

## **Bridget Barker PhD**

Associate Professor, Department of Biological Sciences | Northern Arizona University

Dr. Bridget Barker received her B.A. in Biology and M.S. in Ecological Genetics from the University of Montana and completed her Ph.D. in Genetics at the University of Arizona in 2009 on genomics of *Coccidioides* spp. She completed her postdoctoral work at Montana State University in *Aspergillus fumigatus* in the lab of Dr. Robert Cramer. In 2013, she joined the faculty at TGEN-North, and in 2016 she became tenure track faculty at Northern Arizona University (NAU) in the Pathogen and Microbiome Institute (PMI) in the Department of Biological Sciences. In 2020, she was promoted to Associate Professor. Dr. Barker has extensive experience with genomics, bioinformatics, population and molecular genetics, and evolutionary biology. Her background in microbiology, work with fungal pathogens, and computational biology allowed her to develop and bring these new techniques to the field of Valley Fever research



## **Emily Bray PhD**

Assistant Professor, Arizona Canine Cognition Center | University of Arizona

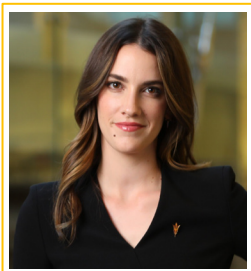
Dr. Emily Bray is an Assistant Professor in the University of Arizona College of Veterinary Medicine and a research scientist at Canine Companions, the largest national provider of assistance dogs to people with mobility disabilities. She earned her BA in Psychology from Duke University and her PhD in Psychology from the University of Pennsylvania. Dr. Bray then served as a post-doctoral research associate at the Arizona Canine Cognition Center at the University of Arizona. By building a comprehensive understanding of dog behavior and cognition, her work aims to enhance both canine health and welfare and our human-animal interactions. Dr. Bray now directs the Behavioral Research Across Years (BRAY) lab, where her current projects focus on the effect of early interactions on subsequent behaviors and outcomes, early detection of cognitive decline, and identification of specific characteristics linked to success in working dogs.



## **Theresa Fossum DVM, PhD, DACVS**

Veterinary Surgeon, CEO, Dr. Fossum's Pet Care | Carefree, Arizona

Dr. Theresa Fossum is a world-renowned board-certified veterinary surgeon and author of the best-selling textbook *Small Animal Surgery*, which is in its 5<sup>th</sup> edition and has been translated into over a dozen languages. Dr. Fossum has over 100 publications and numerous book chapters to her credit and served as a principal investigator for over 30 million dollars in research funding from industry and the federal government. She is also the founder and former Director and Executive Director of the Texas A&M Institute for Preclinical Studies (TIPS), a 60-million-dollar venture at Texas A&M University which promotes for Preclinical Studies (TIPS), a 60-million-dollar venture at Texas A&M University which promotes public-private partnerships to speed the development of medical devices and drugs. She has given over 1,000 invited lectures throughout the world has been honored with numerous awards, including Distinguished Alumni and Continuing Educator of the Year. In 2018 she served as the Special Assistant to the Secretary of Energy, developing STEM initiatives for the Department of Energy, and Dr. Fossum is the CEO and Founder of Dr. Fossum's Pet Care, CEO and President of Phoenix Animal Wellness, and CEO and Co-Founder of Veterinary Intelligent Solutions which is developing AI solutions for veterinary medicine.



## **Valerie Harris PhD**

Director, Knowledge Enterprise Core Facilities | Arizona State University

Dr. Valerie Harris is the Director for Health and Clinical Support Services at Arizona State University. Dr. Harris arrived at ASU initially to pursue her undergraduate education, and over the past decade she has worked in cancer biology, with a particular interest in the evolutionary and ecological dynamics across multiple scales of evolution – from cellular to organismal. During the course of her Ph. D., she studied the incidence of cancer across non-human species, assembling a large-scale epidemiological survey of neoplastic disease from zoological institutions, veterinary facilities, and wildlife sanctuaries. She has taken part in field research throughout the globe, including time in Africa, Greenland, Mexico, Panama, and Thailand. Prior to her role in Health and Clinical Support Services, Dr. Harris helped to lead ASU's COVID response as the Senior Manager of the University's clinical testing lab, providing over 800,000 results to ASU and the community at large. Currently, her work focuses on facilitating clinical research activities across multiple areas within the University and in the surrounding Phoenix biomedical corridor.



### **Evan MacLean PhD**

Director, Arizona Canine Cognition Center | University of Arizona

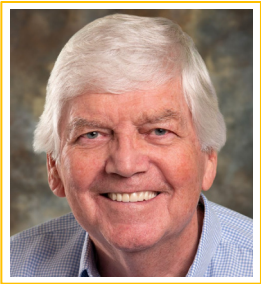
Dr. Evan MacLean is an Associate Professor at the University of Arizona where he holds appointments in Veterinary Medicine, Psychology, Cognitive Science, Anthropology, and Ecology and Evolutionary Biology. He is the founder and Director the Arizona Canine Cognition Center. Dr. MacLean received his Ph.D. in Evolutionary Anthropology from Duke University in 2012, where he was a James B. Duke Fellow. His research integrates methods from evolutionary biology and comparative psychology to address questions about the mechanisms through which animals represent and reason about the world. He also conducts applied work investigating how research on dog behavior, cognition, genetics, and neuroendocrinology can improve the processes through which dogs are selected, bred, and trained for roles in society. In addition to his work on animal behavior and cognition, Dr. MacLean studies the biological mechanisms of human-animal-interaction, with a focus on the neuropeptides oxytocin and vasopressin. He has led diverse projects on these topics which have been supported by the National Institutes of Health, Office of Naval Research, the AKC Canine Health Foundation, and the Waltham Petcare Science Institute. In 2015 he was awarded a Next Generation Canine Research Fellowship from the Stanton Foundation, and his work has been highlighted in media outlets including The New York Times, Washington Post, National Public Radio, the BBC, and National Geographic.



### **Matthew Miller DVM, MS, DACVIM**

Veterinary Cardiologist | Cave Creek, Arizona

Dr. Miller earned his Doctor of Veterinary Medicine degree from The Ohio State University in 1984 and continued his education there for his Master of Science degree in 1993. He completed a small animal medicine and surgery internship at the West Los Angeles Veterinary Medical Group from 1984–1985 and a cardiology residency at the Ohio State University from 1985–1988. He became a diplomate of the American College of Veterinary Internal Medicine (Cardiology) in 1988. He served on the faculty of the Texas A&M University College of Veterinary Medicine and Biomedical Sciences from 1988–2014 where he achieved the position of full professor with tenure. He served as the director of the Texas A&M University Institute for Preclinical Studies (TIPS) from 2012–2014. He is a Charter Fellow of the Michael E. DeBakey Institute of Comparative Cardiovascular Science and Biomedical Devices and was voted the 2023 Arizona Veterinarian of the Year by the Arizona Veterinary Medical Association.

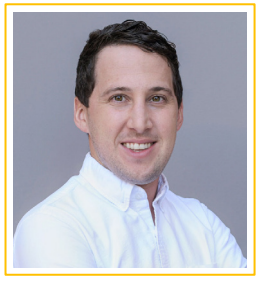


### **George Poste DVM, PhD**

Regents Professor and Del E. Webb Chair in Health Innovation

Chief Scientist, Complex Adaptive Systems Initiative | Arizona State University

Dr. George Poste is the Del E. Webb Professor of Health Innovation and Chief Scientist at The Complex Adaptive Systems Initiative at Arizona State University (ASU). This program integrates research in genomics, synthetic biology and high-performance computing to study the altered regulation of molecular networks in human diseases to develop new diagnostic tests for precision medicine and the remote monitoring of health status using miniaturized body sensors and mobile devices. From 2003 to 2009 he directed and built The Biodesign Institute at ASU. Dr. Poste is a Fellow of the U.K. Royal Society, the Royal College of Pathologists, the U.K. Academy of Medicine and The American Institute for Medical and Biological Engineering, the Council for Foreign Relations and the US Academy of Medicine Forum on Global Health. He served as a member of the Defense Science Board of the U.S. Department of Defense and currently serves on advisory committees for several U.S. government agencies in defense, intelligence, national security and healthcare and is an Ex-Officio Member of the Bipartisan Commission on Biodefense. His areas of expertise in biosecurity focus on zoonotic emerging infectious diseases, dual-use research in biotechnology and synthetic biology and new diagnostic systems for global biosurveillance.



### **Noah Snyder-Mackler PhD**

Assistant Professor, Center for Evolution and Medicine | Arizona State University

Dr. Snyder-Mackler's molecular and computational lab (SMack Lab) combines demographic and behavioral data with high throughput genomics and the requisite bioinformatic and statistical tools to probe the dynamic interaction between the environment and the genome. The SMack Lab tackles questions from two directions: 1) Identifying the molecular mechanisms through which the environment, age, socioeconomic status, and lived experiences alter physiology, health, and survival; and 2) examining the molecular and physiological adaptations that help organisms thrive in extreme environments. His lab conducts this work using socially complex nonhuman primates and dogs, where they pair molecular, computational, and statistical tools from genomics, behavioral ecology, and neuroscience with theories from sociology, evolutionary biology, and immunology, to investigate the dynamic interaction between our environments and our bodies.



**Rachel Venable, DVM, MS, DACVIM (Oncology)**

Veterinary Oncologist and Founder, Pet Cancer Care Consulting | Scottsdale, Arizona

Dr. Venable is Board Certified as a medical oncologist from the American College of Veterinary Internal Medicine. Dr. Venable has always been surrounded by animals growing up on a farm in the Midwest. She obtained her veterinary degree from the University of Missouri and graduated *cum laude*. After veterinary school, Dr. Venable pursued further training as a small animal intern at the University of Georgia. She then completed her 3-year medical oncology residency at the world-renowned Colorado State Flint Animal Cancer Center. During her residency, she achieved a master's degree and studied new cancer therapies and clinical trials. She continues to seek out clinical trials and cutting-edge therapies for her patients. Dr. Venable has authored numerous publications and has been a speaker on local and national levels. She is the founder of Pet Cancer Care Consulting an innovative teleconsulting service which consults with the family vet and pet owner together to give personalized responses and needed information to make an informed decision on treatments. She is also a VIN consultant and was an adjunct professor of veterinary oncology at Midwestern University. She is a member of many organizations and currently a director to the board of the Arizona Veterinary Medical Association. Her oncology philosophy is one of a team-based approach with the family and referring veterinarians for compassionate, individualized care, and optimal quality of life for cancer patients and their families.



**Craig Woods DVM, MS, MBA**

Director, Infectious Disease and Biosecurity Projects | The Institute for Future Health  
Arizona State University

Craig Woods is a clinical researcher and business developer with over 20 years of experience in human and veterinary clinical trials, regulatory affairs (FDA, USDA), technology licensing, and pharmaceutical development. Craig joined the Institute for Future Health in 2021, where he focuses on infectious disease and biosecurity projects including surveillance for highly pathogenic avian influenza, human cardiac disease biomarker development and a collaborator on projects with the Department of State and Department of Defense. Prior to ASU, Craig directed Phase II-III clinical trials and veterinary clinical studies at Midwestern University. During this time, Craig served as a clinical investigator on infectious diseases (anti-infectives, SARS-CoV-2) and comparative medical studies in the areas of envenomation, oncology, neurology, orthopedics, and cardiovascular disease. From 1998-2015, Craig was in the pharmaceutical industry holding positions in business development, regulatory affairs and clinical research. Craig has founded several start-up biomedical companies and his work in comparative ophthalmology led to the development and commercialization of a novel subscleral (suprachoroidal) glaucoma implant for humans. From 1995-1998, Craig was in veterinary practice in Tucson, AZ and Fountain Hill, AZ, and remains a licensed veterinarian in Arizona.



**Hayley Yaglom-Hemmelgarn MS, MPH**

One Health Genomics Epidemiologist | TGen North

Hayley D. Yaglom has a broad background in one health and epidemiology, with specific training and experiences in infectious disease, veterinary public health, and genomic surveillance. Her current research at the Translational Genomics Research Institute in Flagstaff, Arizona, focuses on developing and implementing one health genomic surveillance programs to understand endemic and emerging diseases in the Southwest. She previously served as the Senior Vector-borne and Zoonotic Disease Epidemiologist at the Arizona Department of Health Services and worked with various partners to investigate diseases such as rabies, plague, and tick-borne diseases using a One Health approach. During the height of the pandemic, Mrs. Yaglom seized the opportunity to put One Health into practice and developed numerous surveillance projects to investigate and characterize the impact of SARS-CoV-2 on animals, including working dogs, free-range wildlife, and animals in zoo settings. She continues to collaborate in these contexts with state, local, and tribal public health, wildlife agencies, zoos, the veterinary community, and other One Health partners at the national level. She also has 15 years of personal experience as a veterinary technician. Mrs. Yaglom holds a Masters in Veterinary Public Health and Epidemiology from the University of Missouri and a Masters in Animal Biotechnology and Biomedical Sciences from the University of Massachusetts-Amherst. She is currently pursuing a PhD in Interdisciplinary Health at Northern Arizona University.