Curriculum vitae
Ana M. Chero Osorio
Nationality: Peruvian

EDUCATION

Current **PhD student, Genetics, Molecular and Cellular Biology,** University of Pavia
Scientific supervisor: Prof. Alessandro Achilli

2017 - 2019 **Master program, Biological Sciences**, Bio Bio University, Chile
2019 Thesis: Detection of adaptation patterns to extreme environments in the vicuña genome *(Mark: 6.9 out of 7)*
Master Degree, issued in 2019

2008 - 2013 **Undergraduate program in Veterinary Medicine**, National University of San Marcos, Peru
Bachelor Degree, issued in 2014
2016 Thesis: Molecular identification of *Salmonella* Typhimurium and Enteritidis in guinea pigs at first parturition by multiplex PCR *(Mark: 18 out of 20)*
Professional Degree, issued in 2018

RESEARCH EXPERIENCE

Oct 2018- Jan 2019 ***Intern at the Molecular Ecology Laboratory**, Cardiff University, Wales*
Bioinformatics with genomes, Population Genetics Analysis (Admixture, SNeP, Plink, Vcftools, Selscan).

Mar 2017- Mar 2019 ***Research Assistant in Genomics and Biodiversity Laboratory**, Bio Bio University, Chile*
Bioinformatics (Trimmomatic, BWA, Samtools, GATK, freebayes), PCR, DNA extraction, fieldwork.
Project "Evolution and domestication of South American camelids: genomic adaptations to extreme environments and captive breeding"

May 2014- Feb 2017 ***Research Assistant in Molecular Biology and Genetics Unit**, National University of San Marcos, Peru*
DNA extraction from different type of samples, PCR, electrophoresis, cultivation of bacteria, antibiogram, sampling, fieldwork.
Project "Vaccine Development to control Salmonelosis in Peruvian guinea pig"

Jan 2015- Mar 2015 ***Research Assistant in CONOPA - Research and Development Institute of South American Camelids**, Peru*
DNA extraction of blood samples, DNA quality by electrophoresis.
Project "Cartographic analysis of alpaca genetic diversity in Puno"

TEACHING EXPERIENCE

***National University of San Marcos**, Department of Veterinary Medicine, Peru*
2020 Ecology and Conservation of Ecosystems
2016 Bachelor teaching assistant in Genetics and Animal Genetic Improvement

***Bio Bio University**, Department of Sciences, Chile*
2018 Human Physiology laboratory
Biological Foundation laboratory
2017 Animal Biology laboratory
Introductory Biology laboratory
Environmental Sciences and Ecology laboratory
Human Physiology laboratory

PUBLICATIONS

González, B. Vasquez, J. Gomez-Uchida, D. Cortés, J. Rivera, R. Aravena, N. **Chero, A.** Agapito, A. Varas, V. Wheeler, J. Orozco-terWengel, P. (**2019**). Phylogeography and population genetics of Vicugna vicugna: evolution in the arid Andean high plateau. Frontiers in Genetics. https://doi.org/10.3389/fgene.2019.00445

Marín, JC. Rivera, R. Varas, V. Cortés, J. Agapito, A. **Chero, A.** Chávez, A. Johnson, W. Orozco-terWengel, P. (**2018**) Genetic variation in coat colour genes MC1R and ASIP provides insights into domestication and management of South American camelids. *Frontiers in Genetics.* https://doi.org/10.3389/fgene.2018.00487

Salvatierra, G. Rímac, R. **Chero, A**. Reyna, I. Rosadio, R. Maturrano, L. (**2018**) Antimicrobial resistance and genotyping of *Salmonella* Typhimurium strains isolated from guinea pigs (*Cavia porcellus*) from intensive production farms of the city of Lima, Peru. *Revista de Investigaciones Veterinarias del Perú* (RIVEP) 29:319-327

Maximiliano, J. Maturrano, L. Luna, L. Hurtado, R. **Chero, A**. Rosadio, R. (**2018**) Evaluation of the immunogenicity of a recombinant protein of a *Pasteurella multocida* isolated from alpacas with pneumonia. *Revista de Investigaciones Veterinarias del Perú* (RIVEP) 29:339-348

Chero, A. Rosadio, R. Marcelo, G. Díaz, G. Jiménez, R. Castro, Y. Maturrano, L. (**2017**) Molecular identification of *Salmonella* Typhimurium and Enteritidis in guinea pigs at first parturition by multiplex PCR. *Revista de Investigaciones Veterinarias del Perú* (RIVEP) 28:679-686

Marcelo, G. Rosadio, R. **Chero, A.** Díaz, G. Ciprian, A. Maturrano, L. (**2017**) Identification of *Salmonella* Enteritidis and *Salmonella* Typhimurium in guinea pigs by the multiplex PCR. *Revista de Investigaciones Veterinarias del Perú* (RIVEP) 28:411-427

Díaz, G. Rosadio, R. Marcelo, G. **Chero, A.** Jiménez, R. Reyna, I. Maturrano, L. (**2017**) Evaluation of a multiplex-PCR method for rapid detection of *Salmonella* Typhimurium and Enteritidis in naturally infected guinea pigs (*Cavia porcellus*). *Revista de Investigaciones Veterinarias del Perú* (RIVEP) 28:713-722

POSTER PRESENTATIONS

Chero, A. Agapito, A. González, B. Vásquez, J. Cortés, J. Rivera, R. Aravena, N. Varas, V. Wheeler, Marín, J. (2017) Phylogeography and population genetics of *Vicugna vicugna*: evolution in the arid Andean high plateau. Presented in 50th Annual meeting of the Chilean society of genetics and XI Annual meeting of the Chilean society of evolution, Puerto Varas, Chile.

Chero, A. Marcelo, G. Díaz. G. Rosadio, R. Maturrano, L. (2016) Detection of *Salmonella* spp. in Peruvian guinea pigs at first parturition by multiplex PCR. Presented in "ASM microbe 2016", Boston, MA, USA.

TRAINING AND CERTIFICATION

2019 Workshop: Intensive course of introduction to the language and analytical environment of R, **Bio Bio University, Chile**.

2018 Recent Advances in Conservation Genetics Course ConGen2018, **The American Genetic Association, USA**.
Course-Workshop "Ecophysiology protocols for the study of amphibians and reptiles in the face of global climate change", **Bio Bio University, Chile**.
Course-Workshop "Ecology, Ecophysiology and Genetics of Conservation in a changing world", **Biological Station Senda Darwin, Chile.**

2017 50th Annual meeting of the Chilean society of genetics and XI Annual meeting of the Chilean society of evolution, **Chile**.
Course "Phylogenetic analysis and estimation of divergence times using molecular tools", **Bio Bio University, Chile**.
Symposium "Movement and migration of ungulates in a climate change scenario", **Universidad de Chile.**
Theoretical-practical workshop: "Bioinformatics: massive sequencing and genomics", **Pontificia Universidad Católica de Chile**.

2016 Seminar: Research Workshop - Veterinary Institute of Tropical and Height Research, **Peru**.
Seminar: "Objectives for the conservation of wild South American Camelids in Peru until 2020", **Peru**.

LANGUAGES

Spanish: native speaker English: fluent Italian: basic