

Ali Ahmed AZZAWRI

**Medical Genetics and Molecular Diagnostics Consultant, according to
Classification of the Yemeni Medical Council**

E-mail azzawri@gmail.com
Mobile +967734374092 – +905533766333 (WhatsApp)
Address Konya –Turkey & Dhamar – Yemen
Nationality Yemen



OBJECTIVE

An advanced position in medical genetics and molecular biology or other related fields that require dedication, responsibility, and productivity.

SUMMARY

Dr. Ali Azzawri is an experienced medical geneticist and molecular biologist with expertise in genetics, molecular diagnostics, biochemistry, and bioinformatics. He has worked on projects within a variety of research fields, including cancer biology, Nucleic acid vaccines, immunology, and infectious diseases and others. Ali has a strong academic background with a PhD and MSc degrees in medical genetics and molecular biology, and he also participated in a specialized team as a postdoctoral researcher to produce a Covid 19 vaccine using mRNA technology. Ali is skilled in laboratory techniques, data analysis, and writing scientific papers.

EDUCATIONAL QUALIFICATIONS

Doctor of Philosophy (Ph.D.), 2014 - Feb | 2018 - April

Faculty of Medicine, Department of Medical Genetics

Selçuk University, Konya, Turkey

Thesis Subject: Effects of KRAS Gene Lcs6 Mutation on Metastasis Pathways in Human Lung Cancer

Master of Health Science (MHS), 2011 - Sep | 2014 - Jan

Faculty of Medicine, Department of Medical Genetics

Selçuk University, Konya, Turkey

Thesis Subject: The Effect Of Helicobacter Pylori CagA Gene On Autophagy Pathway In Human Gastric Cancer Cells.

Bachelor of Applied Science (BAS), 1997 - Sep | 2001 – Jun

Department Of Applied Biology

Thamar University, Yemen

PROFESSIONAL EXPERIENCE:

- **Assistant Professor** at Faculty of Laboratory Medicine at 21 September University (**2023 – present**).
- **Assistant Professor** at Faculty of Medicine and Health Sciences at Genius University for Sciences & Technology (**2023 – present**).
- **Assistant Professor** at Faculty of Medical Sciences at Al-Hikma University (**2023 – present**).
- **Postdoctoral researcher** on a team **to produce a vaccine for the Covid 19** virus (Project for Development of Self-Amplifying mRNA Vaccine Against SARS-CoV-2 (COVID-19) Spike (S) Antigen) (**2020 – 2023**) at Selçuk University commissioned by Technological Research Council of Turkey (TÜBİTAK).
- **Researcher, Lecturer and Specialist in Medical Genetics, Molecular biology and Cancer (2020 – 2023)** at Department of Medical Genetic - Faculty of Medicine - Selçuk University.
- **Assistant Professor and Researcher in Genetics, Molecular biology and Cancer (2018 - 2020)** at Department of Genetics - Dicle University.
- **Assistant Specialist in Medical Genetics and Molecular Diagnostics** - Genetic Laboratories - Department of Medical Genetics - Faculty of Medicine Hospital - Selcuk University - Konya - Turkey - (2014 - 2018).
- **Researcher and Lecturer in Medical Genetics, Molecular biology and Cancer (2012 - 2018)** at Department of Medical Genetics, Scientific Research Projects Coordination Unit (BAP) – Selçuk University and Scientific & Technological Research Council of Turkey (TÜBİTAK).
- **Genetic Laboratory Technician** - Department of Medical Genetics - Selcuk University - Konya - Turkey - (2011 - 2014).
- **Teacher assistant (2002-2007)** at Applied Biology Department - Thamar University, Yemen. A teacher to several courses at Applied Sciences-Applied Biology Department, Faculty of Medicine and Faculty of Education-Department of Biology, Thamar University such as (General Genetics, Genetic Engineering, Microbiology, General Biology, Cell).
- **Lab Technician (2002– 2010)** : Work for interval time in several hospitals and medical labs.
- **Research Assistant (2002– 2009):** in many medical and biological fields, especially around: Qat and Nicotine influences on humans and some kinds of bacteria, Salmonella (Cause of typhoid disease) in Thamar province, medical herbs and toxic herbs in Yemen.
- Working in School Health and Supervision.
- Participate in the preparation and supervision of more than 30 workshops, training courses and awareness campaigns in genetic counseling, cancer awareness and risk education, support groups for patients with genetic disorders and their families in Yemen and Turkey.

RESEARCH EXPERIENCE:

- Cell culture techniques, using various Non-adherent and adherent cell lines:
 - Tissue Culture (rodent/human cell lines and embryonic stem cells)
 - Transfection of mammalian cells with single and multiple genes
 - Bacterial culture and transformation
- Study of cancer cell proliferation:
 - Manual and automated cell count.
 - Colorimetric assays.
 - MTT cell proliferation assay
 - immortalization
- Study of cancer cell migration in vitro:
 - Wound healing migration assay
 - Transwell migration assays.
- 3D cell culture:
 - Transwell co-culture
 - Matrigel transwell chamber invasion assay
 - Trans Epithelial Electrical Resistance (TEER)
 - Soft agar colony formation assay.
- Molecular biology techniques:
 - PCR (various techniques).
 - Electro Mobility Shift Assay (EMSA).
 - DNA/RNA extraction from cell or tissue and patient samples
 - Evaluation of gene expression level using luciferase assay.
 - Gene cloning, ligation and subcloning, amplification and sequencing.
 - plasmid DNA preparation, DNA digestion
 - Using restriction enzymes for detection of gene polymorphism
 - Protein immunoprecipitation,
 - Protein extraction, Gel electrophoresis, and Western blotting.
 - Nuclear fractionation techniques
 - Apoptosis and autophagy analysis.
 - ELISA
- Flow cytometry:
 - Analysis of cell cycle
 - Study of intra-nuclear transcription factors.
- Cytogenetic techniques:
 - Karyotyping using G-banding technique
 - Fluorescent in situ hybridization (FISH) technique using centromeric and whole X-chromosome painting probes
- Histological techniques for both light and electron microscopy:
 - The routine histological techniques for light microscopy using paraffin sections and staining with ordinary stains such as Hematoxylin and Eosin, silver stain and PAS stain.
 - Preparation of histological cryosections using cryostat for histochemistry and immunohistochemistry staining.
 - Preparation of histological specimens for electron microscopy.
 - Immunofluorescence.
- Sequencing technologies:
 - Sanger sequencing
 - MGI next-generation sequencing (preparation and enrichment optimization and design).

- Bioinformatics techniques:
 - Analysis of gene expression.
 - Analysis of protein interaction and gene interaction networks
 - Software tools and web portals for RNA structure and function prediction.

Different techniques to study signal transduction pathways in cancer Using siRNA and different pharmacological inhibitors.

TEACHING EXPERIENCE: (Undergraduate and Postgraduate)

Fundamental Genetics, Molecular Biology, Medical Genetics, Cell Biology and Physiology, Virology, Diagnostic Molecular Biology, Molecular Genetics, Cell Signaling System, Gen Expression, Gen Regulation, Genetic Engineering, Cancer Genetics, Cell Culture Methods, Oncology, Biochemistry, Pharmacogenomics & Personalized Medicine, Cytogenetics, Immunogenetics, Techniques in Analysis of Nucleic Acids, Recombinant DNA Technology, Genetic Counseling, Biotechnology and other related courses.

COMPUTER AND BIOINFORMATICS EXPERIENCE:

- Next-Generation Sequencing Bioinformatics (trimming and mapping optimization, variant calling and annotation analysis, mutation pathogenicity interpretation, genomic sequencing, RNAseq, bisulfite sequencing pipelines)
- Transcriptomics analysis (gene expression analysis; microarray expression profiling)
- Protein interaction analysis, molecular docking analyses.
- Knowledge and use of various software for image analysis, statistical analysis, and scientific writing (Image J, Image Studio, GraphPad Prism).
- Experienced in different operating systems, Windows and MacOS.
- Proficient in most Microsoft applications: Word, Excel, Access, and PowerPoint.

LANGUAGE SKILLS:

- 1- ARABIC ((mother tongue).
- 2- ENGLISH (good knowledge written/spoken).
- 3- TURKISH (good knowledge written/spoken).

AWARDS, GRANTS, AND ACCOLADES:

- Proficient Master's Scholarship form Yemeni Higher Education and Presidency for Turks Abroad and Related Communities (YTB).
- Ph.D. scholarship 4 years form Technological Research Council of Turkey (TÜBİTAK).
- Postdoctoral Scholarship 3 years form Technological Research Council of Turkey (TÜBİTAK).
- Research Award from the 1st National HematoOncoGenetics Congress (25-28 December 2021 Antalya - Turkey).
- The Award of excellence in Faculty of Applied Sciences, Dhamar University.
- The Award of excellence in high school: The ministry of Education, Yemen.

PROJECT ACCOMPLISHED:

- Koçak N, et al. Development of Self-Amplifying mRNA Vaccine Against SARS-CoV-2 (COVID-19) Spike (S) Antigen) (2020 – 2023) at Selçuk University commissioned by Technological Research Council of Turkey (TÜBİTAK).
- Atıç R, Yildirim I, **Azzawri A**, et al. Investigation the effect of expression of Sox9 gene on Smad proteins, ALK1 and ALK5 receptor and the effect of Sox9 expression differences on ALK1 / ALK5 ratio in mesenchymal stem cells. 2019 Faculty of Medicin, Dicle University, TURKEY.
- Kaplan I, Yildirim I, **Azzawri A**, Atıç R. Investigation of the effect of beta 2 adrenergic receptors in pathophysiology of chondrocyte hypertrophy. 2019 Faculty of Medicin, Dicle University, TURKEY.
- Yiğın A, **Azzawri A**, et al. Investigation of Medicarpin Effect on the Head and Neck Cell Line. 2018 Faculty of Medicin, Dicle University, TURKEY
- **Azzawri A**, Acar H, Çora T. Effects Of KRAS Gene Lcs6 Mutation On Metastasis Pathways In Human Lung Cancer. 2018. *Faculty of Medicin, Department of Medical Genetics- Selçuk University, TURKEY.*
- **Azzawri A**, Acar H, Çora T. The effect of LCS6 mutation in the K-RAS gene on AKT and MEK pathways in Human Lung Cancer Cells. 2017. *Faculty of Medicin, Department of Medical Genetics- Selçuk University, TURKEY.*
- Acar H, Öztürk K, **Azzawri A**, et al. Study of metastasis pathway in head and neck squamous cell carcinoma (HNSCC). 2017. *TÜBİTAK, TURKEY.*
- **Azzawri A**, Acar H. The effect of Helicobacter pylori CagA Gene on Autophagy Pathway in Human Gastric Cancer Cells. 2014 *Master thesis, Faculty of Medicin, Department of Medical Genetics- Selçuk University, TURKEY.*

PUBLICATIONS, ORAL PRESENTATIONS, POSTERS AND ACCEPTED ABSTRACTS:

- Yenigun V, Azzawri A, et al. Evaluation of the simultaneous effects of KRAS G12V and LCS6 alterations on the behavior of head and neck squamous cell carcinoma. *Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis*, doi.org/10.1016/j.mrfmmm.2024.111895
- Korucu E, Aydemir S, Azzawri A, et al. Gene expression of MTATP6 and cytochrome P450 in MCF-7 and MDA-MB -231 breast cancer cell lines with juglone and curcumin supplemented. , *Nucleosides, Nucleotides & Nucleic Acids*, DOI: 10.1080/15257770.2024.2418907.
- Azzawri A, Yildirim IH, Yegin Z, et al. Expression of GRP78 and its copartners in HEK293 and pancreatic cancer cell lines (BxPC-3/PANC-1) exposed to MRI and CT contrast agents. , *Nucleosides, Nucleotides & Nucleic Acids*, DOI: 10.1080/15257770.2023.2263496.
- Soylera D, Korucua E, Azzawri A, et al. Effects of Juglone and Curcumin Administration on Expression of FABP5 and FABP9 in MCF-7 and MDA-MB-231 Breast Cancer Cell Lines. *Biochemistry (Moscow), Supplement Series A: Membrane and Cell Biology* 17, pages58–67 (2023).
- Azzawri A, Marzioğlu E, Koçak N. Umut vadeden tedaviler için yeni tasarım: mRNA aşılıarı. *Sağlık Düşüncesi ve Tıp Kültürü Dergisi (SD)* 2022, 61sayı s:35- 41.
- Yiğın A, Azzawri A, et al. Determination of cytokine profile and associated genes of the signaling pathway in HNSCC. *Journal of Receptors and Signal Transduction*.
<https://doi.org/10.1080/10799893.2021.2013888>
- Yenigun V, Azzawri A, et al. Alcoholic extract of *Tarantula cubensis* (Theranekron®) induce autophagy on gastric cancer cells. *Experimental Biomedical Research*.
DOI: <https://doi.org/10.30714/j-ebr.2021267971>
- Akar s, **Azzawri A**, et al. Small molecule inhibitor of Nicotinamide N-methyltransferase shows anti-proliferative activity in HeLa cells. *Journal of Obstetrics and Gynaecology (IJOG)*.ID: IJOG 1854696.2021.
- Nami B, **Azzawri A**, et al. Recombinant *Helicobacter pylori* CagA protein induces endoplasmic reticulum stress and autophagy in human cells. *bioRxiv*. vOI: 10.1101/2020.174615.
- Yildirim IH, **Azzawri AA**, Duran T. Thymoquinone induces apoptosis via targeting the Bax/BAD and Bcl-2 pathway in breast cancer cells. *Dicle Medical Journal*.2019:46(3).

- **Azzawri Ali, Book in Arabic:** Encyclopedia of Molecular Biology (more than 1500 questions and answers) "under publication".
- Şahin G, **Azzawri A**, et al. Antitumor Effect of Neferine via Endoplasmic Reticulum Stress in Hela Cells. Journal of Cancer Research and Therapeutics. "under publication".
- **The European Human Genetics Conference 2018, June 16-19, 2018, Milan, Italy.** Effects of KRAS gene LCS6 mutation on metastasis pathways in human lung cancer. **Ali. A. Azzawri**, H. Acar ,T. Çora.
- **The European Human Genetics Conference 2018, June 16-19, 2018, Milan, Italy.**
The Effect of Helicobacter Pylori CagA Gene on Autophagy Pathway in Human Gastric Cancer Cells. **Ali. A. Azzawri**, H. Acar.
- **The European Human Genetics Conference 2015, June 6-9, 2015, Glasgow, Scotland, UK.**
Autophagic effect of theranekron in gastric cancer cells. Vildan Betül Yenigun, **Ali. A. Azzawri**, Nadir Kocak, Hasan Acar.
- **11th National Medical Genetics Conference, September 24-27, 2014, İstanbul, Turkey.**
Investigation of theranekron's autophagic effect in gastric cancer cells. **Ali. A. Azzawri**, Vildan -- Betül Yenigün, Didem Taştekin, Hasan Acar.
- **Azzawri A**, Yildirim IH, Nadir Kocak. mRNA vaccines, new concept for a promising approach "under review".
- **Azzawri A**, Acar H, et al. Effects Of Kras Gene Lcs6 Mutation On Metastasis Pathways In Human Lung Cancer. "under review".
- **Azzawri A**, Kaplan B, Acar H. The Effect Of Exogenous Helicobacter Pylori Caga On Autophagy Pathway In Human Gastric Cancer Cells . "under review".
- **Azzawri A**, almaghrebi E, et al. The Effect of Different Extracts of Dracaena cinnabari Resin on Proliferation and Apoptosis Levels in Human Mcf-7 Cell Line. . "under review".
- Akbulut H, **Azzawri A**, almaghrebi E, et al. Western Blot Parameters Investigation Of Chronic Obstructive Lung Disease (Copd) In Rats. "under review".

- Kaplan B, **Azzawri A**, et al. Investigation of Relationship Between *KRAS* 3'UTR LCS6 Mutation, and *Lin28* Gene and IL-6/STAT3, in Laryngeal Carcinoma. "under review".
- **Azzawri A**. Human Papilloma Virus (Hpv) and its Role in the Larynx Cancer. "under review".
- **Azzawri A**. The Effect Of Bacterial Proteins On Pathways In Human Cells. "under review".
- **Azzawri A**. Bacterial Proteins and Cancer & Use of Bacteria in The Treatment of Cancer. "under review".