DARLAN CONTERNO MINUSSI

I'm a computational and experimental biologist with interest in cancer research.

Currently a PhD candidate leveraging single-cell genomics to understand tumor evolution and mechanisms of metastasis. I am passionate about topics that can help progress cancer research and reduce the disease burden faced by patients. I am also actively looking for ways to promote scientific communication and education.



EDUCATION

2021 2016

PhD Student, Quantitative Sciences

The University of Texas MD Anderson Cancer Center UTHealth Graduate School of **Biomedical Sciences**

O Houston, TX

- · Quantitative Sciences Graduate Program, Bioinformatics track. Graduate Research
- · Working on single-cell copy number data to understand breast cancer tumor heterogeneity
- · Advisor: Nicholas Navin, PhD

2015 2013

MSc, Cellular and Molecular Biology

Federal University of Rio Grande do Sul, UFRGS

Porto Alegre, RS, Brazil

- · Thesis: OncoProSim: A tool for in silico tumor evolution analysis
- · Advisor: Guido Lenz, PhD. Co-Advisor: Manuel Menezes de Oliveira Neto, PhD

2013

BS, Biomedicine (Senior year)

Harvard University/Beth Israel Deaconess Medical Center

Paston, MA

- · Thesis: A20 promotes ubiquitination and degradation of Caspase-8 to protect from TRAIL mediated apoptosis: The need to tailor anti-cancer therapies to the molecular signature of the tumor
- · Advisor: Márcia Rosângela Wink, PhD. Co-Advisors: Cleide Gonçalves da Silva, PhD and Christiane Ferran, PhD

2012

BS, Biomedicine

Federal University of Health Sciences of Porto Alegre, UFCSPA

Porto Alegre, RS, Brazil



I POSITIONS

2021 2016

Graduate Research Assistant

The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences

• Houston, TX

- · Breast Tumors Maintain a Reservoir of Subclonal Diversity During Expansion
- · Advisor: Nicholas Navin

2013 2011

Undergraduate Researcher

Federal University of Rio Grande do Sul, UFRGS

- Porto Alegre, RS, Brazil
- · Investigating the role of NTPDase2 on cellular adhesion.
- · Advisor: Guido Lenz. Co-Advisor: Márcia Rosângela Wink

2011 2010

Undergraduate Researcher

Federal University of Health Sciences of Porto Alegre, UFCSPA

Porto Alegre, RS, Brazil

· Impact of environmental pollution in health



CONTACT



dcminussi@mdanderson.org

- y darlanminussi
- github.com/darlanminussi

2021

2019

2018

2018

2016

2014

2014

2013

PUBLICATIONS

MEDALT: single-cell copy number lineage tracing enabling gene discovery 2021

Genome Biology

· Wang, F., Wang, Q., Mohanty, V., Liang, S., Dou, J., Han, J., Minussi, D. C., Gao, R., Ding, L., Navin, N., Chen, K.

Breast Tumors Maintain a Reservoir of Subclonal Diversity During Expansion

Nature

· Minussi, D. C., Nicholson, M. D., Ye, H., Davis, A., Wang, K., Baker, T., Tarabichi, M. Sei, E. Du, H., Rabanni, M., Peng, C., Hu, M., Bai, S. Lin, Y., Schalck, A., Multani, A., Ma, J., McDonaldo, T. O., Casasent, A., Barrera, A., Chen, H., Lim, B., Arun, B. Meric-Bernstam, F. Van Loo, P., Michor, F. Navin, N.

esiCancer: Evolutionary In Silico Cancer Simulator

Cancer Research

· Minussi, D. C., Henz, B., Oliveira, S., Filippi-chiela, E. C., Oliveira, M. M., & Lenz, G.

Analysis of NTPDase2 in the cell membrane using fluorescence recovery after photobleaching (FRAP)

Cytometry Part A

· Kipper, F.C., A.S.K. Tamajusuku, D.C. Minussi, J.E. Vargas, A.M.O. Battastini, E. Kaczmarek, S.C. Robson, G. Lenz, and M.R. Wink

Systematic Functional Annotation of Somatic Mutations in Cancer

Cancer Cell

· Ng PK, Li J, Jeong KJ, Shao S1, Chen H, Tsang YH, Sengupta S, Wang Z, Bhavana VH, Tran R, Soewito S, Minussi DC, Moreno D, Kong K, Dogruluk T, Lu H, Gao J, Tokheim, Zhou DC, Johnson AM, Zeng J, Ip CKM, Ju Z, Wester M, Yu S, Li Y, Vellano CP, Schultz N, Karchin R, Ding L, Lu Y, Cheung LWT, Chen K, Shaw KR, Meric-Bernstam F, Scott KL, Yi S, Sahni N, Liang H, Mills GB.

Culture conditions tailored to the cell of origin are critical for maintaining native properties and tumorigenicity of glioma cells

Neuro-Oncology

· Ledur PF, Liu C, He H, Harris AR, Minussi DC, Zhou H, Shaffrey ME, Asthagiri A, Lopes MBS, Schiff D, Lu Y, Mandell JW, Lenz G, Zong, H

A20 regulates atherogenic interferon (IFN)-gamma signaling in vascular cells by modulating basal IFNbeta levels

The Journal of biological chemistry

· Moll HP, Lee A, Minussi DC, da Silva CG, Csizmadia E, Bhasin M, Ferran C

A20 expressing tumors and anticancer drug resistance.

Advances in experimental medicine and biology

- · da Silva CG, Minussi DC, Ferran C, Bredel M
- · Book Chapter

A20 promotes liver regeneration by decreasing SOCS3 expression to enhance IL-6/STAT3 proliferative signals

Hepatology

· da Silva CG, Studer P, Skroch M, Mahiou J, Minussi DC, Peterson CR, Wilson SW, Patel VI, Ma A, Csizmadia E, Ferran C

Q AWARDS

2022 | 2021

Fellowship

The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences

· Schissler Foundation Fellowship

2021

Scholarship

The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences

· GSBS Presidents' Research Scholarship

2018

Travel Award

The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences

- · Cold Spring Harbor Asia conference on Frontiers in Single Cell Genomics
- · Quantitative Sciences Program

2013 | 2012

Fellowship

National Counsel of Technological and Scientific Development, CNPq, Brazil

· Science Without Border Fellowship

2011

Poster Award

Federal University of Health Sciences of Porto Alegre, UFCSPA

• Federal University of Health Sciences of Porto Alegre, UFCSPA

· Interference of NTPDase2 in cellular adhesion

TEACHING

2019

Teaching Assistant

The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences

O Houston, TX

- · Introduction to Bioinformatics
- · Graduate level class

2019

Lecturer

OHouston, TX

· ASC Data Visualization Workshop

2014

Teaching Assistant

Federal University of Health Sciences of Porto Alegre, UFCSPA

Porto Alegre, RS, Brazil

- · Molecular Biology, course of Biomedicine
- · Undergraduate level class

2011

Teaching Assistant

Federal University of Rio Grande do Sul, UFRGS

• Porto Alegre, RS, Brazil

- · Methods in Biophysics, course of Biomedicine
- · Undergraduate level class

E COMMITTEES

2018

Student Council

The University of Texas MD Anderson Cancer Center UTHealth Graduate School of

Biomedical Sciences

♦ Houston, TX

- · Quantitative Sciences Program
- \cdot Member

2011 | 2010

Student Council

Federal University of Health Sciences of Porto Alegre, UFCSPA

• Porto Alegre, RS, Brazil

- $\cdot \, \text{Biomedicine}$
- · President