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A molecular geometry imaging platform enabling life saving measures in ALS

This presentation deals with a molecular geometry imaging platform capable of mapping the spatial protein-colocalization and anti-colocalization code of large molecular systems at a time. The platform called molecular unlimited systems imaging cyler (MUSIC) robotics was applied to amyotrophic lateral sclerosis (ALS). The detection of ALS specific cells with a corresponding multi molecular geometry in the blood led to therapeutic depletion of these cells and to recovery of the treated patient, obviously because this therapy interferes with pathogenic invasion of these cells into the central nervous system, where they axotomize motor axons. Large scale geometry MUSIC robotics imaging of up to 4.5×10^4 power of combinatorial molecular resolution is key to detect these cells and to control depletion therapy for clinical success. These data and new possibilities may argue for clinical application and for a systematic research in the field of molecular geometry of diseases to discover new mathematically defined insight.

Recent Publications

1. Schubert W (2018) A platform for parameter unlimited molecular geometry imaging obviously enabling life saving measures in ALS. *Advances in Pure Mathematics* 8(3):329-334.
2. Schubert W, Bonnekoh B, Pommer AJ, Philipsen L, Boeckelmann R, Malykh Y, Gollnick H, Friedenberger M, Bode M and Dress AW (2006) Analyzing proteome topology and function by automated multidimensional fluorescence microscopy. *Nature Biotechnology* 24(10):1270-1278.

Biography

Walter Schubert is the Director of the International Human Toponome Project, Munich, Germany. Based on observations on the island of KOS, Greece, in 1987, he formulated the sun light hypothesis and derived MUSIC robotics for simultaneous imaging of millions of molecular signals in one and the same sample, e.g. in diseased tissues of ALS: the imaging cyler technology applying millions of quasi channels. He is Emeritus Professor for Toponomics of the International Faculty, CAS-MPI partner Institute for Computational Biology, Shanghai, China. He has received many national and international awards and honors. He has 150 publications, and holds over 80 technology and therapy patents.

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