



Alexandra Switzer

Basic Life Research Scientist, Microbiology and Immunology

CONTACT INFORMATION

- **Alternate Contact**

Email adswitzer@ucdavis.edu

Bio

CURRENT ROLE AT STANFORD

Microbiologist, veterinarian and data analyst in the Relman lab studying the indigenous gut microbiota of a wide range of marine and terrestrial mammals. Current research interests include characterizing microbiome assembly in neonatal mammals, host-microbiome co-evolution and patterns of microbiome diversity associated with wildlife population health.

EDUCATION AND CERTIFICATIONS

- PhD, Stanford School of Medicine , Microbiology & Immunology (2019)
- Doctor of Veterinary Medicine, University of California at Davis School of Veterinary Medicine , Veterinary Medicine (2009)
- Masters of Preventative Vet Med, University of California at Davis , Public health & zoonoses (2013)

Publications

PUBLICATIONS

- **Best practices for collecting and preserving marine mammal biological samples in the 'omics era** *MARINE MAMMAL SCIENCE*
Van Cise, A. M., Switzer, A. D., Apprill, A., Champagne, C. D., Chittaro, P. M., Dudek, N. K., Gavery, M. R., Hancock-Hanser, B. L., Harmon, A. C., Jaffe, A. L., Kellar, N. M., Miller, C. A., Morin, et al
2024
- **Rookery through rehabilitation: Microbial community assembly in newborn harbour seals after maternal separation.** *Environmental microbiology*
Switzer, A. D., Callahan, B. J., Costello, E. K., Bik, E. M., Fontaine, C., Gulland, F. M., Relman, D. A.
2023
- **Characterizing the oral and distal gut microbiota of the threatened southern sea otter (*Enhydra lutris nereis*) to enhance conservation practice.** *Conservation science and practice*
Dudek, N. K., Switzer, A. D., Costello, E. K., Murray, M. J., Tomoleoni, J. A., Staedler, M. M., Tinker, M. T., Relman, D. A.
2022; 4 (4)
- **Reduced Gut Microbiome Diversity and Metabolome Differences in Rhinoceros Species at Risk for Iron Overload Disorder.** *Frontiers in microbiology*
Roth, T. L., Switzer, A., Watanabe-Chailland, M., Bik, E. M., Relman, D. A., Romick-Rosendale, L. E., Ollberding, N. J.
2019; 10: 2291
- **Namibian farmland cheetahs (*Acinonyx jubatus*) demonstrate seronegativity for antibodies against *Bacillus anthracis*** *AFRICAN JOURNAL OF WILDLIFE RESEARCH*

Switzer, A., Munson, L., Beesley, C., Wilkins, P., Blackburn, J. K., Marker, L.
2016; 46 (2): 139-143

- **Marine mammals harbor unique microbiotas shaped by and yet distinct from the sea.** *Nature communications*
Bik, E. M., Costello, E. K., Switzer, A. D., Callahan, B. J., Holmes, S. P., Wells, R. S., Carlin, K. P., Jensen, E. D., Venn-Watson, S., Relman, D. A.
2016; 7: 10516-?
- **Bartonella and Toxoplasma Infections in Stray Cats from Iraq** *AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE*
Switzer, A. D., McMillan-Cole, A. C., Kasten, R. W., Stuckey, M. J., Kass, P. H., Chomel, B. B.
2013; 89 (6): 1219-1224
- **Infection of pregnant mice with *Listeria monocytogenes* induces fetal bradycardia** *PEDIATRIC RESEARCH*
Hardy, J., Kirkendoll, B., Zhao, H., Pisani, L., Luong, R., Switzer, A., McConnell, M. V., Contag, C. H.
2012; 71 (5): 539-545