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## Autoimmune inflammation and the human microbiome

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We all possess autoantibodies, even in the absence of disease. The ELI-Viscero panel, for example, measures 24 autoantibodies which are part of a normal healthy human body, often called “natural” autoantibodies. It appears that their proper homeostasis is essential to maintenance of a healthy body, assisting the immune system to deal with apoptotic cells and dead tissue. Elevated titres of natural autoantibodies can often be the earliest sign of incipient development of a latent disease process. Historically attributed to “*Horror Autotoxicus*,” it is now considered more likely that these antibodies are produced against components of the human microbiome. Antibody poly-specificity causes some of them to become autoantibodies, with a definable autoimmune target. The inflammation generated by this process often leads, over time, to a diagnosis of chronic disease, or to an inflammatory cancer.

### Biography

Trevor Marshall graduated from the University of Adelaide, South Australia, in 1974. His Doctoral thesis, ‘Insulin metabolism in Diabetes,’ was accepted by the University of Western Australia in 1985. He taught at the Institute of Technology in Lae, Papua New Guinea, Curtin University and the University of Western Australia, before moving to California in 1982. He is currently Director of the Autoimmunity Research Foundation in California. Research in the 1980's led to successful therapies for cryptorchidism, male and female infertility, and diabetes, but he is best known for his recent discoveries in translational Metagenomics and Autoimmune disease. He has won US FDA designations for minocycline and clindamycin in the treatment of sarcoidosis, and is currently steering the new generic drug ‘Pure Olmesartan’ through FDA review. He is a Fellow of the European Association for Predictive, Preventive and Personalised Medicine (Brussels) and a member of the International Expert Council, Community of Practice: Preventative Medicine (Moscow).

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