Bio

Linda Gay Griffith, (BS Georgia Tech, PhD UC Berkeley, Chemical Engineering) is the School of Engineering Teaching Innovation Professor of Biological and Mechanical Engineering and MacVicar Fellow at MIT, where she directs the Center for Gynepathology Research. She led development of the MIT Biological Engineering SB degree program, which was approved in 2005 as MIT's first new undergraduate major in 39 years. She has pioneered approaches in tissue engineering, including the first tissue-engineered cartilage in the shape of a human ear; commercialization of the 3DP™ Printing Process for manufacture of FDA-approved scaffolds; commercialization of the 3D perfused "LiverChip" for drug development; and synthetic matrices for tissue morphogenesis. She recently led one of two major DARPA-supported "body-on-a-chip" programs, resulting in the first platform to culture 10 different human mini-organ systems interacting continuously for a month. She is now establishing the field of "Physiomimetics", integrating these platform technologies with systems biology and systems immunology to humanize drug development for the most challenging chronic inflammatory diseases, including endometriosis and adenomyosis, through collaboration with industry partners in Pharma and Biotech around the world. She has over 200 peer-reviewed scientific publications and holds over a dozen patents. She has chaired numerous scientific meetings, including the Keystone Tissue Organoids Conference (2020), the Signal Transduction by Engineering Extracellular Matrix Gordon Research Conference (2016) and the annual Open Endoscopy Forum (2015-continuing), which brings together gynecology surgeons, scientists, engineers and liberal arts practitioners annually at MIT for a TED conference-like weekend. She is a member of the National Academy of Engineering, the recipient of a MacArthur Foundation Fellowship, Radcliffe Fellowship and several awards from professional societies. She currently serves on the Advisory Board of the Society for Women's Health Research and has served on the Advisory Councils for the National Institute of Dental and Craniofacial Research, the National Institute of Arthritis and Musculoskeletal Diseases, and the Advisory Committee to the Director of the National Institutes of Health.