

## Curriculum Vitae

# ESTHER BORGES FLORSHEIM

Assistant Professor  
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### Education

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- 2014      **Doctorate of Philosophy in Sciences**  
Immunology  
University of Sao Paulo, Brazil
- 2009      **Bachelor of Science**  
Fundamental Sciences for Health (major), Biological Sciences (minor)  
University of Sao Paulo, Brazil

### Positions and Employment

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- 2021 - present    Assistant Professor  
School of Life Sciences, Center for Immunotherapy, Vaccines, & Virotherapy  
Arizona State University *effective January 1, 2021*
- 2015 - 2020      Postdoctoral Scholar with Prof. Ruslan Medzhitov  
Department of Immunobiology, Yale University School of Medicine
- 2009 - 2014      Immunology PhD Student with Prof. Momtchilo Russo  
Department of Immunology, University of Sao Paulo
- 2012 - 2013      Graduate Fellow with Prof. Ruslan Medzhitov  
Department of Immunobiology, Yale University School of Medicine
- 2011              Graduate Fellow with Prof. Maria Leite-de-Moraes  
Necker Enfants-Malades Institute, Paris
- 2008              Undergraduate Research Assistant  
Department of Ecology, Forestry Institute of the State of Sao Paulo
- 2005 - 2008      Undergraduate Fellow  
Department of Immunology, University of Sao Paulo

### Honors & Awards

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- 2020      Travel award and invited talk, *Gordon Research Conference*
- 2019      Best presentation award, *2<sup>nd</sup> Annual Yale Postdoc Symposium*, Yale University
- 2018      AAI Young Investigator Award, *New England Immunology Conference*, MBL
- 2018      Travel award, *The Cell-Weizmann Institute of Science Symposium*, Israel
- 2017      Best content and presentation awards, *Flipped Science Fair*, Yale University
- 2008      Honorable mention/best presentation, *Young Researchers Program*, USP

## Publications

1. **Florsheim E\***, Sullivan Z\*, Khoury-Hanold W\*, Medzhitov R. Food allergy as a biological food quality control system. *Cell*. 2020 (*accepted*). \*co-authors. *Review*
2. Altwerger G, **Florsheim E**, Menderes G, Black J, Schwab C, Gressel GM, Nelson WK, Carusillo N, Passante T, Huang G, Litkouhi B, Azodi M, Silasi DA, Santin A, Schwartz PE, Ratner ES. [Impact of carboplatin hypersensitivity and desensitization on patients with recurrent ovarian cancer.](#) *J Cancer Res Clin Oncol*. 2018 Dec; 144(12):2449-2456. doi: 10.1007/s00432-018-2753-y. PMID: 30255380.
3. Barros MS, Gomes E, Gueroni DI, Ramos AD, Mirotti L, **Florsheim E**, Bizzarro B, Lino CN, Maciel C, Lino-Dos-Santos-Franco A, Tavares-de-Lima W, Capurro ML, Russo M, Sá-Nunes A. [Exposure to Aedes aegypti Bites Induces a Mixed-Type Allergic Response following Salivary Antigens Challenge in Mice.](#) *PLoS One*. 2016; 11(5):e0155454. doi: 10.1371/journal.pone.0155454. PMID: 27203689.
4. **Florsheim E**, Yu S, Bragatto I, Faustino L, Gomes E, Ramos RN, Barbuto JA, Medzhitov R, Russo M. [Integrated innate mechanisms involved in airway allergic inflammation to the serine protease subtilisin.](#) *J Immunol*. 2015 May 15;194(10):4621-30. doi: 10.4049/jimmunol.1402493. PMID: 25876764.
5. Faustino L, Fonseca DM, **Florsheim E**, Resende RR, Lepique AP, Faquim-Mauro E, Gomes E, Silva JS, Yagita H, Russo M. [Tumor necrosis factor-related apoptosis-inducing ligand mediates the resolution of allergic airway inflammation induced by chronic allergen inhalation.](#) *Mucosal Immunol*. 2014 Sep; 7(5):1199-208. doi: 10.1038/mi.2014.9. PMID: 24569802.
6. Palm NW, Rosenstein RK, Yu S, Schenten DD, **Florsheim E**, Medzhitov R. [Bee venom phospholipase A2 induces a primary type 2 response that is dependent on the receptor ST2 and confers protective immunity.](#) *Immunity*. 2013 Nov 14;39(5):976-85. doi: 10.1016/j.immuni.2013.10.006. PMID: 24210353.
7. Barboza R, Câmara NO, Gomes E, Sá-Nunes A, **Florsheim E**, Mirotti L, Labrada A, Alcântara-Neves NM, Russo M. [Endotoxin Exposure during Sensitization to Blomia tropicalis Allergens Shifts TH2 Immunity Towards a TH17-Mediated Airway Neutrophilic Inflammation: Role of TLR4 and TLR2.](#) *PLoS One*. 2013;8(6):e67115. doi: 10.1371/journal.pone.0067115. PMID: 23805294.
8. Castro JM, Resende RR, Mirotti L, **Florsheim E**, Albuquerque LL, Lino-dos-Santos-Franco A, Gomes E, de Lima WT, de Franco M, Ribeiro OG, Russo M. [Role of m2 muscarinic receptor in the airway response to methacholine of mice selected for minimal or maximal acute inflammatory response.](#) *Biomed Res Int*. 2013; 2013:805627. doi: 10.1155/2013/805627. PMID: 23691511.
9. Faustino L, da Fonseca DM, Takenaka MC, Mirotti L, **Florsheim E**, Guerreschi MG, Silva JS, Basso AS, Russo M. [Regulatory T cells migrate to airways via CCR4 and attenuate the severity of airway allergic inflammation.](#) *J Immunol*. 2013 Mar 15;190(6):2614-21. doi: 10.4049/jimmunol.1202354. PMID: 23390295.
10. Mirotti L, **Florsheim E**, Rundqvist L, Larsson G, Spinozzi F, Leite-de-Moraes M, Russo M,

Alcocer M. [Lipids are required for the development of Brazil nut allergy: the role of mouse and human iNKT cells.](#) *Allergy*. 2013 Jan;68(1):74-83. doi: 10.1111/all.12057. PMID: 23137012.

My Bibliography at NCBI

Citations until Dec 2020 = 346

### Fellowships & Research Grants

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2020 - 2023	Food Allergy Research & Education Foundation (postdoctoral research grant) PI: Ruslan Medzhitov, Co-PI: Marcelo Dietrich
2009 - 2014	Sao Paulo Research Foundation FAPESP (Ph.D. fellowship grant)
2012 - 2013	FAPESP Research Internships Abroad for Honors Doctorate Award (fellowship grant, Medzhitov Lab)
2011	FAPESP (research grant, Leite-de-Moraes Lab)
2010 - 2011	National Research Council CNPq (teaching assistant fellowship)
2007 - 2008	Young Investigator Award FAPESP (fellowship grant, Russo Lab)
2005 - 2007	CNPq Research Award (fellowship grant, Russo Lab)

### Service

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2020	Participant and speaker, Spook-takular Science Yale program for high-school students in the New Haven community.
2015 - present	Ad hoc reviewer for eLife, The Journal of Immunology, PLOS One, The International Journal of Molecular Sciences, Mediators of Inflammation, Biomedical Journal
2020	Co-organizer, Yale-CAPES Seminars in Biomedical Sciences ( <i>postponed</i> )
2018 - 2020	Founder and organizer, Philosophy of Science Discussion Group
2017 - 2020	Co-founder and organizer, Girl's Night Out, Dept of Immunobiology, Yale University School of Medicine
2016 - 2020	Co-founder and member, <a href="#">Immunobiology Working Group on Diversity &amp; Inclusion</a>
2018 - 2019	Member, <a href="#">Women in Science Mentoring Group</a> with Profs. Jessica Cardin and Sreenganga Chandra, Yale School of Medicine
2017, 2019	Co-organizer and postdoctoral representative, Yale Immunobiology Dept Retreat
2015 - 2018	Co-founder and organizer, Allergy Group Meetings, Medzhitov Lab
2007 - 2014	Member, Brazilian Society for Immunology
2010 - 2012	Elected student representative, Inst. of Biomedical Sciences, Univ. of Sao Paulo
2010 - 2012	Elected student representative, Dept of Immunology, Univ. of Sao Paulo
2009 - 2011	Founder and organizer, Graduate Student <i>Research in Progress</i> , Dept of Immunology, Univ. of Sao Paulo

### Teaching

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At Yale University:

2020	Mentoring in the lab (workshop participant)
2020	Course design (workshop participant)
2020	Preparing and delivering an effective lecture (workshop participant)

2019 Teaching international students (workshop participant)  
 2018 [Flipped Science Fair](#) (guest lecturer)  
 2018 Scientific teaching for life scientists (guest lecturer)  
 2017 Immunity and Microbes, Yale undergraduate course (guest lecturer)  
 2017 Immunity and Microbes, Yale undergraduate course (guest lecturer)  
 2017 [Theory and Practice of Scientific Teaching for Life Scientists](#) (class participant)  
 2017 Fundamentals of teaching (workshop participant)  
 2016 Teaching and mentoring in a lab environment (workshop participant)  
 2015 Fundamentals of teaching (workshop participant)

#### At University of Sao Paulo:

2011 Immunology of infectious diseases (teaching assistant)  
 2010 Advanced and clinical immunology (teaching fellow)  
 2010 Basic immunology (teaching fellow)  
 2008 General properties of the immune system (teaching assistant)

#### Mentoring

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2019 Nathaniel Bachtel, Yale School of Medicine, MD-PhD student  
 2018 Timothy Sullivan, Hopkins School – CT, High school student  
 2017 Jacob Siegel, Yale School of Medicine, MD student  
 2016 Arthur Baisangurov, Moscow University, Undergraduate student  
 2015 Gowri Kaluglotla, Yale University, Undergraduate student  
 2015 Ana Alicia Cirac, Technical University of Munich, MD-PhD student  
 2010 Paulo Masini, Anhembi-Morumbi University, Undergraduate student  
 2009 Monique Baron, Uninove University, Undergraduate student

#### Invited Talks

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10/2020 “The physiological immune system”  
 Arizona State University School of Life Sciences Seminar Series (online).  
 10/2020 “Immunological zombies: how allergens can change behavior”  
 Zombie Apocalypse Medicine Meeting (online).  
 08/2020 “Experimental models of food allergy”  
 Food Allergy Science Initiative FASI regular meeting (online).  
 06/2020 “Immunological basis of food aversion”  
 European Academy of Allergy and Clinical Immunology EAACI (digital congress).  
 02/2020 “Immunological basis of behavior: allergy & avoidance”  
 Arizona State University School of Life Sciences & Biodesign Institute (CIVV).  
 01/2020 “IgE-dependent taste preference”  
 II Gordon Research Conference on Food Allergy.  
 12/2019 “Neuroimmune mechanisms in allergies”  
 Yale-CAPES Seminars in Biomedical Sciences.

- 03/2019 "Immune-mediated allergen sensing controls avoidance behavior"  
Keystone Symposia on Mammalian Sensory Systems.
- 02/2019 "The Immunology of Aversion"  
Yale School of Medicine, Immunobiology Dept, Research in Progress.
- 10/2018 "Neuroimmune mechanisms of food aversion"  
University of Sao Paulo, Institute of Biomedical Sciences, Dept of Immunology.
- 09/2018 "Neuroimmune mechanisms of food aversion"  
The Rockefeller University, invited seminar to the Mucida Lab.
- 08/2018 "Neuroimmune mechanisms of food aversion"  
Food Allergy Science Initiative, The Broad Institute, regular seminar.
- 01/2018 "Characterizing the neuroimmune mechanisms of food aversion"  
Gordon Research Conference on Food Allergy.
- 01/2017 "Allergic inflammation and food aversion"  
Yale University School of Medicine, Dept of Comparative Medicine, invited seminar to the Dietrich Lab.
- 04/2016 "Allergic sensitization as adaptation to stress"  
University of Sao Paulo, Institute of Biomedical Sciences, Dept of Immunology.