

Prof. Panos G. Georgopoulos (Summary Biosketch, 1/2008)

Dr. Georgopoulos is Professor of Environmental and Occupational Medicine at the University of Medicine and Dentistry of NJ – Robert Wood Johnson Medical School. He is also a member of the Graduate Faculties of Chemical and Biochemical Engineering, Biomedical Engineering, and of Environmental Sciences at Rutgers University, and of the Environmental and Occupational Health Sciences Institute (EOHSI), which is a joint project of UMDNJ-RWJMS and Rutgers. Dr. Georgopoulos received his M.S. and Ph.D. Degrees in Chemical Engineering from the California Institute of Technology (Caltech) and he continued with Post-Doctoral Studies at the Environmental Quality Laboratory (EQL) of Caltech; he had obtained his Dipl. Ing. Degree from the National Technical University of Athens (EMΠ, 'Εθνικό Μετσόβιο Πολυτεχνείο).

At EOHSI he established and directs the *Computational Chemodynamics Laboratory (CCL)*, a state-of-the-art facility for *Informatics and Modeling of Complex Environmental and Biological Systems and of their Interactions*. Furthermore, he directs the State-funded *Ozone Research Center* at EOHSI; co-directs the USEPA-funded *Center for Exposure and Risk Modeling (CERM)* at EOHSI and he is Associate Director of the USEPA-funded *Environmental Bioinformatics and Computational Toxicology Center (ebCTC)*, a research consortium of UMDNJ-RWJMS, Princeton University, Rutgers University and USFDA's Center for Toxicoinformatics. Also, Dr. Georgopoulos has directed research efforts in the areas of physiologically based toxicokinetic and toxicodynamic modeling, in support of activities of the National Institute of Environmental Health Sciences (NIEHS) Center of Excellence at EOHSI and he was the Director of the USDOE-funded *Center of Expertise in Exposure Assessment of the Consortium for Risk Evaluation with Stakeholder Participation (CRESP)*.

Dr. Georgopoulos has participated in both research and teaching in the graduate programs of Rutgers and UMDNJ-RWJMS and has developed innovative course materials in modeling and informatics related to environmental health applications. He has been the primary doctoral thesis advisor to eighteen students, with nine Ph.D. degrees awarded since 1997, and mentor to twenty-one post-doctoral fellows. His research interests involve the development and application of novel mathematical and computational methods for diagnostic and mechanistic studies of multipathway physicochemical transport and fate processes taking place in environmental and biological systems. Aim of this research is to improve the understanding and quantification of human exposure, biological mechanism-based dosimetry, and risk assessment, for environmental toxics; and to develop a consistent mechanistic computational framework for source-to-dose modeling of toxicant dynamics. Outcomes of this research include quantitative estimates of molecular biomarkers and delivered/metabolized target tissue doses from inhalation, dietary and non-dietary ingestion, and dermal absorption of multi-pollutant mixtures.

Dr. Georgopoulos has received research grant awards, as Principal or co-Principal Investigator, from various federal, state, and private sector agencies and organizations, including among others the USEPA, USDOE, NJDEP, NJDHSS, NIEHS, ATSDR/CDC, API, ACC, etc. He has lectured as an invited speaker at various universities, such as the Harvard School of Public Health, Johns Hopkins University, Stanford University, Illinois Institute of Technology, University of Minnesota, and others. He has published research articles in many scientific journals, including *Aerosol Science and Technology*, *AIChE Journal*, *American Journal of Industrial Medicine*, *Atmospheric Environment*, *Bioinformatics*, *Chemical Engineering Science*, *Environmental Fluid Mechanics*, *Environmental Health Perspectives*, *Environmental Science & Technology*, *Environmental Toxicology & Chemistry*, *International Archives of Environmental Health*, *Journal of the Air & Waste Management Association*, *Journal of the American Water Resources Association*, *Journal of Chemical Physics*, *Journal of Colloid & Interface Science*, *Journal of Computational Chemistry*, *Journal of Exposure Science & Environmental Epidemiology*, *Journal of Physical Chemistry*, *Journal of Toxicology & Environmental Health*, *Journal of Toxicology & Industrial Health*, *Marine Environmental Research*, *Physical Review*, *Regulatory Toxicology & Pharmacology*, *Risk Analysis*, *Tellus*, *Water, Air and Soil Pollution*, and *Water Resources Research*. He has authored or co-authored chapters in over thirty books.

Dr. Georgopoulos is also the author or co-author of a number of State and Federal Government Documents and of numerous technical reports. He has received various academic awards and honors including the National Award of the Society of Toxicology for Best Presentation in Risk Assessment; the DuPont Education and Research Award for his work on air pollution; and USEPA's Certificate of Appreciation. He served as Associate Editor of *JAWMA*, the scientific journal of the International Air and Waste Management Association, from 1995 to 2001, and as Guest Editor of special supplement issues of *Epidemiology* and of *Environmental Health Perspectives*. From 2001-2004 he was a member of the Editorial Board of *Stochastic Environmental Research and Risk Assessment*. He was Co-Chair of the 1999 Joint Conference of the International Society of Exposure Analysis (ISEA) and the International Society for Environmental Epidemiology (ISEE). He currently serves as member of various national and international scientific and technical committees on environmental health issues.