BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Kim, Jeffrey

eRA COMMONS USER NAME (credential, e.g., agency login): j0kim067

POSITION TITLE: Assistant Professor, Clinical Veterinarian

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing,

include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE	END	FIELD OF STUDY
	(if applicable)	DATE	
		MM/YYYY	
University of California, Davis	BS	06/2012	Animal Biology
The Ohio State University	MPH	05/2016	Veterinary Public Health
The Ohio State University	DVM	05/2020	Veterinary Medicine
Sue VandeWoude Research Group, Colorado State	Postdoctoral	06/2022	Retroviral Therapy
University, Fort Collins, CO	Fellow		
Colorado State University, Fort Collins, CO	Resident	06/2022	Comparative Medicine
			Residency

A. Personal Statement

I am an Assistant Professor and a board-certified Laboratory Animal Veterinarian with a research background on the toxicity, clinical efficacy, and pharmacokinetics of analgesia in mice, and the antiviral treatment and oral microbiome impacts of feline immunodeficiency virus and HIV patients. I established a rigorous and repeatable analgesia toxicity and efficacy model performing ovariectomy surgeries in laboratory mice to address the important knowledge gap of their pain assessment and treatment. Currently, I am administering a project (e.g. staffing, research protections, budget) to assess the transmammary exposure and neonatal toxicity of analgesia drugs in mice. Furthermore, from my postdoctoral training with the Sue VandeWoude Research Group that has received over 24 million dollars in funding, I have expertise in digital quantification and immunophenotyping of feline retroviruses and HIV models. I established an HIV model using feline immunodeficiency virus and I used their homologous pathophysiology to address the important clinical knowledge gap of treating oral disease in HIV patients. I simultaneously focused on highly impactful research that bridges human and animal health. With an expansive One Health impact, I investigated novel antiretroviral therapies for feline immunodeficiency virus, which has a large global prevalence with no treatment. During 2021-2022, my research career was disrupted due to my clinical residency training. However, I immediately resumed my research projects and successfully completed and published resultant projects described above and cited below. Together, my experiences equip me with proficiency in communication, team management, and stewardship to realistically achieve our goals within the timeline and budget outlined in this grant proposal.

Citations:

- McKenna B, Weaver H, Kim J, Bowman M, Knych H, Kendall L. A Pharmacokinetic and Analgesic Efficacy Study of Carprofen in Female CD1 Mice. Journal of the American Association for Laboratory Animal Science. 2023 November 11; 62(6):545-552. Available from: https://www.ingentaconnect.com/content/10.30802/AALAS-JAALAS-23-000041 DOI: 10.30802/AALAS-JAALAS-23-000041
- Kim J, Behzadi E, Nehring M, Carver S, Cowan S, Conry M, Rawlinson J, VandeWoude S, Miller C. Combination Antiretroviral Therapy and Immunophenotype of Feline Immunodeficiency Virus. Viruses. 2023 March 24; 15(4):822-. Available from: https://www.mdpi.com/1999-4915/15/4/822 DOI: 10.3390/v15040822

 Kim J, Cannon B, Freeman L, Tan S, Knych H, Kendall L. High-dose Meloxicam Provides Improved Analgesia in Female CD1 Mice: A Pharmacokinetic and Efficacy Study. Journal of the American Association for Laboratory Animal Science. 2023 January 01; 62(1):74-80. Available from: https://www.ingentaconnect.com/content/10.30802/AALAS-JAALAS-22-000064 DOI: 10.30802/AALAS-JAALAS-22-000064

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

- 2023 Present Diplomate, American College of Laboratory Animal Medicine
- 2023 Present Adjunct Professor, Lincoln Memorial University College of Veterinary Medicine
- 2022 Present Assistant Professor, Clinical Veterinarian, University of Louisville School of Medicine, Louisville, KY
- 2022 2023 Consultant, Regulatory Expert, Bellarmine University, Louisville, KY
- 2022 Present Member, Kentucky Veterinary Medical Association, Frankfort, KY
- 2021 2022 Clinical Veterinarian, The Centers for Disease Control and Prevention, Fort Collins, CO
- 2020 Present Member, American Veterinary Medical Association
- 2020 2022 Fellow, Sue VandeWoude Research Group, Colorado State University, Fort Collins, CO
- 2020 2022 Comparative Medicine Resident, Colorado State University, Fort Collins, CO
- 2018 2018 Fellow, The American Society of Laboratory Animal Practitioners, Colorado State University, Fort Collins, CO
- 2016 Present Member, American Society of Laboratory Animal Practitioners
- 2015 Present Member, American Association for Laboratory Animal Science
- 2014 2019 Surgery Nurse, University Laboratory Animal Resources, The Ohio State University, Columbus, OH
- 2013 2014 Veterinary Nurse, University of California, San Diego, San Diego, CA
- 2013 2013 Veterinary Nurse, Valley Biosystems, Sacramento, CA
- 2011 2013 Veterinary Nurse, University of California, Davis, Davis, CA

C. Contribution to Science

- 1. My early publications addressed an important knowledge gap of antimicrobial resistance of zoonotic pathogens in nonhuman primates. Humans continue to have high levels of contact with nonhuman primates worldwide in biomedical research, zoological gardens, and wild settings. This high human-animal interface presents considerable risks to public health because nonhuman primates are frequently infected with zoonotic pathogens and their transmissibility and pathogenicity to humans are threatening. They are even more threatening if resistant to antimicrobials, which is increasingly dangerous and will likely soon become the greatest killer of humans globally. These publications report the emerging and neglected threat of antimicrobial resistance in nonhuman primates. They document to physicians and veterinarians recent prevalences of resistance, and they offer guidance on antimicrobial use practices. Collectively, I have published the most comprehensive literature on antimicrobial use and resistance of zoonotic pathogens in humans and nonhuman primates.
- a. Kim J, Habing G, Salyards G, Coble D. Antimicrobial Stewardship in Captive Monkeys. In: Knauf S, Jones-Engel L, editors. Neglected Diseases in Monkeys [Internet] Cham: Springer International Publishing; 2020. Chapter Chapter 7141-170p. Available from: https://link.springer.com/10.1007/978-3-030-52283-4_7 DOI: 10.1007/978-3-030-52283-4_7
- b. **Kim J**, Coble DJ, Salyards GW, Habing GG. Comparative Review of Antimicrobial Resistance in Humans and Nonhuman Primates. Comp Med. 2018 Apr 2;68(2):124-130. PubMed Central PMCID: PMC5897968.
- c. **Kim J**, Coble DJ, Salyards GW, Bower JK, Rinaldi WJ, Plauche GB, Habing GG. Antimicrobial Use for and Resistance of Zoonotic Bacteria Recovered from Nonhuman Primates. Comp Med. 2017 Feb 1;67(1):79-86. PubMed Central PMCID: PMC5310628.