As for my research intrest, I am interested in carrying out scientific research on:

- Research on safety evaluation and genotoxicity assessment.
-Functional foods and nutraceuticals development for disease prevention.
-Bioactive compounds extraction, determination, identification and application.
-Natural antioxidants and antioxidant activity.
-Research on the biological activity and molecular mechanisms of functional foods and traditional herbal medicine used by society in the area of diabetes, cardiovascular diseases and cancer.

I have gained my scientific experiences from different advanced laboratories in Malaysia, USA, Germany and Italy, I have published two international patents and 34 international publications with h index=16 and citation of 1034 (google scholar), I have been selected for the international award: The 2016 Elsevier Foundation Awarded for Early Career Women Scientists in the Developing World, in Biological Sciences: Agriculture, Biology, Medicine. My research is providing new knowledge on the health benefits of herbal plants, nutrients, functional foods and nutraceuticals as new effective natural products for disease prevention in the areas of cardiovascular system, obesity, peptic ulcer and type 2 diabetes, with clear mechanisms of action through gene and protein expression level. My research now is mainly focuses on food safety, genotoxicity and toxicology related foods and food additives. I was involved in nutrition awareness and food insecurity enhancement in Yemen from 2011-2017.

I joined the University of Trento in Italy, the Center Agriculture Food Environment as a research fellowship holder for more than years until now. During my first and second year in University of Trento, I had the possibility to activate research collaborations among the University Departmnets and other Universities in Itlay through the following collaboration research:

1- Toxicological Evaluation of Hydrochar and hydrochar co-compost from OFMSW digestate for soil application.
This reserach was a collaboration between three different Departments in University of Trento, the Center Agriculture Food Environment (C3A), Computational and Integrative Biology (CIBIO) and Department of Civil, Environmental and Mechanical Engineering.We have published our findings in Journal of environmental management. Impact factor 8.91 https://doi.org/10.1016/j.jenvman.2022.115910.

2- Supercritical fluid extraction of *Cactus Opuntia ficus-indica* L seeds oil, antioxidant activity, chemical characterization and comparison with conventional solvent extraction.
This project was a collaboration project between three different Universities in Italy, the Center Agriculture Food Environment (C3A) University of Trento, Free University of Bozen-Bolzano, Faculty of Science and Technology, Italy and Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy.

Recently I have Joined the Universty of Pavia as RTD-A (Assistant professor) Laboratory of Dietetics and Clinical Nutrition, Department of Public Health, Experimental and Forensic

Medicine, my activities are involved in acadmic tetaching for master students ans also condcutting reserach in Toxicological Evaluation and safytey profile of smoe selected plants extracts and nutracuticlas orginted from Italy.

You can look at my profile in

https://scholar.google.com/citations?user=QOGepAcAAAAJ&hl=en

https://orcid.org/0000-0002-7734-1706

https://www.researchgate.net/profile/Ghanya-Al-Naqeb/research

https://www.scopus.com/authid/detail.uri?authorId=36522174100

https://sciprofiles.com/profile/1724105

Here is the list of my publications:

list of publications of Ghanya Al-Naqeb

A- Publications with peer review process

1. **Al-Naqeb, G**., Cafarella, C., Aprea, E., Ferrentino, G., Gasparini, A., Buzzanca, C., Micalizzi, G., Dugo, P., Mondello, L., Rigano, F. (2023). Supercritical Fluid Extraction of Oils from *Cactus Opuntia ficus-indica* L. and *Opuntia dillenii* Seeds. Foods, 12, 618. https://doi.org/10.3390/foods12030618.
2. **Al-Naqeb, G**., Sidarovich, V., Scrinzi, D., Mazzeo, I., Robbiati, S., Pancher, M., Fiori, L., & Adami, V. (2022). Hydrochar and hydrochar co-compost from OFMSW digestate for soil application: 3. Toxicological evaluation. Journal of environmental management, 320, 115910. https://doi.org/10.1016/j.jenvman.2022.115910.
3. **Al-Naqeb, G**.; Fiori, L.; Ciolli, M.; Aprea, E. (2021). Prickly Pear Seed Oil Extraction, Chemical Characterization and Potential Health Benefits. Molecules, 26, 5018. https://doi.org/10.3390/molecules26165018.
4. **Al-Naqeb, G**. (2020). Antioxidants activity and cholesterol regulation effect of *Caralluma flava N.E.Br* extract in HepG2 cells. Arabian Journal of Medicinal and Aromatic Plants, 6(3), 57-75. doi:https://doi.org/10.48347/IMIST.PRSM/ajmap-v6i3.23655.
5. Kaokabah, N., Al-Qubati, A., Al-**Naqeb, G**. (2020). Anti-Obesity Effects of *Pulicaria Jaubertii E. Gamal-Eldin* in High Fat Diet-Induced Rats. Universal Journal of Pharmaceutical Research, Vol. 5, no. 5, Nov. doi: https://doi.org/10.22270/ujpr.v5i5.487.
6. **Al-Naqeb, G**. (2017). Acute toxicity and anti-ulcerative potential of *caralluma flava N.E.Br* methanolic extract against ethanol-induced gastric ulcers in rats. Journal of Medicinal Plants Studies. 5(6): 21-25.
7. **Al-Naqeb, G.** (2017). *Caralluma flava N.E.Br* extract reduces plasma glucose level and improves plasma antioxidant enzymes in hyperglycemic rats. Journal of Medicinal Plants Studies. 5(6): 39-43. 2017.
8. **Al-Naqeb, G**., Taj Al- Deen, A. (2017). The effect of *Rumex nervosus Vahl* leaves on high fat diet-induced hyperglycemia and hyperlipidemia in albino rats. International Journal of Chemical Science. 1(2), 80-83.

9. **Al-Naqeb, G**., Rousová, J., Kubátová, A., & Picklo, M. J., Sr (2016). *Pulicaria jaubertii E. Gamal-Eldin* reduces triacylglyceride content and modifies cellular antioxidant pathways in 3T3-L1 adipocytes. Chemico-biological interactions, 253, 48–59. https://doi.org/10.1016/j.cbi.2016.05.013.
10. **Al-Naqeb, G**. (2015). Effect of prickly pear cactus seeds oil on the blood glucose level of streptozotocin-induced diabetic rats and its molecular mechanisms. International Journal of Herbal Medicine. 3(4): 2934.
11. **Al-Naqeb, G**. (2015). Antioxidant and Antibacterial Activities of Some Yemeni Medicinal Plants. International Journal of Herbal Medicine 2015; 3(3): 06-11.
12. Mohd Ghazali, M. A., **Al-Naqeb, G**., Krishnan Selvarajan, K., Hazizul Hasan, M., & Adam, A. (2014). Apoptosis Induction by Polygonum minus is related to antioxidant capacity, alterations in expression of apoptotic-related genes, and S-phase cell cycle arrest in HepG2 cell line. BioMed research international, 2014, 539607. https://doi.org/10.1155/2014/539607.
13. Wesam, R. K., **Ghanya, A. N**., Mizaton, H. H., Ilham, M., & Aishah, A. (2013). Assessment of genotoxicity and cytotoxicity of standardized aqueous extract from leaves of Erythroxylum cuneatum in human HepG2 and WRL68 cells line. *Asian Pacific journal of tropical medicine*, *6*(10), 811–816. https://doi.org/10.1016/S1995-7645(13)60143-1.
14. Taj Al- Deen, A., **Al-Naqeb, G**., Al-Maqtari. Q., (2013). Potential antioxidants and antibacterial from *Dodonaea viscose*, *Fragaria x ananassa* duch and *Vernonia amygdalina* leaves. University of Aden Journal of Natural and Applied Sciences, 17, 2013.

15. Azahar, M. A., **Al-Naqeb, G**., Hasan, M., & Adam, A. (2012). Hypoglycemic effect of Octomeles sumatrana aqueous extract in streptozotocin-induced diabetic rats and its molecular mechanisms. Asian Pacific journal of tropical medicine, 5(11), 875–881. https://doi.org/10.1016/S1995-7645(12)60163-
16. John, C. M., Ramasamy, R., **Al Naqeeb, G**., Dhiab Al-Nuaimi, A. H., & Adam, A. (2012). Enhanced CD4+CD25+ regulatory T cells with splenic proliferation and protection against oxidative stress by nicotinamide in gestational diabetes. *Current medicinal chemistry*, Advance online publication.
17. John, C. M., Ramasamy, R., **Al Naqeeb, G**., Al-Nuaimi, A. H., & Adam, A. (2012). Nicotinamide supplementation protects gestational diabetic rats by reducing oxidative stress and enhancing immune responses. Current medicinal chemistry, 19(30), 5181–5186. https://doi.org/10.2174/092986712803530449.
18. **Al-Naqeep, G**., Al-Zubairi, A. S., Ismail, M., Amom, Z. H., & Esa, N. M. (2011). Antiatherogenic Potential of *Nigella sativa* Seeds and Oil in Diet-Induced Hypercholesterolemia in Rabbits. Evidence-based complementary and alternative medicine: eCAM, 2011, 213628. https://doi.org/10.1093/ecam/neq071.
19. Ismail, N., Ismail, M., Al-Absi A., **Al-Naqeeb, G.** (2011). Thymoquinone rich fraction from *Nigella sativa* and thymoquinone are cytotoxic towards colon and leukemic carcinoma cell lines. Journal of Medicinal Plants Research. 2011, Vol. 5(15), 3359–3366.
20. **Al-Naqeb**, G. Ismail, M., Bagalkotkar, G., Adamu, H. (2010). Vanillin rich fraction regulates LDLR and HMGCR genes expression in HepG2 cells. Food Research International 43 2437–2443. https://doi.org/10.1016/j.foodres.2010.09.015.

21. Ismail, M., **Al-Naqeep, G**., Chan, K. W. (2010). *Nigella sativa* thymoquinone-rich fraction greatly improves plasma antioxidant capacity and expression of antioxidant genes in hypercholesterolemic rats. Free radical biology & medicine, 48(5), 664–672. https://doi.org/10.1016/j.freeradbiomed.2009.12.002.
22. Mariod, A.A., **Al-Naqeep, G**., Ismail, M. (2010). Monechma ciliatum methanolic extract regulates low density lipoprotein receptor and 3-hydroxy-3- methylglutaryl coenzyme A reductase genes expression in HepG2 cells. 9(36) 5813-5819.
23. Ismail, M., **Al-Naqeeb, G**., Mamat, W. A., & Ahmad, Z. (2010). Gamma-oryzanol rich fraction regulates the expression of antioxidant and oxidative stress related genes in stressed rat's liver. Nutrition & metabolism, 7, 23. https://doi.org/10.1186/1743-7075-7-23.
24. **Al-Naqeep**, G., Ismail, M., & Allaudin, Z. (2009). Regulation of low-density lipoprotein receptor and 3-hydroxy-3-methylglutaryl coenzyme A reductase gene expression by thymoquinone-rich fraction and thymoquinone in HepG2 cells. Journal of nutrigenetics and nutrigenomics, 2(4-5), 163–172. https://doi.org/10.1159/000227264.
25. **Al-Naqeep, G**., Ismail, M. (2009). Effects of Thymoquinone Rich Fraction and Thymoquinone on plasma lipoprotein level and hepatic low-density lipoprotein receptor and 3-Hydroxy-3methylglutaryl coenzyme A reductase gene expression. Journal of Functional Foods 1 (2009) 298–303. https://doi.org/10.1016/j.jff.2009.06.003.

26. **Al-Naqeep, G.N.,** M.M. Ismail, A.S. Al-Zubairi and N.M. Esa. (2009). Nutrients composition and minerals content of three different samples of Nigella sativa L. cultivated in Yemen. Asian Journal of Biological Sciences, 2: 43-48.

27. **Al-Naqeep, G**., Ismail, M., (2009). Regulation of Apolipoprotien A-1 and Apolipoprotien B100 Genes by Thymoquinone Rich Fraction and Thymoquinone in HepG2 Cells. Journal of Food Lipids16(2009) 245–258.

28. **Al-Naqeeb, G**., M. Ismail and A.S. Al-Zubairi. (2009). Fatty acid profile, α-tocopherol content and total antioxidant activity of oil extracted from Nigella sativa seeds. International Journal of Pharmacology. 5 (4): 244-250. Impact factor 0.751.

29. Yazan, L.S., Ng, W.K., **Al-Naqeeb, G**., Ismail, M. (2009). Cytotoxicity of Thymoquinone (TQ) from *Nigella sativa* Towards Human Cervical Carcinoma Cells (HeLa). Journal of Pharmacy Research, 2(4), 585-589. Impact factor 0. Citation 34.

B- Publications without peer review process (Conference paper)

30. **Al-Naqeb, G**. (2022). Genotoxicity Evaluation of Prickly Pear Cactus Seeds Oil in Cultured V79 Cells. September 2022. DOI: 10.21748/ZIFS8532. Conference: 2022 AOCS Annual Meeting & Expo.
31. Picklo M, Rousova J, Kubatova, **Al-Neqeb G**. (2015). *Pulicaria jaubertii* Extract Prevents Triglyceride Deposition in 3T3-L1 Adipocytes. FASEB J, 29(1):924.19.

32. Kraidi, S., Adam, A., Iryani, W., **Al-Naqeb, G**. (2013). Antiproliferative Effect of Antioxidant Rich Fraction Isolated from Cassia Auriculat and its Molecular Mechanisms.

The Open Conference Proceedings Journal, 2013, Volume 4.
10.2174/2210289201304010228.

C – Patents

33. Ismail, M., **Al-Naqeeb, G**. Cardioprotective Effects of Nutraceuticals Isolated from *Nigella Sativa Seeds*. US Patent App. 13/124,370, 2011.
    Publication of US20110244060A1. 2011-10-06.

34. M Ismail, G Al-Naqeeb, W Chan, NE Adnan Extraction of fixed oil and thymoquinone rich fraction - US Patent App. 13/832,499, 2013.
    2012-02-23. Publication of US20120046366A1
    https://patents.google.com/patent/US20110244060A1/en