

Mahmoud Gargotti

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Research gate profile: https://www.researchgate.net/profile/Mahmoud_Gargotti

EDUCATION

PhD by Research, Technological University of Dublin **2014 – 2019**

The research titled 3D growth substrates in mammalian cell culture in vitro, their effects on cellular function and response.

B.Sc Veterinary Medicine College, Tripoli University **1991 – 1997**

RESEARCH AND LECTURING EXPERIENCE

Medical lab. Supervisor at Military medical services **(Tripoli-LIBYA) 2019- To date**

Dept. of Microbiology, Medical College, Zawia University **(Tripoli-LIBYA) 2020-2022**

- Delivery of lectures, practical laboratory classes and tutorials to the 3ed year students (general bacteriology, systematic bacteriology, and mycology).
- Set-up and examination of students for continuous assessments.

Technological University Dublin, Kevin Street, Dublin 8, IRELAND **Nov.2014 – May 2019**

- Develop evaluation and characterization *in vitro* 2D and 3D cell culture research, using cell-based assays on both normal and cancer cell lines to conduct toxicological profiling.
- Senior laboratory demonstrator for undergraduate 3rd level students in biology and chemistry, while assisting them in carrying out practical experiments, explain concepts, mark reports, and deliver feedback.

Medical Lab Scientist at Preventive Medicine Centre **(Tripoli-LIBYA) 2005- 2013**

- Performed lab analyses to provide data for diagnosis, treatment, and prevention of disease.
- Identification and Characterization of the samples received using different technics such as (Biochemistry, Bacterial medium preparation, API test, ELISA, Blood film)
- Stock management and waste management within the lab: Inward order handling and ordering of new stock (Chemicals, Drugs, samples, solvents, equipment, etc.), Management of Bio and chemical waste daily.

Medical Lab Scientist at Mitiga Hospital **(Tripoli-LIBYA) 1999- 2005**

- Preformed scientific research analysis carried out experiments to assist professionals in their research while adhering to all results and methods.
- Identification and Characterization of the samples received using different technics such as (Biochemistry, ELISA, Blood film, Body fluid analysis and Bacteriology).

SKILLS

- Acquired skills in *In vitro* biochemical evaluation and toxicological profiling on various cell lines conducting a battery of cell-based assays, *in vitro* 2D and 3D cell culture research. Live cell images (confocal microscopy), (viability and cytotoxicity using molecular spectroscopy (UV/VES), Cell cycle, live/dead cell on 2D and 3D cell culture (Flow cytometry), Develop, evaluation of 3D culture (Collagen) as a non-expensive substrate used in Raman spectroscopy to get structural fingerprint of cells and drug.
- Data evaluation and data mining skills acquired through research-based raw data analysis utilizing statistical tools.

- Extensive data analysis and review of results using MS Office, MATLAB (PCA), GraphPad Prism (IC₅₀).
- Literature search, review and writing skills acquired in the course of performing tasks associated with research publications and project writing.
- Strong interpersonal and networking capabilities, with highly developed written, verbal and presentational communication skills and ability to communicate persuasively and influentially.
- Thorough, positive, objective and adaptable approach to tasks, opportunities and challenges.
- Very comfortable taking responsibility for projects and working on own initiative.
- Excellent organisational abilities; dynamic, with a strong work ethic.
- Good-humoured and personable, with proven ability to build good relationships with colleagues.

PUBLICATION LIST

Casey, A, **Gargotti, M**, Bonnier, F & Byrne, H J (2016) Chemotherapeutic efficiency of drugs in vitro: comparison of doxorubicin exposure in 3D and 2D culture matrices, *Toxicol In Vitro*, <https://doi.org/10.1016/j.tiv.2016.02.022>

Gargotti, M, Lopez-Gonzalez, U, Byrne, H J & Casey, A (2017). Comparative studies of cellular viability levels on 2D and 3D in vitro culture matrices. *Cytotechnology*, <https://doi.org/10.1007/s10616-017-0139-7>

Gargotti, M, Efeoglu, E, Byrne, H J & Casey, A (2018). Raman spectroscopy detects biochemical changes due to different cell culture environments in live cells in vitro, *Anal Bioanal Chem*, <https://doi.org/10.1007/s00216-018-1371-5>

Alrouwab, O, Allafi, A, Abosheta, H,... & **Gargotti, M** (2021). Alhudaj: CpG islands Detection Tool in Mammalian Genome Using C++, (IJPSAT)ISSN: 2509-0119.

Alrouwab, O, Mansour, D & **Gargotti, M** (2021). Evaluating Efficiency of Some Exact String- Matching Algorithms on Large-Scale Genome, Vol. 9 No. 9: 112.

Alrouwab, O, & **Gargotti, M** (2022). Zenobia: CODIS 13 STR Loci Allele Detection Tool, AJMAS, 2022;5(1):159-165.

Alrouwab, O, Mallian, A, Ramadhn, B & **Gargotti, M** (2023). Almespar: An Open Reading Frames Detection Tool Using Python, AJMAS, eISSN 2707-7179.