

Jeffrey I. Gordon, MD

Jeffrey Gordon is the Dr. Robert J. Glaser Distinguished University Professor at Washington University in St. Louis. He received his A.B. from Oberlin College and his M.D. from the University of Chicago.

He joined the Washington University faculty after completing his clinical training in internal medicine and gastroenterology. He was Head of the Department of Molecular Biology and Pharmacology from 1991-2004, before becoming the founding Director of an interdisciplinary University-wide Center for Genome Sciences and Systems Biology. From 1994 to 2003, he also served as director of the University's Division of Biology and Biomedical Sciences, which oversees all PhD and M.D./PhD students in the biological sciences.

His lab studies of the genomic and metabolic foundations of mutually beneficial host-microbial relationships in the human gut have helped create a new field of research that focuses on understanding the role of our microbial communities in shaping our postnatal development, physiological variations and disease predispositions. His work has provided an extended view of ourselves as a composite of species from all three domains of life, where the genes and metabolic activities of our microbiomes endow us with attributes we have not had to evolve on our own. His group has developed new experimental and computational approaches to characterize the assembly and dynamic operations of human gut communities, and has involved novel 'humanized' gnotobiotic animal models, twins discordant for disease phenotypes, and children and adults living in geographically and culturally diverse environments.

A central issue that his lab is addressing is how our gut microbiomes impact our nutritional status, including obesity and severe forms of childhood undernutrition, and help determine the nutritional value and metabolic effects of the various foods we consume. His findings have implications for 21st century medicine, including how changes in our cultural traditions, lifestyles, technology, and biosphere are impacting human biology.

Gordon is a member of the National Academy of Sciences where he currently serves as the Chair of its Section on Medical Physiology and Metabolism, the American Academy of Arts and Sciences, and the Institute of Medicine of the National Academies.