



Professor Wilhelm J. Ansorge EPFL, (ETH Lausanne)

Short description of background:

Dissertation in: Magnetic properties of materials at cryogenic temperatures.

Texas Instruments Inc., Dallas - Semiconductor technology development.

CERN, Geneva - Construction of Superconducting magnets and Components, Computer system control.

EMBL, Heidelberg - Genomic Biomedical Technology development, commercialized by my Department at at European Molecular Biology Laboratory and leading European industry.

At present at EPFL - serving on several European Scientific Advisory Boards.

Continued interest in innovative DNA analysis and other genomics tools.

DNA Sequencing Systems:

Development and construction of five generations, starting with Ultra-thin Gel Technique, to High-throughput Fluorescent multiple lasers sequencing systems. (Commercialized by LKB, Pharmacia Amersham).

The technique was used for determination of the first Human Gene locus (HPRT) 70 kb sequence, published 1990 in Genomics, proving feasibility of the technology for analysis of complex genome projects, serving as a feasibility for the Human Genome Project. Furthermore were sequenced human chromosomal DNA for clinical projects. Dr. Ansorge and his team participated in sequencing Yeast Genome (largest contribution in continental Europe), Genomic and Mitochondrial DNA in Arabidopsis, parts of Drosophila and Anopheles. Performed first analysis of gene expression in Yeast on low carbon diet, by SAGE technique. Dr. Ansorge already in 1991 submitted the first patent applications for a DNA sequencing system without gels, fluorescent "Sequencing by Synthesis", similar to those used today in US, in the so called Next-generation systems.

Other contributions from my EMBL department include:

Automated Microinjection in Single cells (Zeiss, Eppendorf), Electro-Transfection (Eppendorf), Ultrathin Gel Technique for DNA and protein analysis, DNA Synthesiser, Protein Synthesiser, Mass Spectrometry from Gel+Fingerprint, Nano-electrospray Mass Specs, 1st Whole Genome Chip (52000cDNAs) in 2001, transferred to US company
Development of software, robotics and automation.

Membership and Honors:

EMBO, HUGO, HUPO, EBF

Publications, Patents and Technology Transfer:

Over 300 publications, Reviews, 5 books (Techniques, Molecular Diagnostics), H-index > 75

Over 30 patent applications, resulting in several commercial products by leading European companies.

Involved in Technology Transfer, founder of a Biotech company listed on Nasdaq and Frankfurt.