

Soterios A. Kyrtopoulos

Research Professor

National Hellenic Research Foundation, Institute of Biology, Medicinal Chemistry and Biotechnology, Division of Organic and Medicinal Chemistry, Vas. Constantinou 48, 11635 Athens, Greece

Phone: +30-210-7273740

Fax: +30-210-7273677

E-mail: skyrta@eie.gr

Website: <http://www.eie.gr/nhrf/institutes/ibrb/cvs/cv-kyrtopoulos-en.html>

Curriculum Vitae

Education

1972: Ph.D. in Chemistry, King's College, University of London

1969: B.Sc. in Chemistry (First Class Honours), King's College, University of London

Appointments

1. Since 1979: Institute of Biology, Medicinal Chemistry and Biotechnology (previous name: Institute of Biological Research and Biotechnology), National Hellenic Research Foundation. Current position: Research Professor, Head of the Laboratory of Chemical Carcinogenesis and Genetic Toxicology and of the Unit of Environmental Toxicology
2. 1977-1979: Research Associate, Courtauld Institute of Biochemistry, Middlesex Hospital Medical School, University of London
3. 1974-1977: Research Assistant, Department of Chemistry, Imperial College of Science and Technology, University of London
4. 1972-1974: Tutorial Research Scholar, Department of Biochemistry, Bedford College, University of London

Research interests

Soterios A. Kyrtopoulos is the Director of the Laboratory of Chemical Carcinogenesis and Genetic Toxicology at the IBPCB. His research interests include the role of DNA damage and repair in chemical carcinogenesis and cancer chemotherapy and the application of biomarkers of carcinogenic exposure and disease risk in population-based studies (molecular epidemiology). During recent years he has been active in the area of toxicogenomics and the use of global profiling technologies for the improved understanding of the environmental causes of cancer as well as the formulation of the emerging concept of the exposome. He has participated in a large number of

collaborative EU projects, having acted as coordinator in five. The most recent EU project coordinated by him (EnviroGenomarkers - "Genomics biomarkers of environmental health"), which ended in 2013, has been included by the European Commission services among the "FP7 success stories".

He is the author of more than 120 papers in international peer-reviewed journals, and is on the Editorial Board of "Mutation Research", "International Journal of Occupational Medicine and Environmental Health" and "The Open Biomarkers Journal". He has served on various national and international advisory bodies, including the EU Scientific Advisory Committee on Toxicity, Ecotoxicity and the Environment, as Greek national representative on the European Environmental Mutagen Society (EEMS) Executive Council and as a member of the scientific committee of multiple international conferences organised by the European Environmental Mutagen Society and the International Association of Environmental Mutagenesis and Genomics Societies.

Current and recent competitively funded research projects

1. Exposomics ("Enhanced exposure assessment and omic profiling for high priority environmental exposures in Europe"). EU FP7 Integrated project, 2012-2016; coordinator: Prof. P. Vineis, Imperial College, London; NHRF budget (EU contribution): 372.000 euro
2. EnviroGenomarkers ("Genomics biomarkers of environmental health"). EU FP7 Integrated Project, 2009-2013; coordinator: S.A. Kyrtopoulos; NHRF budget (EU contribution): 474.000 euro
3. COPHES ("Consortium to perform human biomonitoring on a European scale (EU FP7, Coordination Action)"). EU FP7 Coordination and Support action, 2010-2012; coordinator: Dr. R. Joas, BiPRO GmbH, Munich, Germany; NHRF budget (EU contribution): 44.000 euro
4. ECNIS2 ("Towards ECNIS Centre for Research and Education on Cancer, Environment and Food"). EU FP7 Coordination and Support action, 2011-2013; coordinator: Dr. K. Rydzynski, NOFER Institute, Lodz, Poland; NHRF budget (EU contribution): 73.500 euro
5. ECNIS ("Environmental Cancer, Nutrition and Individual Susceptibility"). EU FP6 Network of Excellence, 2005-2009; co-ordinator: Dr. K. Rydzynski, NOFER Institute, Lodz, Poland; NHRF budget (EU contribution): 834.000 euro
6. NewGeneris ("Newborns and Genotoxic exposure risks"). EU FP6 Integrated Project, 2005-2009; co-ordinator: Dr. J. Kleinjans, University of Maastricht, Netherlands; NHRF budget (EC contribution): 435.000 euro

Recent publications

1. Merlo D.F., Agramunt S., Anna L., Besselink H., Botsivali M., Brady N.J., Ceppi M., Chatzi L., Chen B., Decordier I., Farmer P.B., Fleming S., Fontana V., Försti A., Fthenou E., Gallo F., Georgiadis P., Gmuender H., Godschalk R.W., Granum B., Hardie L.J., Hemminki K., Hochstenbach K., Knudsen L.E., Kogevinas M., Kovács K., Kyrtopoulos S.A., Løvik M., Nielsen J.K., Nygaard U.C., Pedersen M., Rydberg P., Schoket B., Segerbäck D., Singh R., Sunyer J., Törnqvist M., van Loveren H., van Schooten F.J., Vande Loock K., von Stedingk H., Wright J., Kleinjans J.C., Kirsch-Volders M., van Delft J.H. (2013) Micronuclei in Cord Blood Lymphocytes and Associations with Biomarkers of Exposure to Carcinogens and Hormonally Active Factors, Gene Polymorphisms, and Gene Expression: The NewGeneris Cohort. *Environ Health Perspect.* (*in press*).
2. Vafeiadi M., Agramunt S., Pedersen M., Besselink H., Carreras R., Chatzi L., Fthenou E., Kyrtopoulos S.A., Fleming S., Hardie L.H., Wright J., Knudsen L.E., Nielsen J.K.S., Sunyer J., Nygaard U.C., Løvik M., Segerbäck D., Merlo D.F., Kleinjans J.C., Vrijheid M., Kogevinas M. and the NewGeneris Consortium (2013) In utero exposure to dioxins and dioxin-like compounds and birth outcomes, in a European prospective mother–child study (NewGeneris). *Epidemiology* (*in press*)
3. Gkatzamanidou M., Terpos E., Bamia C., Kyrtopoulos S.A., Sfikakis P.P., Dimopoulos M.A. and Souliotis V.L. (2013) Progressive changes in chromatin structure and DNA damage response signals in bone marrow and peripheral blood during myelomagenesis. *Leukemia* (*in press*)
4. Kelly R.S., Lundh T., Porta M., Bergdahl I.A., Palli D., Johansson A.S., Botsivali M., Vineis P., Vermeulen R., Kyrtopoulos S.A. and Chadeau-Hyam M. on behalf of the EnviroGenoMarkers project consortium (2013) Blood erythrocyte concentrations of cadmium and lead and the risk of B-cell non-Hodgkin's lymphoma and multiple myeloma: a nested case-control study. *PLOS One* 8(11):e81892. doi: 10.1371/journal.pone.0081892.
5. Valavanis I., Sifakis E., Georgiadis P., Kyrtopoulos S. and Chatziioannou A.A. (2012) Analysis of DNA methylation epidemiological data through a generic composite statistical framework. *IEEJ Biomed Health Informatics, Proceedings of the 12th International Conference on Bioinformatics and Bioengineering*, 632-637.
6. Pedersen M., Schoket B., Godschalk R.W., Wright J., von Stedingk H., Törnqvist M., Sunyer J., Nielsen J.K., Merlo D.F., Mendez M.A., Meltzer H.M., Lukács V., Landström A., Kyrtopoulos S.A., Kovács K., Knudsen L.E., Haugen M., Hardie L.J., Gützkow K.B., Fleming S., Fthenou E., Farmer P.B., Espinosa A., Chatzi L., Brunborg G., Brady N.J., Botsivali M., Arab K., Anna L., Alexander J., Agramunt S., Kleinjans J.C., Segerbäck D., Kogevinas M. (2013) Bulky DNA adducts in cord blood, maternal fruit-and-vegetable consumption, and birth weight in a European mother-child study (NewGeneris). *Environ. Health Perspect.* 121:1200-1206

7. Kyrtopoulos S.A. (2013) Making sense of OMICS data in population-based environmental health studies. *Environ. Mol. Mutagen.* 54:468-479
8. Hebels D.G.A.J., Georgiadis P., Keun H.C., Athersuch T.J., Vineis P., Vermeulen R., Portengen L., Bergdahl I.A., Hallmans G., Palli D., Bendinelli B., Krogh V., Tumino R., Sacerdote C., Panico S., Kleinjans J.C.S., de Kok T.M.C.M., Smith M.T. and Kyrtopoulos S.A. on behalf of the EnviroGenomarkers project consortium (2013). Performance in omics analyses of blood samples in long-term storage: opportunities for the exploitation of existing biobanks in environmental health research. *Environ. Health. Perspect.* 121:480–487
9. Stefanou D.T, Episkopou H, Kyrtopoulos S.A., Bamias A., Gkatzamanidou M., Bamia C., Liakou C., Bekyrou M., Sfrikakis P.P., Dimopoulos M.A and, Souliotis V.L. (2012) Development and validation of a PCR-based assay for the selection of patients more likely to benefit from therapeutic treatment with alkylating drugs. *Br. J. Clin. Pharmacol.* 74:842-853
10. Pedersen M., Steding H.V., Botsivali M., Agramunt S., Alexander J., Brunborg G., Chatzi L., Fleming S., Fthenou E., Hardie L.J., Knudsen L.E., Kyrtopoulos S.A., Mendez M.M., Merlo F.D., Nielsen J.K.S., Rydberg P., Segerbäck D., Sunyer J., Wright J., Tornqvist M., Kleinjans J.C., Kogevinas M. and the NewGeneris Consortium (2012) Birth weight, head circumference, and prenatal exposure to acrylamide from maternal diet: the European prospective mother-child study (NewGeneris). *Envir. Health Perspect.* 120:1739-1745
11. Georgiadis P., Polychronaki N. and Kyrtopoulos S.A. (2012) Progress in high-throughput assays of MGMT and APE1 activities in cell extracts. *Mutat. Res.* 736, 25-32.
12. Georgiadis P., Kovacs K., Kaila S., Makedonopoulou P., Anna L., Poirier M.C., Knudsen L.E., Schoket B. and Kyrtopoulos S.A. (2012) Development and validation of a direct sandwich chemiluminescence immunoassay for measuring DNA adducts of benzo[a]pyrene and other polycyclic aromatic hydrocarbons. *Mutagenesis* 27, 589–597.
13. Koryllou A., Patrinoou-Georgoula M., Dimozi A., Kyrtopoulos, S.A. and Pletsas, V. (2011) Investigation of Cell Death Induced by N-Methyl-N-Nitrosourea in Cell Lines of Human Origin and Implication of RNA Binding Protein Alterations. *Anticancer Res.* 31, 4291-4299.
14. Hebels D.G., Brauers K.J., van Herwijnen M.H., Georgiadis P.A., Kyrtopoulos S.A., Kleinjans J.C., de Kok T.M. (2011) Time-series analysis of gene expression profiles induced by nitrosamides and nitrosamines elucidates modes of action underlying their genotoxicity in human colon cells. *Toxicol. Lett.* 207, 232-241.

15. Episkopou H., Kyrtopoulos S.A., Sfikakis P.P., Dimopoulos M.A., Souliotis V.L. (2011) The repair of melphalan-induced DNA adducts in the transcribed strand of active genes is subject to a strong polarity effect. *Mutat. Res.* 714, 78-87
16. Georgiadis P.A., Kaila S., Makedonopoulou P., Pletsa V., Fthenou E., Chatzi L., Kyrtopoulos S.A. (2011) Development and validation of a sensitive immunochemical assay for O6-methylguanine in DNA and its application in a population study. *Cancer Epidemiol. Biomarkers Prev.* 20, 82-90.
17. Burley V.J., Greenwood D.C., Hepworth S.J., Fraser L.K., de Kok T.M., van Breda S.G., Kyrtopoulos S.A., Botsivali M., Kleinjans J., McKinney P.A. and Cade J.E. (2010) Dietary acrylamide intake and risk of breast cancer in the UK Women's Cohort. *Brit. J. Cancer*, 103, 1749-54.
18. Episkopou H., Kyrtopoulos S.A., Sfikakis P.P., Fousteri M., Dimopoulos M.A., Mullenders L.H.F. and Souliotis V.L. (2009) Association between transcriptional activity, local chromatin structure and the efficiencies of both subpathways of nucleotide excision repair of melphalan adducts. *Cancer Res.* 69, 4424-33.
19. Merlo, D.F., Wild, C.P., Kogevinas, M., Kyrtopoulos, S., Kleinjans, J. (2009) NewGeneris: a European study on maternal diet during pregnancy and child health. *Cancer Epidemiol Biomarkers Prev.* 18, 5-10.

Editorship of Special Issues of journals and Collective Volumes

1. Kyrtopoulos S.A., Associate guest co-editor: Benzene 2009 - Health effects and mechanisms of bone marrow toxicity: Implications for t-AML and the mode of action framework (Guest Editors: J.A. Bond & J.M. Rice), *Chemico-Biological Interactions* 184 (1-2) (2010), pp. 1-312
2. Akesson B, Kyrtopoulos SA. Biomarkers of exposure to and mechanisms behind the anticarcinogenic action of selected dietary components. *Eur. J. Nutr.* 48 (2008) Suppl. 2, pp. 1-88.
3. Farmer PB, Kyrtopoulos SA & Emeny JM, Editors: State of validation of biomarkers of carcinogen exposure and early effects and their applicability to molecular epidemiology. *ECNIS Reports*, 2007, pp. 1-92
4. Kyrtopoulos SA & Sram RJ, Guest Editors: Biomarkers in children and adults. *Toxicology Letters* 172 (2007), pp. 1-89.
5. Kyrtopoulos SA & Sarrif A, Special editors: Biomarkers and molecular epidemiology-present state and future trends. *Mutat. Res.* 600 (1-2) (2006), pp. 1-206
6. Sarrif A & Kyrtopoulos SA, Special editors: Environmental genotoxins in children and adults. *Mutat. Res.* 608 (2) (2006), pp. 97-170.

7. Kyrtopoulos SA, Special Editor: Mechanisms of Genotoxicity and Carcinogenesis of Mineral Fibres. *Mutat. Res.* 553 (1-2) (2004), pp. 1-124