

## Current Activity

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- **Postdoctoral Associate**, Department of Dermatology, University of Miami Miller School of Medicine, Miami, Florida  
Mentor: Dr. Barbara Bedogni  
Project: *Notch1 blockage in combination with immuno checkpoint inhibitors as a novel strategy to treat melanoma*

## Education

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- *Doctor of Philosophy in Biology* Florida International University (FIU), Miami, FL - April 2019
- *Master en route to PhD*, Florida International University (FIU), Miami, FL - May 2016
- *Bachelor of Science in Biological Sciences*, Federal University of Viçosa (UFV), Brazil - January 2012

## Internship

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- Equipe Génétique du Développement des Mélanocytes, Institut Curie, Orsay, **France** - 2011
  - Skills: Human melanoma cell culture, invasion assay, growth anchorage independence / Mentor: Lionel Larue
- Landwirtschaftliches Technologiezentrum Augustenberg, Karlsruhe, **Germany** - 2011
  - Skills: Electrophoresis Isoelectric Focusing (IEF) / Mentor: Andrea Jonitz
- Laboratory of Pathology, Technical University of Lisbon (UTL), Lisbon, **Portugal** - 2010
  - Skills: Histology / Mentor: Maria da Conceição da Cunha e Vasconcelos Peleteiro
- Polytechnic Institute of Bragança (IPB), Bragança, **Portugal** - 2009
  - Skills: Fungal cell culture / Mentor: Anabela Martins

## Research Experience

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- **Postdoctoral Associate** (May 2019 to September 2019)
  - Developmental Biology Laboratory, Florida International University (FIU), Miami, USA
  - Mentor: Dr. Lidia Kos, Scholarship: Biological Sciences Department
  - Project: *The immunosuppressive role of endothelin signaling in the melanoma microenvironment*
  - Skills: Transgenic mice, Cell Culture, Immunofluorescence, Flow Cytometry, Western Blotting and qRT-PCR
- **Graduate Student** (August 2012 to March 2019)
  - Developmental Biology Laboratory, Florida International University (FIU), Miami, USA
  - Mentor: Dr. Lidia Kos, Scholarship: Biological Sciences Department
  - Project: *The immunosuppressive role of endothelin signaling in the melanoma microenvironment*
  - Skills: Transgenic mice, Cell Culture, Immunofluorescence, Flow Cytometry, Western Blotting and qRT-PCR
- **Junior Scientist** (March 2011 to February 2012)
  - Laboratory of Biological Physics (Department of Physics), Federal University of Viçosa (UFV), Brazil
  - Project: *Study of biomolecules, cells and their interactions - using video microscopy, clamping optical, photon correlation spectroscopy and proteomics*
  - Mentor: Dr. Marcelo Lobato Martins, Scholarship: FAPEMIG
  - Skills: Cell culture and therapeutic drugs
- **Junior Scientist** (August 2007 to July 2009)
  - Laboratory of Cancer (Department of Animal Biology), Federal University of Viçosa (UFV), Brazil
  - Project: *Culture of cells of murine melanoma B16F10, primary and metastatic induced in mouse BALB/c*
  - Mentor: Dr. Marcelo José Vilela, Scholarship: Council for Scientific and Technological Development (CNPq)
  - Skills: Cell culture, mouse work and therapeutic drugs

## Publications

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- Freitas, J., Lopez, J., Cavallini, M., Llorian, C., Kos, L. ***The immunosuppressive role of Edn3/Ednrb signaling in the melanoma microenvironment.*** Under review.
- Freitas, J., Leng, F., Kos, L. ***Netropsin Blocks EMT of murine BRAF mutated melanoma cells.*** In preparation.

## Oral Presentations

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- Freitas, J., ***The immunosuppressive role of Edn3/Ednrb signaling in the melanoma microenvironment.*** Dermatology Grand Rounds, Department of Dermatology, University of Miami Miller School of Medicine, March 11, 2020, Miami, Florida
- Freitas, J., ***The immunosuppressive role of Edn3/Ednrb signaling in the melanoma microenvironment.*** Cell Biology Department Seminar, Federal University of Viçosa (UFV), August 26, 2019, Viçosa, Brazil

- Freitas, J., Cavallini, M., Lopez, J., Palmer, J., Kos, L. ***The non-cell autonomous role of Edn3/Ednrb signaling during melanoma lung metastasis formation.*** The Fifteenth International Conference on Endothelin, Prague, Czech Republic, October 2017
- Freitas, J., Cavallini, M., Lopez, J., Palmer, J., Kos, L. ***The non-cell autonomous role of Edn3/Ednrb signaling during melanoma lung metastasis formation.*** International Pigmented Cell Conference, Denver, Colorado, August 2017
- Freitas, J., Cavallini, M., Lopez, J., Palmer, J., Kos, L. ***The non-cell autonomous role of Edn3/Ednrb signaling during melanoma lung metastasis formation.*** Workshop on Techniques in Modeling Human Cancer in Mice, Bar Harbor, Maine, August 2017
- Freitas, J., Cavallini, M., Palmer, J., Kos, L. ***The Role of Endothelin 3 during Melanoma Lung Premetastatic Niche Formation.*** 19<sup>th</sup> Annual Biology Research Symposium, Miami, Florida, February 2017
- Freitas, J., Palmer, J., Sportsman, J., Kos, L. ***Evaluation of premetastatic niche formation in a mouse model of spontaneous melanoma lung metastasis.*** 18<sup>th</sup> Annual Biomedical and Comparative Immunology Symposium, Miami, FL, March 2016
- Freitas, J., Palmer, J., Sportsman, J., Kos, L. ***Evaluation of premetastatic niche formation in a mouse model of spontaneous melanoma lung metastasis.*** 18<sup>th</sup> Annual Biology Research Symposium, Miami, Florida, February 2016
- Freitas, J., Kos, L. ***Endothelin 3 as Main Regulator of Lung and Brain Premetastatic Niche Formation in Melanoma.*** From Melanocyte Development to Melanoma Therapies - Basic Science and Clinical Applications, Reykjavik, Iceland, June 2015
- Freitas, J., Mendes, R., Oliveira, M. ***Evaluation of the effect of platinum complexes on the viability of murine melanoma cells and normal melanocytes.*** Academic Symposium of Integration – SIA/UFV 2010, Federal University of Viçosa (UFV), Viçosa, Minas Gerais, Brazil, October 2010
- Freitas, J., Vilela, M., Mendes, R. ***Culture of cells and histopathology of murine melanoma B16F10, primary and metastatic induced in mouse BALB/c.*** XVIII Scientific Initiation Symposium, Federal University of Viçosa (UFV), Viçosa, Minas Gerais, Brazil, October 2008

#### Poster Presentations

- Freitas, J., Li, Y., Thakur, V., Bedogni, B., ***The role of Notch1 in Regulatory T Cell function.*** Graduate & Postdoctoral Research Symposium, March 5, 2020, Miami, Florida
- Freitas, J., Lopez, J., Cavallini, M., Llorian, C., Kos, L. ***The immunosuppressive role of Edn3/Ednrb signaling in the melanoma microenvironment.*** Society for Melanoma Research Congress, October 24-27, 2018, Manchester, England
- Freitas, J., Leng, F., Kos, L. ***Netropsin Blocks EMT of murine BRAF mutated melanoma cells.*** American Association of Cancer Research (AACR) Meeting, April 1-5, 2017, Washington, District of Columbia
- Freitas, J., Cavallini, M., Palmer, J., Kos, L. ***The Role of Endothelin 3 during Melanoma Lung Premetastatic Niche Formation.*** Metastatic Niche Symposium, March 30, 2017, National Institute of Health (NIH), Bethesda, Maryland
- Freitas, J., Cavallini, M., Palmer, J., Kos, L. ***The Role of Endothelin 3 during Melanoma Lung Premetastatic Niche Formation.*** Society for Melanoma Research Congress, November 6-9, 2016, Boston, Massachusetts
- Freitas, J., Cavallini, M., Palmer, J., Kos, L. ***The Role of Endothelin 3 during Melanoma Lung Premetastatic Niche Formation.*** 20<sup>th</sup> Conference of the PanAmerican Society for Pigment Cell Research (PASPCR) October 5-8, 2016, Baltimore, Maryland
- Freitas, J., Palmer, J., Sportsman, J., Kos, L. ***Evaluation of premetastatic niche formation in a mouse model of spontaneous melanoma lung metastasis.*** 25<sup>th</sup> Annual Short Course on Experimental Models of Human Cancer, August 20 - 26, 2016, Bar Harbor, Maine
- Freitas, J., Palmer, J., Sportsman, J., Kos, L. ***Evaluation of premetastatic niche formation in a mouse model of spontaneous melanoma lung metastasis.*** The Allied Genetics Conference, July 13 - 17, 2016, Orlando, Florida
- Freitas, J., Kos, L. ***Evaluation of premetastatic niche formation in a mouse model of spontaneous melanoma lung metastasis.*** Society for Melanoma Research Congress, November 18 - 21, 2015, San Francisco, California
- Freitas, J., Mendes, R., Vilela, M. ***Evaluation of activity of platinum complexes as an alternative therapy for murine melanoma.*** XV Meeting of the Brazilian Society for Cell Biology. 2010, São Paulo, Brazil
- Penitente, A. R., Fernandes, K. M., Souza, A. M. A., Freitas, J., Chianca, D. A. Jr., Natali, A. J., Neves, C. A. ***Histomorphometric analysis of rat ventricular cardiomyocytes subjected to protein malnutrition after weaning.*** XIV Brazilian Symposium on Cardiovascular Physiology, 2010, Araraquara, São Paulo, Brazil
- Mendes, R., Freitas, J., Vilela, M. ***Culture of cells and histopathology of murine melanoma B16F10, primary and metastatic induced in mouse BALB/c.*** XVIII Brazilian Congress of Oncology, 2009, Curitiba, Paraná, Brazil
- Marcal, L., Freitas, J., Garavani, E., Vilela, M. ***Analysis of diagnosis of exams prevention of Cervical Cancer held at the Laboratory of Cancer (UFV) in the period July 2006 to July 2008.*** XVIII Scientific Initiation Symposium, 2008, Federal University of Viçosa (UFV), Viçosa, Minas Gerais, Brazil

## Awards

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- **Worlds Ahead Graduate**
  - Recognition during FIU Commencements for outstanding academic, professional and personal achievements
- **Young Investigator Award**
  - Conference Organizing Committee - Fifteenth International Conference on Endothelin (\$750)
- **Doctoral Evidence Acquisition (DEA) Fellowship**
  - Stipend of \$8,300 for 2016 Summer Term
- **Student Summer Research Award**
  - Support of \$3,000 for research project funded through the MBRS RISE Biomedical Research Initiative (BRI)
- **Winner of Poster Presentation**
  - Graduate & Postdoctoral Research Symposium, March 5, 2020, Miami, Florida
  - **Freitas, J.,** Li, Y., Thakur, V., Bedogni, B., *The role of Notch1 in Regulatory T Cell function.*
- **1<sup>st</sup> Place Poster Presentation**
  - 20<sup>th</sup> PanAmerican Society for Pigment Cell Research (PASPCR) Conference
  - **Freitas, J.,** Cavallini, M., Palmer, J., Kos, L. *The Role of Endothelin 3 during Melanoma Lung Premetastatic Niche Formation*
- **Honors Research Prize**
  - Academic Symposium of Integration – SIA/UFV 2010, Federal University of Viçosa (UFV)
  - **Freitas, J.,** Mendes, R., Oliveira, M. *Evaluation of the effect of platinum complexes on the viability of murine melanoma cells and normal melanocytes*
- **Travel Awards**
  - NIH for the Whole Scientist course at the Jackson Lab (\$1000)
  - NIH for the Workshop on Techniques in Modeling Human Cancer in Mice at the Jackson Lab (\$2600)
  - NIH for the 25<sup>th</sup> Annual Short Course on Experimental Models of Human Cancer at the Jackson Lab (\$2000)
  - PanAmerican Society for Pigment Cell Research (PASPCR) for PASCR meeting in 2016 (\$600)
  - Genetics Society of America for The Allied Genetics Conference in 2016 (\$500)
  - Society for Melanoma Research (SMR) for SMR meeting in 2016 (\$1000)
  - Society for Melanoma Research (SMR) for SMR meeting in 2015 (\$1000)
  - Workshop Organizing Committee – From Melanocyte Development to Melanoma Therapies (\$1000)

## Society Membership

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- American Association for Cancer Research (AACR) – 2017 to present
- PanAmerican Society for Pigmented Cell Research (PASPCPR) – 2016 to present
- Society for Melanoma Research (SMR) - 2015 to 2016

## Teaching and Mentoring Experience

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- Teaching Assistant (TA)
  - Courses: Human Biology and General Biology (August 2012 to July 2017)
  - Florida International University (FIU), Miami, Florida, USA
- Tutor
  - Courses: General Pathology (March to July 2010) and General Physiology (April to June 2009)
  - Federal University of Viçosa (UFV), Viçosa, Minas Gerais, Brazil
- Undergraduate students mentoring
  - Jessie Sportsman (May 2014 to December 2015), Joseph Palmer (July 2015 to July 2016), Martina Cavallini (October 2015 to April 2019), Jesus Lopez (August 2016 to April 2019), Claudia Llorian (March 2017 to present)
  - Activities: teaching PCR, immunofluorescence staining, flow cytometry, western blotting and advising on poster and oral presentations

## Volunteering Activities

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- Pint of Science: worldwide outreach event to promote science to a lay audience
  - Talk title: “The GPS of the cancer cell”
  - Miami, Florida, May 2016
- Skype a Scientist Project: worldwide outreach event to promote science to young students
  - Talk title: “The crazy life of a scientist”

- Russellville, Arkansas, May 2018
- Judge in Poster Section
  - 4<sup>th</sup> Annual McNair Scholar Research Conference
  - Miami, Florida, October 2017
- Mentor of Brazilian Student Association (BRASA)
  - Activities: assist Brazilian students during the application process to graduate school in US universities
  - Students: Ramir Junior and Diana Barbosa