Post-infectious autoimmune syndrome (PIFAS) as a predictive and a diagnostic factor to monitor chronic diseases of infectious and autoimmune origin (CDIO)

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Even though chronic inflammatory disease can comprise 70% of a nation's health budget, its molecular mechanisms have remained elusive. Without a clear pathogenic description, the available treatments for autoimmune, neurologic and even psychiatric diagnoses have remained marginally effective. Preventative and predictive medicine has been stalled at the starting-gate. With metagenomics, came the understanding that man is a super-organism, a community of thousands of species of microbes functioning in homeostasis with the human genome. Proteomics and Metabolomics have built on this foundation with the knowledge that even seemingly similar diseases result not from a single transcriptional dysfunction of DNA, but from thousands of dysfunctional interactions between the host and its micro-biome the 'Interactome'. Antibodies are produced against components of the human micro-biome, so we all possess antibodies, even in the absence of disease. Antibody poly-specificity causes some of these to become auto-antibodies, with a definable autoimmune target. The ELI-Viscero panel, for example, measures 24 auto-antibodies which are part of a normal healthy human body, often called "natural" auto-antibodies. It appears that their proper homeostasis is essential to maintenance of a healthy body. Inflammation generated by other auto-antibodies can lead, over time, to a diagnosis of chronic disease, or to an inflammatory cancer. Fortunately, the retargeting of an approved drug (Olmesartan Medoxomil) has allowed quick translation of immune-stimulative, rather than immuno-suppressive therapies, resulting in a clinical paradigm shift and improved opportunities for rapid molecular discovery.

Biography

Trevor G Marshall graduated from the University of Adelaide, South Australia. His Doctoral thesis has been titled with 'Insulin metabolism in Diabetes'. Currently, he is Director of the Autoimmunity Research Foundation in California. He has won US FDA designations for Minocycline and Clindamycin in the treatment of Sarcoidosis. He is a Fellow of the European Association for Predictive, Preventive and Personalized Medicine, Brussels and a Member of the International Expert Council, Community of Practice: Preventative Medicine, Moscow.

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