

Raíssa Medina Santos

CURRICULUM VITAE



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- Conservatoire National des Arts et Métiers – 2 rue Conté, Paris - France
- Born on February, 8th 1995, in Belo Horizonte, Brazil
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CURRENT POSITION

12/2021 – Now

Conservatoire National des Arts et Métiers | Paris, France | CDD
Post-doctoral researcher (ingénieure de recherche)

- Genomic and transcriptomic research on Chikungunya virus infection

EDUCATION

08/2018 – 11/2021

Universidade Federal de Minas Gerais | Belo Horizonte, Brazil
Ph.D in Genetics applied to Bioinformatic

One-year alternating at Sys2Diag - Montpellier, France

Title: Composition of Peruvian *Loxosceles laeta* venom revealed through NGS transcriptomic analysis and the development of the computational tool PepLess.
Advisors: Carlos Chavez Olortegui, Franck Molina

07/2017 – 07/2018

Universidade Federal de Minas Gerais | Belo Horizonte, Brazil
Master in Bioinformatic

Title: Metalloproteinases diversity in the venom gland of Peruvian spider *Loxosceles laeta* revealed by transcriptome analysis.
Advisors: Carlos Chavez Olortegui, Clara Guerra

01/2013 – 12/2016

Universidade Fumec | Belo Horizonte, Brazil
Bachelor of Science in Biomedical Sciences

Specialization in clinical analysis and molecular biology and development of bioinformatics database for laboratory management.

TEACHING ACTIVITY

2023 - 2025

Conservatoire National des Arts et Métiers | Paris, France
Temporary professor

- Responsible for certain courses in "Utilization et applications de la bio-informatique", "Bio-informatique structurale, drug design" and "Outils mathématiques et informatiques pour la génomique" from the chair professor.

01/2019 - 12/2019

Universidade Federal de Minas Gerais | Belo Horizonte, Brazil
Monitoring in biochemistry and genetics courses

- Responsible for certain courses in biochemistry and genetics (as a doctoral assistant) from the chair professor.

08/2018 - 12/2018

Centro Universitário Metodista Izabela Hendrix | Belo Horizonte, Brazil | CDD
Professor of Oncotic Cytology

- Teaching Oncotic Cytology courses at the BSc in Biomedical Sciences.
- Assessing students' activities and performance to record their academic progress.

01/2017 - 12/2017

Universidade Federal de Minas Gerais | Belo Horizonte, Brazil | CDD
Higher Education Support Technician

- Provide technical support and assistance to faculty and students in laboratory experiments and research projects.

01/2016 - 12/2016

Universidade Fumec | Belo Horizonte, Brazil | CDD
Monitoring in Cytology/General Histology and Special Histology courses

- Assisting and conducting laboratory sessions and guiding students during practical exercises.

AWARDS

2023

Best presentation prize

7th Brazilian Student Council Symposium: Neglected Diseases | Virtual event

2016

Academic merit for outstanding performance in the National Student Performance Examination

Universidade Fumec | Belo Horizonte, Brazil

2014

Honorable Mention for the work 'Implementation of bioinformatics databases for scientific data mining and digital resources for laboratory management'

VIII Scientific Initiation Seminar and Carlos Ribeiro Diniz Award at Fundação Ezequiel Dias | Belo Horizonte, Brazil

LANGUAGES

Portuguese :

Mother tongue

French :

Advanced (C1)

English :

Advanced (C1)

Spanish :

Basic (A2)

OTHERS ACTIVITIES

2019

Writing of a book section at "Biomedicina: 15 anos"

"Uma nova área - Bioinformática: quem é o bioinformata?" - EN: "A new area - Bioinformatics: who is the bioinformatician ?"

2018

Participation as a judging committee member for Integrated Activity - Business Plan

Member of the jury at Centro Universitário Metodista Izabela Hendrix | Belo Horizonte, Brazil

2015

Organisation of the I Workshop on Introduction to Computational Biology by LBTN/FUNED and DECON/CEFET-MG

Member of the organizing committee | Belo Horizonte, Brazil

CONFERENCES

2024 **Latin American Student Council Symposium 2024** | Virtual event | Talk

2024 **ISCB-Latin America SolBio CCBCOL International Conference on Bioinformatics 2024** | Virtual event | Talk

2024 **Atelier Inserm n° 281: Données génomiques massives : avancées statistiques et bioinformatiques** | Bordeaux, France | Poster presentation

2023 **7th Brazilian Student Council Symposium** | Virtual event | Talk

2019 **The 1st Biomedicine Symposium at Fumec** | Belo Horizonte, Brazil | Talk

2018 **Izabela Hendrix Biomedical Week** | Belo Horizonte, Brazil | Talk

2018 **UFMG Bioinformatics Seminar** | Belo Horizonte, Brazil | Talk

2017 **XIV Congress of the Brazilian Society of Toxinology** | Florianópolis, Brazil | Poster presentation

2017 **X-meeting** | Campinas, Brazil | Poster presentation

2016 **III UFMG Microbiology Symposium** | Belo Horizonte, Brazil | Poster presentation

2015 **"Wednesday at Eleven" at Fundação Ezequiel Dias** | Belo Horizonte, Brazil | Talk

2015 **"Wednesday at Eleven" at Fundação Ezequiel Dias** | Belo Horizonte, Brazil | Talk

2014 **VIII Scientific Initiation Seminar and Carlos Ribeiro Diniz Award at Fundação Ezequiel Dias** | Belo Horizonte, Brazil | Poster presentation and Talk

PUBLICATIONS

[1] Rafaela Silva-Magalhães, Ana Luiza Silva-Araújo, Pamella Peres-Damásio, Elaine Henriques Teixeira Pereira, Ramon de Oliveira Souza, Luana Silveira da Rocha Nowicki Varela, Luiz Marcelo Ribeiro Tomé, Felipe Campos de Melo Iani, Adriano Lima Silveira, Márcia Helena Borges, **Raissa Medina-Santos**, Carlos Chavez-Olórtegui, Marcelo Ribeiro Vasconcelos Diniz, Ana Luiza Bittencourt Paiva, and Clara Guerra-Duarte. Loxosceles amazonica Brown Spider venom: Insights into enzymatic activities, immunorecognition, and novel phospholipase D isoforms. Biochimie, S0300-9084(24)00156-1 (2024). Advance online publication. <https://doi.org/10.1016/j.biochi.2024.06.012>

[2] Myriam RAHMOUNI, Lorenzo De Marco, Jean-Louis Spadoni, Maxime Tison, **Raissa Medina-Santos**, Taoufik Labib, Josselin Noirel, Ryad Tamouza, Sophie Limou, Olivier Delaneau, Jacques Fellay, Armand Bensussan, Sigrid Le Clerc, Paul J McLaren and Jean-François Zagury. The identification of a large haploblock associated with the HLA-B*57 allele may explain its massive effect for HIV-1 control. Frontiers in Immunology Sec. Molecular Innate Immunity. Volume 14 - 2023. doi: 10.3389/fimmu.2023.1305856

- [3] Moussa Ndiaye, Gora Diop, Celine Derbois, Jean-Louis Spadoni, Josselin Noirel, **Raissa Medina-Santos**, Cedric Coulonges, Magali Torres, Alioune Dieye, Mbacke Sembene, Jean-François Deleuze, Alain Toledano, Ahmadou Dem, Jean-François Zagury, Sigrid Le Clerc. Gene expression profiling of peripheral blood mononuclear cells from women with cervical lesions reveals new markers of cancer". *Oncology Reports* 49.6 (2023): 118. <https://doi.org/10.3892/or.2023.8555>
- [4] **Raissa Medina Santos**, Tamara G. Fernandes Costa, Thamyres C. Silva de Assis, Yan Kalapothakis, Sabrina de Almeida Lima, Anderson Oliveira do Carmo, Edgar E. Gonzalez-Kozlova, Evanguedes Kalapothakis, Carlos Chávez-Olórtegui, Clara Guerra-Duarte. Analysis of NGS data from Peruvian *Loxosceles laeta* spider venom gland reveals toxin diversity. *COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY PART D: GENOMICS AND PROTEOMICS*, Volume 43, 101017, ISSN 1744-117X, 2022. <https://doi.org/10.1016/j.cbd.2022.101017>.
- [5] Francisco Santos Schneider, Laurence Molina, Marie-Christine Picot, Nicolas L'Helgoualch, Julien Espeut, Pierre Champigneux, Mellis Alali, Julie Baptiste, Lise Cardeur, Christophe Carniel, Martin Davy, Daniel Dedisse, Benjamin Dubuc, Hugo Fenech, Vincent Foulongne, Carole Fruchart Gaillard, Florence Galtier, Alain Makinson, Grégory Marin, **Raissa Medina Santos**, David Morquin, Alimata Ouedraogo, Alexandra Prieux Lejeune, Marine Quenot, Pierre Keiflin, Francisco Checa Robles, Carolina Rodrigues Rego, Nicolas Salvétat, Charline Trento, Diana Vetter, Franck Molina & Jacques Reynes. Performances of rapid and connected salivary RT-LAMP diagnostic test for SARS-CoV-2 infection in ambulatory screening. *Sci Rep* **12**, 2843 (2022). <https://doi.org/10.1038/s41598-022-04826-7>.
- [6] Francisco Santos Schneider, Laurence Molina, Marie Christine Picot, Nicolas L'Helgoualch, Julien Espeut, Pierre Champigneux, Mellis Alali, Julie Baptiste, Lise Cardeur, Christophe Carniel, Daniel Dedisse, Benjamin Dubuc, Hugo Fenech, Vincent Foulongne, Carole Gaillard, Florence Galtier, Alain Makinson, Gregory Marin, **Raissa Medina Santos**, David Morquin, Alimata Ouedraogo, Alexandra Prieux Lejeune, Marine Quenot, Pierre Keiflin, Francisco Chega Robles, Caroline Rodrigues Rego, Nicolas Salvétat, Charline Trento, Diana Vetter, Franck Molina, Jacques Reynes. Comparative Evaluation of Rapid Salivary RT-LAMP Assay for Screening of SARS-CoV-2 Infection. Preprint with The Lancet (2021). <http://dx.doi.org/10.2139/ssrn.3774184>
- [7] Patrícia D. Vaz de Melo, Sabrina de Almeida Lima, Priscila Araújo, **Raissa Medina Santos**, Edgar Gonzalez, Andreza Alves Belo, Ricardo A. Machado-de-Ávila, Fernanda Costal-Oliveira, Vanete T. Soccol, Clara Guerra-Duarte, Leonides Rezende, Carlos Chavez-Olortegui. Immunoprotection against lethal effects of *Crotalus durissus* snake venom elicited by synthetic epitopes trapped in liposomes. *INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES*, v. 161, p. 299-307 (2020). <https://doi.org/10.1016/j.ijbiomac.2020.05.171>
- [8] **Raissa Medina Santos**, Clara Guerra-Duarte, Sabrina de Almeida Lima, Fernanda Costal-Oliveira, Priscilla Alves de Aquino, Anderson Oliveira do Carmo, César Bonilla Ferreyra, Edgar E. Gonzalez-Kozlova, Evanguedes Kalapothakis, Carlos Chávez-Olórtegui. Diversity of astacin-like metalloproteases identified by transcriptomic analysis in Peruvian *Loxosceles laeta* spider venom and in vitro activity characterization. *BIOCHIMIE*, v. 167, p. 81-92 (2019). <https://doi.org/10.1016/j.biochi.2019.08.017>.