

Dr. Christos D. Georgiou, Ph.D.
Associate Professor of Biochemistry
Department of Biology
University of Patras
Patras - 26100
Greece
Tel. 00302610 997227
Fax 00302610 997840
Email c.georgiou@upatras.gr

Short CV

I specialize in the biochemistry of oxidative stress -its reactive oxygen components and its antioxidant machinery (enzymic and non-enzymic). My lab has extensive experience on oxidative stress and specializes in the development of innovative assays to measure (in vivo and in vitro) certain molecular parameters of oxidative stress. Such is the superoxide radical, a direct marker of oxidative stress. My lab has developed a unique in vivo and in vitro assay for this radical. Other assays for the indirect assessment of oxidative stress developed in my lab measure DNA damage (such as DNA fragmentation) and thiol redox state. All these assays been successfully applied in studies using various experimental models such as mouse, rat, rabbit, cell cultures (e.g. human umbilical vein cells, CD3 T-cells, yeast), whole blood (human), mussels (*Mytilus galloprovincialis*), flies (*Drosophila melanogaster*), filamentous fungi, spinach leaves, and even soil. From my 65 published articles (with over 750 citations), some indicative publications involving oxidative stress assessment are the following:

Georgiou, D. C., Papapostolou, I., Patsoukis, N., Tsegenidis, T., Sideris, T. (2005). An ultrasensitive fluorescent assay for the in vivo quantification of superoxide radical in organisms. *Anal. Biochem.* 347: 144-151.

Patsoukis, N., Georgiou, D. C. (2005). Fluorometric determination of thiol redox state. *Anal. Bioanal. Chem.* 383: 923 - 929.

Georgiou, D. C., Patsoukis, Í., Papapostolou, É. (2005). Assay for the quantification of small-sized fragmented genomic DNA. *Anal. Biochem.* 339: 223-230.

Georgiou, D. C., Papapostolou, N. (2006). Assay for the quantification of intact/fragmented genomic DNA. *Anal. Biochem.* 358: 247-256.