



Marco Antonio Campanário Sampaio

Date of birth: 08/01/2001 | **Nationality:** Brazilian, French | **Gender:** Male |

(+55) 24998153341 | marcocampanario@ufpr.br |

<http://lattes.cnpq.br/3151326822304466> | www.linkedin.com/in/marcocampanario |

Whatsapp Messenger: +55 24998153341 |

100 Coronel Francisco Heráclito dos Santos Avenue, Department of Genetics,
81530-000, Curitiba, Brazil

About me: Passionate Biological Sciences undergraduate student interested in Genetics, Evolution and every kind of computer software capable of analyzing biological data. Also a firm believer in education and its power to change lives.

● WORK EXPERIENCE

26/04/2018 – 01/08/2018 – Curitiba, Brazil

VOLUNTARY RESEARCHER – LABORATORY OF MICROBIAL GENETICS (LABGEM-UFPR)

- **Phycological strain collection maintenance:**
 - *In vitro* cultivation of green microalgae and diatoms;
 - Culture media preparation.
- **Laboratory organization:**
 - Microbiological waste sterilization and disposal;
 - Inventory control (instruments and consumables).
- **Bibliographic review** on themes:
 - Green microalgae (Chlorophyceae);
 - Algae biotechnology.

01/08/2018 – 25/02/2020 – Curitiba, Brazil

SCIENTIFIC INITIATION FELLOW – BRAZILIAN NATIONAL COUNCIL FOR SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT (CNPQ)

- **Writing and development of projects** at the Laboratory of Microbial Genetics (LabGeM), under the supervision of Dr. Vanessa Merlo Kava:
 - Subproject "Genetic characterization of biotechnologically relevant microalgae" as part of the project "Biotechnologically relevant microalgae: taxonomy and genetic enhancement"
- **Molecular biology techniques:**
 - Molecular cloning;
 - Exponential decay wave and time constant electroporation;
 - Extraction and purification of microalgal nuclear DNA, plasmid DNA and RNA;
 - Large-scale cultivation of green microalgae (*Tetradismus obliquus*);
 - Spectrophotometric microalgal biomass measurement.
- **Phycological strain collection maintenance:**
 - *In vitro* cultivation of green microalgae;
 - Culture media preparation.
- **Laboratory organization:**
 - Microbiological waste sterilization and disposal;
 - Inventory control (instruments, consumables and molecular biology reagents).
- **Bibliographic review** on themes:
 - Genetic transformation methods;
 - Chlorophyceae, Scenedesmaceae and *Tetradismus* genus;
 - Algae biotechnology.

14/10/2020 – CURRENT – Curitiba, Brazil

TEACHING INITIATION FELLOW – BRAZILIAN COORDINATION FOR THE IMPROVEMENT OF HIGHER EDUCATION PERSONNEL (CAPES)

- **Educational meetings** conducted by Dr. Yanina Sammarco:
 - Educational dialogue circles and book analysis under the theme "Complexity", "Epistemology of Science" and "Socio-environmental education";
 - "A Discourse on the Sciences" - Boaventura de Sousa Santos
 - "The Tree of Knowledge" - Humberto Maturana and Francisco Varela
 - "The Web of Life" - Fritjof Capra
 - "Educar en la Era Planetária" - Edgar Morin
- **Classroom observations** conducted by Professor Wanda Husak at the Paraná State College (CEP-PR):
 - Teaching;

- Writing of classroom observation reports;
- Analysis of the Political-Pedagogical Project;
- Elaboration of theoretical and practical tests and activities;

20/05/2021 – CURRENT – Curitiba, Brazil

VOLUNTARY RESEARCHER – LABORATORY OF HUMAN CYTOGENETICS AND ONCOGENETICS (LABCHO-UFPR)

- *In silico* analysis of long non-coding RNAs in breast cancers, acute lymphoid leukemia and chronic myeloid leukemia, under the supervision of Dr. Jaqueline Carvalho de Oliveira.

● EDUCATION AND TRAINING

19/03/2017 – 19/03/2017 – The Triangle Building, Shaftesbury Road, Cambridge, United Kingdom

FIRST CERTIFICATE IN ENGLISH (FCE) CEFR LEVEL B2 – Cambridge Assessment English

<https://www.cambridgeassessment.org.uk/>

16/02/2018 – CURRENT – 100 Coronel Francisco Heráclito dos Santos Avenue, Curitiba, Brazil

BACHELOR'S DEGREE IN BIOLOGICAL SCIENCES – Federal University of Paraná

<http://www.bio.ufpr.br/portal/>

16/02/2018 – CURRENT – 100 Coronel Francisco Heráclito dos Santos Avenue, Curitiba, Brazil

LICENCIATE DEGREE IN BIOLOGICAL SCIENCES – Federal University of Paraná

<http://www.bio.ufpr.br/portal/>

● LANGUAGE SKILLS

Mother tongue(s): PORTUGUESE

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	B2	B2	B2	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● DIGITAL SKILLS

Bioinformatics

SnapGene Software | R Studio | PyMOL + Molecular Visualization Program | Bash scripting | Genetic analysis (Chromas, Gene Runner, ClustalX, MEGA) | NCBI Blast GenBank | Phyton programming language

Document formatting and Data visualization

LaTex | Microsoft Powerpoint | R package (ggplot2) | Microsoft Word | Microsoft Excel

Reference management

Mendeley | Zotero

● DRIVING LICENCE

Driving Licence: B | 16/09/2019 – 27/02/2024

● CONFERENCES AND SEMINARS

24/09/2019 – 03/10/2019 – Federal University of Paraná (UFPR), Curitiba-PR, Brazil
Genetic transformation of *Tetrademus obliquus* LGMA01

This study was presented orally in the 1st UFPR Science, Culture and Innovation Festival, during the 11th Integrated Education, Research and Extension Week (SIEPE).
<http://www.siepe.ufpr.br/2019/downloads/anais/EINTI-EVINCI-VIDA.pdf>

05/10/2020 – 09/10/2020 – Virtual platform (Youtube)
Molecular biology of green microalgae

An overview of my work at the Laboratory of Microbial Genetics was presented orally in the 30th Update Cycle in Biological Sciences UFPR in the form of a science communication video.
https://www.youtube.com/watch?v=FdvE_Js88j8&t=12s

05/11/2020 – 08/11/2020 – Virtual Platform (Eventos IME)
Genetic transformation of *Tetrademus obliquus* (Turpin) M.J.Wynne isolated from Paraná

This study was presented orally in the 1st On-line Brazilian Molecular Biology Congress (Conbramol).
<https://www.eventosime.com.br/resumo/786>

● PROJECTS

29/04/2018 – 01/03/2020
Biotechnologically relevant microalgae: taxonomy and genetic enhancement

The project aims to identify biotechnologically relevant microalgae species, based on the promising algal biofuel production. The strategies involve the sequencing of specific DNA regions of these organisms, species biodiversity evaluation and identification of genes which are interesting for genetic enhancement both via *in silico* analysis and genetic engineering for mutants obtention. The selected strains are genetically manipulated for the oil content enhancement. Also, some strains are studied as bioreactors for other compounds such as astaxanthin and polyunsaturated fatty acids (PUFAs). This is a collaborative project between the Laboratory of Microbial Genetics (LabGeM-UFPR) and the Research and Development on Autosustainable Energy Nucleus (NPDEAS-UFPR).

20/05/2021 – CURRENT
Identification of regulatory role of lncRNAs in breast cancer

Breast cancer (BC) is the most common cancer and it is an important cause of mortality among women. Considering the heterogeneity of breast cancer, tools that enable a better diagnosis and classification of the disease are used in clinical practice, however, the available classification is not yet sufficient to predict the clinical outcomes of all patients, in addition to the lack of therapy specifically in some groups. Therefore, the identification of new molecular markers and potential new therapeutic targets are essential. In this context, we aim to identify lncRNAs with potential to regulate genetic networks in different breast cancer molecular subtypes, searching for lncRNAs that are important in the differentiation of BC subtypes, that act as endogenous competitors in the process of cellular resistance and that have SNPs involved with the regulation of these molecules.

● HONOURS AND AWARDS

03/01/2019
Outstanding-Freshman Award – OEI & Inep

Outstanding-Freshman Award laureate certified by the Organization of Ibero-American States for Education, Science and Culture (OEI) and the National Institute for Educational Studies and Research "Anísio Teixeira" (Inep).

09/11/2020

Best abstract and oral presentation in the 1st On-line Brazilian Molecular Biology Congress (Conbramol) – Multiprofessional Teaching Institute (IME)

Honorable mention and 1st place award for the abstract and oral presentation of the study "Genetic transformation of *Tetrademus obliquus* (Turpin) M.J.Wynne isolated from Paraná".

<https://www.eventosime.com.br/eventos/conbramol/anais> <https://www.eventosime.com.br/resumo/786>

20/11/2020

1st Place Award in the 1st National Competition of Microbiological Collections and Molecular Genetics (I CoNaCoM Brasil) – Federal University of Paraná (UFPR) and Federal Technological University of Paraná (UFTPR)

The *Vibrio vibrante* team, of which I was a part, won 1st place in the 1st National Competition of Microbiological Collections and Molecular Genetics (I CoNaCoM Brasil 2020) for the Phycoil Project.

<https://www.youtube.com/watch?v=8TYWEozgcYU&t=9s>

20/11/2020

Featured Awards in the 1st National Competition of Microbiological Collections and Molecular Genetics (I CoNaCoM Brasil) – Federal University of Paraná (UFPR) and Federal Technological University of Paraná (UFTPR)

The *Vibrio vibrante* team, of which I was part, won 3 featured awards ("Best research", "Best technique", "Best design") in the 1st National Competition of Microbiological Collections and Molecular Genetics (I CoNaCoM Brasil 2020) for the Phycoil Project.

<https://www.youtube.com/watch?v=8TYWEozgcYU&t=9s>