Jay I. Goodman

Biosketch

Dr. Jay I. Goodman, a past President of the Society of Toxicology (1999-2000), joined the faculty at Michigan State University in 1971 and currently is a Professor (Emeritus) of Pharmacology and Toxicology and a member of the University's Institute for Integrative Toxicology. He is a Diplomate of the American Board of Toxicology and a Fellow of the Academy of Toxicological Sciences. Dr. Goodman's research interests focused on discerning mechanisms underlying, and biomarkers for, non-genotoxic chemical-induced carcinogenesis. The two hypotheses tested were: 1) altered DNA methylation is an epigenetic, nongenotoxic mechanism underlying carcinogenesis and, possibly, other toxicities; and 2) there is an inverse relationship between the capacity to maintain the normal DNA methylation status and susceptibility to cancer. The unique aspect of this research is that it combined the testing of hypotheses that are shedding light on basic mechanisms involved in toxicity while providing fundamental knowledge required to take a more rational approach towards carcinogen risk/safety assessment, e.g., defining dose-response relationships and species-to-species extrapolation. When the U.S. Environmental Protection Agency issued its 2005 revised "Guidelines for Carcinogen Risk Assessment" a new section titled "Non-mutagenic and Other Effects" was included. This represents a marked step forward compared to the Agency's previous Guidelines that focused exclusively on mutagenesis as the basis for carcinogenesis. Thus, a role for non-mutational events (e.g., altered DNA methylation, epigenetics) in carcinogenesis was recognized and acknowledged explicitly by stating, "perturbations of DNA methylation patterns may cause effects that contribute to carcinogenesis," and a publication from Dr. Goodman's laboratory is cited in this context. He was very active in graduate education, mentoring numerous Ph.D. students, serving as Chair of the Department of Pharmacology and Toxicology's Graduate Committee for a lengthy term and he taught pharmacology to medical students plus advanced graduate courses (topics included, mutagenesis, epigenetics, cancer chemotherapy, carcinogenesis, and risk/safety assessment. Dr. Goodman published 135+ papers and was a frequent invited speaker at both national and international scientific meetings, e.g., John Doull Symposium, University of Kansas; Plenary Speaker at a EUROTOX Meeting. He was an Associate Editor of Toxicological Sciences, served on the Editorial Board of Toxicology, and was an Associate Editor of Regulatory Toxicology and Pharmacology. Dr. Goodman served as a member of numerous advisory committees, e.g., a member of the Advisory Committee to the Director of the Centers for Disease Control and Prevention; the Board of Scientific Counselors of the National Toxicology Program; the Board of Directors of the American Board of Toxicology; the Board of Directors of the Academy of Toxicological Sciences; Chair of the Board of Trustees of the International Life Sciences Institute's (ILSI) Health

and Environmental Sciences Institute (HESI); Member of the Pharmacology and Toxicology Subcommittee, Pharmaceutical Sciences Advisory Committee, U.S. Food and Drug Administration; Expert Reviewer, U.S. Environmental Protection Agency Workshop on Cancer Risk Assessment Guidelines Issues; Member of the Expert Panel, Flavor and Extract Manufacturers' Association; Member of the Subcommittee on Upper Reference Levels of Nutrients, Committee on the Scientific Evaluation of Dietary Reference Intakes, Food and Nutrition Board, Institute of Medicine, National Academy of Sciences; the Board of Scientific Counselors, NIH, National Institute of Environmental Health Sciences; a member of the Committee on Inorganic Arsenic, National Academies of Science, National Research Council, Board on Environmental Studies and Toxicology; and a member of the Committee to Evaluate the IRIS (US Environmental Protection Agency's Integrated Risk Information System) Protocol for Inorganic Arsenic, National Academies of Science, National Research Council, Board on Environmental Studies and Toxicology. Dr. Goodman's honors and awards include: Distinguished Alumnus Award, Long Island University, College of Pharmacy, 1998; Distinguished Alumnus Award, Doctoral Program in Pharmacology, The University of Michigan, 2000; Recipient of the John Barnes Prize Lecture, awarded by the British Toxicology Society, 2005; Recipient of the George H. Scott Memorial Award, awarded by the Toxicology Forum, 2007; Recipient of the Society of Toxicology's Merit Award, 2014; Recipient of the International Society of Regulatory Toxicology and Pharmacology's International Achievement Award, 2014; Recipient of the Pharmaceutical Research and Manufacturers of America (PhRMA) Foundation Award in Excellence in Pharmacology/Toxicology, 2019; Awarded Honorary Membership in the Federation of European Toxicologists & European Societies of Toxicology (EUROTOX), 2019; and Elected a Fellow of the American Association for the Advancement of Science, 2020. Dr. Goodman retired from Michigan State University (MSU) in 2019 and since then has served the University as a fixed- term, part-time, Emeritus Professor of Pharmacology and Toxicology, and facilitates the activities of MSU's Institute for Integrative Toxicology's Superfund Program Project Grant's Research Experience and Training Coordination Core. Dr. Goodman holds a Ph.D. in Pharmacology from The University of Michigan and was a postdoctoral fellow in the McArdle Laboratory for Cancer Research, University of Wisconsin.