

# SPOTLIGHT ON University of Arizona Veterinary Medicine

Advancing animal health and welfare through research

## Advancing human and animal health globally

Sierra Phillips, BA, and Mindy Burnett, MA\*

College of Veterinary Medicine, University of Arizona, Oro Valley, AZ

\*Corresponding author: Ms. Burnett (mindyburnett@arizona.edu)

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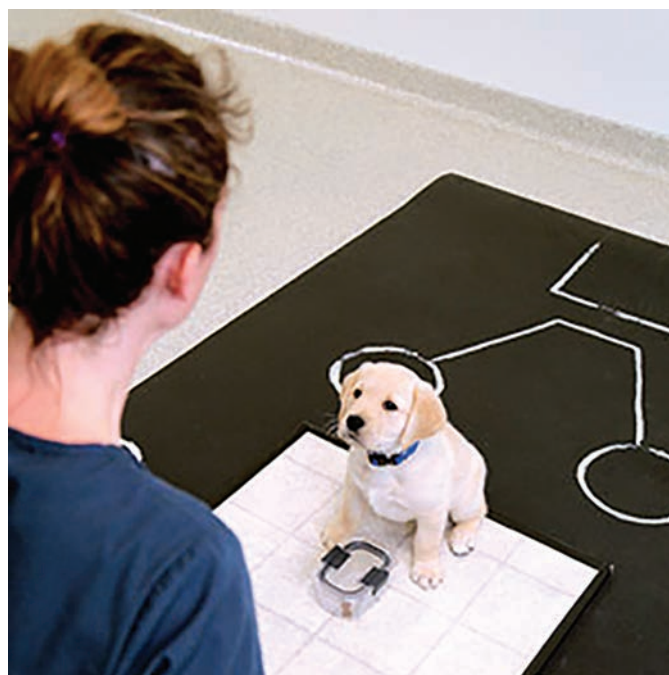
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The University of Arizona College of Veterinary Medicine's Human-Animal Interaction research team, led by Dr. Maggie O'Haire and Dr. Evan MacLean, embodies Arizona's explorative and compassionate ethos as we design and carry out groundbreaking advancements at the intersection of the biological and psychological sciences. Dr. O'Haire, under whose leadership the University of Arizona will retain the largest Human-Animal Interaction faculty group in the world, shared, "Currently, Dr. Evan MacLean and I have a grant from the National Institutes of Health for a 5-year longitudinal, randomized clinical trial looking at the effects of service dogs for military veterans with posttraumatic stress disorder in their families. Our goal is to look at this from both sides, human and animal." Alongside studying how service animals impact veterans' mental and physical health, the human-animal research team will examine dogs' stress hormone physiology and behavioral profiles. Insights such as where the animals are at their baseline, how they pair with their human, and what outcomes develop are all data points our team plans to explore.

Dr. MacLean, founder and director of the Arizona Canine Cognition Center, focuses his aspect of the team's research on exploring canine cognition and studying how canines interpret the world around them, while Dr. O'Haire's efforts center on how humans interact with service animals. Dr. MacLean's canine research, combined with Dr. O'Haire's focus on human attachments to animals, can potentially inform the processes through which animals are selected, bred, and trained for assistance or service roles. Dr. MacLean shared:

"My specialty is in dog behavioral biology, which is an umbrella term that captures aspects of dog temperament, behavior, and cognition. One of the central themes in my research is trying to understand sources of variation, because dogs are one of the most variable species on the planet. Only about half the dogs that begin professional training programs to be service dogs complete it. What is it that sets half of them apart?"

Research focused on service animals' interactions with humans aims to uncover how and why some dogs succeed at becoming service animals and attempt to provide empirical data to support future legislation and medical diagnosis. Dr. MacLean believes a greater understanding of animal



Dr. Emily Bray, PhD, working with a puppy at the Canine Cognition Lab.

selection will lead to better human decisions regarding service animals. He stated, "If we want to set dogs up for success in the world, we can do 2 things. We can do our best to breed healthy dogs and then we can try to create the environments that they need to be successful." The team's joint efforts will provide a holistic picture of how Human-Animal Interaction links needs, best practices, and outcomes and will highlight opportunities for further inquiry.

With our experienced research team, Arizona is prepared to make groundbreaking discoveries and lead the world in Human-Animal Interaction research. When discussing the team's vision for Arizona's current research, Dr. O'Haire shared, "It's my hope and my vision to give a voice to service animals and their humans through science."



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