

JASMINE HANAFY HOLAIL
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Date of Birth: 11/1/1986

Nationality: Egyptian- American

OBJECTIVE

Organized and detail-oriented individual with a strong scientific background in the field of Molecular Biochemistry and Pharmacology. Eager and enthusiastic to pursue my postgraduate studies at a highly reputable and eminent education institute.

EDUCATION

2022- Present	Bristol University, Faculty of Health Sciences Ph.D. candidate (Translational Health Sciences)	Bristol, UK
2008- 2011	American University of Beirut, Faculty of Medicine Master of Science (Pharmacology and Therapeutics)	Beirut, Lebanon
2003- 2008	Alexandria University, Faculty of Pharmacy Bachelor's degree in pharmacy and pharmaceutical Science	Alexandria, Egypt
1991-2003	El- Nasr Girls College Preliminary, middle, and high school	Alexandria, Egypt

WORK EXPERIENCE

September 2015-present: Senior lecturer, **Alfaisal University, Faculty of Medicine, Riyadh, KSA**

- Responsible for teaching Molecular Biochemistry practical sessions for medical students including DNA isolation, PCR-RFLP, gel electrophoresis, Western blot, and ELISA techniques.
- Supervising and training Pharm D students on performing quantitative analytical techniques on body fluids such as titrimetry and spectrophotometry.
- Teaching lectures on Complementary and Alternative Medicine for 4th-year Pharm-D students.
- Conducting Problem Based Learning sessions for medical students.

- Member of team-based learning program for first-year medical students.
- Member of Curriculum Committee for the Pharm-D program.

Feb 2013-June 2015: Lecturer assistant, **Pharos University in Alexandria, Faculty of Physical therapy Alexandria, Egypt**

- Responsible for teaching biochemistry practical sessions and laboratory activities for 1st-year students.
- Assist in organizing the course syllabus and intended learning outcomes for Biochemistry and pharmacology courses.
- Responsible for evaluating students' performance during the lab sessions, oral presentations, and assignments.

2008- 2011: Lab Demonstrator, **Beirut Arab University, Faculty of Science, Beirut, Lebanon**

- Responsible for teaching Molecular techniques and clinical biochemistry practical sessions for biochemistry students.
- Responsible for teaching biochemistry practical lessons and laboratory activities for 1st and 2nd-year Pharmacy students.
- Supervising and training students on quantitative and qualitative analytical techniques (identification and purity testing).
- Responsible for evaluating students' performance during lab sessions and oral presentations.

RESEARCH EXPERIENCE

- Conducting research in the field of cellular and molecular organismal aging with a specific focus on cellular senescence. Ph.D. thesis project “ Role of Type A Lamins in Chemo Resistance: Inhibition by Sulfated Non-Anticoagulant Heparin (S-NACH)
- Co-investigator in two other projects:
“Anti-Cancer drug resistance classification based on signal transduction pathways in MCF7 sublines” and “Differential Gene Expression Signatures And Cellular Signaling Pathways of Lamin A/C Transcript Variants in MCF7 Cell Line By RNA Sequencing”

- Conducting research in the field of pharmacogenomics of drug-metabolizing enzymes, drug transporters, and drug target genes.
- Co-investigator in a running project entitled “The influence of VEGFA gene polymorphisms on the incidence of warfarin associated bleeding events in Saudi patients”.
- Master thesis entitled “The Influence of *CYP2D6* genetic polymorphisms on variability of tamoxifen metabolism in the Lebanese breast cancer population”.
- As a part of the thesis work, acquired a huge experience in patient’s recruiting, gathering, and organizing clinical data, collecting blood samples, performing DNA isolation, and genotyping techniques.
- Development of a reversed-phase ion-pairing high-performance liquid chromatography technique employing solid-phase extraction with fluorescence detection to quantify tamoxifen (anti-estrogenic drug).

▪ **Grants**

2016; Internal Research Grant (IRG) Office of research- Alfaisal University- “Association of VKORC1 and CYP2C9 single-nucleotide polymorphisms with warfarin dose adjustment in Saudi patients. Drug metabolism and personalized therapy”.

TECHNICAL SKILLS

- Ran various complex analytical systems such as HPLC.
- Cell culture and cell viability assays.
- Extensive experience with RT-qPCR reagents and assays.
- Agarose gel electrophoresis.
- Sample preparation techniques including solid phase extraction (SPE) and liquid/liquid extraction.
- Perform Various DNA and RNA extraction from biological samples.
- UV spectrometry and fluorometry-based methods
- Basic knowledge in statistical software SPSS.

WORK SHOPS AND TRAINING

June 2022	Alfaisal University The art of writing multiple choices
February 2020	Alfaisal University Medical Education and quality assurance
November 2019	Alfaisal University Problem-based learning workshop
October 2018	King Saud bin Abdulaziz University for Health Sciences

Correlation & Regression Analysis (ANOVA)

March 2018	Alfaisal University Saudi MED Competency Framework workshop
November 2017	Alfaisal University Team-based learning workshops
April 2013	Pharos University Academic advising workshops
June 2010	American University of Beirut, Environmental Health & Safety Center Chemical and Biological lab safety training
July 2010	American University of Beirut, Environmental Health & Safety Center Radiation safety training for users of unsealed radioactive materials in research.
December 2010	American University of Beirut CFX96 Real-time PCR workshop
Summer 2006	Pharco Pharmaceuticals Completed 60 hours of training
July 2005	Knowledge Academy Attended “Communications in the workplace” seminar Attended “How to build your business plan for small business” seminar

ADDITIONAL COURSES

April 2012	Goethe Institute, Alexandria Completed level A
June 2010	Collaborative Institutional Training Initiative Completed Biomedical Research - Basic/Refresher, Basic Course (Online)

CONFERENCES AND PRESENTATIONS

- Presentations:
Holail Y, Tfayli A, Habbal M.Z, Halawi R, El Saghir N, Salem Z, Shamseddine A, Bazarbach A, Zgheib N.K. The Influence of CYP2D6 genetic polymorphisms on variability of tamoxifen

metabolism in the Lebanese breast cancer population. Poster presented at “Research day 2011 organized by the standing committee on research exchange (**SCORE**) of the Lebanese medical students’ international committee (**LeMSIC**).

- Conferences:
- **1st International Conference on Genomic Medicine**, November 2022, King Faisal Specialist Hospital and Research center, Riyadh-KSA
- **Pioneers in Medicine**, December 2018, Alfaisal University, Riyadh-KSA
- **Saudi International Medical Education Conference (SIMEC)** April 2018, Riyadh-KSA.
- **Mass Gatherings Medicine**, October 2017, Alfaisal University, Riyadh-KSA.
- **The International Conference on Genetics & Molecular Research**, May 2017, Dubai-UAE.
- **Saudi International Medical Education Conference (SIMEC)** April 2016, Alfaisal University, Riyadh-KSA. Participated as a judge on oral presentations and posters/E-posters competition.
- Attended the **44th Middle East Medical Assembly (MEMA)** May 2011, AUB, Beirut-Lebanon.

PUBLICATIONS

Zhra M, Holail JH, Mohammad KS. *Epigenetic Modulation and Bone Metastasis: Evolving Therapeutic Strategies.* **Pharmaceuticals (Basel).** 2025 Jul 31;18(8):1140. doi: 10.3390/ph18081140. PMID: 40872531; PMCID: PMC12389651.

Khalil MI, Ali MM, Holail J, Houssein M. *Growth or death? Control of cell destiny by mTOR and autophagy pathways.* **Progress in Biophysics and Molecular Biology.** 2023 Dec;185:39–55. doi: 10.1016/j.pbiomolbio.2023.10.002. PMID: 37944568.

Khalil MI, Helal M, El-Sayed AF, El Hajj R, Holail J, Houssein M, Waraky A, Pardo OE. *S6K2 in Focus: Signaling Pathways, Post-Translational Modifications, and Computational Analysis.* **International Journal of Molecular Sciences.** 2024 Dec 28;26(1):176. doi: 10.3390/ijms26010176. PMID: 39796034; PMCID: PMC11719502.

Holail J, Mobarak R, Al-Ghamdi B, Aljada A, Fakhoury H. *Association of VKORC1 and CYP2C9 single-nucleotide polymorphisms with warfarin dose adjustment in Saudi patients.* **Drug**

Metabolism and Personalized Therapy. 2022 Apr 4;37(4):353–359. doi: 10.1515/dmpt-2022-0108. PMID: 36476275.

Holail J, Sukkarieh HH, Aljada A. *Expanding the Role of Heparin Derivatives in Oncology: From Anticoagulation to Antitumor Activity.* **Pharmaceuticals (Basel).** 2025 Mar 12;18(3):396. doi: 10.3390/ph18030396. PMID: 40143176; PMCID: PMC11944584.

Batha L, Aziz MA, Zhra M, Holail J, Al-Qahtani WS, Fakhoury R, Aljada A. *Differential Gene Expression Signatures and Cellular Signaling Pathways Induced by Lamin A/C Transcript Variants in MCF7 Cell Line.* **Frontiers in Bioscience (Landmark Edition).** 2023 Jun 12;28(6):113. doi: 10.31083/j.fbl2806113. PMID: 37395027.

Helal AM, Yossef MM, Seif IK, Abd El-Salam M, El Demellawy MA, Abdulmalek SA, Ghareeb AZ, Holail J, Mohsen Al-Mahallawi A, El-Zahaby SA, Ghareeb DA. *Nanostructured biloalbuminosomes loaded with berberine and berberrubine for alleviating heavy metal-induced male infertility in rats.* **International Journal of Pharmaceutics.** 2024 Dec 25;667(Pt A):124892. doi: 10.1016/j.ijpharm.2024.124892. PMID: 39481813.

SUMMARY SKILLS

- **COMPUTER SKILLS:** MS Word, Excel, PowerPoint, Internet use.
- **LANGUAGES:** Fluent in English and Arabic with basic knowledge of French and German (writing, reading, and speaking).
- **SOFT SKILLS:** Communication, team building, organizational, and public speaking.

INTERESTS AND HOBBIES

- Sports: Yoga
- Artistic: Photography
- Cultural: Reading

REFERENCES

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