Dr. Slack received his bachelor's degree from Princeton University, his medical degree from Columbia University's Columbia University's College of Physicians and Surgeons, and his residency training in neurology at the University of Wisconsin. Over the past 35 years he has focused his research on the use of computers to improve communication in medicine and to empower both doctors and patients for better health care. His early work in computer-based medical interviewing at the University of Wisconsin led to the first study of patient-computer dialogue. Over the years, he has established new computer-based approaches to the medical interview, and developed and studied programs that provide direct assistance to the patient in the management of common, important medical and psychological problems. He was an early advocate of the patient's right to participate in decisions about diagnosis and treatment.

During the past 20 years, Dr. Slack and his colleagues at the Center for Clinical Computing (CCC) and the Harvard Medical School, have developed, implemented, and studied an integrated, hospital-wide clinical computing system (the CCC system) which is used in patient care at Boston's Beth Israel Deaconess Medical Center and Brigham and Women's Hospital. Distinguishing features of the CCC system are the unparalleled intensity and extensiveness of its use by clinicians in the care of their patients and the substantial financial benefits that have been realized in conjunction with its use. Pursuing his interest in the field of mental testing, Dr Slack has examined the use and misuse of the Scholastic Aptitude Test, and the results of his studies, done in collaboration with Dr. Douglas Porter, have been influential in reformative efforts, such as the "truth in testing" legislation in New York State.

Dr. Slack is Professor of Medicine at Harvard Medical School and, with Dr. Howard L. Bleich, co-president, of the Center for Clinical Computing and co-director of the Division of Clinical Computing, Department of Medicine, Beth Israel Deaconess Medical Center. Among his recent publications, Dr. Slack is the author of Cybermedicine: How Computing Empowers Doctors and Patients for Better Health Care (revised and updated edition, San Francisco: Jossey-Bass, 2001).