### Renalison Farias-Pereira

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**Education:** 

09/2020 Ph.D. in Food Science

University of Massachusetts Amherst

Dissertation: Coffee bioactives regulate lipid metabolism in Caenorhabditis elegans

09/2013 M.S. in Biochemistry

Federal University of Ceará

Thesis: Biochemical, nutritional and functional characterization of elite cowpea [Vigna

unguiculata (L.) Walp] genotypes

11/2009 B.S. in Biology Education

Ceará State University

## Relevant Experience:

09/2021 – Present Postdoctoral Fellow

Department of Plant Biology, Rutgers University

• Investigating the effects of plants and functional foods on metabolic syndrome

· Using lab rodents as animal model

06/2020 – 08/2021 Teaching Postdoctoral Fellow

Department of Biology and Biomedical Sciences, Salve Regina University

• Investigated the effects of environmental pollutants on glucose metabolism

Investigated the effects of neuropeptides on metabolism under stresses

Used Drosophila melanogaster as animal model

09/2015 - 05/2020 Research Assistant

Department of Food Science, University of Massachusetts Amherst

Investigated the effects of plant extracts and polyphenols on lipid metabolism

• Used Caenorhabditis elegans as animal model

**12/2010 – 08/2015 Laboratory Technician** 

Laboratory Animal Facilities, Federal University of Ceará

Handled lab rodents (Mus musculus and Rattus norvegicus)

09/2011 - 09/2013 Research Assistant

Department of Biology, Federal University of Ceará

Investigated food composition through analytical chemistry

05/2006 - 02/2010 Research Assistant

Institute of Biomedical Sciences, Ceará State University

Investigated the effects of essential oils on muscle physiology

### **Publications in Peer-reviewed Journals:**

- 1. J. Kim, B. Barbagallo, K. Annunziato, et. al. Maternal preconception PFOS exposure of *Drosophila melanogaster* alters reproductive capacity, development, morphology and nutrient regulation. *Food and Chemical Toxicology*. 151; 112153, 2021. https://doi.org/10.1016/j.fct.2021.112153
- 2. **R. Farias-Pereira**, L. Young, and Y. Park. Neuroprotective effects of green coffee bean extract against Alzheimer's and Parkinson's disease: a mini review. *Food and Life*. 1; 1-7, 2021. https://doi.org/10.5851/fl.2020.e11
- 3. J. Bai, **R. Farias-Pereira**, M. Jang, et. al. Azelaic acid promotes *Caenorhabditis elegans* longevity at low temperature via an increase in fatty acid desaturation. *Pharmacetical Research*. 38; 15-26, 2021. https://doi.org/10.1007/s11095-020-02975-w
- 4. Y. Yue, S. Li, Z. Qian, et. al. Perfluorooctanesulfonic acid (PFOS) and perfluorobutanesulfonic acid (PFBS) impaired reproduction and altered offspring physiological functions in *Caenorhabditis elegans*. Food and

- Chemical Toxicology. 145; 111695, 2020. https://doi.org/10.1016/j.fct.2020.111695
- 5. **R. Farias-Pereira**, C.S. Park, and Y. Park. Kahweol reduces food intake of *Caenorhabditis elegans. Journal of Agricultural and Food Chemistry*.68; 9683-9689, 2020. https://doi.org/10.1021/acs.jafc.0c03030
- 6. **R. Farias-Pereira**, Z. Zhang, C.S. Park, D. Kim, K.-H. Kim, and Y. Park. Butein inhibits lipogenesis in *Caenorhabditis elegans. Biofactors*. 46; 777-787, 2020. https://doi.org/10.1002/biof.1667
- 7. J. Bai, **R. Farias-Pereira**, Y. Zhang, M. Jang, Y. Park, and K.-H. Kim. *C. elegans* ACAT regulates lipolysis and its-related lifespan in fasting through modulation of the genes in lipolysis and insulin/IGF-1 signaling. *Biofactors*. 46; 754-765, 2020. https://doi.org/10.1002/biof.1666
- 8. **R. Farias-Pereira**, J. Savarese, Y. Yue, S.-H. Lee, and Y. Park. Fat-lowering effects of isorhamnetin are via NHR-49-dependent pathway in *Caenorhabditis elegans*. *Current Research in Food Science*. 2; 70-76, 2020. https://doi.org/10.1016/j.crfs.2019.11.002
- R. Farias-Pereira, E. Kim, and Y. Park. Cafestol increases energy expenditure in *Caenorhabditis elegans* via DAF-12-dependent pathway. *Food Chemistry*. 307; 125537, 2020. https://doi.org/10.1016/j.foodchem.2019.125537
- 10. **R. Farias-Pereira**, C.S. Park, and Y. Park. Mechanisms of action of coffee bioactive components on lipid metabolism. *Food Science and Biotechnology*. 28; 1287-1296, 2019. http://doi.org/10.1007/s10068-019-00662-0
- J.S. Yang, W. Qi, R. Farias-Pereira, et. al. Permethrin and ivermectin modulate lipid metabolism in steatosisinduced HepG2 hepatocyte. Food and Chemical Toxicology. 125; 595-604, 2019. https://doi.org/10.1016/j.fct.2019.02.005
- R. Farias-Pereira, J. Oshiro, K.-H. Kim, and Y. Park. Green coffee bean extract and 5-O-caffeoylquinic acid regulate fat metabolism in *Caenorhabditis elegans*. *Journal of functional foods*. 48; 586-593, 2018. http://doi.org/10.1016/j.jff.2018.07.049
- 13. V. Leonhardt, J.H. Leal-Cardoso, S. Lahlou, et. al. Antispasmodic effects of essential oil of *Pterodon polygalaeflorus* and its main constituent β-caryophyllene on rat isolated ileum. *Fundamental & Clinical Pharmacology*. 24; 749-758, 2010. https://doi.org/10.1111/j.1472-8206.2009.00800.x

# Scholarship and Awards:

- Outstanding Service Awardee, Nutraceuticals and Functional Foods Division, IFT FIRST, 2021
- Merit-based Grantee of a Brazilian Scholarship, National Counsel of Technological and Scientific Development, 09/2015 08/2019
- Emerging Leader Finalist and Travel Awardee, Dietary Bioactive Components RIS, American Society for Nutrition, 2019
- Graduate Student Travel Awardee, Department of Food Science, University of Massachusetts Amherst, 2019
- 3<sup>rd</sup> Place Awardee, Ocean Spray Student Product Development Competition, 2018
- 3<sup>rd</sup> Place Awardee, Changing Face of Entrepreneurship Workshop contest. STEM Diversity Institute, University of Massachusetts Amherst, 2016
- Honorable Mention, IV Animal Science Conference (Animal Lab), Ceará State University, 2013
- Merit-based Awardee, III Regional Conference of Federation of Societies for Experimental Biology (FeSBE), 2008

### **Classroom Teaching:**

BiologyCell Biology and Chemistry Lab2 creditsPublic HealthFood toxicology3 creditsNatural SciencesThe physiology of the next superhero1 credit

### **Professional Affiliations:**

- Institute of Food Technologists
- Phi Tau Sigma The Honor Society of Food Science and Technology