



B. Brett Finlay, PhD

In 1676, the great Dutch naturalist Antonie van Leeuwenhoek first observed bacteria in a drop of water. Almost two centuries later Louis Pasteur and Robert Koch recognized bacteria as a cause of disease, leading to development of germ theory, and applied by Joseph Lister in antiseptic surgery. These and other great discoveries establish microbiology as one of the triumphs of human knowledge. Now, Dr. Brett Finlay, Peter Wall Distinguished Professor at the Michael Smith Laboratories at the University of British Columbia, is extending our understanding of how microbes interact with humans in both health and disease, uncovering their role in asthma, malnutrition and enteric diseases, with implications for prevention, treatment and cure. His research in the field of cellular microbiology has led to human and animal vaccines, treatments for drug-resistant infections, and fundamental changes in our ideas of childhood health.

A respected and honoured researcher in his field, recipient of numerous awards, credited with hundreds of frequently cited publications, Dr. Finlay is also known to a broader public as the co-author of the provocative best-seller, *Let Them Eat Dirt: Saving Your Child from An Oversanitized World*, which presents to a popular audience scientific evidence concerning possible dangers of excessive sanitation in childhood environments. The argument advanced by Dr. Finlay, and his co-author Dr. Marie-Claire Arietta, represents one actionable and public application of his profound research into the mechanisms of microbes at the molecular level, which has revealed their positive contributions to human wellness in addition to their role in infectious disease. With Dr. Finlay, germ theory comes full circle in a balanced recognition of the complex and diverse function of microbes as components of organic life. The medical research of Dr. Finlay and his colleagues carries us beyond reactive confrontation with microbes as pathogens to a deeper comprehension of their biological mechanisms. An older era of microbe hunters gives way to new microbe managers who unlock the potential of microbes as instruments of healing.

Dr. Finlay continues his ground-breaking work as co-director of the Canadian Institute for Advanced Research program "Microbes and Humans," an interdisciplinary group of physicians, scientists and anthropologists exploring the effect of microbes in human development, evolution and society. Researcher, author, teacher, lecturer, co-founder of companies devoted to microbiome modification of the immune system, and an advocate of science and science knowledge for the public, Dr. Finlay has made and continues to make significant contributions to the health of Canadians and the world. He is one of a small number of scientists advancing our fundamental knowledge of life processes while providing understandable guidance and advice to parents and ordinary citizens concerned with the care and well-being of children.