

# Mahmoud Gargotti

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Research gate profile: [https://www.researchgate.net/profile/Mahmoud\\_Gargotti](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 (IC<sub>50</sub>).
- 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.