


Name/Surname		John D. GROOPMAN, Professor
Affiliation	Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, USA	
IARC Host Group	Office of the Director (DIR), IARC, Dr C.P. Wild	
Speciality	<p>Public Health-Based Cancer Prevention Strategies</p> <p>Dr. Groopman's main research goals are in the development of molecular biomarkers reflective of exposure, early disease, and risk from environmental carcinogens.</p>	
Academic Degrees	BA 1974 (Chemistry), Elmira College, Elmira New York, USA, PhD 1979 (Toxicology), Massachusetts Institute of Technology, Cambridge, MA, USA	
Recent Publications	<ul style="list-style-type: none"> • Kensler, TW, Ng, D, Carmella, SG, Chen, M, Jacobson, LP, Muñoz, A, Egner, PA, Chen, JG, Qian, GS, Chen, TY, Fahey, JW, Talalay, P, Groopman, JD, Yuan, JM and Hecht, SS. Modulation of the metabolism of air-borne pollutants by broccoli sprout beverages: Results of a short term, cross-over clinical trial in Qidong, China <i>Carcinogenesis</i>, 33:101-7, 2012. • Villar S, Ortiz-Cuaran S, Abedi-Ardekani B, Gouas D, Nogueira da Costa A, Plymoth A, Khuhaprema T, Kalalak A, Sangrajang S, Friesen MD, Groopman JD, Hainaut P. Aflatoxin-Induced TP53 R249S Mutation in Hepatocellular Carcinoma in Thailand: Association with Tumors Developing in the Absence of Liver Cirrhosis. <i>PLoS One</i>. 2012;7(6):e37707. Epub 2012 Jun 4. • Herbrich, S., Cole, R., West, K., Schulze, K., Yager, J., Groopman, J., Christian, P., Wu, L., O'Meally, R., May, D., McIntosh, M., and Ruczinski, I. Statistical inference from multiple iTRAQ experiments without using common reference standards <i>Journal of Proteome Research</i>, in press. • Gouas, D., Villar, S., Ortiz-Cuaran, S., Legros, P., Ferro, G., Kirk, G., Lesi, O., Mendy, M., Bah, E., Friesen, M., Groopman, J., Chemin, I., and Hainaut, P. TP53 R249S mutation, genetic variations in HBX and risk of hepatocellular carcinoma in The Gambia. <i>Carcinogenesis</i>, 33:1219-24, 2012. • Scholl, PF, Cole, RN, Ruczinski, I, Gucek, M, Diez, R, Rennie, A, Nathasingh, C, Schulze, K, Christian, P, Yager, J.D., Groopman, JD, and West, KP. Comparative Serum Proteomic Analysis During Pregnancy in Rural Nepal. <i>Placenta</i>, 33:424-432, 2012. • Wattanawaraporn, R, Woo, LL, Belanger, C, Chang, SC, Adams, JE, Trudel, LJ, Jason T. Bouhenguel, JT, Egner, PA, Groopman, JD, Croy, RG, Essigmann, JM and Wogan, GN. A single neonatal exposure to aflatoxin B1 induces prolonged genetic damage in two loci of mouse liver. <i>Toxicological Sciences</i>, 128:326-33, 2012. • Muñoz, A., Chen, JG, Egner, PA, Marshall, ML, Johnson, JL, Schneider, MF, Lu, JH, Zhu, YR, Wang, JB, Chen, TY, Kensler, TW, and Groopman, JD. Predictive Power of Hepatitis B 1762T/1764A Mutations in Plasma for Hepatocellular Carcinoma Risk in Qidong, China. <i>Carcinogenesis</i>, 32: 860-865, 2011. 	

	<ul style="list-style-type: none"> • Iyer, S. and Groopman, J.D. Interaction of Mutant Hepatitis B X Protein With p53 Tumor Suppressor Protein Affects Both Transcription and Cell Survival. <i>Molecular Carcinogenesis</i>, 50:972-80, 2011 • Egner, PA, Chen, J-G, Wang, J-B, Wu, Y, Sun, Y., Lu, J-H., Zhu, J., Zhang, Y-H., Chen, Y-S., Friesen, M.D., Jacobson, L., Muñoz, A., Ng, D., Qian, G-S., Zhu, Y-R., Chen, T-Y., Botting, N.P., Zhang, Q-Z., Fahey, J.W., Talalay, P., Groopman, J.D. and Kensler, T.W. Bioavailability of sulforaphane from two broccoli sprout beverages: Results of a short term, cross-over clinical trial in Qidong, China. <i>Cancer Prevention Research</i>, 4:384-395, 2011. • Bai, X., Zhu, Y, Jin, Y, Guo, X., Qian, GS., Chen, TY, Zhang, J., Wang, JB., Groopman, JD, Gu, JR, Li, JJ, and Tu, H. Temporal acquisition of sequential mutations in enhancer II/basal core promoter of HBV in high-risk individuals for hepatocellular carcinoma. <i>Carcinogenesis</i>, 32:63-68, 2011.
Programme at IARC	Molecular epidemiology of aflatoxin exposures: hepatocellular cancer and other health endpoints
Short background	<p>Dr. John Groopman is the Anna M. Baetjer Professor of Environmental Health at the Johns Hopkins Bloomberg School of Public Health and the Associate Director for Cancer Prevention and Control at the Sidney Kimmel Comprehensive Cancer Center in the School of Medicine. He received his Ph.D. degree from the Massachusetts Institute of Technology and was also a post-doctoral fellow at MIT. He received further training as a staff fellow at the National Cancer Institute in the Laboratory of Human Carcinogenesis. Prior to coming to Johns Hopkins in 1989, Dr. Groopman was the Associate Dean at the Boston University School of Public Health. Dr. Groopman's main research interests involve the development and application of molecular biomarkers of exposure, dose and effect from environmental carcinogens. The environmental carcinogens studied include agents that are naturally occurring in the diet. A major emphasis of the research has been in the elucidation of the role of aflatoxins, a common contaminate of the food supply, in the induction of liver cancer in high-risk populations living in Asia and Africa. This work has led to the identification of a very strong chemical-viral interaction between aflatoxin and the human hepatitis B virus in the induction of liver cancer. These biomarkers have also been used in many collaborative molecular epidemiology studies of liver cancer risk and recently employed to assess the efficacy of a number of chemopreventive agents in trials in high-risk aflatoxin-hepatitis B virus exposed populations. This research is now being extended to develop genetic biomarkers of p53 mutations in human samples as early detection of disease biomarkers using a novel mass spectroscopy based method for genotyping developed in the laboratory. The most cited research publication from this research was the finding from a prospective cohort of over 18,000 people in Shanghai that established for the first time a viral-chemical interaction essential to the etiology of liver cancer, a leading cause of cancer death in the world. This work has led to the collaborative chemoprevention trials in China. Collectively, Dr. Groopman's expertise involves the biological consequences of exposures to mycotoxins and other environmental contaminants on human health. Thus, the research in our laboratory, resulting in over 250 peer-reviewed publications and chapters, focuses on the translation of mechanistic research to public health based prevention strategies. Dr. Groopman is the Principal Investigator on the National Institute for Environmental Health Sciences (NIEHS) program project grant, P01 ES 006052, Molecular Biomarkers of Environmental Carcinogens, since 1993 and the Director of the NIEHS Center in Urban Environmental Health (P30 ES003819). Dr. Groopman also served as a member of the National Advisory Council for the</p>

	<p>NIEHS and numerous other committees at the national and international level. Thus, Dr. Groopman has a long-standing record of commitment to interdisciplinary and translational research in oncology and public health. Finally, in recognition of his contributions to cancer prevention efforts, Dr. Groopman was the recipient of the 2010 American Association for Cancer Research – Prevent Cancer Foundation Award for Excellence in Cancer Prevention Research.</p>
Institutional webpage:	<p>http://www.jhsph.edu/departments/environmental-health-sciences/_archive/research/Groopman/index.html</p>