



Zebrafish Models of Lymphocyte Development and Lymphocytic Cancers

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Message from the Guest Editor

Colleagues,

Zebrafish have a proven history in developmental studies and, more recently, studies of the vertebrate immune system, including the innate and adaptive arms. Lymphocytes are key to both. Zebrafish are also used to study lymphocyte cancers, with the first *D. rerio* cancer model being a transgenic line prone to lymphoblast malignancies. Several others have now been described. Tools to label cells and ablate or mis-express genes in specific *D. rerio* lineages continue to expand, making zebrafish a premier model for in vivo studies of gene function in immune cells. Recent discoveries of T-regulatory and innate lymphoid cells in zebrafish show once again that *D. rerio* and man have similar immune systems, opening new avenues to study the roles played by these cells and their genetic programs.

This Special Issue invites manuscripts on these and related topics of *D. rerio* lymphocytes, their development, and genes and mechanisms guiding their function. We also solicit papers about lymphocyte cancers and genetic events causing lymphocyte transformation, progression, and therapy resistance. Zebrafish allow experimental strategies like genetic manipulation, in vivo imaging, high-throughput screens, and cell-specific mechanistic studies. Submissions using these or other approaches to study *D. rerio* lymphocytes in normal and pathologic contexts are welcome.

Dr. J. Kimble Frazer
Guest Editor

