



Heinrich Jasper, PhD

Dr. Jasper is a Staff Scientist at Genentech Inc. in South San Francisco and a Professor at the Buck Institute for Research on Aging in Novato, California, USA. He obtained a diploma in biochemistry from the University of Tübingen (Germany) in 1999 and his PhD from the University of Heidelberg/EMBL (Germany) in 2002, where he studied transcriptional regulation of developmental processes in *Drosophila*. H.J. assumed his first faculty appointment (research assistant professor) at the Department of Biomedical Genetics of the University of Rochester Medical Center in 2003, and in 2005 was appointed Assistant Professor and then tenured Associate Professor in 2010 in the Department of Biology of the School of Arts, Sciences, and Engineering at the University of Rochester. He was appointed Professor at the Buck Institute in July of 2012, where he was assumed the position of Chief Scientific Officer in 2014. In 2017 he was recruited to Genentech Inc. He further heads a collaboration group at the Fritz Lipmann Institute, Leibniz Institute for Aging Research in Jena, Germany.

Dr. Jasper is interested in regulatory mechanisms that control stress tolerance, metabolism and aging in multi-cellular organisms. The Jasper lab has a long history of studying the basic biology of aging, and uses the *Drosophila* system to explore mechanisms that cause the loss of homeostasis in multiple biological processes. Current projects in his lab focus on the control of tissue regeneration and repair, metabolic homeostasis, and cell death, taking advantage of the wide range of genetic, molecular, and genomic techniques available for *Drosophila*. An important focus of this work has been the control of stem cell function in stressed and aging epithelia. Dr. Jasper and his lab have established the *Drosophila* intestinal stem cell (ISC) system as a model for age-related regenerative decline, and have characterized molecular pathways that control ISC activation, self-renewal and differentiation. Another focus of Dr. Jasper's work has been the regulation of photoreceptor survival in the retina of *Drosophila* and mice.

These studies have resulted in insights that have important implications for understanding and treating a wide-range of age-related diseases, including diabetes, cancer, chronic inflammatory diseases and age-related macular degeneration.

Dr. Jasper received the Senior Fellow Award of the Ellison Medical Foundation in 2008, was named Wilmot Assistant Professor in Arts, Sciences, and Engineering in 2009, and has received the Glenn Foundation Award in Research in Biological Mechanisms of Aging in 2010. He is editorial board member of *Aging Cell* and *Scientific Reports* and is a member of the Board of Directors (and currently President elect) of the American Aging Association. His work is currently or has been funded by the American Federation for

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