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SOMAscanTM: A Quantitative Multiplex Proteomic Platform that Measures >1000 Analytes in Complex Matrices

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SomaLogic presents a transformative proteomic biomarker discovery and diagnostic application technology that measures 1 to \sim 1000 human proteins in low sample volumes (\sim 15-75 μ L of serum/plasma, tissue homogenate) with a high-performance, high- throughput, and cost-effective assay. This technology is enabled by a new class of DNA aptamers – "SOMAmers" – that contain novel chemically-modified nucleotides, which greatly expand the physicochemical diversity of the large combinatorial SELEX libraries from which they are selected. We will describe the highly scalable process that we use routinely to monitor changes in subjects or measure differences between clinical samples, taking into account pre-analytical variability, to derive biomarkers for use in differential diagnosis, determination of disease status, and for monitoring or predicting drug-response.

Biography

Following graduation and 10 years at the research laboratory bench at the CRUK's Birmingham University's laboratories and a UK-based diagnostics company, Tony Bartlett has been engaged for 20 years in the early stages of product development and commercialisation of a number of game-changing analytical technology platforms including, but not limited to: the electro-chemiluminescence-based immunoassay platforms now owned by Roche Diagnostics, Affymetrix' GeneChip microarray platform, and a number of other platforms developed by start-up companies. He has held a number of senior positions including VP and General Manager positions in mature life science tools companies before joining SomaLogic to expand the company's footprint into Europe for whom he is the Director of European Commercial Operations & Collaborations. He describes himself as a "technology geek who is still a scientist at heart".

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