

CURRICULUM VITAE

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CURRENT STATE

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

EDUCATIONAL BACKGROUND

- 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.

PROFESSIONAL BACKGROUND

- June 2014-Febr. 2020: Lecturer of Cellular Biochemistry, Laboratory of Biochemistry, Department of Medicine, School of Health Science, University of Thessaly, Greece.
- Jan 2010 -May 2014: Postdoctoral research. Frauke Melchior Research Group, Zentrum Für Molekulare Biologie (ZMBH), University of Heidelberg.
- June 2006 - Dec2009: Postdoctoral research Department of Medicine, University of Thessaly, Larissa, Greece. Supervisor Pr. Dr. George Simos, in collaboration with the Institute of Biomedical Research and Technology (BioMed), Larissa, Greece.
- June 2006 - Dec2009: Teaching assistant in the undergraduate courses of Biochemistry (Medical Dep. Larissa Greece) and Clinical Biochemistry (Biochemistry and Biotechnology Dep. Larissa, Greece)
- July 2004 – August 2004: Research as part of PhD thesis, as visiting PhD student, in the Laboratory of Pr. Dr. Dirk Görlich at the ZMBH, University of Heidelberg Germany.
- September 2002-June 2006: Ph.D. thesis in the Laboratories of Biochemistry and Physiology, Department 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 Pr. Dr. George Simos.

Career Breaks

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

RESEARCH INTERESTS:

- Investigation of the molecular mechanisms induced under hypoxia and the role of HIF-1 (Hypoxia Inducible Factor 1).
- Investigation of the role of sumoylation of proteins in the cellular response to hypoxia.
- Investigation of transcription factor TFAP2a in the context of hypoxia.

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 at the FEBS Young Scientist Forum and 32 FEBS Congress, 5-12 July 2007 Vienna, Austria.
- Oct 2010-May 2014: 2year Postdoctoral fellowship from the Alexander von Humboldt foundation, Germany. 1year Fellowship of the Center for Molecular Biology, University of Heidelberg (ZMBH),

Germany

GRANTS:

- 2002-2005: PENED 2001 (O1EΔ121, Coordinator: S. Bonanou-Tzedaki): Participant as PhD candidate.
- 2005-2006: Pythagoras II (52211.01, Coordinator G. Simos): Participant as PostDoc Researcher.
- 2014-2015: Aristeia II (Coordinator G. Simos): Participant as Member of the Research Group.
- 2018-2021: EPANEK (Coordinator G. Simos): Participant as Member of the Research Group.
- 2019: Research Committee of the University of Thessaly: Coordinator G. Chachami (4000E)
- 2020-2023: ELIDEK (Greek Institute of Research and Innovation): Coordinator G. Chachami (160000E)
- 2022: Research Committee of the University of Thessaly: Coordinator G. Chachami (4000E)

OTHER ACADEMIC ACTIVITIES

- Participation in 20 international and 25 national conferences.
- Reviewer (ad hoc reviewer) of scientific articles for Bioscience Reports journal, Molecules, Cells, Cancers, Biological Chemistry, Biomolecules, Biophysical Reports, In Vitro Cellular & Developmental Biology, International Journal of Molecular Science.
- Co-editor of Cancers Journal Special Issue "Inhibition of HIFs as an Anti-Cancer Strategy"
- Member of the organizing Committee of the 69th meeting of the Hellenic Society of Biochemistry & Molecular biology, Larissa 2018.
- 2002-today: Member of the Hellenic society of Biochemistry and Molecular Biology (HSBMB), a FEBS constituent society.
- 2021-today: Member of the Proteocure COST European action as MC representative for Greece and Core group member.

Linguistic proficiency: English: advanced knowledge /German: A basic level knowledge.

Total impact factor: 125,756

Total citations according to Scopus: 1094

h index according to Scopus: 16

Total citations according to Google Scholar: 1716

h index according to Google Scholar: 18

1. **Chachami, G.**, Simos, G., Hatziefthimiou, A., Bonanou, S., Molyvdas, P. A., and Paraskeva, E. (2004) Cobalt induces hypoxia-inducible factor-1 α expression in airway smooth muscle cells by a reactive oxygen species- and PI3K-dependent mechanism. *American Journal of Respiratory Cell and Molecular Biology* 31, 544-551 (**IF: 4,593**)
2. **Chachami, G.**, Paraskeva, E., Georgatsou, E., Bonanou, S., and Simos, G. (2005) Bacterially produced human HIF-1 α is competent for heterodimerization and specific DNA-binding. *Biochemical and Biophysical Research Communications* 331, 464-470 (**IF: 2,855**)
3. Mylonis, I., **Chachami, G.**, Samiotaki, M., Panayotou, G., Paraskeva, E., Kalousi, A., Georgatsou, E., Bonanou, S., and Simos, G. (2006) Identification of MAPK phosphorylation sites and their role in the localization and activity of hypoxia-inducible factor-1 α . *Journal of Biological Chemistry* 281, 33095-33106 (**IF: 5,808**)

4. Triantafyllou, A., Liakos, P., Tsakalof, A., **Chachami, G.**, Paraskeva, E., Molyvdas, P. A., Georgatsou, E., Simos, G., and Bonanou, S. (2007) The flavonoid quercetin induces hypoxia-inducible factor-1 α and inhibits cell proliferation by depleting intracellular iron. *Free Radical Research* 41, 342-356 (IF: 2,536)
5. Papagianni, M., Hatziefthimiou, A., **Chachami, G.**, Gourgoulisanis, K., Molyvdas, P. A., and Paraskeva, E. (2007) Insulin causes a transient induction of proliferation via activation of the PI3-kinase pathway in airway smooth muscle cells. *Experimental and Clinical Endocrinology & Diabetes*, 115, 118-123 (IF: 1,356)
6. Lyberopoulou, A., Venieris, E., Mylonis, I., **Chachami, G.**, Pappas, I., Simos, G., Bonanou, S., and Georgatsou, E. (2007) MgcRacGAP interacts with HIF-1 α and regulates its transcriptional activity. *Cellular Physiology and Biochemistry*, 20, 995-1006 (IF: 3,558)
7. **Chachami, G.**, Hatziefthimiou, A., Liakos, P., Ioannou, M. G., Koukoulis, G. K., Bonanou, S., Molyvdas, P. A., Simos, G., and Paraskeva, E. (2007) Exposure of differentiated airway smooth muscle cells to serum stimulates both induction of hypoxia-inducible factor-1 α and airway responsiveness to ACh. *American Journal of Physiology*. 293, L913-922 (IF: 4,25)
8. Braliou, G. G., Verga Falzacappa, M. V., **Chachami, G.**, Casanovas, G., Muckenthaler, M. U., and Simos, G. (2008) 2-Oxoglutarate-dependent oxygenases control hepcidin gene expression. *Journal of Hepatology* 48, 801-810 (IF: 6,073)
9. Mylonis, I., **Chachami, G.**, Paraskeva, E., and Simos, G. (2008) Atypical CRM1-dependent nuclear export signal mediates regulation of hypoxia-inducible factor-1 α by MAPK. *Journal of Biological Chemistry* 283, 27620-27627 (IF: 5,52)
10. **Chachami, G.**, Paraskeva, E., Mingot, J. M., Braliou, G. G., Gorlich, D., and Simos, G. (2009) Transport of hypoxia-inducible factor HIF-1 α into the nucleus involves importins 4 and 7. *Biochemical and Biophysical Research Communications* 390, 235-240 (IF: 2,548)
11. Papagianni, M., Hatziefthimiou, A., **Chachami, G.**, Gourgoulisanis, K., Molyvdas, P. A., and Paraskeva, E. (2009) Inhaled insulin does not trigger lung inflammation and airway remodelling. *The European Respiratory Journal* 33, 444-445 (IF: 5,527)
12. Kalousi, A., Mylonis, I., Politou, A. S., **Chachami, G.**, Paraskeva, E., and Simos, G. (2010) Casein kinase 1 regulates human hypoxia-inducible factor HIF-1. *Journal of Cell Science* 123, 2976-2986 (IF: 6,290)
13. Darekar, S., Georgiou, K., Yurchenko, M., Yenamandra, S. P., **Chachami, G.**, Simos, G., Klein, G., and Kashuba, E. (2012) Epstein-Barr virus immortalization of human B-cells leads to stabilization of hypoxia-induced factor 1 α , congruent with the Warburg effect. *PloS One* 7, e42072 (IF: 3,73)
14. Schulz, S.*, **Chachami, G.***, Kozackiewicz, L.*, Winter, U., Stankovic-Valentin, N., Haas, P., Hofmann, K., Urlaub, H., Ovaa, H., Wittbrodt, J., Meulmeester, E., and Melchior, F. (2012) Ubiquitin-specific protease-like 1 (USPL1) is a SUMO isopeptidase with essential, non-catalytic functions. *EMBO Reports* 13, 930-938 *Equally contributed authors (IF: 7,181)
15. **Chachami, G.**, Lyberopoulou, A., Kalousi, A., Paraskeva, E., Pantopoulos, K., and Simos, G. (2013) Oxygen-dependent secretion of a bioactive hepcidin-GFP chimera. *Biochemical and Biophysical Research Communications* 435, 540-545 (IF: 2,71)
16. **Chachami, G.**, Kalousi, A., Papatheodorou, L., Lyberopoulou, A., Nasikas, V., Tanimoto, K., Simos, G., Malizos, K. N., and Georgatsou, E. (2013) An association study between hypoxia inducible factor-1 α (HIF-1 α) polymorphisms and osteonecrosis. *PloS One* 8, e79647 (IF: 3,534)

17. Hutten, S., **Chachami, G.**, Winter, U., Melchior, F., and Lamond, A. I. (2014) A role for the Cajal-body-associated SUMO isopeptidase USPL1 in snRNA transcription mediated by RNA polymerase II. *Journal of Cell Science* 127, 1065-1078 (**IF: 5,432**)
18. Lyberopoulou, A.*, **Chachami, G.***, Gatselis, N. K.*, Kyratzopoulou, E.*, Saitis, A., Gabeta, S., Eliades, P., Paraskeva, E., Zachou, K., Koukoulis, G. K., Mamalaki, A., Dalekos, G. N., and Simos, G. (2015) Low Serum Hecpudin in Patients with Autoimmune Liver Diseases. *PloS One* 10, e0135486, *Equally contributed authors (**IF: 3,057**)
19. Karagiota, A., Mylonis, I., Simos, G.*, and **Chachami, G.*** (2019) Protein phosphatase PPP3CA (calcineurin A) down-regulates hypoxia-inducible factor transcriptional activity. *Archives of Biochemistry and Biophysics* 664, 174-182, *Corresponding author (**IF: 3,118**)
20. **Chachami, G.***, Stankovic-Valentin, N., Karagiota, A., Basagianni, A., Plessmann, U., Urlaub, H., Melchior, F., and Simos, G. (2019) Hypoxia-induced changes in SUMO conjugation affect transcriptional regulation under low oxygen. *Molecular & Cellular Proteomics*, Jun;18(6):1197-1209, *Corresponding author (**IF: 5,232**)
21. Filippopoulou C, Simos G, **Chachami G.** The Role of Sumoylation in the Response to Hypoxia: An Overview. *Cells*. 2020 Oct 26;9(11):2359. doi: 10.3390/cells9112359. Review. (**IF: 4,366**)
22. Mylonis I, **Chachami G**, Simos G. Specific Inhibition of HIF Activity: Can Peptides Lead the Way? *Cancers (Basel)*. 2021 Jan 22;13(3):410. doi: 10.3390/cancers13030410. (**IF:6,126**)
23. Karagiota A, **Chachami G**, Paraskeva E. Lipid metabolism in cancer: The role of acylglycerolphosphate Acyltransferases (AGPATs). *Cancers (Basel)*. 2022 Jan 4;14(1):228. doi: 10.3390/cancers14010228. (**IF:6,126**)
24. Karagiota A, Kanoura A, Paraskeva E, Simos G, **Chachami G.** (2022) Pyruvate dehydrogenase phosphatase 1 (PDP1) stimulates HIF activity by supporting histone acetylation under hypoxia. *FEBS J*. Dec 1. Online ahead of print. (**IF: 5,622/C: 1**)
25. Yfantis A., Mylonis I.,**Chachami G.**, Nikolaidis M. , Amoutzias G.D., Paraskeva E. and George Simos G. (2023) Transcriptional Response to Hypoxia: The Role of HIF-1-Associated Co-Regulators. *Cells Review* 12.798 (**IF: 7,666, C: 0**)
26. **Chachami, G.**, and Barysch, S. V. (2023) Comparative SUMO Proteome Analysis Using Stable Isotopic Labeling by Amino Acids (SILAC). *Methods Mol Biol* 2603, 71-86 (**IF: 1,37/C: 0**)
27. Filippopoulou, C. C. Thomé, S. Perdikari, E. Ntini, G. Simos, K. E. Bohnsack and **G. Chachami***. Hypoxia-driven deSUMOylation of EXOSC10 promotes adaptive changes in the transcriptome profile Bioarxivs-<https://doi.org/10.1101/2023.06.23.546038>, Cellular and Molecular Life Sciences, Jan 2024, Nov 2023 accepted 10.1007/s00018-023-05035-9 *corresponding author