





# Marta Bica

I'm a computational biologist with a passion for data analysis and visualization. I have advanced expertise in R programming and single-cell RNA sequencing data analysis. I excel at transforming complex datasets into clear insights through interactive applications. I enjoy tackling both collaborative and independent projects.

## Education

 Lisbon, Portugal

 Mbica.compbio@gmail.com

 [LinkedIn](#)

 [Scientific curriculum](#)

## Skills

### Programming & Software Development:

R/R Shiny  
Docker Containerization  
GitHub for Version Control

### Data Analysis & Bioinformatics:

Single-cell Transcriptomics  
Machine Learning  
Data Visualization

### Research & Scientific Expertise:

Oncology & Immunology  
Grant Writing  
Communication & Collaboration

## Languages

English Proficient (C2)



Portuguese Native



### Doctor of Philosophy in Computational Biology – Expected 2025

Doctoral Programme of the Lisbon Academic Medical Centre  
Faculty of Medicine of the University of Lisbon

- **Dissertation:** *Single-cell transcriptomics in unravelling the complexity of the breast tumour microenvironment*
- **Academic Achievement Award:** Best Poster XVI CAML PhD Students Meeting at the Faculty of Medicine, University of Lisbon, Portugal, May 2023
- **Key Achievement:** developed scStudio, a web-based tool for scRNA-seq data analysis, improving accessibility for non-computational researchers.  
<https://compbio.imm.medicina.ulisboa.pt/app/scStudio>
- **Publications:**

Sousa, Neuza S.; **Bica, Marta**; et al. “The immune landscape of murine skeletal muscle regeneration and aging”, Cell Reports 2024, 43(11), p.114975 <https://doi.org/10.1016/j.celrep.2024.114975>.

Jardim, Carolina#; **Bica, Marta**#; et al. “Sustained macrophage reprogramming is required for CD8 T cell-dependent long-term tumor eradication”. Manuscript under Review. #These authors contributed equally.

### Master of Science in Bioinformatics and Computational Biology - 2019

Faculty of Sciences of the University of Lisbon

**Dissertation:** *Single-cell transcriptomics in unravelling the molecular complexity of immunity in human disease (20/20)*

**Academic Achievement Award:** Accenture Award - best candidate for the Master's degree in Bioinformatics and Computational Biology in 2017/2018

### Bachelor of Science in Health Sciences - 2017

University of Lisbon

Completed coursework in a Minor in Informatics, including Python programming and web application development using HTML, CSS, and JavaScript.

## Experience

### Researcher, Mye-InfoBank Project – 09/2022 – 09/2023

[COST Action CA20117: Converting Molecular Profiles of Myeloid Cells into Biomarkers for Inflammation and Cancer](#)

Collected and curated metadata for the Breast Cancer Myeloid Cell Atlas. Conducted a short-term scientific mission to advance in silico myeloid cell deconvolution from bulk transcriptomics.

### Instructor, Computational Biology in Cancer - 09/11/2023

Champalimaud Foundation - Lisbon, Portugal

Delivered a short course on computational biology in cancer, focusing on single-cell RNA sequencing data analysis, to Ph.D students as part of the INCDP2022 program.

### Researcher 09/2019 - 05/2020

GenomePT - Lisbon, Portugal

Developed pipelines for bioinformatics analysis of genomic data from microarray and next-generation sequencing platforms, including Docker containerization. Created a best-practice handbook for developing and sharing Docker images for genomics data analysis software.