

CURRICULUM VITAE

PERSONAL DATA

Name	Maroua Elmoledi Jalouli
Nationality	Tunisian
Position	Assistant Professor
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EDUCATION

Year	Academic Degree	Institution
2007	Bachelor Degree in Life Sciences	College of Sciences, University of Gafsa-Tunisia
2010	Master in Cell and Molecular Biology	Faculty of Medicine, Laval University , Quebec, Canada
2018	PhD in Cell and Molecular Biology	Faculty of Medicine, Laval University, Quebec, Canada

WORK EXPERIENCE

Period	Position	Address
2019-2021	Postdoctoral Research fellow	College of Sciences, King Saud University, Riyadh
2021-2022	Guest Assistant Professor	College of Sciences, King Saud University, Riyadh
2022-2023	Assistant Professor	Department of Biology, College of Science, Imam Mohammad Ibn Saud Islamic University
2023-2024	Assistant Professor	Department of Biology, College of Science, Imam Mohammad Ibn Saud Islamic University
2024-2025	Assistant Professor	Department of Biology, College of Science, Imam Mohammad Ibn Saud Islamic University
2025-2026	Assistant Professor	Department of Biology, College of Science, Imam Mohammad Ibn Saud Islamic University

RESEARCH INTERESTS

- Signal transduction
- Cell death pathways
- Cell proliferation pathways
- Gene expression and regulation
- Cancer research
- Genomics
- Proteomics
- Developmental Biology

PUBLICATIONS

1. **Jalouli M.** Emerging Role of Hypoxia-Inducible Factors (HIFs) in Modulating Autophagy: Perspectives on Cancer Therapy. International Journal of Molecular Sciences, 2025, 26.
2. Rahman M.A., **Jalouli M.** , Al-Zharani M., Apu E.H. & Harrath A.H. Mechanistic Insights into Autophagy-Dependent Cell Death (ADCD): A Novel Avenue for Cancer Therapy. Cells, 2025, 14.
3. **Jalouli M.** , Rahman M.A., Biswas P., Rahman H., Harrath A.H., Lee I.S., Kang S.J., Choi J., Park M.N. & Kim B. Targeting natural antioxidant polyphenols to protect neuroinflammation and neurodegenerative diseases: a comprehensive review. Frontiers in Pharmacology, 2025, 16.
4. Rahman M.A., **Jalouli M.** , Bhajan S.K., Al-Zharani M. & Harrath A.H. A Comprehensive Review of Nanoparticle-Based Drug Delivery for Modulating PI3K/AKT/mTOR-Mediated Autophagy in Cancer. International Journal of Molecular Sciences, 2025, 26.
5. Rahman M.A., **Jalouli M.** , Bhajan S.K., Al-Zharani M. & Harrath A.H. The Role of Hypoxia-Inducible Factor-1 α (HIF-1 α) in the Progression of Ovarian Cancer: Perspectives on Female Infertility. Cells, 2025, 14.
6. Rahman M.A., **Jalouli M.** , Yadab M.K. & Al-Zharani M. Progress in Drug Delivery Systems Based on Nanoparticles for Improved Glioblastoma Therapy: Addressing Challenges and Investigating Opportunities. Cancers, 2025, 17.
7. Beyaoui A., Kaplan M., Saidi I., **Jalouli M.**, Goren A.C., Harrath A.H. & Ben Jannet H. (2024) Phenolic Profile, Bioactivities and Analysis of the Trunk Bark of *Lindl.* Chemistry & Biodiversity 21.
8. Mohamed M.Y.A., Ferjani H., Ogunjinmi O.E., **Jalouli M.** & Onwudiwe D.C. (2024) Phyto-mediated synthesis of Ag, ZnO, and Ag/ZnO nanoparticles from leave extract of *Solanum macrocarpon*: Evaluation of their antioxidant and anticancer activities. Inorganica Chimica Acta 569.
9. Yahia I.B., Baccouri O., **Jalouli M.**, Boujelbene N., Rahman M.A., Harrath A.H. & Zidi I. (2024) The small phyto molecule resveratrol A promising role in boosting tumor cell chemosensitivity. Pharmacia 71.
10. **Jalouli M.** ; Barhoumi, T. ; Al-Zharani, M. ; Chahine, M. (2024) The angiotensin II type 1 receptor mediates the induction of oxidative stress, apoptosis, and autophagy in HUVECs induced by angiotensin II. J King Saud Univ Sci, 36, 103180.

11. Djemai, M., **Jalouli M.**, Chahine, M. (2024) Impacts of DCM-linked gating pore currents on the electrophysiological characteristics of hiPSC-CM monolayers. *Biochem Biophys Res Commun*, 723, 150175.
12. Hammache, M. ; Benchekroun, S. ; Alamri, A. ; **Jalouli M.** ; Yousry, A.M.M. ; Boufahja, F. ; Chahine, M. ; Chandad, F. ; Semlali, A. (2024) Modulation of signature cancer-related genes in oral cancer cells (Ca9-22) by anethole treatment: Insights into therapeutic potential. *PLoS One*, 19, e0315085.
13. Harrath, A.H. ; Rahman, M.A. ; Bhajan, S.K. ; Bishwas, A.K. ; Rahman, M.D.H. ; Alwasel, S. ; **Jalouli M.** ; Kang, S. ; Park, M.N.et al. (2024) Autophagy and Female Fertility: Mechanisms, Clinical Implications, and Emerging Therapies. *Cells*, 13,
14. Kaplan, M. ; Beyaoui, A. ; Jlizi, S. ; Goren, A.C. ; **Jalouli M.** ; Harrath, A.H. ; Ben Jannet, H. (2024) Phytochemical profiling, antioxidant, and tyrosinase inhibitory potential of the Acacia cyclops trunk bark: in vitro combined with in silico approach. *Biomed Chromatogr*, 38, e5891.
15. Rahman, M.A. ; Apu, E.H. ; Rakib-Uz-Zaman, S.M. ; Chakraborti, S. ; Bhajan, S.K. ; Taleb, S.A. ; Shaikh, M.H. ; **Jalouli M.** ; Harrath, A.H.et al. (2024) Exploring Importance and Regulation of Autophagy in Cancer Stem Cells and Stem Cell-Based Therapies. *Cells*, 13,
16. Rahman, M.A. ; Rakib-Uz-Zaman, S.M. ; Chakraborti, S. ; Bhajan, S.K. ; Gupta, R.D. ; **Jalouli M.** ; Parvez, M.A.K. ; Shaikh, M.H. ; Hoque Apu, E.et al. (2024) Advancements in Utilizing Natural Compounds for Modulating Autophagy in Liver Cancer: Molecular Mechanisms and Therapeutic Targets. *Cells*, 13,
17. Rahman, M.A. ; Sarker, A. ; Ayaz, M. ; Shatabdy, A.R. ; Haque, N. ; **Jalouli M.** ; Rahman, M.D.H. ; Mou, T.J. ; Dey, S.K.et al. (2024) An Update on the Study of the Molecular Mechanisms Involved in Autophagy during Bacterial Pathogenesis. *Biomedicines*, 12,
18. Sirotkin, A.V. ; Fabova, Z. ; Loncova, B. ; Popovicova, K. ; Bauer, M. ; **Jalouli M.** ; Harrath, A.H. (2024) The microRNA miR-152 can mitigate and prevent the toxic effect of benzene on porcine ovarian cells. *Toxicol In Vitro*, 99, 105855.
19. Mufti A., **Jalouli M.**, Nahdi S., Tlili N., Alqahtani W., Mansour L., Alwasel S. & Harrath A.H. (2023) Maternal Exposure to Acephate Caused Nephrotoxicity in Adult Offspring Rats Mediated by Excessive Autophagy Activation, Oxidative Stress Induction, and Altered Epithelial Sodium Channel and Na⁺/K⁺-ATPase Gene Expression. *Biology* 12, 162.
20. Alghanem, B., Mansour, F.A., Shaibah, H., Almuhalhil, K., Almourfi, F., Alamri, H.S., Alajmi, H., Rashid, M., Alroqi, F., **Jalouli, M.**, Harrath, A.H., Boudjellal, M. Barhoumi, T. (2023). Quantitative proteomics analysis of COVID-19 patients: Fetuin-A and tetranectin as potential modulators of innate immune responses. *Heliyon* 9, e15224.
21. Barhoumi, T., Mansour, F.A., **Jalouli, M.**, Alamri, H.S., Ali, R., Harrath, A.H., Aljumaa, M. Boudjellal, M. (2023). Angiotensin II modulates THP-1-like macrophage phenotype and inflammatory signatures via angiotensin II type 1 receptor. *Front Cardiovasc Med* 10, 1129704.
22. Malekpour, M., Shekouh, D., Safavinia, M.E., Shiralipour, S., **Jalouli, M.**, Mortezaejad, S., Azarpira, N. Ebrahimi, N.D. (2023). Role of FKBP5 and its genetic mutations in stress-induced psychiatric disorders: an opportunity for drug discovery. *Front Psychiatry* 14, 1182345.
23. Aldawood N., **Jalouli M.**, Alrezaki A., Nahdi S., Alamri A., Alanazi M., Manoharadas S., Alwasel S. & Harrath A.H. (2022) Fetal programming: in utero exposure to acrylamide leads to

intergenerational disrupted ovarian function and accelerated ovarian aging. Aging (Albany NY) 14, 6887.

24. Allagui I., Horchani M., Zammel N., **Jalouli M.**, Elfeki A., Kallel C., Mansour L., Alwasel S., Harrath A.H. & Jannet H.B. (2022) Phytochemical Characterization, Antioxidant and Anti-Inflammatory Effects of Cleome arabica L. Fruits Extract against Formalin Induced Chronic Inflammation in Female Wistar Rat: Biochemical, Histological, and In Silico Studies. *Molecules* 28, 26.
25. Anifowose S.O., Alqahtani W.S., Al-Dahmash B.A., Sasse F., **Jalouli M.**, Aboul-Soud M.A., Badjah-Hadj-Ahmed A.Y. & Elnakady Y.A. (2022) Efforts in Bioprospecting Research: A Survey of Novel Anticancer Phytochemicals Reported in the Last Decade. *Molecules* 27, 8307.
26. Harrath A.H., Alrezaki A., **Jalouli M.**, Al-Dawood N., Dahmash W., Mansour L., Sirotkin A. & Alwasel S. (2022a) Benzene exposure causes structural and functional damage in rat ovaries: occurrence of apoptosis and autophagy. *Environmental Science and Pollution Research* 29, 76275-85.
27. Harrath A.H., Alrezaki A., **Jalouli M.**, Aldawood N., Aldahmash W., Mansour L. & Alwasel S. (2022b) Ethylbenzene exposure disrupts ovarian function in Wistar rats via altering folliculogenesis and steroidogenesis-related markers and activating autophagy and apoptosis. *Ecotoxicology and Environmental Safety* 229, 113081.
28. Tizaoui K., **Jalouli M.**, Boujelbene N., Harrath A.H., Ouzari H.I., Rizzo R. & Zidi I. (2022a) The relationship of 3' UTR HLA-G14-bp insertion/deletion and+ 3142 C/G polymorphisms and soluble HLA-G expression with gynecological cancers: An updated meta-analysis. *Immunity, Inflammation and Disease* 10, e645.
29. Tizaoui K., **Jalouli M.**, Ouzari H.-i., Harrath A.H., Rizzo R., Boujelbene N. & Zidi I. (2022b) 3' UTR-HLA-G polymorphisms and circulating sHLA-G are associated with breast cancer: Evidence from a meta-analysis. *Immunology Letters* 248, 78-89.
30. Uddin M.S., Kabir M.T., **Jalouli M.**, Rahman M.A., Jeandet P., Behl T., Alexiou A., Albadrani G.M., Abdel-Daim M.M., Perveen A. & Ashraf G.M. (2022) Neuroinflammatory Signaling in the Pathogenesis of Alzheimer's Disease. *Curr Neuropharmacol* 20, 126-46.
31. **Jalouli M.**, Mofti A., Elnakady Y.A., Nahdi S., Feriani A., Alrezaki A., Sebei K., Bizzarri M., Alwasel S. & Harrath A.H. (2022) Allethrin Promotes Apoptosis and Autophagy Associated with the Oxidative Stress-Related PI3K/AKT/mTOR Signaling Pathway in Developing Rat Ovaries. *International Journal of Molecular Sciences* 23, 6397.
32. Bizzarri M., Fedeli V., Monti N., Cucina A., **Jalouli M.**, Alwasel S.H. & Harrath A.H. (2021) Personalization of medical treatments in oncology: time for rethinking the disease concept to improve individual outcomes. *EPMA Journal*, 1-14.
33. Abdel-Daim M.M., Abdeen A., **Jalouli M.**, Abdelkader A., Megahed A., Alkahtane A., Almeer R., Alhoshani N.M., Al-Johani N.S., Alkahtani S. & Aleya L. (2021) Fucoidan supplementation modulates hepato-renal oxidative stress and DNA damage induced by aflatoxin B1 intoxication in rats. *Sci Total Environ* 768, 144781.
34. Aissa I., Abdelkafi-Koubaa Z., Chouaib K., **Jalouli M.**, Assel A., Romdhane A., Harrath A.H., Marrakchi N. & Ben Jannet H. (2021) Glioblastoma-specific anticancer activity of newly synthesized 3,5-disubstituted isoxazole and 1,4-disubstituted triazole-linked tyrosol conjugates. *Bioorg Chem* 114, 105071.

35. Harrath A.H., **Jalouli M.** , Oueslati M.H., Farah M.A., Feriani A., Aldahmash W., Aldawood N., Al-Anazi K., Falodah F., Swelum A. & Alwasel S. (2021) The flavonoid, kaempferol-3-O-apiofuranosyl-7-O-rhamnopyranosyl, as a potential therapeutic agent for breast cancer with a promoting effect on ovarian function. *Phytother Res* 35, 6170-80.
36. Hasana S., Hossain M.F., **Jalouli M.** , Kabir M.T., Uddin M.G., Wahed M.I.I., Behl T., Bin-Jumah M.N., Abdel-Daim M.M., Aleya L. & Uddin M.S. (2021) Genetic Diversity of SARS-CoV2 and Environmental Settings: Possible Association with Neurological Disorders. *Mol Neurobiol* 58, 1917-31.
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39. **Jalouli M.** , Dery M.A., Lafleur V.N., Lamalice L., Zhou X.Z., Lu K.P. & Richard D.E. (2014) The prolyl isomerase Pin1 regulates hypoxia-inducible transcription factor (HIF) activity. *Cell Signal* 26, 1649-56.
40. **Jalouli M.** , Lapierre L.R., Guerette D., Blais K., Lee J.A., Cole G.J. & Vincent M. (2010) Transitin is required for the differentiation of avian QM7 myoblasts into myotubes. *Dev Dyn* 239, 3038-47.