Name: **RAFAEL RENATINO CANEVAROLO**

Position Title: Postdoctoral Research Fellow

Education/Training

INSTITUTION AND LOCATION	DEGREE	START DATE	END DATE	FIELD OF STUDY
Federal University of Sao Carlos (UFSCar), Sao Carlos, Brazil	BS	02/2004	02/2008	Biological Sciences
University of Campinas (Unicamp), Campinas, Brazil	Master's	07/2009	01/2012	Medical Sciences
University of Campinas (Unicamp), Campinas, Brazil	Ph.D.	07/2012	01/2017	Sciences
H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL, USA	Postdoctoral	11/2017	-	Cancer Research

A. Personal Statement

I am a biologist thrilled by understanding the origin and molecular aspects of cancer. My first project on cancer research started in my Master's research project in 2009, in which I investigated the impact of methotrexate (MTX), a folic acid antagonist, on the metabolome of acute lymphoblastic leukemia (ALL) cells. In my PhD, I moved forward and explored in more depth the role of the glutathione metabolism on MTX resistance. During the eight years of my graduate studies, I had the opportunity to present my work in various international congresses, as well as to collaborate with many other researchers and projects. These collaborations resulted in more than a dozen of publications, one book chapter and two patents. In 2017, I joined the Silva Lab at Moffitt Cancer Center, expanding my knowledge on cancer research, specifically, *ex vivo* drug screening, data analysis, computational modeling, and Systems Biology. I work with a large database comprising clinical, molecular, and *ex vivo* drug screening data from almost one thousand multiple myeloma (MM) patients, as well as with a state-of-the-art *ex vivo* organotypic clinical decision tool termed "EMMA" (*Ex Vivo Mathematical Malignancy Advisor*) to access patient-specific *ex vivo* drug response and predict their clinical outcome. I use molecular biology techniques to investigate the molecular basis of drug resistance in MM. At Moffitt, I have also served as a preceptor for students enrolled in the "High School Student Internship Program in Integrated Mathematical Oncology" (HIP-IMO), a 8-10 weeks program designed for motivated aspiring scientists to help prepare them for interdisciplinary cancer research careers. Besides, I act as a "*project manager*" in the partnership our laboratory has with AbbVie Inc., in which new compounds are being tested against MM using "EMMA". In this role, I am responsible for organizing topics and presentations, compiling and QC'ing data, recalling deliverables, and acting as a field coordinator on Moffitt's end. Our multidisciplinary team and the outstanding research infrastructure of Moffitt Cancer Center have boosted my skills towards the goal of becoming an independent researcher and, hopefully, contribute significantly to the cure of cancer.

B. Positions and Honors

Positions and Employment

2017 – Current: Postdoctoral Research Fellow, Dept. of Cancer Physiology, Moffitt Cancer Center, Tampa, FL

Honors

2020	Poster Presentation Award – NCI Physical Sciences-Oncology Network (PS-ON) Annual Investigators Meeting.
2019	Two-Minute Elevator Pitch Contest, 2nd place – Junior Scientists Retreat, USF.
2012 - 2016	PhD Scholarship (full tuition and monthly stipend), The Sao Paulo Research Foundation (FAPESP), Campinas, Brazil.

2009 - 2011	Master's Scholarship (full tuition and monthly stipend), The Sao Paulo Research Foundation (FAPESP), Campinas, Brazil.
2006 - 2007	Scholarship (monthly stipend) from The Brazilian National Council for Scientific and Technological Development (CNPq).

C. Contribution to Science

Early Career: My early career started during my undergraduation, under the orientation of Dr. Silvia Nassif Del Lama, at the Federal University of São Carlos (São Carlos, Brazil). My first research project focused on the genetic variability of black skimmers (*Rynchops niger*) populations from diverse Brazilian regions. By comparing the intronic sequences of four genes, I found that birds from a specific Brazilian region (*i.e*., the Pantanal, a natural region encompassing the world's largest tropical wetland area) presented the most diverse allelic repertoire among all regions studied (even more than the Amazon forest), thus constituting the most important Brazilian natural genetic reservoir for the specie.

Graduate Career: My graduate research was under the orientation of Dr. Jose Andres Yunes, from Boldrini Children's Hospital (Campinas, Brazil), and co-orientation of Dr. Ana Carolina Zeri from LNBio (part of the Brazilian Center for Research in Energy and Materials, CNPEM, Campinas, Brazil). My research focused on the metabolomics of methotrexate (MTX) resistance in acute lymphoblastic leukemia (ALL). MTX is a folic acid antagonist that inhibits nucleotide synthesis, commonly used against ALL. I studied the differential impact MTX exerts in the metabolome of drug-resistant *versus* drug-sensitive cell lines using nuclear magnetic resonance (NMR). We also found a very small set of metabolites that could discriminate drug resistant from drug sensitive samples with high sensitivity and specificity. Particularly, basal glutathione (GSH) levels were positively correlated to MTX resistance. Expression of several genes coding for enzymes involved in GSH metabolism were correlated to the metabolite's levels across the cell lines. I found that another antioxidant system of the cell, the thioredoxin system, was cooperating with GSH to neutralize MTX-induced redox imbalance. We observed that arsenic trioxide (ATO), a thioredoxin inhibitor, sensitizes patient-derived ALL cells to MTX *in vivo* (manuscript in preparation). In parallel to my main research project, collaboration with other researchers resulted in a dozen of publications so far, a book chapter and two patents.

Publications

1. Ruberti OM, Sousa AS, Viana LR, Pereira Gomes MF, Medeiros A, Gomes Marcondes MCC, Borges LF, Crestani CC, Mostarda C, Moraes TFDC, **Canevarolo RR**, Delbin MA, Rodrigues B. Aerobic training prevents cardiometabolic changes triggered by myocardial infarction in ovariectomized rats. J Cell Physiol, v. 236(2), p. 1105-1115, 2021.
2. Cruz B, Oliveira A, Viana LR, Lopes-Aguiar L, **Canevarolo RR**, Colombera MC, Valentim RR, Garcia-Fóssa F, de Sousa LM, Castelucci BG, Consonni SR, Martins-de-Souza D, de Jesus MB, Russell ST, Gomes-Mardondes MCC. Leucine-Rich Diet Modulates the Metabolomic and Proteomic Profile of Skeletal Muscle during Cancer Cachexia. Cancers, v. 12, p. 1880, 2020.
3. Cury NM, Mühlethaler T, Laranjeira ABA, **Canevarolo RR**, Zenatti PP, Lucena-Agell D, Barasoain I, Song C, Sun D, Dovat S, Yunes RA, Prota AE, Steinmetz MO, Díaz JF, Yunes JA. Structural Basis of Colchicine-Site targeting Acylhydrazones active against Multidrug-Resistant Acute Lymphoblastic Leukemia. iScience, v. 21, p. 95-109, 2019.
4. Zeni PF, Santos DPD, **Canevarolo RR**, Yunes JA, Padilha FF, Junior RLCA, Egues SM, Hernández-Macedo ML. Photocatalytic and Cytotoxic Effects of Nitrogen-Doped TiO_2 Nanoparticles on Melanoma Cells. J Nanosci Nanotechnol., v. 18, p. 3722-3728, 2018.
5. Valério DF, Berton R, Conceição MS, **Canevarolo RR**, Chacon-Mikahil MPT, Cavaglieri CR, Meirelles GV, Zeri AC, Libardi CA. Early metabolic response after resistance exercise with blood flow restriction in well-trained men: a metabolomics approach. Appl Physiol Nutr Metab., v. 43, p. 240-246, 2018.
6. Malagrino PA, Venturini G, Yogi PS, Dariolli R, Padilha K, Kiers B, Gois TC, Motta-Leal-Filho JM, Takimura CK, Girardi ACC, Carnevale FC, **Canevarolo RR**, Malheiros DMAC, Zeri ACM, Krieger JE, Pereira AC. Metabolomic characterization of renal ischemia and reperfusion in a swine model. Life Sciences, v. 156, p. 57-67, 2016.

7. Viana LR, **Canevarolo RR**, Luiz ACP, Soares RF, Lubaczeuski C, Zeri ACM, Gomes-Marcondes MCC. Leucine-rich diet alters the 1H-NMR based metabolomic profile without changing the Walker-256 tumour mass in rats. BMC Cancer, v. 16, p. 764, 2016.
8. Berton R, Conceição MS, Libardi CA, **Canevarolo RR**, Gáspari AF, Chacon-Mikahil MPT, Zeri ACM, Cavaglieri CR. Metabolic time-course response after resistance exercise: A metabolomics approach. Journal of Sports Sciences, v. 35, p. 1-8, 2016.
9. Salum LB, Mascarello A, **Canevarolo RR**, Altei WF, Laranjeira ABA, Neuenfeldt PD, Stumpf TR, Chiaradia-Delatorre LD, Vollmer LL, Daghestani HN, Melo CPS, Silveira AB, Leal PC, Frederico MJS, Do Nascimento LF, Santos ARS, Andricopulo AD, Day BW, Yunes RA, Vogt A, Yunes JA, Nunes RJ. N-(1'-naphthyl)-3,4,5-trimethoxybenzohydrazide as microtubule destabilizer: synthesis, cytotoxicity, inhibition of cell migration and in vivo activity against acute lymphoblastic leukemia. European Journal of Medicinal Chemistry, v. 96, p. 504-518, 2015.
10. Kawahara R, Meirelles GV, Heberle H, Domingues RR, Granato DC, Yokoo S, **Canevarolo RR**, Winck FV, Ribeiro ACP, Brandao TB, Filgueiras PR, Cruz KSP, Barbuto JA, Poppi RJ, Minghim R, Telles GP, Fonseca FP, Fox JW, Santos-Silva AR, Coletta RD, Sherman NE, Leme AFP. Integrative analysis to select cancer candidate biomarkers to targeted validation. Oncotarget, v. 6, p. 43635, 2015.
11. Goncalves RF, Ferreira MS, De Oliveira DN, **Canevarolo RR**, Achilles MA, D'ercole DL, Bols PE, Visintin JA, Killian GJ, Catharino RR. Analysis and characterisation of bovine oocyte and embryo biomarkers by matrix-assisted desorption ionisation mass spectrometry imaging. Reproduction, Fertility and Development, v. 28, p. 293, 2014.
12. **Canevarolo RR**, Pegos V, Sampaio A, Balan A, Zeri ACM. Xanthan Gum Removal for 1H-NMR Analysis of the Intracellular Metabolome of the Bacteria *Xanthomonas axonopodis* pv. citri 306. Metabolites, v. 4, p. 218-231, 2014.
13. Salum LB, Altei WF, Chiaradia LD, Cordeiro MNS, **Canevarolo RR**, Melo CPS, Winter E, Mattei B, Daghestani HN, Santos-Silva MC, Creczynski-Pasa TB, Yunes RA, Yunes JA, Andricopulo AD, Day BW, Nunes RJ, Vogt A. Cytotoxic 3,4,5-trimethoxychalcones as mitotic arresters and cell migration inhibitors. European Journal of Medicinal Chemistry, v. 63, p. 501-510, 2013.

Book Chapter

1. Silveira AB, **Canevarolo RR**, Vasconcellos JF, Yunes JA. Descoberta, desenho e desenvolvimento de novos agentes anticâncer no âmbito do programa iberoamericano CYTED. 1. ed. Itajaí (SC): Univali, 2014. v. 1. 496p.

Patents

1. Mascarello A, Yunes RA, Stumpf TR, Leal PC, Yunes JA, Melo CPS, Canevarolo RR, Chiaradia LD. Acylhydrazone and oxadiazole compounds, pharmaceutical compositions containing the same and uses thereof US 20150191445 A1; Number: US 14/360,279; PCT Number: PCT/BR2012/000480; Publishing Date: 09/07/2015; also published as: CA2869807A1, CN104159887A, EP2784061A1, EP2784061A4, WO2013075199A1.
2. Melo CPS, **Canevarolo RR**, Brandalise SR, Zeri ACM, Yunes JA. [*Deposited in Brazil*] Método de determinação da resistência do câncer a quimioterápicos, método de identificação de perfis metabólitos, conjunto de metabólitos, seu uso e kit. 2011, Brasil. Patente: Privilégio de Inovação. Número do registro: PI11056037, título: "Método de determinação da resistência do câncer a quimioterápicos, método de identificação de perfis metabólitos, conjunto de metabólitos, seu uso e kit.", Instituição de registro: INPI - Instituto Nacional da Propriedade Industrial. Depósito: 17/11/2011.

Postdoctoral Career: As a postdoctoral fellow under the mentorship of Dr. Ariosto Silva from Moffitt Cancer Center (Tampa, FL), my research is basically focused on finding and exploring therapeutic fragilities of multiple myeloma (MM). I do this by working in the frontline of an *ex vivo*-informed clinical decision support tool, developed by my mentor, Dr. Silva, and Dr. Kenneth Shain, Moffitt's scientific director of the Multiple Myeloma Working Group. This automated, high-throughput organotypic tool (named EMMA – "*Ex Vivo Mathematical Myeloma Advisor*") incorporates patient-specific elements of the tumor microenvironment to quantify the

response of MM patient CD138+-selected cells to 31 drugs (or drug combinations) simultaneously. I am primarily responsible for setting EMMA experiments, whose steps include: i) preparing a fresh patient-derived CD138+ cell suspension in a collagen-based matrix with stroma cells and patient-derived plasma; ii) seeding the cell suspension in 384-well culture plates using automatic robots (Precision/Biotek and Mosquito/SPTLabtech); iii) adding drugs (single agents and combinations) to the plates, also with the help of robots; iv) setting image acquisition on EVOS™ FL Auto 2 Imaging Systems, i.e., automated inverted microscopes equipped with mini incubators that capture pictures of each plate's well in regular intervals over the course of the experiment. The *ex vivo* sensitivity data, in combination with clinical drug dosing and pharmacokinetic data, informs models that predict patient clinical response through the first 90 days of therapy within 7 days of biopsy. Since Moffitt tumor specimens are collected under the ORIEN/AVATAR protocol, tumor's molecular data (WES and RNAseq) is also available. Our MM molecular database comprises almost 1,000 patients so far, which I am constantly querying and matching with our *ex vivo* drug screening results to find patterns and associations that could lead to new hypothesis for treatment re-sensitization – which I test through validation experiments. I also have expertise in analysis of signaling and metabolic pathways using publicly available databases (String-DB, KEGG, Enrichr, KEA, Chea, GeneGo, MetaboAnalyst, Metacore, etc.), and multivariate statistical analysis (PCA, PLS-DA, non-supervised clustering) to generate testable hypothesis for inference and interference of cellular mechanisms. Currently, we are working on single cell RNAseq and chromatin accessibility (scATACseq) assays to investigate the role of epigenetic reprogramming on MM onset and drug resistance (manuscript under review). In parallel to my research duties, I have been appointed "Project Manager" by my mentor, Dr. Ariosto Silva, in the partnership of our research group has with AbbVie Inc. In this industry alliance, our group is performing *ex vivo* drug screening assays on 50 MM fresh samples, testing AbbVie's compounds efficacy as both single agents and/or in combination with standard-of-care drugs. My responsibilities include organizing topics and presentations, compiling and QC'ing data, recalling deliverables, and acting as a field coordinator on Moffitt's end.

Publications

1. Sudalagunta P, Silva MC, **Canevarolo RR**, Alugubelli RR, DeAvila G, Tungesvik A, Perez L, Gatenby R, Gillies R, Baz R, Meads MB, Shain KH, Silva AS. A pharmacodynamic model of clinical synergy in multiple myeloma. EbioMedicine, Apr 5;54:102716, 2020.
2. **RR Canevarolo**, Meads M, Silva MCS, Sudalagunta PR, DeAvila G, Alugubelli RR, Tungesvik A, Bell ET, Burger K, Kulkarni A, Hampton O, Jiang Z, Dai H, Cubitt C, Teer J, Welsh E, Yoder S, Shah B, Tao J, Hazlehurst L, Gatenby R, Sullivan D, Alsina M, Nishihori T, Brayer J, Cleveland JL, Dalton W, Gillies RJ, Baz R, Shain KH, Silva AS. Dynamic super-enhancer core regulatory circuits and epigenetic landscapes drive malignant progression and refractory disease in multiple myeloma. Pre-print DOI: 10.21203/rs.3.rs-125536/v1 (the pre-print brings Ariosto Silva as the first author; he will be the corresponding author in the peer-reviewed article). (Ready for submission to Cancer Cell).
3. Mostofa A, Distler A, Meads M, Sahakian E, Powers J, Achille A, Noyes D, Wright G, Fang B, Izumi V, Koomen J, Ramakrishnan R, Nguyen T, De Avilla G, Silva A, Sudalagunta P, **Canevarolo RR**, Silva MCS, Alugubelli RR, Dai H, Kulkarni A, Dalton W, Hampton O, Welsh E, Teer J, Tungesvik A, Wright K, Pinilla-Ibarz J, Sotomayor E, Shain K, Brayer J. Plasma Cell Dependence of HDAC11 Reveals a Therapeutic Target in Multiple Myeloma. (currently under review in Blood Cancer Discovery).
4. Zhou L, Zhang Y, Meads MB, Dai Y, Ning Y, Hu X, Li L, Sharma K, Nkwocha J, Parker R, Bui D, McCarter J, Kramer L, Purcell C, Sudalagunta PR, **Canevarolo RR**, Silva MDCS, DeAvila G, Alugubelli RR, Silva AS, Kmeiciak M, Ferreira-Gonzalez A, Shain KH, Grant S. LCL161 interacts synergistically with Panobinostat in multiple myeloma cells through non-canonical NF-kB- and caspase-8-dependent mechanisms. (recently accepted for publication in Blood Advances).
5. Burger K, Meads MB, Sudalagunta PR, Fernandez M, Oliveira P, **Canevarolo RR**, Alugubelli RR, Avila G, Silva M, Distler A, Dai H, Kulkarni A, Hampton O, Koomen J, Roush W, Monastyrskyi A, Berglund A, Silva AS, Cleveland J, Shain KH. CK1δ/CK1ε signaling is necessary to sustain mitochondrial metabolism and cell survival in multiple myeloma. (currently under review in Cancer Discovery).

Patents

1. A Pharmacodynamic Model of Clinical Synergy in Multiple Myeloma. Sudalagunta PR, Silva MCS, **RR Canevarolo**, Alugubelli RR, DeAvila G, Tungesvik A, Perez L, Gatenby R, Gillies RJ, Baz R, Meads MB, Shain KH, Silva AS. Provisional Patent Application, USPTO 62/940,223, filed on 11/25/2019.

Abstracts

1. **Canevarolo RR**, Meads MB, Silva MCS, Sudalagunta PR, Cubitt C, DeAvila G, Alugubelli RR, Kulkarni A, Zhang Q, Hampton O, Shain KH, Silva AS. Dynamic Epigenetic Landscapes are Associated with Multiple Myeloma Progression and Drug Resistance. In: Moffitt Scientific Symposium, Virtual, 2021.
2. Sudalagunta PR, **Canevarolo RR**, Meads MB, Silva MCS, Alugubelli RR, DeAvila G, Shain KH, Silva AS. A Multiomic Approach to Mathematical Modeling of Gene Regulatory Networks in Multiple Myeloma. In: Moffitt Scientific Symposium, Virtual, 2021.
3. Sudalagunta PR, Meads MB, **Canevarolo RR**, Silva MSC, Cubitt C, DeAvila G, Alugubelli RR, Logothetis CN, Kulkarni A, Zhang Q, Hampton O, Walker CJ, Landesman Y, Shain KH, Silva AS, Characterization of synergistic Selinexor combinations with Dexamethasone, Pomalidomide, Elotuzumab, and Daratumumab in primary MM cells. In: AACR Annual Meeting, Virtual, 2021.
4. **Canevarolo RR**, Meads MB, Silva MCS, Sudalagunta PR, Cubitt C, DeAvila G, Alugubelli RR, Kulkarni A, Zhang Q, Hampton O, Shain KH, Silva AS. Dynamic Epigenetic Landscapes Define Multiple Myeloma Progression and Drug Resistance. In: 62nd ASH Annual Meeting and Exposition, 2020. Blood, 2020. v. 136. p. 32-33.
5. Silva AS, **Canevarolo RR,** Meads MB, Silva MCS, Sudalagunta PR, Cubitt C, DeAvila G, Alugubelli RR, Kulkarni A, Mitchell M, Dai H, Zhang Q, Hampton Oliver, Lu Xin, Modi DA, Motwani M, Harb J, Ross JA, Shain KH. Ex Vivo Drug Sensitivity and Functional Genomics Platform Identifies Novel Combinations Targeting Intrinsic and Extrinsic Apoptotic Signaling Pathways in Multiple Myeloma. In: 62nd ASH Annual Meeting and Exposition, 2020. Blood, 2020. v. 136. p. 49-50.
6. **Canevarolo RR**, Sudalagunta PR, Silva MLCS, Meads MB, Shain KH, Silva AS. Topology of Gene Expression Indicates that Epigenetic Reprogramming Drives Disease Progression in Multiple Myeloma. In: Moffitt Scientific Symposium, Tampa, FL, 2020.
7. Sudalagunta PR, **Canevarolo RR**, Silva MDCS, Meads MB, Tungesvik A, DeAvila G, Shain KH, Silva AS. Pharmacodynamical Modeling of Clinical Synergy in Cancer. CSBC-PSON Junior Investigator's Meeting, Virtual, 2020.
8. Sudalagunta PR, **Canevarolo RR**, Silva MDCS, Meads MB, Tungesvik A, DeAvila G, Shain KH, Silva AS. Pharmacodynamical Modeling of Clinical Synergy in Cancer. PSOC Annual Investigator's Meeting, Virtual, 2020.
9. Sudalagunta PR, Silva MC, **Canevarolo RR**, Alugubelli RR, DeAvila G, Tungesvik A, Perez L, Gatenby R, Gillies R, Meads MB, Shain KH, Silva AS. Pharmacodynamic Model of Clinical Synergy in Multiple Myeloma. In: SMB Annual Meeting, Virtual, 2020.
10. Sudalagunta PR, Silva MC, **Canevarolo RR**, Alugubelli RR, DeAvila G, Tungesvik A, Perez L, Gatenby R, Gillies R, Meads MB, Shain KH, Silva AS. Pharmacodynamic Model of Clinical Synergy in Multiple Myeloma. In: Moffitt Scientific Symposium, Virtual, 2020.
11. Koomen DC, Meads MB, Magaletti DM, Guingab JD, Oliveira PS, Fang B, Izumi V, **Canevarolo RR**, Sudalagunta PR, Silva M, Alugubelli RR, De Avilla G, Tungesvik Alex, Welsh EA, Meke LE, Zhang W, Eschrich SA, Garrett TJ, Silva AS, Koomen JM, Shain KH. Integrated Multi-Level Omics to Characterize Bortezomib Resistance in Multiple Myeloma. In: 61st ASH Annual Meeting and Exposition, 2019, Orlando. Blood, 2019. v. 134. p. 5544.
12. **Canevarolo RR**, Sudalagunta PR, Silva MCS, Meads MB, Tungesvik A, De Avilla G, Raghunandan Reddy A, Nong M, Teer J, Welsh EA, Lwin T, Kulkarni A, Dai H, Dalton WS, Shain KH, Silva AS. Re-Constructing and Exploiting Transcriptional Regulatory Networks in Multiple Myeloma Drug Resistance. In: 61st ASH Annual Meeting and Exposition, 2019, Orlando. Blood, 2019. v. 134. p. 5544.
13. Sudalagunta PR, **Canevarolo RR**, Silva MCS, Meads MB, Tungesvik A, DeAvila G, Shain KH, Silva AS. Pharmacodynamical Modeling of Two-Way Synergistic Effect for High-Throughput Drug Combination Screening in an Ex Vivo Reconstruction of Bone Marrow Using Primary Multiple Myeloma Cells. In: CSBC-PSON Junior Investigator's Meeting, Bethesda, MD, 2019.
14. Sudalagunta PR, **Canevarolo RR**, Silva MDCS, Meads MB, Tungesvik A, DeAvila G, Shain KH, Silva AS. Pharmacodynamical Modeling of Two-Way Synergistic Effect for High-Throughput Drug Combination

Screening in an Ex Vivo Reconstruction of Bone Marrow Using Primary Multiple Myeloma Cells. In: 60th ASH Annual Meeting and Exposition, 2018, San Diego. Blood, 2018. v. 132. p. 1919.

15. Meads MB, **Canevarolo RR**, Sudalagunta PR, Oliveira PS, Magaletti DM, Fang B, Silva MCS, Kulkarni A, Dai H, Dalton WS, Petre I, Koomen JM, Silva AS, Shain KH. Systems Biology Analysis Identifies Targetable Vulnerability Networks to Proteasome Inhibitors in Multiple Myeloma. In: 60th ASH Annual Meeting and Exposition, 2018, San Diego. Blood, 2018. v. 132. p. 950.
16. **Canevarolo RR**, Sudalagunta PR, Silva MCS, Meads MB, Granados P, Berglund A, Kulkarni A, Dai HY, Dalton WS, Petre I, Shain KH, Silva AS. A Systems Biology Approach to Identify Mechanisms of Therapy Resistance in Multiple Myeloma. In: 60th ASH Annual Meeting and Exposition, 2018, San Diego. Blood, 2018. v. 132. p. 3266.
17. **Canevarolo RR**, Sudalagunta PR, Silva MCS, Meads MB, Shain KH, Silva AS. A Systems Biology approach identifies therapeutic opportunities for personalized treatment in multiple myeloma: a case study of HDAC and BCL2 inhibitors. In: Moffitt Scientific Symposium, Tampa, FL, 2019.
18. **Canevarolo RR**, Sudalagunta PR, Silva MCS, Meads MB, DeAvila G, Shain KH, Silva AS. A Systems Biology Approach for Unraveling Carfilzomib Resistance in Multiple Myeloma. In: Physical Sciences Oncology Center Meeting at Moffitt Cancer Center, Tampa, FL, 2018.

Oral Presentations

1. **Canevarolo RR**, Sudalagunta PR, Meads MB, Silva MCS, Shain KH, Silva AS. Topology of Gene Expression Indicates that Epigenetic Reprogramming Drives Disease Progression in Multiple Myeloma. CSBC-Physical Sciences Oncology Network – Junior Investigator's Meeting. Virtual meeting, August 27-28, 2020.
2. **Canevarolo RR**, Sudalagunta PR, Meads MB, Silva MCS, Shain KH, Silva AS. Topology of Gene Expression Indicates that Epigenetic Reprogramming Drives Disease Progression in Multiple Myeloma. Physical Sciences Oncology Network – Annual Investigator's Meeting. Virtual meeting, September 21-23, 2020.

Mentoring and teaching activities

1. Preceptor of Priscila Granados in the 4th edition of the High School Student Internship Program in Integrated Mathematical Oncology (HIP-IMO), Moffitt Cancer Center. June – July 2018. Title of the work: "Systems Biology: Resistance to Akt inhibition in Multiple Myeloma".
2. Preceptor of Elissa Bell in the 5th edition of the High School Student Internship Program in Integrated Mathematical Oncology (HIP-IMO), Moffitt Cancer Center. June – July 2019. Title of the work: "Transcriptional Regulation of Drug Resistance in Multiple Myeloma".

Complete List of Published Work in My Bibliography:
https://www.ncbi.nlm.nih.gov/myncbi/10IUnyqNPYCgvx/bibliography/public/

D. Scientific Journal Referee

1. Scientific Reports (2019 – Present).
2. Journal of Pharmaceutical and Biomedical Analysis (Print) (2016 – Present).
3. Metabolomics (Dordrecht. Print) (2012 – Present).