Sabah Al-Zahrani BSc, MSc

Email: alzahranisabah@gmail.com

Cell: +966 553938005

EDUCATION:

2021 **MSc**. Collage of Science, Biochemistry, King Saud University, Saudi Arabia.
M.Sc. Thesis Title: "Screening of natural anticancer products via targeting ATM/Chk2 and ATR/Chk1 signaling pathway on different colon cancer cell lines"

Jun 2014- Jul-2016 American English Language program **Columbia University**

2009 **BSc**. Collage of Science, Biochemistry, King Saud University, Saudi Arabia.
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POSITIONS AND EMPLOYMENT:

2012- Present **Demonstrator**, Biochemistry Department, College of Science, KSU
2006-2012 **Research Assistance**, Zoology Department, KSU& Genetics Department, KFSHRC.
2005-2006 **Research Trainee,** Genetics Department, KFSHRC

TECHNICAL TRAINING:

2006-2007 Volunteer Research Assistant for three month in in Neurogenetics Unit and Laboratory, headed by Dr. Namik Kaya, KFSHRC, Genetics Department.

Molecular Biology Techniques

- DNA and RNA isolation and purification from whole blood, different cell lines and tissue samples.
- Determination of the quantity and quality of RNA, DNA and proteins in various cell and tissue types.
- Primer design and optimization.
- Cell culture.
- Cell line treatment.
- PCR preparation and product purification.
- Imaging (Typhoon and UV imager).
- Gel Electrophoresis (Agarose).
- Preparing and sequencing samples of DNA (ABI 3100, MegaBase).
- Sequence analysis (ChromasPro, Lasergene 6.0).
- cDNA Synthesis.

Microbiology Technique:

- Minimum inhibitory concentration assay
- Bacterial inhibition's assay

Computer Skills:

• **Software**: ChromasPro, Lasergene 6.0, GraphPad Prism 9.0 Microsoft Office Professional.

VOLANTEERING EXPERIENCE:

As a technician working at Zoology Department, College of Science, KSU, in the following courses:

- **Zoo 551** Advanced Genetics
- **Zoo 556** Advanced Cytogenetics
- **Zoo 331** Physiology-1
- **Zoo 553** Molecular Biology

TEACHING EXPERIENCE:

As a demonstrator working at Biochemistry Department, College of Science, KSU, I have taught and gave lectures on practical training to the students taking following courses:

- **BCH 361** Molecular Biology
- **BCH 302** General Biochemistry-2
- **BCH 445** Nutritional Biochemistry
- **BCH 447** Practical Metabolism
- **BCH 472** Biochemistry of Biological Fluids
- **BCH 497** Research and Seminar
- **BCH 220** Blood Biochemistry

PUBLICATIONS:

RESEARCH ARTICLES PUBLISHED IN PEER REVIEWED JOURNALS:

Sabah Ahmed Al-Zahrani[1], Ramesa Shafi Bhat*, Mona Awad Al-Onazi, Mona S. Alwhibi, Dina. A. Soliman, Nora Abdullah Aljebrin, Leenah Saleh Al-Suhaibani, and Sooad Al Daihan. Anticancer potential of biogenic silvernanoparticles using the stem extract of Commiphora gileadensis against human colon cancer cells. Green Processing and Synthesis 2022; 11: 435–444. (https://doi.org/10.1515/gps-2022-0042)

Sabah Ahmed Al-Zahrani[1], Ramesa Shafi Bhat, Sarah A. Al Rashed, Amer Mahmood, Ahmed Al Fahad, Ghadah Alamro, Jamilah Almusallam, Roua Al Subki, Raha Orfali and Sooad Al Daihan. Green-synthesized silver nanoparticles with aqueous extract of green algae *Chaetomorpha ligustica* and its anticancer potential. Green Processing and Synthesis 2021; 10: 711–721. (https://doi.org/10.1515/gps-2021-0067).

Arwa Althomali[1], Maha H. Daghestani, Fatimah Basil Almukaynizi, **Sabah Ahmed Al-Zahrani,** Manal A. Awad, Nada M. Merghani, Wadha I. Bukhari, Eiman M. Ibrahim, Sherifah M. Alzahrani, Nouf Altowair, Afaf S. AL-Ghamdi, Asma M. AlQahtani, Rasha Ramadan, and Ramesa Shafi Bhat*. Anti-colon cancer activities of green-synthesized Moringa oleifera–AgNPs against human colon cancer cells. Green Processing and Synthesis 2022; 11: 1–10. (https://doi.org/10.1515/gps-2022-0052).

Hussah M. Alobaid[1], Maha H. Daghestani, Nawal M. AL-Malahi, **Sabah A. Alzahrani**, Lina M. Hassen, and Dina M. Metwally*. Exploring the effect of silver nanoparticles on gene expression in colon cancer cell line HCT116. Green Processing and Synthesis 2022; 11: 1108–1117. (https://doi.org/10.1515/gps-2022-0094).

Hanan A. Bin Saeed[1], Maha H. Daghestani[1], Khushboo Ambreen[2] , Mazin H. Daghestani[3], **Sabah A. Al-Zahrani[4]**, Hussah Alobaid[1], Nawal M. AL-Malahi[1].
Low Dose of Green Synthesized Silver Nanoparticles is Sufficient to Cause Strong Cytotoxicity via its Cytotoxic Efficiency and Modulatory Effects on the Expression of *PIK3CA* and *KRAS*Oncogenes*,* in Lung and Cervical Cancer Cells
Journal of Cluster Science 2022;11. (https://doi.or10.1007/s10876-022-02395-3).

Nuha Sulaiman Alduraihem [1], Ramesa Shafi Bhat [2]*, **Sabah Ahmed Al-Zahrani [2]**, Doaa M. Elnagar [1], Hussah M. Alobaid [1] and Maha H. Daghestani [1],*
Anticancer and Antimicrobial Activity of Silver Nanoparticles Synthesized from Pods of *Acacia nilotica. Processes* 2023, *11*, 301. (https://doi.org/10.3390/pr11020301)

Maha H Daghestani[1]*, Arjumand Warsy[2], Mazin H Daghestani[3], Ali N Alodaib[4], Abdelmoneim Eldali5, Nadia A Al-Eisa[1] and **Sabah Al-Zhrani[2]**. The Gln27Glu Polymorphism in β2-Adrenergic receptor gene is linked to hypertriglyceridemia, hyperinsulinemia and hyperleptinemia in Saudis. Lipids in Health and Disease. 2010 Aug 25;9:90. (https:// doi: 10.1186/1476-511X-9-90).

PARTICIPATION IN RESEARCH:

- **2006-2007** The change of insulin receptor gene in polycystic ovaries in Saudi women.
- **2006-2007** The link in beta Adrenergic gene in obesity among Saudis.
- **2007-2008** The change of 3 non-associated protein gene in Saudi diabetics.
- **2008-2009** The relationship between the change of Leptin gene and obesity in Saudi children.

- **2012-2013** Genetic association between the HLA-G 14-bp insertion/deletion polymorphism and the recurrent spontaneous abortions in Saudi Arabian women.

- **2012-2013** The relationship between cytokine gene polymorphism and unexplained recurrent spontaneous abortion in Saudi females.

- **2020-2021** Anti-colon-cancer activities of biogenic Moringa oleifera-AgNPs through molecular pathway analysis in human colon-cancer cells HCT116 and SW480.

PROGRAM OF CREATIVITY AND TALENT IN MOLECULAR BIOTECHNOLOGY:

2011 Technician

2010 Technician

LANGUAGES:

Arabic, English