BIOGRAPHICAL SKETCH

NAME: Bizinelli, Daniela

POSITION TITLE: PhD student

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A. Personal Statement

I graduated with a degree in Pharmacy at Herminio Ometto University Center (2019), where I was recognized as the best student of the undergraduate course and received the Paulo Minami award granted by the Regional Pharmacy Council (CRF-SP). I recently completed a Master's Degree in Oncology, investigating oncogenic signaling pathways modulators in colon cancer liver metastasis using computational strategies. With my Master's project and other research collaborations, I have developed skills in data integration, manipulation, analysis, and visualization, not limited to, but focused on transcriptomics, proteomics, and DNA methylation. Also, my recent experience at Vejle Hospital (University of Southern Denmark) as a guest student taught me even more about how to apply my knowledge to different projects and collaborate with translational research, keeping up with wet lab activities and linking it with in silico analysis. Currently, I am a PhD student in the Interunit Bioinformatics Graduate Program at the University of São Paulo (USP).

B. Education/Training

Institution and Location	Degree	Completion Date MM/YYYY	Field of Study
Herminio Ometto University Center, Araras, São Paulo, Brazil	Graduate	12/2019	Pharmacy
A.C.Camargo Cancer Center, São Paulo, Brazil	M.Sc.	08/2022	Oncology
University of Southern Denmark, Vejle, Denmark	Intership	10/2022	Bioinformatics
University of São Paulo, São Paulo, Brazil	Ph.D.	Expected 01/2027	Bioinformatics

C. Additional Training

	Year	Title	Event/Local
Mini-course (online)	2021	Understanding the Most Out of Differential Gene Expression from Scratch.	16th international conference of the AB3C – X-Meeting XPerience 2021.
Extension course (online)	2021	Mass Spectrometry Applied to Metabolomic, Proteomic and Lipidomic Analysis.	Federal University of São Paulo – UNIFESP, São Paulo, Brazil.
International course (online)	2020	Computational Systems Biology of Cancer 3rd Edition.	Institut Curie, Paris.
Mini-course	2019	R software.	Herminio Ometto University Center, São Paulo, Brazil.

D. Poster Presentation and Invited Talks

Bizinelli, D., Klug, K.K., Macedo, K.T., Varella, N., dos Santos,G.O., Labate, M.T.V., Labate, C.A., Camillo, C.M.C., Marchi, F.A. (2023, June). An integrative approach to explore promises targets identifies potential signaling modulators in drug-resistant colon cancer liver metastasis [Poster presentation]. X-Meeting / BSB 2023.
Bizinelli, D., Marchi, F.A., Fujita A. (2023, June). Deciphering oncogenic signaling networks and cellular co-localization profiles by spatial transcriptomics data [Poster presentation]. X-Meeting / BSB 2023.

Bizinelli, D., Oyama, K.T., Silva, V.S., Mello, C.A.L., Olivieri, E.H.R., Mota, L.D.C, Andrade, M.B., Martins Jr., D.C., Barbosa, P.N.V.P., Rogatto, S.R., Marchi, F.A. (2021, October). A multi-omic integrative approach to explore vulnerabilities in drug-resistant colon tumors and hit oncogenic signaling modulators [Online poster presentation]. 16th international conference of the AB3C – X-Meeting XPerience 2021.

Bizinelli, D., Oyama, K.T., Silva, V.S., Mello, C.A.L., Olivieri, E.H.R., Mota, L.D.C, Andrade, M.B., Barbosa, P.N.V.P., Marchi, F.A. (2021, September). A machine learning-based strategy exploring multiomic data identifies oncogenic signaling modulators in drug-resistant colon cancer [Online project presentation]. GENETICS 2021 - Brazilian Congress of Genetics.

Bizinelli, D., Oyama, K.T., Marchi, F.A. (2021, June). Identification of Oncogenic Signaling Modulators in Metastatic Colon Tumors [Online poster presentation]. Next Frontiers to Cure Cancer 2021.

Bizinelli, D., Marchi, F.A. (2021, January). Protegenomic investigation of oncogenic signaling modulators associated with mutational status in patients with metastatic colon cancer [Online poster presentation]. Scientific Meeting of A.C.Camargo Cancer Center, São Paulo, Brazil.

Bizinelli, D. (2020, October). Oncogenetics [Invited talk]. Herminio Ometto University Center, Araras, São Paulo, Brazil.

Bizinelli, D., Santos, N.T.H., Faldoni, F.L.C., Navarro, F.F. (2019, October). In vitro functional assays of Cacti-Nea effect on human breast adenocarcinoma [Poster presentation]. Herminio Ometto University Center, Araras, São Paulo, Brazil.

Bizinelli, D., Santos, N.T.H., Faldoni, F.L.C., Navarro, F.F. (2019, September). In vitro evaluation of cell viability and betalains quantification of nutraceutical Cacti-Nea [Poster presentation]. FeSBE Annual Meeting, Campos do Jordão Convention Center, São Paulo, Brazil.

E. Academic Awards

Year	Honors	Event/Local
2021	Honorable Mention Award for poster presentation in the "omics" category (online). Project: "*A multi-omic integrative approach to explore vulnerabilities in drug-resistant colon tumors and hit oncogenic signaling modulators*".	16th international conference of the AB3C – X-Meeting XPerience 2021.
2021	Darcy Fontoura de Almeida Award for best project presented in the "genomics and bioinformatics" category (online). Project: "*A machine learning-based strategy exploring multiomic data identifies oncogenic signaling modulators in drug-resistant colon cancer*".	GENETICS 2021 - 66th Brazilian Congress of Genetics.
2021	Finalist in the poster presentation section (online). Project: "*Proteogenomic investigation of oncogenic signaling*	Scientific Meeting of A.C.Camargo Cancer Center, São Paulo, Brazil.

	modulators associated with mutational status in patients with metastatic colon cancer".	
2020	Finalist (co-author) in the poster presentation section. Project: "*Oncogenic signaling modulation by the activity of enhancers and promoters in colon cancer microenvironment with immune-responsive and non-responsive genomic profile*".	Scientific Meeting of A.C.Camargo Cancer Center, São Paulo, Brazil.
2020	Paulo Minami Award for best student in Pharmacy degree, from January 2015 to December 2019, granted by the Regional Pharmacy Council of São Paulo (CRF-SP).	Herminio Ometto University Center, Araras, São Paulo, Brazil.
2019	Award for poster presentation. Project: "*In vitro functional assays of Cacti-Nea effect on human breast adenocarcinoma*".	13th Scientific Initiation Congress PIBIC-CNPq at Herminio Ometto University Center, Araras, São Paulo, Brazil.

F. Peer-reviewed Publications

[Under review – #BIOPHA-D-23-03921] Calanca N, Noronha Francisco AL, **Bizinelli D**, Kuasne H, Camargo Barros Filho M, Campos Troncarelli Flores B, Antonio Lopes Pinto C, Aparecida Rainho C, Botelho Pereira Soares M, Albuquerque Marchi F, Kowalski LP, Regina Rogatto S. DNA methylation-based depiction of the immune microenvironment and immune-associated long non-coding RNAs in oral cavity squamous cell carcinomas. *Biomed. Pharmacother.*

Bizinelli D, Flores Navarro F, Lima Costa Faldoni F. Maca Root (*Lepidium meyenii*) Extract Increases the Expression of MMP-1 and Stimulates Migration of Triple-Negative Breast Cancer Cells. *Nutr Cancer*. 2022;74(1):346-356. doi:10.1080/01635581.2021.1882511

G. Other Contributions to Science

Collaborator student in the project "*Heterogeneity of oncogenic signaling associated with colon cancer metastases resistant to systemic therapy: Investigation by proteogenomics and modeling of complex networks*" (FAPESP Regular Grant #2019/20414-0), with Dr. Fabio Albuquerque Marchi as principal researcher.
I was part of the project during my Master's degree and was responsible for patient screening and collection of their biological samples. One of the hypotheses of my master's project was associated with this grant, where I was responsible for bioinformatic analysis trying to identify modulators in several oncogenic signaling pathway. We hope that our findings can impact the personalization of treatment for patients with colon cancer liver metastasis allowing new therapy modalities that can improve survival.

Collaboration in the project "*Diagnostic strategies for tuberculosis and identification of the complex microbiome associated with disease development and progression*", with Dr. Patricia Pintor dos Reis as principal researcher (São Paulo State University - UNESP, Botucatu, São Paulo, Brazil).
In this project, our aim was to identify potential molecular signatures that could characterize patients with latent and active disease, which would have a great impact on the care of patients with tuberculosis and would allow the development of efficient and lower cost prognostic strategies. For this, I participated in data integration analysis to apply the results in a machine learning algorithm.

Collaboration in the project "*Identification of miRNAs profile in mucoepidermoid carcinoma cells*", with Dr. Cláudia Malheiros Coutinho Camillo as principal researcher (A.C.Camargo Cancer Center, São Paulo, Brazil).
I was responsible for data manipulation, analysis, and visualization, conducting statistical tests to verify differences in miRNAs profiles between groups of salivary tumor samples with different clinical characteristics and treatments.