



**Education** | B.S./ M.S. in Biochemistry, University of Coimbra, FCTUC, Coimbra-PT; Ph.D., University of Lisbon, Lisbon Academic Medical Center, Lisbon (Portugal), Lisbon Academic Medical Center PhD Program, Institute of Molecular Medicine (PhD Scholarship SFRH/BD/62674/2009, FCT); EMBO Long-term Postdoctoral fellowship; Cancer Research Institute Postdoctoral Fellowship.

**Professional Experience** | 2022-present, Associate Director of Scholar Support of the PhD in Clinical Investigation Program at Einstein; 2022-present, Einstein Mentors Educator; 2019-present, Assistant Professor, Albert Einstein College of Medicine (Einstein).

**Professional Activities** | Academia: 2024-present Member, Cancer Immunotherapy Institute, Einstein; 2023-present, CIMER Entering Mentoring Trained Facilitator; 2022-present

Member, Cancer Dormancy and Tumor Microenvironment Institute, Einstein; 2022-present, Lecturer at Immunology Course; 2021-present Member, Montefiore-Einstein Comprehensive Cancer Center, Einstein; 2021-present Member of the Institute for Aging Research; 2020-present Member of the Einstein-Mount Sinai Diabetes Research Center; 2020-present, Member of Einstein Graduate Admission Committee; 2019-present Member of the Marion Bessin Liver Research Center, Einstein; 2022-2024, Chair of MECCC Women's Initiative Network (MECCC WIN); 2020-2023, Lecturer at Mechanisms of Disease Course. Society: 2014 – present, Zebrafish Disease Modeling Society (ZDMS), Elected Board of Directors and DEI Committee vice-chair, Organizing Committee of ZDM17 meeting; 2022 – present, Society of Leukocyte Biology, Funder and organizer of Building Bridges in Leukocyte Biology (Virtual Webinar series); 2021-2023, American Gastroenterological Association (AGA)2020-2023; The Histochemical Society (HCS). Grant Review: Cancer Research Institute; Fibrolamellar Carcinoma Foundation; Medical Research Council (UK); The Tel Aviv University Center for Combatting Pandemics (Israel)

**Research Interests** | Our lab's overall goal is to expand our understanding of how neutrophils and their traditional inflammatory responses are affected by chronic low-grade systemic inflammation, which is triggered by environmental or genetic factors. We focus on metainflammation (inflammation due to metabolic imbalance) and inflammaging (inflammation due to aging). We also investigate how these changes influence neutrophil function and their role in liver disease and cancer, such as MAFLD/MASH, HCC, and Fibrolamellar Carcinoma. Utilizing the zebrafish model, known for its transparency and ease of genetic and pharmacological manipulation, we aim to visualize and understand the molecular mechanisms of neutrophil responses in a whole-animal context. Currently, our projects focus on:

1. Characterizing the prioritization mechanisms that neutrophils use during the inflammatory response in polytraumatic injury and how such mechanisms are impacted by metainflammation and aging, leading to poor patient outcomes and prognosis.
2. Deciphering mechanisms that create pro-resolution neutrophil subtypes to help treat and resolve MASH.
3. Exploring how changes in neutrophil immunometabolism dictate their role and function in liver cancer (HCC and FLC) and identifying pathways/compounds that can increase neutrophil cytotoxicity to help eradicate liver tumor cells.

**Statement of Interest** | As a female first-generation college student and neurodiverse scientist, my path to a career in science has been challenging. This journey has heightened my awareness of certain practices and barriers within academia, fueling my commitment to advocating for diversity, equity, inclusion (DEI), and effective mentorship. As a junior faculty member, I have taken on key leadership roles, such as Chair of the MECCC-WIN, supporting female scientists, and Associate Director of Student Support at the PCI Program, where I oversee the career development of graduate students. Additionally, I have served as vice-chair of the ZDMS DEI Committee and founded the Building Bridges in Leukocyte

Sofia de Oliveira, PhD

Biology initiative at SLB—a platform promoting the work of underrepresented scientists. As an SLB Associate Councilor, I aim to expand my advocacy for DEI and mentorship.

I believe scientific leaders must develop research programs that advance science while fostering inclusive, supportive, and diverse environments. As an SLB Council member, I will lobby for initiatives such as:

1. Guiding the Members in Transition and Training Committee (MTTC) to develop mentorship philosophies and neurodiversity awareness activities. These will aid postdocs and pre-doctoral trainees in self-advocacy and co-mentorship, enhancing their experiences and retention.

2. Highlighting the importance of neurodiversity in scientific discovery. Neurodiverse individuals bring innovation and unique perspectives but face challenges that can hinder their progress and self-esteem. Promoting awareness and creating supportive work environments are crucial. SLB's positive culture makes it ideal to develop activities focused on raising awareness for neurodiversity in science:

1. **Workshops and Training Sessions:** Organize workshops on neurodiversity awareness.
2. **Guest Speaker Events:** Invite neurodiverse scientists to share their experiences and insights; Host panel discussions featuring neurodiverse researchers and their contributions to science; Highlight their paths on a iSLB section.
3. **Awareness Campaigns:** Launch social media campaigns highlighting the strengths and achievements of neurodiverse scientists.
4. **Mentorship Programs, &Networking Events:** Establish mentorship programs pairing neurodiverse students with supportive mentors; Facilitate peer networks for neurodiverse scientists to connect and collaborate; Facilitate informal meet-ups and discussions to foster community building.
5. **Recognition and Awards:** Establish awards recognizing the contributions of neurodiverse scientists.
6. **Surveys and Feedback:** Conduct surveys to understand the needs and challenges of neurodiverse individuals in science. Use feedback to inform and improve neurodiversity initiatives.

By implementing these activities, SLB communities can foster a more inclusive and supportive environment in science that recognizes and values the contributions of neurodiverse individuals.