

Institute for Biohealth Innovation

College of Science



SELECT PUBLICATIONS

- A. A. Aguirre et al., Transdisciplinary and socialecological health frameworks—Novel approaches to emerging parasitic and vector-borne diseases. Parasite Epidemiology and Control 4 (2019).
- A. A. Aguirre. Changing patterns of emerging zoonotic diseases in wildlife, domestic animals, and humans linked to biodiversity loss and globalization. *ILAR Journal* 58(3) (2017).
- A. A. Aguirre *et al.*, One Health—Transdisciplinary opportunities for SETAC leadership in integrating and improving the health of people, animals, and the environment. *Environmental Toxicology & Chemistry* 35(10) (2016).

A. Alonso Aguirre, DVM, PhD

Department Chair and Professor, Department of Environmental Science and Policy Chair, GMU Institutional Animal Care and Use Committee

Education

PhD, Wildlife Biology and Protected Area Management, Colorado State University

Key Interests

Conservation Medicine | One Health | EcoHealth | Planetary Health | Infectious Disease Ecology | Wildlife Medicine | Epidemiology | Conservation Biology | Wildlife Anesthesia

CONTACT

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Research Focus

My research spans topics from wildlife management, diseases, anesthesia, and ecology, to the health of ecosystems. My disciplinary expertise is necessarily similarly broad, including microbiology, immunology, biology, biochemistry, veterinary science, wildlife diseases, disease ecology, conservation biology, conservation medicine, ecological health, and One Health. My research has been instrumental in revealing the impact of emerging diseases particularly within marine wildlife populations, such as sea turtles, seals, and manatees. In studies across the globe, I have focused on habitat destruction and degradation, emerging infectious diseases, biodiversity loss, global toxification, and illegal trade as factors affecting the health and disease of wildlife populations and their ecosystems. I cofounded the emerging discipline of Conservation Medicine, building upon the "One Health" approach to animals, people, and the environment, adopted by the CDC, WHO, FAO, OIE, and other organizations. Because diseases know no disciplinary or national boundaries, my work is inherently collaborative, international, and multisectoral.

Current Projects

- Effects of the Illegal Consumption of Sea Turtles on Human Health
- The illegal trade of chelonians and their potential transmission of zoonoses
- Prioritizing fish habitat for American eels in the Chesapeake Bay Watershed
- The One Health approach to sea turtle genetics and conservation
- Characterizing bat-borne virus exposure in cave destinations in Southeast Asia
- Ecoepidemiology of the chytrid fungus in amphibian populations in Panama
- Epidemiology of tuberculosis in captive elephants
- Video games to test risk-taking practices of visitors to national parks