

CARLOS PUMA



EDUCACIÓN

- 2022 • **Universidad Nacional de San Agustín**
Bachiller en Psicología 📍 Arequipa, Perú
Tesis: Dyadic wavelet and its application in edge detection
- 2014 • **University of Chinese Academy of Sciences**
M.S. in Bioinformatics 📍 Beijing, China
Tesis: A multi-omics study for intra-individual divergence of the distributions between mRNA isoforms in mammals
- 2022 | 2025 • **Universidad Nacional de San Agustín**
Bachiller en Biología 📍 Arequipa, Perú
Tesis: XD



RESEARCH EXPERIENCE

- 2011 | 2014 • **Graduate Research Assistant**
Beijing Institute of Genomics, Chinese Academy of Sciences 📍 Beijing, China
 - Performed computational biology research towards understanding regulation of alternative splicing in human and mouse transcriptome.
 - Found EGFR pathway related mutations, aimed to understand the impacts of cancer mutations on EGFR signaling pathway.
- 2015 | 2016 • **Bioinformatician**
My Health Gene Technology Co., Ltd. 📍 Beijing, China
 - Investigated how cancer cells spread to other parts of the body at the single cell level.
- 2016 | 2018 • **Visiting Scientist**
University of Alabama at Birmingham 📍 AL, USA
 - Investigated the role of mitochondria in development of cancer.
 - Investigated the evolution of genome architecture and its role in important evolutionary events.
 - Detected thrombotic thrombocytopenic purpura related mutations in multiple patients' blood genome.



CONTACTO

- 🐦 [Página Web](#)
🐦 [Carlos_Puma](#)
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🔗 [github/Carlos_Puma](#)

IDIOMAS

Español: Nativo

English: Intermedio



Frances: Intermedio

📄 [Descargar](#)



This resume was made with the
R package [pagedown](#).

Last updated on 2022-01-23.


PROFESSIONAL EXPERIENCE

- 2014 ● **Data Scientist, intern**
SupStat Inc.  Beijing, China
- Taught R language to beginners.
 - Wrote Shiny app demos.
 - Converted statistical tutorials from SPSS to R language.
- 2015 | 2016 ● **Bioinformatician**
My Health Gene Technology Co., Ltd.  Beijing, China
- Analyzed whole-exome sequencing data.
 - Wrote analysis pipelines of ChIP-seq, single cell DNA-seq and single cell RNA-seq.
 - Studied tumor metastasis and wrote research reports.
 - Also did case studies to identify the genetic defect causing rare disease.

TEACHING EXPERIENCE

- 2014 ● **Introduction to R Language for Beginners.**
Instructor of R and Data Mining Training Courses at SupStat Inc.  Beijing, China
- 2016 | 2017 ● **Computational Biology and Bioinformatics.**
Teaching assistant of GBS CB2-201 courses at UAB  AL, USA

SELECTED PUBLICATIONS AND POSTERS

- 2014 ● **Genetic and epigenetic signals are found predictive to the distribution of intra-individual divergence of alternative splicing.**
Poster for 2013 International Conference of Genomics  Qingdao, China
- Yu L, Chen B, Zhang Z.
- 2016 ● **ESCRT-0 complex modulates Rbf mutant cell survival by regulating Rhomboid endosomal trafficking and EGFR signaling.**
J Cell Sci. 2016 May 15;129(10):2075-84.
- Sheng Z, Yu L, Zhang T, Pei X, Li X, Zhang Z and Du W.

I'm an active participant in the local R community: I'm a co-organizer of R-Ladies São Paulo since 2018, and I have taught in several meetups and workshops. All the slides are available here: beatrizmilz.com/talk/

I'm also a co-organizer of [satRday São Paulo](#) and [LatinR](#).

GRANTS

☆ [LatinR 2019](#) - Travel and Conference.

☆ [useR! 2019](#). Diversity Scholarship - Travel and Conference.

SOFTWARE

 [Package {dados}](#) - Co-Author.

 [Package {mananciais}](#) - Author, maintainer.

TEACHING

 [tidyverse](#) certified trainer by RStudio.

 The Carpentries instructor.

PROGRAMMING SKILLS

 R

 tidyverse