

# Francisco Xavier Castellanos Insuasti

I am Master of Science in Biology student at the Ray Lab. My research focuses on the characterization and use of a particular type of Transposable Element to be used in phylogenetic hypotheses across the Chiropteran (bat) clade. I am also fascinated by bat immunity, specifically the innate immune response.

## EDUCATION

- Present  
|  
2021
- **MS Student, Biology**  
Texas Tech University. The Ray Laboratory. 📍 Lubbock, USA
  - **B.S. Genetics**  
Laboratorio de Genética Evolutiva, 📍 Posadas, Argentina  
Universidad Nacional de Misiones
- Thesis: Cytogenetic and molecular studies in some species of the Genus *Myotis* (Chiroptera: Vespertilionidae: Myotinae) in Northern Argentina.

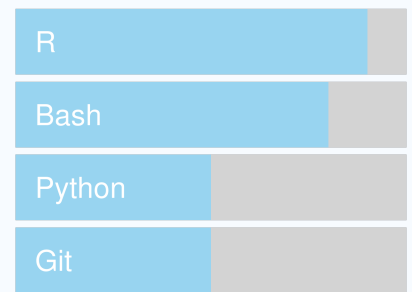
## RESEARCH EXPERIENCE

- Present  
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2021
- **Collaborator**  
The Ray Laboratory, Texas Tech University 📍 Lubbock, USA
- RAPID: Immunological adaptations in bats to moderate the effect of coronavirus infection.
  - RoL: FELS: EAGER: Collaborative Research: Genomics of exceptions to scaling of longevity to body size.
- Present  
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2015
- **Research Assistant**  
Andean Bear Foundation 📍 Quito, Ecuador
- Large Mammals Project in Parque Nacional Cayambe Coca, Zona Alta.
- Present  
|  
2020
- **Associated Researcher**  
[INABIO](#) 📍 Quito, Ecuador
- I lead projects that seek to study the behavior of large mammals by means of analyzing tracking data.
  - I am looking to understand how large mammals make use of their natural habitat and what variables impact on how they move across their home ranges.

## CONTACT

📍 Lubbock, Texas  
📞 (904) 719-2072  
✉ [xacfran@gmail.com](mailto:xacfran@gmail.com)  
🌐 [frcastel.com](http://frcastel.com)  
🐙 [github.com/Xacfran](https://github.com/Xacfran)  
🌐 [linkedin.com/frcastel](https://linkedin.com/frcastel)

## TECH SKILLS



## LANGUAGES



Made in R w/ [pagedown](#).  
Source code: [Github repo](#).  
Last updated on 2022-09-01.



## PROFESSIONAL EXPERIENCE

- 2021 • **Thesis Evaluating Committee**  
Universidad Distrital Francisco José de Caldas 📍 Bogotá, Colombia
- Thesis: "Biological knowledge status of the subfamily Stenodermatinae (Gervais, 1856): a cytogenetic revision within an evolutionary framework"
- 2018  
|  
2015 • **Field Assistant**  
Laboratorio de Genética Evolutiva, Universidad Nacional de Misiones 📍 Posadas, Argentina
- Primarily working with large EHR and Biobank datasets.
  - Developing network-based methods to investigate and visualize clinically relevant patterns in data.



## TEACHING EXPERIENCE

- Present • **Introduction to Telemetry and Ecology of Large Mammals**  
Andean Bear Foundation 📍 Online
- Covered introduction to R language and basic Stats
  - Medium level
- Fall 2021  
& 2022 • **BIOL 1403 (BIOL I)**  
Department of Biological Sciences,  
Texas Tech University 📍 Lubbock, USA
- Laboratory TA
- Spring  
2022 • **BIOL 1403 (BIOL II)**  
Department of Biological Sciences,  
Texas Tech University 📍 Lubbock, USA
- Laboratory TA
  - Graduate level class
- Summer  
2022 • **BIOL 3416 (Genetics)**  
Department of Biological Sciences,  
Texas Tech University 📍 Lubbock, USA
- Laboratory TA
  - Topics covered from Mendelian genetics, Morgan's experiments
  - Highest level course offered in department



## SELECTED PRESS (ABOUT)

2021

- **Estudio reporta patrones de movimiento y estimaciones de rango de hogar del zorro andino**  
[INABIO News](#)



## PUBLICATIONS

2021

- **A pilot study on the home range and movement patterns of the Andean Fox *Lycalopex culpaeus* (Molina, 1782) in Cotopaxi National Park, Ecuador.**

Castellanos, A., **Castellanos, F. X.**, Kays, R. and Brito, J. (2021). *A pilot study* on the home range and movement patterns of the Andean Fox *Lycalopex culpaeus* (Molina, 1782) in Cotopaxi National Park, Ecuador. *Mammalia* 86(1), 22-26. <https://doi.org/10.1515/mammalia-2020-0195>

2020

- ***Tapirus pinchaque* in Western Ecuador**

Castellanos, A., Brito, J. and **Castellanos, F. X.** (2020). *Tapirus pinchaque* in Western Ecuador. *Museum of Zoologic Research IASA, Technical Bulletin, Zoologic Series* 16:1-4.

2019

- ***Glyphonycteris*, O. Thomas, 1896 (Chiroptera: Phyllostomidae: Glyphonycterinae), a new genus of bats for Argentina, with commentary on its karyotype.**

Sánchez, M.S., Labaroni C.A., **Castellanos, F. X.** and Baldo, D.J. *Glyphonycteris*, O. Thomas, 1896 (Chiroptera: Phyllostomidae: Glyphonycterinae), a new genus of bats for Argentina, with commentary on its karyotype. *Mastozoología Neotropical*, 26(2):420-429.  
<https://doi.org/10.31687/saremMN.19.26.2.0.12>

2019

- ***Panthera onca***

Castellanos, A., **Castellanos, F. X.**, and Vallejo, A.F. 2019. *Panthera onca* In: Brito, J., Camacho, M. A., Romero, V. Vallejo, A. F. (eds). *Mamíferos del Ecuador*. Version 2018.0. Zoology Museum, Pontificia Universidad Católica del Ecuador. Online access: <https://bioweb.bio/faunaweb/mammaliaweb/FichaEspecie/Panthera%20onca>



## CONFERENCE PRESENTATIONS

August  
2022

- **deAMplifying the Immune Response: Antimicrobial Peptides Evolution in Chiroptera**

**Castellanos, F. X.**, Moreno-Santillán, D., Corthals, A., Martin, K., Moore, M.S., Lim, M., Lama, T.M., Paulat, N., Sipperly, N., Davalos, L.M., Ray, D.A.  
19<sup>th</sup> IBCR - 50<sup>th</sup> NASBR.

📍 Austin, USA

October  
2018

- **Chromosomal studies in some species of the genus *Myotis* (Chiroptera: Vespertilionidae) from Northern Argentina.**

**Castellanos, F. X.**, Labaroni C.A., Ferro, J.M., Taffarel, A., Baldo, D.J., and Sánchez, M.S. XXXI Argentine Conference of Mastozoology.

📍 La Rioja, Argentina



## AWARDS

2019



### **Science and Technology Scholarship**

Laboratorio de Genética Evolutiva, Universidad Nacional de Misiones

📍 Posadas, Argentina

Fall 2022



### **Study Abroad Competitive Scholarship**

The Ray Laboratory, Texas Tech University

📍 Lubbock, USA

Summer  
2022



### **General Fellowships for New and Continuing Graduate Students**

The Ray Laboratory, Texas Tech University

📍 Lubbock, USA