

# JAVIER TAMAYO LEIVA

## Currently looking for a data scientist position

I received my PhD in Genetics and Microbiology from the Pontificia Universidad Católica de Chile. Due to my great interest and curiosity for science and big data I did my PhD in Genetics and Microbiology with a focus on visualization, statistical analysis and modeling, to study microbial processes of genetic dispersion in communities. I really like to approach analyses with the goal of creating and sharing knowledge and value from data. Therefore, I am always eager to learn new topics, techniques and ways to expose information through dynamic tools. Thus, throughout my career I have acquired advanced knowledge in R, WebScrapping, data engineering, report generation -R Markdown and Jupyter Notebook- and applications with R Shiny. I also have knowledge in HTML, CSS and HUGO. And I am currently focused on learning more about Python and SQL.

As a biotechnologist, microbial ecologist and computational biologist, I am an expert in handling NGS methodologies and data, and how to apply these resources to solve research questions with a holistic approach. As a researcher, and data scientist, I am focused on helping to improve data-driven intelligence and decision making from data collection and interpretation. As a data scientist I have a special focus on data management - big data sets, - analysis and visualization techniques as a tool to help facilitate information interpretation and decision making.



## EDUCATION

- 2022 ● **Pontificia Universidad Católica de Chile**  
Ph.D. Biological Sciences.  
Molecular Genetics, and Microbiology  Santiago, Chile
- 2017 ● **Pontificia Universidad Católica de Chile**  
MSc. Biological Sciences  Santiago, Chile
- 2016 ● **Universidad Andrés Bello**  
MSc. Biotechnology Engineering  Santiago, Chile
- 2013 ● **Universidad Andrés Bello**  
B.S. Biotechnology Engineering  Santiago, Chile



## RESEARCH EXPERIENCE

- 2022 ● **Laboratory of Microbial Ecology and Extreme Environments, Ph.D. Beatriz Díez**  
Pontificia Universidad Católica de Chile  Santiago, Chile  
• Postdoctoral Researcher.
- 2016 – 2022 ● **Laboratory of Microbial Ecology and Extreme Environments, Ph.D. Beatriz Díez**  
Pontificia Universidad Católica de Chile  Santiago, Chile  
• Research performed on the identification and analysis of the plasmid population of marine microbial communities.

## CONTACT INFO

-  [j.tamayo.leiva@gmail.com](mailto:j.tamayo.leiva@gmail.com)
-  [jatamayo@uc.cl](mailto:jatamayo@uc.cl)
-  [Javier Ignacio Tamayo Leiva](#)
-  [TamayoLeiva\\_J](#)
-  [TamayoLeivaJ](#)
-  <https://tamayoleivaj.com>
-  +(56) 9 684 211 99

For more information, please contact me via email or at my website.

## SKILLS


Experienced in microbiology, biotechnology, molecular biology, computational biology, microbial ecology, next generation sequencing.

Experienced in statistical analysis, data analysis and data visualization.

Highly skilled in R, Bash, tidyverse, ggplot2, RMarkdown

Skilled in Blogdown, Shiny, learnr, HTML, CSS, HUGO,

## LANGUAGE SKILLS

-  Spanish (Native)
-  English (IELTS level B2)

*Last updated on 2022-05-18.*

- 2019 ● **Laboratory of Microbial Process, Ph.D. Kornelia Smalla**  
Julius-Kühn Institut 📍 Braunschweig, Germany  
• Research performed on the identification and analysis of the plasmid population of marine microbial communities.
- 2012 |  
2015 ● **Laboratory of Bioengineering, Ph.D. Thomas Ledger**  
Universidad Adolfo Ibáñez 📍 Santiago, Chile  
• Research conducted on the consequence of inoculating crops with a Plant Growth Promoting Rhizobacteria (PGPR) to face abiotic stress
- 2011 ● **Laboratory of Developmental Biology, Ph.D. Carmen Gloria Feijoo**  
Universidad Andrés Bello 📍 Santiago, Chile  
• Research performed on the analysis of several drug effects on Danio rerio larval development



## TEACHING EXPERIENCE

- 2022 ● **Methodological assistant**  
Methodological assistant for degree projects, school of medical technology at Pontificia Universidad Católica de Valparaíso. 📍 Remote
- 2021 ● **Visualization and analysis in R**  
Teacher of Workshop on visualization and analysis in R, applied to statics Courses at Pontificia Universidad Católica de Valparaíso. 📍 Remote
- 2017 |  
2020 ● **Biology of Microorganisms**  
teacher's assistant courses at Pontificia Universidad Católica 📍 Santiago, Chile
- 2017 |  
2020 ● **Introduction to Biochemistry**  
teacher's assistant courses at Pontificia Universidad Católica 📍 Santiago, Chile
- 2013 |  
2015 ● **Chemical and biology**  
teacher's assistant courses at Universidad Adolfo Ibáñez 📍 Santiago, Chile
- 2013 |  
2015 ● **Bioengineering workshop**  
teacher's assistant courses at Universidad Adolfo Ibáñez 📍 Santiago, Chile
- 2013 |  
2015 ● **Applied microbiology**  
teacher's assistant courses at Universidad Adolfo Ibáñez 📍 Santiago, Chile
- 2013 |  
2014 ● **Pioneer's workshop**  
Teacher of microbiology workshop for school students courses at Universidad Adolfo Ibáñez 📍 Viña del Mar, Chile



## PUBLICATIONS

- 2021 ● **Proteorhodopsin Phototrophy in Antarctic Coastal Waters**  
 MSphere. <https://doi.org/10.1128/mSphere.00525.21>  
 Cifuentes-Anticevic, J., Alcamán-Arias, M. E., Alarcón-Schumacher, T.,  
**Tamayo-Leiva, J.**, Pedrós-Alió, C., Farías, L., & Díez, B.
  
- 2021 ● **Influence of Estuarine Water on the Microbial Community Structure of Patagonian Fjords**  
 Frontiers in Marine Science. <https://doi.org/10.3389/fmars.2021.611981>  
**Tamayo-Leiva, J.**, Cifuentes-Anticevic, J., Aparicio-Rizzo, P., Arroyo, J. I.,  
 Masotti, I., & Díez, B.
  
- 2016 ● **Volatile-Mediated Effects Predominate in Paraburkholderia phytofirmans Growth Promotion and Salt Stress Tolerance of Arabidopsis thaliana**  
 Frontiers in Microbiology. <https://doi.org/10.3389/fmicb.2016.01838>  
 Ledger, T., Rojas, S., Timmermann, T., Pinedo, I., Poupin, M. J., Garrido,  
 T., Richter, P., **Tamayo, J.**, & Donoso, R.



## CONGRESS

- 2021 ● **Novedad filogenómica de Cas1 de ambientes termales**  
 Poster for ISME LA 📍 Valparaíso, Chile  
 Salgado O., Guajardo-Leiva S., Moya-Beltrán A., Quatrini R., Barbosa C.,  
 Ridley C., **Tamayo-Leiva J.**, Díez B.
  
- 2019 ● **Identification and classification of mobile genetic elements in marine microbial communities**  
 Poster for ISME LA 📍 Valparaíso, Chile  
**Tamayo-Leiva J.**, Guajardo-Leiva S., Díez B.
  
- 2018 ● **Identification and classification of mobile genetic elements in marine microbial communities from worldwide metagenomics data**  
 Poster for ISME17 📍 Leipzig, Germany  
**Tamayo-Leiva J.**, Díez B.
  
- 2013 ● **Burkholderia phytofirmans PsJN improves growth of Arabidopsis thaliana under drought stress conditions**  
 Poster for XXXVI anual meeting Sociedad de Bioquímica y Biología Molecular de Chile 📍 Puerto Varas, Chile  
**Tamayo-Leiva J.**, Rojas, S., Ledger, T.



## AWARDS

2019



**European Molecular Biology Organization (EMBO)**

Travel Grant: Funding for conferences and training

📍 Heidelberg, Germany

2018



**National Agency for Research and Development (ANID)**

Scholarship to attend a congress abroad

📍 Santiago, Chile

2017



**National Agency for Research and Development (ANID)**

National Doctoral Scholarship no. 21171048

📍 Santiago, Chile