



### Short Curriculum Vitae: Sotiria Boukouvala

<p><b>Current Position:</b></p>	<p>Associate Professor in Molecular Genetics Director, Laboratory of Pharmacogenomics-Toxicogenomics</p> <p><b>Summary CV:</b> <a href="http://utopia.duth.gr/~sboukouv/Sotiria_Boukouvala_BIO.pdf">http://utopia.duth.gr/~sboukouv/Sotiria_Boukouvala_BIO.pdf</a> <b>Lab description:</b> <a href="http://utopia.duth.gr/~sboukouv/Boukouvala_Laboratory.htm">http://utopia.duth.gr/~sboukouv/Boukouvala_Laboratory.htm</a></p>
<p><b>Undergraduate Education:</b></p>	<p>1991-1996: University of Athens, Faculty of Science, Department of Biology, Greece. Degree (<i>B.Sc.</i> equivalent) in Biology.</p>
<p><b>Post-graduate Education:</b></p>	<p>1996-1997: University of London, Imperial College, School of Medicine, London, UK. Master of Science (<i>M.Sc.</i>) in Human Reproductive Biology, awarded with "<i>Distinction</i>".</p> <p>1998-2002: University of Oxford, Department of Pharmacology, St. Peter's College, Oxford, UK. Doctor of Philosophy (<i>D.Phil.</i>), under the supervision of Prof. Edith Sim.</p>
<p><b>Areas of Interest</b></p>	<p><b>Academic Teaching &amp; Mentoring:</b></p> <p>Dr. Boukouvala has been a faculty member at MBG-DUTH since 2006 and also lectured on fixed-term contracts between 2003 and 2005. In the past, her academic modules have included <i>Molecular Biology</i> (4 semesters), <i>Applied Biotechnology</i> (3 semesters), <i>Human Genetics</i> (2 semesters) and <i>Cell Biology</i> (1 semester). She is currently teaching two core modules, <i>Applications of Molecular Biology in Medical Sciences</i> (since 2007) and <i>Genomics</i> (since 2010).</p> <p>She coordinated (2012-17) the elective module <i>Introduction to Bioscience Enterprise</i>, initially funded by an institutional programme for Innovation &amp; Entrepreneurship. In 2014-17, she also coordinated a graduate module on <i>Bio-Entrepreneurship</i>. For these two modules, she mobilised a network of 11 MBG graduates and 16 experienced professionals from the industry, related regulatory and technology transfer agencies, as well as from the Career Office and Innovation &amp; Entrepreneurship Unit of DUTH, who liaised with students and visited the department for several years. Her postgraduate lectures at DUTH have additionally covered scientific topics relevant to pharmacogenomics, comparative genomics, molecular diagnostics and drug development.</p> <p>In 2011-17, she served as departmental coordinator of the European mobility programmes <i>Leonardo Da Vinci</i> and <i>Erasmus (Studies, Traineeships and International Credit Mobility)</i>, overseeing 45 mobilities involving 26 institutions in 12 countries (including the EU, Australia and USA) that created opportunities for students and graduates. She has organized and hosted numerous educational events and activities (e.g. with the Fulbright Foundation, the Career Office and Innovation &amp; Entrepreneurship Unit of DUTH, the Hellenic Association of Young Entrepreneurs etc.), that aim to guide students/graduates of the department as to their future careers. She has also organized joint scientific activities with local NGOs and supported various student-organized events (e.g. 18th Symposium for Biology Students in Europe in 2015) and events addressed to the local community.</p> <p><b>Academic Research:</b></p> <p>Dr. Boukouvala is the Director of the Laboratory of Molecular Genetics &amp; Pharmacogenomics-Toxicogenomics. Her research group applies comparative genomic approaches to investigate genes and molecular mechanisms that modulate the effects of xenobiotics (drugs, carcinogens, pollutants and other toxic agents) on living organisms. She has supervised/co-supervised three doctoral students and many graduate/undergraduate students and summer interns. In 2016 she hosted in her lab an Erasmus+ ICM Scholar from Australia (3 months) and in 2018-19 she is hosting a Fulbright Scholar from the USA (9 months).</p> <p>She has research collaborations with the University of Oxford and Kingston University London (UK), the Eötvös Loránd University of Budapest (Hungary), the US Department of Agriculture (USA), the Universities of Paris-Décartes and Paul Sabatier-Toulouse (France), and the University of Geneva (Switzerland). Her research and educational collaborative network also involves scientists from Koç University (Turkey), the University of Jordan, the University of Louisville (USA), the University of Queensland (Australia) and colleagues from Greek academic institutions and the industry.</p>

	<p>She participates in pharmacogenomics initiatives coordinated by the US Centers for Disease Control &amp; Prevention and the Stanford University PharmacoGenomics KnowledgeBase (PharmGKB). She is Chair of the International Arylamine N-acetyltransferase Gene Nomenclature Committee, acting as contact point for scientists in the field. Many of her collaborators have repeatedly visited MBG-DUTH and she has been invited to give research seminars at academic institutions in the USA and Europe.</p> <p>She has co-organised several scientific conferences and colloquia with international participation, and has served as reviewer for over 30 scientific journals.</p>
<b>Distinctions</b>	<p>Dr. Boukouvala has won competitive scholarships by the Hellenic Scholarship Foundation, the Bodossaki Foundation and Imperial College London. She received a Fondation Santé Fellowship in 2006, and in 2008 she was awarded the National UNESCO-L'Oréal Prize for Women in Science. In 2012, she was the first Greek scientist awarded the Fulbright-Schuman Research Scholarship to the USA.</p> <p>Before her appointment at the Democritus University of Thrace in 2006, Dr. Boukouvala was a research scientist with the Genome Biochemistry group at Exelixis Inc. in South San Francisco, CA, USA, where she investigated candidate pharmaceutical targets. She has also worked in the R&amp;D department of the Greek biotechnology company Medicon Hellas S.A., where she developed innovative systems for genetic diagnosis.</p>
<b>Funding</b>	<p>Dr. Boukouvala's research has been supported by national and international grants (GSRT, FP7), including bilateral programmes with Hungary (GSRT) and Bulgaria (Interreg). Her lab has also benefited by generous equipment donations by the Bodossaki Foundation (104,000 €), Exelixis Inc. and Fondation Santé (USA). Overall, she has participated in competitive collaborative grants amounting to over 2,000,000 €, undertaking various roles (grant holder, work package leader or project team member). She has also participated in institutional programmes (DUTH Innovation &amp; Entrepreneurship Programme, Erasmus+ International Credit Mobility Programme), contributing to successful proposals on behalf of MBG-DUTH.</p>
<b>Representative publications</b>	<p>Dr. Boukouvala has published 27 peer-reviewed publications receiving a total of 959 citations by 618 documents (h-index 18). Other published work includes book chapters and book translations, magazine articles, a patent and many database submissions.</p> <p>Publications in the past 5 years:</p> <ul style="list-style-type: none"> <li>- Hein, Fakis, Boukouvala (2018). Functional expression of human arylamine N-acetyltransferase <i>NATI*10</i> and <i>NATI*11</i> alleles. <i>Pharmacogenet Genomics</i>, 28:238-44.</li> <li>- Tsirka, Konstantopoulou, Sabbagh, Crouau-Roy, Ryan, Sim, Boukouvala, Fakis (2018). Comparative analysis of xenobiotic metabolising N-acetyltransferases from ten non-human primates as <i>in vitro</i> models of human homologues. <i>Scientific Reports</i> 8:9759.</li> <li>- Klein, Boukouvala, McDonagh, Shuldiner, Laurieri, Thorn, Altman, Klein, (2016). PharmGKB Summary: Isoniazid pathway, pharmacokinetics. <i>Pharmacogenet Genomics</i> 26:436-44.</li> <li>- Kalman, Agúndez, Appell, Black, Bell, Boukouvala <i>et al.</i> (2015). Pharmacogenetic Allele Nomenclature: International Workgroup Recommendations for Test Result Reporting. <i>Clin. Pharmacol. Therapeutics</i> 99:172-85.</li> <li>- Karagianni, Kontomina, Davis, Kotseli, Tsirka, Garefalaki, Sim, Glenn, Boukouvala (2015). Homologues of xenobiotic metabolizing N-acetyltransferases in plant-associated fungi: Novel functions for an old enzyme family. <i>Scientific Reports</i> 5:12900.</li> <li>- Patillon, Luisi, Poloni, Boukouvala, Darlu, Génin, Sabbagh (2014). A homogenizing process of selection has maintained an 'ultra-slow' acetylation NAT2 variant in humans. <i>Hum. Biol.</i> 86:185-214.</li> <li>- McDonagh, Boukouvala, Aklillu, Hein, Altman, Klein (2014). PharmGKB Very Important Pharmacogene (VIP) Summary for N-acetyltransferase 2. <i>Pharmacogenet Genomics</i>, 24:409-25.</li> <li>- Tsirka, Boukouvala, Agianian, Fakis (2014). Polymorphism p.Val231Ile alters substrate selectivity of drug-metabolizing arylamine N-acetyltransferase 2 (NAT2) isoenzyme of rhesus macaque and human. <i>Gene</i> 536:65-73.</li> </ul>