Brazilian Journal of Veterinary Parasitology

ISSN 1984-2961 (Electronic) www.cbpv.org.br/rbpv

In memoriam: a eulogy for Daniel González-Acuña, 1963-2020

Sebastián Muñoz-Leal^{1*} (1); María Carolina Silva-De-La-Fuente²; Darci Moraes Barros-Battesti³; Alberto Alejandro Guglielmone⁴; José Manuel Venzal⁵; Santiago Nava⁴; María Soledad Sepúlveda⁶; Vasyl Tkach⁷; Mike Kinsella⁸; Danny Fuentes-Castillo⁹; Sebastián Llanos-Soto¹⁰; Alexandra Grandón-Ojeda¹¹; José Enrique Celis¹²; Winfred Espejo¹²; Solange Jara-Carrasco¹³; Claudio Azat¹⁴; Thiago Fernandes Martins¹⁵; Marcelo Bahia Labruna¹⁶; Cristóbal Briceño¹⁷; Ricardo Antonio Figueroa¹⁸; Soraya Corales-Stappung¹⁸; Lucila Moreno¹⁹

¹ Departamento de Patología y Medicina Preventiva, Facultad de Ciencias Veterinarias, Universidad de Concepción, Chillán, Ñuble, Chile ² Instituto de Medicina Preventiva Veterinaria, Facultad de Ciencias Veterinarias, Universidad Austral de Chile, Valdivia, Chile

³ Departamento de Patologia, Reprodução e Saúde Única, Faculdade de Ciências Agrárias e Veterinárias – FCAV, Universidade Estadual Paulista "Júlio de Mesquita Filho" – UNESP, Jaboticabal, SP, Brasil

⁴Instituto Nacional de Tecnología Agropecuaria, Estación Experimental Agropecuaria Rafaela and Consejo Nacional de Investigaciones Científicas y Técnicas, Rafaela, Santa Fe, Argentina

⁵ Laboratorio de Vectores y Enfermedades Transmitidas, Departamento de Ciencias Biológicas, Universidad de la República, Salto, Uruguay

⁶ Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN, USA
⁷ Department of Biology, University of North Dakota, Grand Forks, North Dakota, USA
⁸ HelmWest Laboratory, Missioula, Montana, USA

Departamento de Patologia, Faculdade de Medicina Veterinária e Zootecnia, Universidade de São Paulo – USP, São Paulo, SP, Brasil
 Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University, Ithaca, NY, USA
 School of Biological Sciences, University of Bristol, Bristol Life Sciences Building, Bristol, UK

¹²Departamento de Ciencia Animal, Facultad de Ciencias Veterinarias, Universidad de Concepción, Chillán, Ñuble, Chile ¹³Departamento de Formación Transversal, Instituto Profesional Virginio Gómez, Concepción, Chile

¹⁴ Centro de Sustentabilidad & Programa de Doctorado en Medicina de la Conservación, Facultad de Ciencias de la Vida, Universidad Andrés Bello, Santiago, Chile

15 Departamento de Laboratórios Especializados, Superintendência de Controle de Endemias, Secretaria de Estado da Saúde de São Paulo, São Paulo, SP, Brasil

16 Departamento de Medicina Veterinária Preventiva e Saúde Animal, Faculdade de Medicina Veterinária e Zootecnia, Universidade de São Paulo – USP, São Paulo, SP, Brasil

¹⁷ Departamento de Medicina Preventiva Animal, Facultad de Ciencias Veterinarias y Pecuarias, Universidad de Chile, Santiago, Chile

¹⁸ Independent researchers, Pje, Valdivia, Chile

19 Departamento de Zoología, Facultad de Ciencias Naturales y Oceanográficas, Universidad de Concepción, Concepción, Bío-Bío, Chile

How to cite: Muñoz-Leal S, Silva-De-La-Fuente MC, Barros-Battesti DM, Guglielmone AA, Venzal JM, Nava S et al. In memoriam: a eulogy for Daniel González-Acuña, 1963-2020. *Braz J Vet Parasitol* 2021; 30(1): e000821. https://doi.org/10.1590/S1984-29612021005.

Dr. Daniel González-Acuña was born on February 8, 1963, in San Fernando, central Chile, and became a veterinarian in 1988, at the University of Concepción. Keen on science and wildlife, he did his PhD studies in Germany, at the University of Veterinary Medicine in Hannover (Tierärztliche Hochschule Hannover), receiving his degree in 1997. Professor Eberhard Mey, an expert on lice, was his mentor. His doctoral dissertation was on the ecology and taxonomy of ectoparasites and endoparasites of Chilean birds. When he returned to Chile, he won a faculty position at the University of Concepción as a zoology professor in the School of Veterinary Sciences in Chillán. He spent the rest of his career at the same University, where he became a full professor (Figure 1).

Dr. González-Acuña adored his job, and dedicated himself fully to his profession. He was an outstanding researcher, teacher and mentor. The combination of knowledge and enthusiasm for science demonstrated by Daniel González-Acuña was contagious and attracted undergraduate and postgraduate students to his classes and research laboratory. He mentored more than 100 students: some of them followed his footsteps into science (Alexandra Grandón-Ojeda, Danny Fuentes-Castillo, Lucila Moreno, María Carolina Silva-De La Fuente, Sebastián Llanos-Soto and Sebastián Muñoz-Leal) and are among the authors of this eulogy.

Daniel González-Acuña was a dedicated and tireless nature conservationist. He organized/co-organized numerous workshops and seminars on the subject (32), participated as an expert in numerous committees and gave outreach

Received January 12, 2021. Accepted January 19, 2021

*Corresponding author: Sebastián Muñoz-Leal. E-mail: sebamunoz@udec.cl



This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Figure 1. Daniel in his office at Universidad de Concepción.

presentations (50) to diverse audiences, including children. One important milestone in these efforts was the creation of the Wildlife Rehabilitation Center at the University of Concepción, which currently admits around 200 cases per year. Since its creation in 2004, the Center has provided veterinary attention to a number of wildlife species and has facilitated the recovery of thousands of animals. For his efforts in creating the Wildlife Rehabilitation Center and his constant work for wildlife conservation, Dr. González-Acuña received the "Municipal Heritage Recognition" granted by the Municipality of Chillán in 2017 (Chile) and the "Recognition of the Municipality of Bulnes" in 2019.

Daniel was born a naturalist. He loved to explore nature, which led him to do extensive fieldwork in both continental and insular terrains in Chile and South America, including the Antarctic Peninsula. Daniel was a recognized ornithologist. He documented diverse aspects of the natural history of Chilean birds. Since 2016, Daniel had been the Editor-in-Chief of the Revista Chilena de Ornitología (Chilean Journal of Ornithology). His arduous dedication and close interaction with associate editors, reviewers and authors contributed to raising the standard and increasing the visibility of the journal.

As a parasitologist, Daniel showed a genuine interest in almost all terrestrial fauna. His contributions encompassed an extremely broad spectrum of subjects, ranging from his favorite ectoparasites (mites, fleas, lice and ticks) to helminths and blood sporozoans from Chilean vertebrates, including work on disease vector biology. During his academic life, Daniel achieved amazing scientific productivity. He authored 301 scientific papers, two books and 23 book chapters, and made 338 presentations at national and international conferences. His publications included descriptions of several novel parasite species, including 30 mites, 11 fleas, five ticks and four lice. Daniel's scientific research was funded primarily by seven major projects: four by the Chilean National Science and Technology Fund (FONDECYT); two by the Chilean Antarctic Institute (INACH); and one by the Scientific and Technological Equipment Fund (FONDEQUIP). It is reasonable to say that he was one of the most influential contemporary researchers on this topic, not only in Chile but also throughout Latin America. Daniel was always open to collaborate in other interdisciplinary projects on wildlife toxicology, Antarctic science, genetics, one health and so on. His scientific work obtained national recognition through the "Dr. Álvaro Blanco B. Award" (2013) given

by the Chilean Veterinary Medical College, and the "Award for a scientific career" (2016) given by the University of Concepción to the 10 faculty members with the highest scientific productivity over the last 20 years.

Daniel González-Acuña's research and recognition were not restricted to Chile. He collaborated widely with biologists and veterinarians, including ectoparasitologists, helminthologists and vector biologists in South America, Australia, France, Germany, New Zealand, Poland, Russia and the United States. These studies, often tackling broader questions, earned Daniel international recognition.

Although Daniel was interested in endoparasites and ectoparasites in general, he had a particular interest in ticks. In July 2003, he and colleagues from South America congregated at the Butantan Institute in São Paulo, to participate in the first International Course on Tick Taxonomy of the Neotropical Region. Daniel, who worked as a professor of zoology, was among the most motivated participants. Acarology became one of his central topics of research for the rest of his career. Fruitful scientific collaboration and friendship with the colleagues he met in São Paulo was another milestone of his research life. His role was particularly instrumental in collaborations with tick experts in Argentina and Uruguay, who greatly benefited from Daniel's motivation, and from his ability to conduct fieldwork in harsh environments and find rare tick specimens (González-Acuña et al. 2018).

Daniel González-Acuña passed away on December 28, 2020, in Rancagua (central Chile). His departure is especially distressing because the scientific community and his students not only lost a wonderful scientist, colleague or mentor. Many lost a friend. Daniel was an extremely engaging, open and friendly person, which resulted in many of his international colleagues becoming close friends and joining him in different expeditions in Chile and abroad. Besides his research-related travel and expeditions, Daniel was an outdoorsman and a true globetrotter. He visited all continents and was an extremely avid, outstanding mountaineer who ascended some of the tallest peaks on Earth. He was also an active marathon runner, completing numerous races in Chile and abroad, and an experienced wildlife photographer. Daniel was always willing to share his stories with his closest friends. Hundreds of short letters narrating his travels were spread by him during his career (Suppl. 1).

Without any doubt Daniel González-Acuña's outstanding work marked a significant phase in the studies of parasites in Chile and Latin America. We are convinced that his scientific endeavor constitutes a benchmark for both colleagues and emerging young parasitologists. We will always be thankful for all the special moments we shared with him, and his legacy as an exceptional researcher and as a person will live in our minds and hearts forever.

References

González-Acuña D, Saracho-Bottero MN, Ossa G, Guglielmone AA, Nava S. *Ixodes chilensis* Kohls, 1956 (Acari: Ixodida: Ixodidae): re-description of the female, description of the nymph, and phylogenetic position inferred from mitochondrial DNA sequences of the 16S rRNA gene. *Syst Parasitol* 2018; 95(8-9): 959-967. http://dx.doi.org/10.1007/s11230-018-9818-9. PMid:30155597.