**Juliana Batista, MsC, PhD**

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**SUMMARY**

PhD level scientist seeking transition from academic research into a career in a biotechnology company. I have over nine years of experience working in teams and international collaborations in academic research, employing a wide range of techniques in fields including cellular and molecular biology, microbiology, genetics, biochemistry, and host-microbe interactions.

* Experienced in assay design and development, confocal microscopy, organoid culture, cell culture, RT-PCR and RNAseq.
* Authored original scientific publications in peer reviewed journals. Presented work at international conferences: oral and interpersonal communications.
* Demonstrated autonomy from graduate student to postdoctoral scholar.
* Demonstrated ability to set goals, project management and meet deadlines.

**EDUCATION**

**Ph.D., Cellular and Molecular Biology**, University of Sao Paulo, Brazil, 2021. Thesis: Functional characterization of outer membrane vesicles from the opportunistic pathogen *Chromobacterium violaceum.*

**M.Sc., Cellular and Molecular Biology**, University of Sao Paulo, Brazil, 2017. Dissertation: Characterization of eukaryotic-like serine/threonine kinases of *Chromobacterium violaceum*.

**B.Sc., Biological Sciences**, Federal University of Sao Carlos, Brazil, 2015.

**RESEARCH EXPERIENCE**

Department of Infectious Diseases, Boston Children’s Hospital | Harvard Medical School 2022-present

**Postdoctoral Research Fellow** - *Focused on understanding the molecular mechanism of the interactions between the microbiota and intestinal homeostasis.*

* Discovered a new pathway that regulates cell differentiation and homeostasis in the gut.
* Collaborated with a project that described the mechanism in which a bacterial pathogen evades the intestinal innate immunity.

Department of Cellular and Molecular Biology, University of Sao Paulo 2017-2021

**Doctoral researcher** – *Focused on bacterial interspecies interactions and pathogenesis.*

* Discovered a mechanism by which bacteria delivers antibiotics during competition against other species.
* Described a new mechanism that bacterial pathogens use to secrete membrane vesicles during infection to promote adaptation and pathogenesis.

Department of Microbiology, University of North Carolina at Chapel Hill 2019-2020

**Visiting researcher award** – *Focused on innate immunity response against bacterial pathogens.*

* Discovered novel regulation of inflammasome activation in macrophages by membrane vesicles.

Department of Cellular and Molecular Biology, University of Sao Paulo 2015-2017

**Master researcher** – *Focused on the characterization of virulence factors from an opportunistic pathogen.*

* Identified and characterized proteins important during pathogenesis.
* Mentored undergraduate students in the disciplines of cellular and molecular biology.

**TECHNICAL EXPERTISE**

**Molecular biology:** DNA/RNA isolation and quantification from bacteria, mouse and human cells/tissues, cloning, PCR, qPCR, RT-PCR, gene expression analysis by RNA-seq.

**Microbiology and genetics:** vector construction, strain generation, gene deletions and insertions, optimization of microbial growth, antibiotic resistance screening assays.

**Cell biology:** primary and immortalized cell culture, organoids, confocal microscopy imaging and analysis, transmission and scanning electron microscopy imaging.

**Protein biochemistry and characterization:** polypeptide synthesis using *E. coli* system, polypeptide isolation and characterization, polypeptide overexpression, purification, and quantification, proteomic analysis, affinity chromatography, SDS PAGE, Western blotting, preparative HPLC, protein-protein interaction assay.

**Biochemical and immunology assays:** β-galactosidase assays using 96-well plate reader, polyclonal antibody production, ELISA, cytotoxicity assays.

***In vivo* procedures:** mice husbandry, infection, organ removal and processing.

**VOLUNTEER EXPERIENCE**

**Ad hoc reviewer**

* Journal of Applied Microbiology 2022-present

**Conference organization**

* Symposium on Bacterial Pathogenesis and Host Response, Sao Paulo, Brazil, 2019.
* Symposium in Cell and Molecular Biology, Sao Paulo, Brazil, 2018.
* XV Summer Course in Cellular and Molecular Biology, Sao Paulo, Brazil, 2018.
* XIII Summer Course in Cellular and Molecular Biology, Sao Paulo, Brazil, 2016.

**TEACHING/MENTORING EXPERIENCE**

**Tutor and Lab supervisor at University of Sao Paulo, Brazil** 2018-2020

* Conduced and supervised laboratory sessions for medical undergraduate courses of Cellular and Molecular Biology, and Practice in Parasitology.
* Instructed students during lab sessions, weekly discussions, and exam review sessions.
* Trained, supervised, and managed summer interns as a graduate researcher.

**Established protocols, techniques and helped set up the laboratory as a graduate researcher and postdoctoral research fellow.**

**PUBLICATIONS**

B. E. Jugder, **J. H. Batista**, J. A. Gibson, P. M. Cunningham, J. M. Asara, P.I. Watnick. *Vibrio cholerae* high cell density quorum sensing activates de host intestinal innate immune response. 2022. *Cell Reports.* doi: 10.1016/j.celrep.2022.111368.

**Batista, J. H.**, Leal, F. C., Fukuda, T. T. H., Diniz, J. A., Almeida, F. B. R., Pupo, M. T. and da Silva Neto, J. F. Interplay between two quorum sensing-regulated pathways, violacein biosynthesis and VacJ/Yrb, dictates outer membrane vesicle biogenesis in *Chromobacterium violaceum*. 2020. *Environmental Microbiology*. doi: 10.1111/1462- 2920.15033

Barroso, K. C. M., Previato-Mello, M., Batista, B. B., **Batista, J. H.** and da Silva Neto, J. F. EmrR-Dependent Upregulation of the Efflux Pump EmrCAB Contributes to Antibiotic Resistance in *Chromobacterium violaceum*. 2018. *Frontiers in Microbiology.* doi: 10.3389/fmicb.2018.02756.

**Batista, J. H.** and da Silva Neto, J. F. Chromobacterium violaceum Pathogenicity: Updates and Insights from Genome Sequencing of Novel *Chromobacterium* Species. 2017. *Frontiers in Microbiology*. doi: 10.3389/fmicb.2017.02213.

Google Scholar: <https://scholar.google.com.br/citations?user=FNvXnuUAAAAJ&hl=pt-BR&oi=ao>

**ORAL PRESENTATIONS**

64th Annual Drosophila Research Conference, workshop in Immunemetabolism. The *Vibrio cholerae* quorum sesing regulator, HapR, promotes *Drosophila* survival by preventing intestinal serotonin depletion. Chicago, 2023.

XI Symposium in Cell and Molecular Biology. Functional characterization of outer membrane vesicles from the opportunistic pathogen *Chromobacterium violaceum.* Sao Paulo, Brazil, 2019.

VIII Symposium in Cell and Molecular Biology. Characterization of eukaryotic-like serine/threonine kinases of *Chromobacterium violaceum*. Sao Paulo, Brazil, 2016.