations in Marine Mammals

5. **Mentor:** Lorrie Rea, University of Alaska  
**Scholar:** Stephanie Rouse  
**Research Project:** Serology comparison between Serum samples and Filter Paper samples for antibodies to Brucella and Coxiella in Alaskan Northern Fur Seals

6. **Mentor:** Lorrie Rea, University of Alaska  
**Scholar:** Nicole DelPino  
**Research Project:** Mercury concentrations and stable isotope values for Northern fur seals