The Zon Lab Research Assistant Program

<u>URRARATED</u>

Work as a Research Assistant with Dr. Leonard Zon,

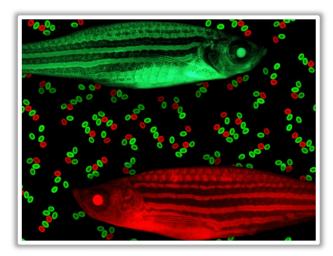
Grousbeck Professor of Pediatrics at Harvard Medical School, HHMI Investigator, HSCI Faculty Member, and Director of the Stem Cell Program at Boston Children's Hospital.

Our lab uses the zebrafish model system and cutting-edge technologies to study the role of gene expression in hematopoiesis, cancer, and stem cell development. We aspire to develop and improve drug therapies and treatments for patients with blood disorders and cancer. Our lab is based in two locations: Longwood Medical Area (Boston) and Harvard University (Cambridge).

Our research

Hematopoiesis

Each day, humans require the production of ~100 billion new blood cells for proper hematopoietic function. Assaults to this system can cause diseases including leukemias, lymphomas, and anemias. We study how hematopoietic progenitor cells are induced from vascular precursors, how hematopoietic stem cells (HSCs) engraft into their stem cell niche, which genes control HSC selfrenewal and differentiation, what goes awry in blood cancers and diseases, and how to improve treatments such as bone marrow transplants.



Title image credit: Sam Wattrus (Graduate Student)



Positions available

Research Assistants: We have multiple open positions for candidates with strong biology backgrounds. Research Assistants will perform a variety of molecular biology techniques, microinjections, microscopy, tissue culture and zebrafish husbandry. We are fishing for highly motivated, intellectually curious candidates with strong organizational skills and an ability to work independently.



Melanoma

The Zon Lab created the first animal model of a BRAF driven cancer in 2005 with the publication of our zebrafish melanoma model. Our lab has gone on to identify genes important in melanoma initiation such as SPRED1 and SETDB1. We study epigenetic regulators of melanoma onset, molecular events in melanoma initiation, and mechanisms of melanoma drug resistance.



Image credit: Georgia Stirtz (Graduate Student)

Benefits to you

Many recent college graduates spend time as Zon Lab Research Assistants prior to successfully moving on to positions in medical school, graduate school, and other health professions. You will learn how to design and execute state-of-the-art experiments, providing an excellent opportunity to grow creatively as a scientist and to think critically about how the lab translates to the clinic. Research assistants regularly give presentations and become authors on primary research papers, providing a competitive edge when applying to graduate and medical programs.

How to apply

Positions are competitive and require a two-year commitment beginning Summer 2022.

Email your CV and cover letter to Dr. Anne Ellett (Lab Manager): anne.ellett@childrens.harvard.edu



Praise from Zon Lab Alumni

The Zon Lab gave me an opportunity to understand and carry out experimental thinking at an advanced level. It opened my eyes to the intricate thought processes that successful research requires. But best of all, the Zon Lab was a warm and welcoming family who I will always cherish.

- Eugenia Custo (Yale; Yale School of Medicine)

I was exposed to incredible cutting-edge research in a nurturing environment where every lab member cared about my professional and personal growth. My mentors provided me with unparalleled research responsibilities that had important clinical implications for patient care.

- Francesca Barrett (Williams; Harvard Medical School MD/MBA)

I was able to learn from incredible mentors, work with fun and driven colleagues, and do really cool science on a daily basis. It was a valuable and awesome experience!

- Vy Nguyen (Bowdoin; Stanford University Developmental Biology PhD Program)

The lab was a great environment for me to identify the path in biomedicine that was right for me, and to grow as a researcher. The lab was a fun environment filled with caring people who I was excited to work with every day.

– Will Mannherz (University of Pennsylvania; Harvard Medical School MD/PhD)

I found inspiring and dedicated mentors - not only in Len, but in every lab member. The experience allowed me to become competent as a scientist. The lab atmosphere of collaboration and rigor helped me decide what to look for in future mentors and work environments.

- Jessica Moore (Colby; Yale BBS PhD Program)

My experience in the Zon Lab helped make me more confident in both my technical skills and my ability to discuss and apply scientific research. As a result, I am able to share my research experience and ideas with certainty while meeting with PIs and applying for research fellowships.

- Madeleine Daily (Bowdoin; Columbia Dental Medicine)

The supportive culture of the Zon Lab makes it a unique and exciting place to be. I gained practical experience analyzing complex genetic data for numerous projects. This experience gave me the foundation necessary to pursue further informatics research as a medical student.

- Michael Superdock (Swarthmore; Brown Medical School)

The relationships and camaraderie are amazing. I was thrilled by how friendly people are and how much fun we have outside of work. The other lab members are fantastically supportive of our career goals and I've met some of my closest friends here!

- Kevin Chen (Harvard College; David Geffen School of Medicine at UCLA)

Hear directly from Zon Lab Research Assistants:

https://youtu.be/_21wI5af3Cl