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Obituary

Lorenz Poellinger MD, PhD (1957–2016)

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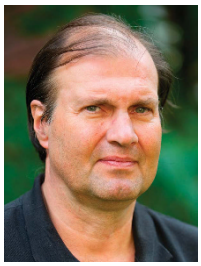

Lorenz Poellinger suddenly passed away on March 13, 2016. He will be missed by his family, friends and colleagues around the world. Lorenz was an eminent scientist who provided many important insights into the control of transcriptional regulation and how cells sense low oxygen (hypoxia). He was also a world traveler, mastered several languages and had a deep knowledge of history and culture.

Lorenz graduated from the German Academy (Tyska Skolan) in Stockholm, Sweden, he was fluent in Swedish, English, German and French. Medicine became his next major interest and he obtained a PhD from the Karolinska Institute in 1985, with Professor Jan-Åke Gustafsson as his advisor, followed by an MD in 1991. In his doctoral work, he made important contributions to nuclear receptor biology. Following his PhD, Lorenz was a postdoctoral fellow with Professor Robert Roeder and again excelled in the area of gene regulation with a focus on the function of promoters and enhancers.[1]

After his return to Sweden in the late 1980s Lorenz continued to explore the mechanisms of gene regulation, and his work on the PAS domain in the dioxin receptor and its interaction with ARNT (HIF1β) led him into a new research field, the cellular hypoxic response, where he would become a true international leader. As a measure of his success he received prestigious awards, like the Anders Jahre Prize for Young Medical Investigators in 1995 and the The Svedberg Prize in 1996. He was appointed Professor of Molecular Biology at the Karolinska Institute at the young age of 39, in 1996.

Lorenz' work in the field of cellular hypoxia was broad and multifaceted, and he provided numerous important insights into how cells and organisms cope with low oxygen levels. Among his discoveries was the mechanism for how the cornea remains avascular based on the function of IPAS (a hypoxia-inducible splicing variant of HIF3α).[2] I had the honor and privilege to work with Lorenz on unraveling a cross-talk between the cellular hypoxic response and Notch signaling,[3] and this project would have gone nowhere without Lorenz' deep expertise, enthusiasm and scientific generosity.

Lorenz was a leading scientist at the Karolinska Institute. He was awarded the Distinguished Professor Award in 2010 and since 2007 he was a member of the Nobel Assembly for Physiology or Medicine, where he was an important voice with his broad knowledge in biochemistry, molecular biology and physiology. In 2008 Lorenz took the next step in his career, by establishing a satellite laboratory for tumor and hypoxia biology at the Cancer Science Institute of Singapore, a city that became very close to his and his wife Eva's hearts.

Lorenz was truly multi-talented. In addition to being a first-rate scientist, he had a 'joie de vivre' attitude to life. He was a keen mountain climber in his youth and he liked good food, traveling and culture; a coffee room discussion with Lorenz could equally well end up on the role of a specific amino acid in HIF1 as in stories on European history or memories from traveling to remote parts of the world. But above all, Lorenz was truly passionate about science; with an insatiable curiosity for how the cell works at the molecular level. I will always remember our last conversation; he came to my office to share his excitement over a new aspect of hypoxia, S-2-hydroxyglutarate, and how this affects cells in the immune system; a paper that was just recently published in Nature.[4] Lorenz will be missed by many friends and colleagues in Sweden and abroad.

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