A History of Swedish Innovation in Protein Analysis

1838

Jöns Jacob Berzelius (Karolinska Inst) noted for his description of the law of definite proportions and work in electrochemistry, coins the term "protein"; he also originates the terms "catalysis", "isomer" and "polymer"

1924

Thé (Theodore) Svedberg (Uppsala Univ) separates hemoglobin protein in an ultracentrifuge, for which he was awarded a Nobel Prize in 1926.

1930

Arne Tiselius (assistant to Svedberg) receives a doctorate for developing electrophoresis to separate proteins on the basis of charge. Also at Uppsala Univ, he was awarded a Nobel Prize in 1948, and founded LKB a manufacturer of laboratory and medical instruments

1951

Jerker Porath (Uppsala Univ) cross-links dextran. The Nature paper "Gel filtration: a method for desalting and group separation"[1] results in the launch of Sephadex™ and Pharmacia AB in 1959

1967

SGO Johansson (Uppsala Univ Hosp) and Hans Bennich (also Uppsala Univ Hosp) discover IgND a myeloma protein in an unusual patient.[2] Named IgE in 1968, has had a signficant effect on diagnosis and management of allergic disease.

1971

Perlman and Engvall (Univ Stockholm) invent the ELISA method[3], replacing the radioimmunoassay (RIA). The ELISA method revolutionizes diagnostics and still remains a standard for protein quantitation.

1972

Lief Wide (Uppsala Univ) develops the first allergy test (Phadebas IgE) introduced by Pharmacia AB

1989

The first instrument to use Surface Plasmon Resonance (SPR) technology is launched by Uppsala-based Biacore. It is used to study protein interactions, and became part of GE Heathcare (now Danaher Cytiva) in 2006.

2004

Olink Bioscience is founded in Uppsala out of the laboratory of Dr. Ulf Landegren (Univ Uppsala)

2011

Martin Lundberg and Simon Fredrikson publish the Proximity Extension Assay (PEA) technique for high-specificity multiplexed immunoassays with qPCR readout.[4]

2016

Olink Bioscience reorganizes and names Jon Heimer as CEO of the newly formed Olink Proteomics AB. Olink Proteomics Inc. office opens in greater Boston MA USA

2018

Olink Proteomics offers 14 human Olink® Target 96 panels and 1 mouse Olink Target 96 panel

2020

Launch of Olink® Explore 1536 with next-generation sequencing (NGS) readout[5], and launch of the Olink Target 48 Cytokine Panel

2021

Launch of Olink Explore 3072, doubling the number of proteins analyzed with NGS readout. Launch of the Olink Signature Q100 instrument for measuring all Olink Target 96 and Olink Focus custom protein biomarker panels.

2022

Launch of Olink Insight, a knowledge platform for protein biomarker visualization, collaboration and shortening time to discovery. Launch of Olink Flex, a customizable mix & match panel

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3. Engvall E, Perlmann P. (1971) Enzyme-linked immunosorbent assay (ELISA). Quantitative assay of immunoglobulin G. Immunochemistry 8(9):871-874. doi:10.1016/0019-2791(71)90454-x
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