

SHORT CV

Last/First name: Chachami Georgia
Date/Place of Birth: 28/02/1979, Krefeld Germany
Nationality: Greek
Phone number: +30-2410685582
Email: ghah@med.uth.gr

A. EDUCATION TRAJECTORY

- October 2001: Diploma in Biology, Department of Biology, National and Kapodistrian University of Athens, Greece.
- July 2006: PhD in Biochemistry, Department of Medicine, University of Thessaly, Greece. Sept. 2002 - June 2006: Ph.D. thesis in the Laboratories of Biochemistry and Physiology, Faculty of Medicine, University of Thessaly, Larissa, Greece. Thesis Title: "*Activation and regulation of hypoxia inducible factor 1 α (HIF-1 α) in vitro and in primary airway smooth muscle cells.*" Supervisor Prof. George Simos.
- July – Aug. 2004: Visiting PhD student in the Laboratory of Prof. Dirk Görlich at the ZMBH, University of Heidelberg Germany.
- June 2006 – Dec. 2009: Postdoctoral research, Faculty of Medicine, University of Thessaly in collaboration with the Institute of Biomedical Research and Technology (BioMed), Larissa, Greece. Supervisor Prof. George Simos. Teaching assistant for the undergraduate courses of Biochemistry (Faculty of Medicine, University of Thessaly) and Clinical Biochemistry (Biochemistry & Biotechnology Dept. University of Thessaly)
- Jan. 2010 - May 2014: Postdoctoral research in the research group of Prof. Frauke Melchior, Zentrum Für Molekulare Biologie (Postdoctoral fellowship from Alexander von Humboldt foundation) (ZMBH), University of Heidelberg.

Career Breaks

- July 2011-Dec. 2012: Career break for Maternity and child raise.
- July 2016-Sept. 2017: Career break for Maternity and child raise.

B. INDEPENDENT POSITIONS:

- June 2014 – Febr. 2020: Lecturer of Cellular Biochemistry, Laboratory of Biochemistry, Faculty of Medicine, School of Health Science, University of Thessaly, Greece.

CURRENT STATE

- Febr. 2020 - today: Assistant Professor of Cellular Biochemistry, Laboratory of Biochemistry, Faculty of Medicine, School of Health Science, University of Thessaly, Greece. (Permanent position since 14/6/23)

C. MAJOR LAB PROJECT:

Our Lab (Lab. of Biochemistry, Faculty of Medicine, University of Thessaly) has long standing expertise in the investigation of the molecular mechanisms of the cellular response to hypoxia. My group is especially interesting in identifying new control points and novel players in the transcriptional regulation of the hypoxic response. We are also focused on understanding the role of post translational modifications of proteins triggered by hypoxia with emphasis on SUMOylation. We are currently investigating the SUMOylation of transcription factor TFAP2A and RNA exosome catalytic component Exosc10 and their role in hypoxic adaptation (funded by HFRI).

D. FELLOWSHIPS:

- Nov. 2002 - Oct. 2005: PhD fellowship from the Greek Secretariat for Research and Technology (PENED 2001).
- July 2007: Travel fellowship from FEBS society for participation in the FEBS Young Scientist Forum and 32nd FEBS Congress, 5-12 July 2007, Vienna, Austria.
- Oct. 2010 - May 2014: 2-year Postdoctoral fellowship from Alexander von Humboldt foundation, Germany. 1-year Fellowship from the Center for Molecular Biology, University of Heidelberg (ZMBH), Germany.
- Sept.2023: EMBO travel fellowship for participation in EMBO SUMOylation symposium, 25-28 Sept 2023 Povoia de Varzim, Portugal.

E. GRANTS:

- 2002-2005: PENED 2001 (O1EΔ121, Coordinator: Prof. S. Bonanou-Tzedaki): Participant as PhD student.
- 2005-2006: Pythagoras II (52211.01, PI Prof. G. Simos): Participant as post-doctoral researcher.
- 2014-2015: Aristeia II (PI Prof. G. Simos): Participant as Member of the Research Group.
- 2018-2021: EPANEK National consortium (Coordinator Prof. G. Simos): Participant as Member of the Research Group.
- 2019: Research Committee of the University of Thessaly (Coordinator Georgia Chachami 4000E)
- 2021: Research Committee of the University of Thessaly (Coordinator Georgia Chachami 4000E)
- **2020-2023: ELIDEK (HFRI-Coordinator Georgia Chachami -158000E)**

F. OTHER ACADEMIC ACTIVITIES

- Reviewer (ad hoc reviewer) of scientific articles: Bioscience Reports, Molecules, Cells, Cancers, Biological Chemistry, Biomolecules, Biophysical Reports, In Vitro Cellular & Developmental Biology, IJMS. Co-editor of Cancers Special Issue "Inhibition of HIFs as an Anti-Cancer Strategy"
- Member of the organizing and scientific committee of conferences (Committee of the 69th meeting of the Hellenic Society of Biochemistry & Molecular Biology, Larissa 2018, Committee of the 1st Medical conference 'Hippocrates' Faculty of Medicine, Larissa 2022).
- 2002-today: Member of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB), a FEBS constituent society.
- 2021-today: National representative for Greece (MC member) and Member of the International consortium "Proteocure COST European action" (member of the Core group of the action).

G. PUBLICATIONS

I have co-authored a total of 27 publications: 21 original research papers in peer-reviewed journals, 4 Reviews and 1 letter to editor and 1 chapter book. My publications have a total impact factor of around 126 and have received over 1046 citations (according to Scopus) and 1596 (according to Google Scholar). *h-index*: 16 (Scopus), 17 (Google Scholar)

LIST OF SELECTED PUBLICATIONS (since 2013)

-Hypoxia-driven deSUMOylation of EXOSC10 promotes adaptive changes in the transcriptome profile C. Filippopoulou, C. C. Thomé, S. Perdikari, E. Ntini, G. Simos, K. E. Bohnsack and G. **Chachami***. Cellular and Molecular Life Sciences, Jan 2024, Nov 2023 accepted 10.1007/s00018-023-05035-9 *corresponding author

- Transcriptional Response to Hypoxia: The Role of HIF-1-Associated Co-Regulators. Yfantis A., Mylonis I., **Chachami G.**, Nikolaidis M. , Amoutzias G.D., Paraskeva E. and George Simos G. (2023) *Cells Review* 12.798

- Comparative SUMO Proteome Analysis Using Stable Isotopic Labeling by Amino Acids (SILAC). **Chachami, G.**, and Barysch, S. V. (2023) *Methods Mol Biol* 2603, 71-86

-Pyruvate dehydrogenase phosphatase 1 (PDP1) stimulates HIF activity by supporting histone acetylation under hypoxia. Karagiota A, Kanoura A, Paraskeva E, Simos G, **Chachami G.** (2023) *FEBS J.* 2023 Apr;290(8):2165-2179. doi: 10.1111/febs.16694. Epub 2022 Dec 19.

-Transcriptional Response to Hypoxia: The Role of HIF-1-Associated Co-Regulators. Yfantis A., Mylonis I.,**Chachami G.**, Nikolaidis M. , Amoutzias G.D., Paraskeva E. and George Simos G. (2023) *Cells Review* 12.798.

-Lipid Metabolism in Cancer: The Role of Acylglycerolphosphate Acyltransferases (AGPATs).

Karagiota A, **Chachami G.**, Paraskeva E. *Cancers (Basel).* 2022 Jan 4;14(1):228. doi: 10.3390/cancers14010228.PMID: 35008394 Review.

-Specific Inhibition of HIF Activity: Can Peptides Lead the Way?

Mylonis I, **Chachami G.**, Simos G. *Cancers (Basel).* 2021 Jan 22;13(3):410. doi: 10.3390/cancers13030410.PMID: 33499237 Review.

-The Role of Sumoylation in the Response to Hypoxia: An Overview.

Filippopoulou C, Simos G, **Chachami G.** *Cells.* 2020 Oct 26;9(11):2359. doi: 10.3390/cells9112359.PMID: 33114748 Review.

-Hypoxia-induced Changes in SUMO Conjugation Affect Transcriptional Regulation Under Low Oxygen.

Chachami G., Stankovic-Valentin N, Karagiota A, Basagianni A, Plessmann U, Urlaub H, Melchior F, Simos G. *Mol Cell Proteomics.* 2019 Jun;18(6):1197-1209. doi: 10.1074/mcp.RA119.001401. PMID: 30926672

-Protein phosphatase PPP3CA (calcineurin A) down-regulates hypoxia-inducible factor transcriptional activity.

Karagiota A, Mylonis I, Simos G, **Chachami G.** *Arch Biochem Biophys.* 2019 Mar 30;664:174-182. doi: 10.1016/j.abb.2019.02.007. PMID: 30776328

-Low Serum Hepcidin in Patients with Autoimmune Liver Diseases.

Lyberopoulou A, **Chachami G.**, Gatselis NK, Kyratzopoulou E, Saitis A, Gabeta S, Eliades P, Paraskeva E, Zachou K, Koukoulis GK, Mamalaki A, Dalekos GN, Simos G.*PLoS One.* 2015 Aug 13;10(8):e0135486. doi: 10.1371/journal.pone.0135486. PMID: 26270641

-A role for the Cajal-body-associated SUMO isopeptidase USPL1 in snRNA transcription mediated by RNA polymerase II.

Hutten S, **Chachami G.**, Winter U, Melchior F, Lamond AI. *J Cell Sci.* 2014 Mar 1;127(Pt 5):1065-78. doi: 10.1242/jcs.141788. PMID: 24413172

-An association study between hypoxia inducible factor-1alpha (HIF-1 α) polymorphisms and osteonecrosis.

Chachami G, Kalousi A, Papatheodorou L, Lyberopoulou A, Nasikas V, Tanimoto K, Simos G, Malizos KN, Georgatsou E. PLoS One. 2013 Nov 18;8(11): e79647. doi: 10.1371/journal.pone.0079647.PMID: 24260273

-Oxygen-dependent secretion of a bioactive hepcidin-GFP chimera.

Chachami G, Lyberopoulou A, Kalousi A, Paraskeva E, Pantopoulos K, Simos G. Biochem Biophys Res Commun. 2013 Jun 14;435(4):540-5. doi: 10.1016/j.bbrc.2013.04.085. PMID: 23665013

Link to entire bibliography:

<https://www.ncbi.nlm.nih.gov/pubmed/?term=Chachami+G>