Joana Paula S. Oliveira

Biologist and Data Scientist

Personal info

Address
Rio de Janeiro/RJ, Brazil

Phone
+55 21 996-339-390

Email
joanapaulasoliveira@gmail.com

Skills

Bioinformatics

Computer Science

Plant tissue culture

Species Distribution Modelling

Languages

Portuguese (native)

English

Spanish

Social profiles

orcid.org/0000-0002-4111-8019

lattes.cnpq.br/8419084918228381

twitter.com/JoanaPSOliveira

Master's student in the Graduate Program in Neotropical Biodiversity at the Federal University of the Rio de Janeiro State (UNIRIO). Bachelor of Biological Sciences at UNIRIO. Works in the research field of botany, with focus on data and computer science and biotechnology, including tissue culture, metabolomics, ecological modelling and bioinformatics.

EXPERIENCE

2017 — **Assistant/trainee (volunteer), 20h**
68th National Congress of Botany, Brazil.
Acting as helper of the event organizers, assisting speakers and participants.

2017 – 2018 — **Teacher Assistant (volunteer)**
Discipline: Plant Physiology. **Professor:** Dr. Andrea F. Macedo, Botany Department, UNIRIO.
Assisting students with practical classes of in vitro plant tissue cultures under different cultivation treatments, and with the writing of scientific reports.

2015 – 2019 — **Research project participant**
Project: Studies on domestication, cultivation and or cloning of plants that produce metabolites of economic interest – new biotechnological perspectives for quality control of plant raw material. **Advisor/Coordinator:** Dr. Andrea F. Macedo, Botany Department, UNIRIO. **Grantee of:** (2015-2019) Scientific Initiation Program (UNIRIO).
Field activities (collection of biological material), in vitro plant tissue culture assays, implementation of controled phytohomones and light quality treatments, chemical extraction of biological material, metabolomics data acquired through liquid chromatography coupled with mass spectrometry (LC-MS/MS) processing and analyses, chemometrics and writing of scientific research papers and reports.

2019 – 2020 — **Research project participant**
Project: Extraction of bioactive sunflower bran by deep natural eutectic solvents and their analysis by high resolution mass spectrometry. **Advisor/Coordinator:** Dr. Gabriela Koblitz, Nutrition Department, UNIRIO. **Grantee of:** Technical Training and Capacity Building Program (TCT – FAPERJ).
In silico digestion of peptides and in silico assessment on their bioactivities. Brief training on proteomic data analysis.

2020-Present — **Research project participant**
Master's project: Integrative approach to metabolomic and biogeographic analyzes to support bioprospecting and the sustainable use of biodiversity: orchids of economic interest in the Atlantic Forest as models. **Advisor:** Dr. Andrea F. Macedo, Botany Department, and **Co-advisor:** Dr. Maria Lucia Lorini, Biogeography and Ecology Department (both UNIRIO). **Grantee of:** Biology Master's UNIRIO Graduation Program on Neotropical Biodiversity (CAPES).
Field work, LC-MS/MS plants metabolomics data processing and analysis, ecological modelling, full stack web platform development, and writing of scientific research papers and reports.

Joana Paula S. Oliveira

Biologist and Data Scientist

AWARDS AND TITLES

2018 — Best Research Work Award from the 17th Scientific Initiation Journey (2018) – poster modality – Area: Biodiversity, Federal University of the Rio de Janeiro State (UNIRIO).

2018 — Honorable Mention Award on the 7th BrMASS Conference on Mass Spectrometry (2018), Brazilian Mass Spectrometry Society.

EDUCATION

2015 – 2019 — Bachelor in Biological Sciences degree at the Federal University of the Rio de Janeiro State (UNIRIO).

2020 – Present — Master's degree in Biological Sciences on the Neotropical Biodiversity Gaduation Program at UNIRIO.

ARTICLES IN SCIENTIFIC JOURNALS

Oliveira, J. P. S., Koblitz, M. G. B., Ferreira, M. S., Cameron, L. C., & Macedo, A. F. (**2018**). Comparative metabolomic responses to gibberellic acid and 6-benzylaminopurine in Cunila menthoides Benth.(Lamiaceae): a contribution to understand the metabolic pathways. Plant cell reports, 37(8), 1173-1185.

Oliveira, J. P. S., Hakimi, O., Murgu, M., Koblitz, M. G. B., Ferreira, M. S. L., Cameron, L. C., & Macedo, A. F. (**2018**). Tissue culture and metabolome investigation of a wild endangered medicinal plant using high definition mass spectrometry. Plant Cell, Tissue and Organ Culture (PCTOC), 134(1), 153-162.

de Souza, T. S., Dias, F. F., **Oliveira, J. P. S.**, de Moura Bell, J. M., & Koblitz, M. G. B. (**2020**). Biological properties of almond proteins produced by aqueous and enzyme-assisted aqueous extraction processes from almond cake. Scientific reports, 10(1), 1-12.

Araújo-Lima, C. F., **da Silva Oliveira, J. P.**, Coscarella, I. L., Aiub, C. A. F., Felzenszwalb, I., Evaristo, G. P. C., & Macedo, A. F. (**2020**). Metabolomic analysis of Cyrtopodium glutiniferum extract by UHPLC-MS/MS and in vitro antiproliferative and genotoxicity assessment. Journal of ethnopharmacology, 253, 112607.

COMPLEMENTARY EDUCATION

2016 — Mass Spectrometry for Natural Products Analysis. Credit Hours: 6h. Waters Corporation, Brazilian Mass Spectrometry Conference.

2017 — Botany applied to research, development and innovation (RD&I) in phytomedications. Credit Hours: 7h. 68th National Congress of Botany, Brazil.

2018 — Metabolomics: Understanding Metabolism in the 21st Century. Credit Hours: 12h. Future Learn, online – University of Birmingham, England.

2019 — Introduction to Chemistry: Structures and Solutions. Credit Hours: 26h. Coursera, online – Duke University, United States.

2020 — Species Distribution Models with GIS & Machine Learning in R. Credit Hours: 1h. Udemy, online.