

Amani A. Alhadid, Ph.D.

PhD. in Biological Sciences – Biochemistry.
MSc. / BSc. in Nutrition - Dietetics.



Profile:

- Assistant Professor of Biological Sciences, specialized in Biochemistry and Molecular Biology - Ibn Sina University for Medical Sciences (ISUMS) www.isums.edu.jo
- Researcher in Nanomedicine, Glycemic Control and Glycation.
- Volunteer health care provider for people with diabetes and volunteer lecturer in the scientific methodology and research.
- Fulbright Alumnus (JFDP award – 2021).
- ORCiD iD: <https://orcid.org/0000-0002-9007-7743>

Personal Information

- **Full Name:** Amani Abdelrahman Jaffal Alhadid
- **Date of Birth:** June 10, 1981
- **Nationality:** Jordanian
- **Home address:** Al-Rabiyyeh – Amman – Jordan.
- **Phone Number:** *office:* +962 6 479 5555 - Ext. 4022
Mobile: +962795637462
- **E-mail:** *Work:* amanialhadid@isums.edu.jo
Personal: aajh07@gmail.com

Education

- PhD in **Biological Sciences / Biochemistry**, 2008-2016, Faculty of Science - Dept. of Biological Sciences - University of Jordan, Amman – Jordan. Ph.D. Dissertation: "The Role of Putative Anti-glycating Agents in Inhibiting the Formation of Advanced Glycation End-products (AGEs)".
- MSc. in **Nutrition and Food Science – majoring in Dietetics**, 2003-2006, Faculty of Agriculture – Dept. of Nutrition and Food Technology - University of Jordan, Amman - Jordan. MSc. Thesis: "Dietary and Anthropometric Evaluation of a Sample of Autistic Subjects in Jordan".
- BSc. in **Nutrition and Food Science – majoring in Dietetics**, 1999-2003, Faculty of Agriculture – Dept. of Nutrition and Food Technology - University of Jordan, Amman – Jordan.
- High-school – Scientific stream – 84% - 1998-1999 - Al-Omariyyeh Schools – Amman – Jordan.

Work Experience

- **Assistant professor of Biological Sciences** (Biochemistry and Molecular Biology): Faculty of Dentistry - Ibn Sina University for Medical Sciences (ISUMS) www.isums.edu.jo: October, 2024 – present.
- **Assistant Professor of Biology for Health Sciences** – Faculty of Science - Philadelphia University – Jarash – Jordan, Oct. 2022 – Feb. 2023.
- **Assistant Professor of Biochemistry and Nutrition** – Faculty of Pharmacy – Al-Zaytoonah University of Jordan, Amman, Jordan, 2016 - 2021.
- **Consultant Dietitian for Children with Autism:**
 - Tawasol Center for Autism – Amman, 2006 – 2007.
 - Jordanian Association for Autism – Amman, 2007–2013 (*as a volunteer dietitian*).

Teaching Experience:

- Cell and Molecular Biology.
- Pharmaceutical Biochemistry.
- Clinical Biochemistry.
- Clinical Nutrition.
- Clinical Biostatistics.
- General Biology.
- Laboratory of Pharmaceutical Biochemistry.

Skills:

- **Languages:**
 - Arabic: *mother tongue*.
 - English: *excellent* (iBT TOEFL score: 99/120 (2007)).
 - French: *beginner*.
- **Software Skills:**
 - Graphpad prism & SPSS for statistical analysis: *excellent*.
 - ESHA for nutrition analysis: *excellent*.
 - ChemDraw for chemical structures: *beginner*.
 - Python - programing language: *beginner*.

Experience/Interests

- **Lecturer of fundamental and clinical biomedical courses:** prepared & taught courses of biochemistry, clinical biochemistry & clinical nutrition. In addition to credible background in physiology, pathology and biostatistics.
- **Researcher in nanomedicine and antiglycation:** conducted several research projects in these two fields of research & currently conducting three related research projects in the University of Applied Sciences and Arts – Dortmund - Germany, in collaboration with the University of Nebraska – USA and the CTC and NTC research centers in the University of Jordan – Amman.

- **Clinical dietitian:** 1) counsellor and provider of dietary management programs and tips for people with nutrition- related health problems (obesity, diabetes, autism, epilepsy, endocrinological aberrations, and nutrient deficiency). 2) Raising awareness about healthy eating and adverse effects of unhealthy eating patterns.
- Extensive experience in **dietary management of autism:** thorough investigation and research (2004 - 2011), dietary interventions with tens of children with autism (2005 – 2011), lecturer in the dietary management of autism (2004-2011), one published paper (2008), three conference talks (2006 + 2008 +2011), and author of 13 parent – guidance bulletins.
- Extensive experience in **diabetes therapeutics and management:** being a patient with type 1 diabetes since 1993, and having experienced different modes of treatment (insulin pumps, pens, vials, different generations of glucometers, glucose sensors, oral hypoglycemic agents, different types of insulin...), I provide tips and advices for people with type 1 and type 2 diabetes either individually or through group meetings.
- A member of “**Yalla Talk**” team, 2005 – present: Yalla Talk is a voluntary, non-official team which is interested in “intercultural, inter-faith dialogue”. Yalla talk carries out meetings with people from different backgrounds, usually coming to Jordan for learning or working. The meetings are organized through institutions involved in inter-cultural dialogue, including ACORE, ICEE, SIT, Qasid and others.
- Voluntary lecturer in the "**Scientific Methodology**" in different educational centers in Amman since 2013.

Research Experience:

✚ Research Interests:

- Glycemic control.
- Anti-glycation.
- Nanomedicine.
- Bioactivity of natural and synthetic compounds.

✚ Technical Laboratory Skills:

- Mammalian cell culture.
- Nanomaterials synthesis and characterization (*ongoing training*).
- Handling of experimental animals (rats).
- Histology assays: IHC, H&E.
- Biochemical assays (gel electrophoresis, spectrophotometry, enzyme immobilization, assay kits...).
- Basic microbiological techniques (bacteria & yeast culture, Gram stain...).
- Molecular biotechnology techniques: DNA extraction, PCR, RT- PCR, Flow cytometry, DNA Sequencing (*limited practical experience*).

Research visits and training:

- **A research visit to Fachhochschule University (University of Applied Sciences & Arts) - Dortmund – Germany, in the field of “Nanomedicine”, July 2023 – October 2023:**

The visit mainly involved synthesis of novel nanoparticles and investigating their anticancer and antiglycation activities. Currently, I am following up this work in the Cell Therapy Center in the University of Jordan.

- **A research training at the University of Nebraska Medical Center (UNMC) – USA, June 2021 – August 2021:**

A research training and mentoring on research topics related to diabetes and glycemic control in the University of Nebraska Medical Center (UNMC) through a Fulbright grant (JFDP), 2021.

- **Applied diploma in Molecular Biotechnologies, 2016**, Molecular Genetics Center – Specialty Hospital Training & Research Center– Accredited by Al-Isra University.

Ongoing Research Projects:

- Investigating the antiglycating activity of peptides tethered with nanostructures using in vitro experimental models, NMR metabolic profiling, and machine learning.
- Developing peptide- based biosensors for quantification of glycated proteins.

Research collaborators:

- **Dr. Ahmad Telfah:** Associate Professor of Biophysics – University of Applied Sciences and Arts – Dortmund – Germany.
- **Dr. Walhan Alshaer:** Associate Professor of Nanobiotechnology and Drug Delivery Systems – Cell Therapy Center – University of Jordan - Amman – Jordan.
- **Dr. Rund Abu Zurayk** – Hamdi Mango Center for Scientific Research – University of Jordan – Amman - Jordan.

Grants and Awards:

- Accepted proposal by the **Synchrotron-Light for Experimental Science and Applications in The Middle East (SESAME)** – Amman – Jordan, to perform measurements on synthesized nanoparticles using XAFS/XRF beamline (proposal no.: 20245119 – May, 2025).
- **Fulbright award** – Junior Faculty Development Program (JFDP) – One Health program – The medical center of the University of Nebraska, May, 2020.
- The Deanship of Scientific Research – Al-Zaytoonah University of Jordan. Project no.: 11/18/2018-2019. Project title: **Design and Development of an Enzyme-Based Closed Loop System for Controlling Glycemia**. Grant amount: 28.382 JD.
- Scientific Research and Innovation Support Fund – *approved* research proposal no.: MPH/1/9/2024. Project title: “**Protamine – Nanoparticle Complexes: A Novel Intervention for Glycation Inhibition for Controlling Non-communicable Diseases**”. Grant amount: 114, 100 JD.
- Scientific Research and Innovation Support Fund – *submitted* research proposal. Proposal serial number: BAS/18/2025. Project title: “**Enhancing the electrochemical biosensor sensitivity of cerium dioxide nanocomposites by doping with metal ions for biomedical applications**”. – *Under revision*.

Publications:

- Ababneh, R., Harahsheh, G., **Alhadid, A.**, Alshaer, W., Alqudah, D., Kirchner, J., & Telfah, A. (2025). Synthesis and characterization of boron-doped cadmium sulfide nanocomposites for anticancer applications. *Biochemical and Biophysical Research Communications*, <https://doi.org/10.1016/j.bbrc.2025.153039>
- Ahmad, A., **Alhadid, A.**, Binni, M., Elayeh, E., & Nassar, R. (2025). Exploring the utilization of supplements, natural products, and medications among Jordanian COVID-19 patients. *Pharmacy Practice*, 23(2), 1-8. <https://pharmacypractice.org/index.php/pp/article/view/3157>
- **Alhadid, A.**, Bustanji, Y., Harb, A., Al-Hiari, Y., & Abdalla, S. (2022). Vanillic Acid Inhibited the Induced Glycation Using in Vitro and in Vivo Models. *Evidence-Based Complementary and Alternative Medicine*, vol. 2022. [DOI: 10.1155/2022/7119256](https://doi.org/10.1155/2022/7119256)
- Almomani, E. Y., Jarrar, W., **Alhadid, A.**, Hamadneh, L., Qablan, A., & Almomani, H. Y. (2022). Shedding light on pharmacists' knowledge of kidney stones' etiology and treatment. *Pharmacy Practice*, 20(3), 01-10. DOI: [10.18549/PharmPract.2022.3.2712](https://doi.org/10.18549/PharmPract.2022.3.2712)
- Qashou, E., Al-Hiari, Y., Kasabri, V., AlBashiti, R., AlAlawi, S., Telfah, A., & **AlHadid, A.** (2022). Antiproliferative Activities of Lipophilic Fluoroquinolones-Based Scaffold Against a Panel of Solid and Liquid Cancer Cell Lines. *Asian Pacific Journal of Cancer Prevention*, 23(5), 1529-1537. DOI: [10.31557/APJCP.2022.23.5.1529](https://doi.org/10.31557/APJCP.2022.23.5.1529)
- Sunoqrot, S., **Al-Hadid, A.**, Manasrah, A., Khnouf, R., & Ibrahim, L. H. (2021). Immobilization of glucose oxidase on bioinspired polyphenol coatings as a high-throughput glucose assay platform. *RSC advances*, 11(62), 39582-39592. [DOI: 10.1039/D1RA07467A](https://doi.org/10.1039/D1RA07467A)
- Al-Hadid KJ, Abu-Irmaileh B, Harb AA, Sharab A, **Alhadid A.** *Acacia cyanophylla, Eucalyptus camaldulensis*, and *Pistacia atlantica* Ethanol Extracts Revealed Cytotoxicity of Breast Cancer Cell Lines. *Trop J Nat Prod Res.* 2021; 5(10): 1808-1815 doi.org/10.26538/tjnpr/v5i10.18
- Rula Al-Shahrabi, Violet Kasabri, Yusuf Al-Hiari, Shereen Arabiyat, Rabab Al Bashiti, Sundus Alalawi & **Amani Alhadid** (2020). Functionalised Flouroquinolones as a Potentially Novel Class of Anti-inflammatory and Anti-glycation Compounds; Synthesis and Pharmacological Appraisal, *Analytical Chemistry Letters*, 10:3, 280-297, DOI: [10.1080/22297928.2020.1777196](https://doi.org/10.1080/22297928.2020.1777196).
- **Alhadid, A.** and Ahmad, N. Dietary Practices and Nutritional Status and Their Relation to Symptom Severity of a Group of Autistic Subjects in Jordan – *Arab Journal of Food and Nutrition*, 2008; 9(19): 63-90.
- Zaid Ababneh; Abrar Sulaiman; Walhan Alshaer; Jumana Ma'touq; Nehad Tashtoush; **Amani Alhadid**; Baidaa AlQuaissi; Qais M. Al Bataineh. *Under review*: Journal of Physics and Chemistry of Solids: ISSN: 0022-3697. Manuscript Number: PCS-D-25-00901.
- Riad Ababneh; Ana'am Alqudah; Qais M. Al Bataineh; Dana Alqudah; **Amani Alhadid**; Walhan Alshaer. *Under review*. Surfaces & Interfaces: ISSN: 2468-0230. Manuscript Number: SURFIN-D-25-03626.
- ¹H-NMR, FTIR, and XRD Characterizations of Synergistic Antibacterial Activity of Ampicillin Antibiotic Tethered to ZnONPs: *in preparation*.
- Nano Cobalt Cerium Dioxide Embedded in Polyethylene Oxide: A Nanocomposite Approach for Antimicrobial Antifouling Water Filtration Membranes: *in preparation*.

Academic and non-Academic Activities

Selected organized Scientific Meetings:

- **Diabetes Awareness Day**, organized by The Jordanian Society for the Care of Diabetes and Ibn Sina University for Medical Sciences (ISUMS), November, 19th, 2024.
- Al-Zaytoonah University of Jordan and the University of Toledo International Pharmaceutical Conference **ZTIPC** – 2019.

Supervising students' participation in scientific contests:

- “Glucose Binding System Using Cystamine-Coated Gold Nanoparticles” – Research proposal submitted to **Phi Research and Innovation Summit Competition – 2017** – Participating students: Rami Ammourah, Khaled Juma’, Mohammd-Saleem As-sbbagh. Supervisor: Dr. Amani Alhadid & Dr. Nof Mahmoud. (*the project has been placed among the ten finalists in the competition*).
- “Analysis of blood pressure, pulse amplitude & frequency using vibration & force sensors” - Research proposal submitted to **Phi Research and Innovation Summit Competition– 2017** – Participating students: Rami Ammourah, Khaled Juma’, Mohammd-Saleem As-sbbagh. Supervisors: Dr. Amani Alhadid & Dr. Ahmad Manasrah. (*the project has been placed among the ten finalists in the competition*).
- “Glucose - binding capacity of compounds with high affinity to aldehydes” – a proposal submitted to **King Abdullah II Fund for Development (KAFD) competition – 2018**. Participating students: Farah Emad, Rasha Daás, Al-Yaman Al-Amleh. Supervisor: Dr. Amani Alhadid.
- Using Glucose – Metabolizing Enzymes as Glucose Scavengers – A proposal submitted to **Falling Walls Labs Competition – Germany - 2018**. Participating students: Khaled Juma’ and Rami Ammourah. Supervisor: Dr. Amani Alhadid.

Selected attended scientific meetings:

- **Qiagen Expert Meeting**, May,2025, Amman - Jordan.
- **The 11th Congress of the Jordanian Society of Endocrinology Diabetes and Metabolism (JSED)**, July, 2024, Amman – Jordan.
- **The 5th Middle East Molecular Biology Congress and Exhibition**, October, 2018 – The Dead Sea, Jordan.
- **The 5th Congress of the Jordanian Society of Endocrinology, Diabetes & Metabolism (JSED)**, May, 2017, Amman- Jordan.
- **Autism One Conference**, 21-25/5/2008, Rosemont, Illinois , U.S.A.
- **The Jordanian Conference on Nutrition**, 28-29/4/2010, Amman- Jordan, *Speaker*: “Nutritional Implications in Autism Spectrum disorders”.

Voluntary – Selected given workshops:

- 45-hr course in “**Scientific Methodology and Research Methods**”, organized by Jerusalem Cultural Forum, October, 2023 – February, 2024.
- 2-hr workshop, “**Healthy fasting in Ramadan!**”, organized by students committee in the ZUJ, April-2021.
- 6-hr workshop, “**A Scientific Approach to Deal with Science**”, given to a group of interested students from different disciplines, October -2019.
- 2-hr workshop, “**How to simplify science?!**”, Anthar institute for intellectual studies – September, 2019.
- 2-hr workshop, “**Scientific Research & Methodology for Undergraduate Students**”, November, 2017, Al-Zaytoonah University of Jordan.
- 25-hr course, “**Scientific Research Methodology**”, given periodically to groups of students intending to be enrolled in advanced educational programs in different disciplines, 3 courses have been given between 2013 – 2019.
- 2-hr session, “**Dietary Management for Autism**”, nutritional counseling sessions given for mothers of children with autism, held in different specialized centers for autism between the years 2004 - 2011.
- 1-2 hr session, “**How to deal with diabetes, a personal and professional perspective**”, voluntary interactive sessions given to individuals with diabetes since 2006 – present.

Supervising non-academic students' activities:

- Organizing a “**Diabetes Awareness Day**” on the occasion of the World Diabetes Day at Ibn Sina University for Medical Sciences in collaboration with the Jordanian Society for the Care of Diabetes (JSCD) - November, 2024.
- Organizing and supervising a “**medical counselling booth**” presented by seven pharmacy faculty students, at **the Arab Council for Training Students of Arab Universities – 2018**. The counselling services included blood glucose testing, blood pressure testing, body weight and BMI calculations, distributing a bulletin about “Common examples of drug misuse”.
- “**Dual Thera: A combined therapeutic- based software for both health practitioners and patients**” – project proposal submitted to **The Technology Incubator – JUST University – 2018**. Participating student: Khaled Juma’, Supervisor: Dr. Amani Alhadid. (*Has been approved but not funded due to shortage of financial resources*).

Membership in Scientific Associations

- The Jordanian Association of Agricultural Engineers (**JAAE**) – Amman – Jordan.
- Jordanian Society of Food and Nutrition (**JSFN**) – Amman – Jordan.
- The Jordanian Society for the Care of Diabetes (**JSCD**) – Amman – Jordan.
- International Diabetes Federation (**IDF**) – Brussels, Belgium (*the application is under revision*).

Selected Attended Courses:

- 18-hr course “**Self-Assembling Biomaterials**” – Royal Scientific Society (RSS) + University of Nebraska Medical Center (UNMC) – 2023.
- 9-hr course “**Clinical Studies**” – Amygdala Research Hub – 2021.
- 4 CPEUs workshop “**Sports Nutrition**” accredited by the Academy of Nutrition and Dietetics – 2019.
- 25-hr course in “**Python Programming Language**” - Phi Science Institute – October – 2018.
- 12-hr course in “**Advanced Statistical Analysis**” – Al-Zaytoonah University of Jordan – October – 2018.
- 12-hr course in “**HPLC**” – Jordanian Chemical Society – February – 2019.
- 6-hr workshop “**Data Science**” - Phi Science Institute – July, 2018.
- 12-hr workshop “**Scientific Research, from ideation to publication**”, September, 2018 – Phi Science Institute – Amman – Jordan.
- 12-hr course in “**Construction and evaluation of course exams**” – Al-Zaytoonah University of Jordan – February – 2017.
- 20-hr course in “**Case studies in Nutrition Medical Therapy of Chronic Diseases using NCP approach**”. July – 2017.
- 4 CPEUs workshop “**Weight management: Nutritional Intervention**” accredited by the Academy of Nutrition and Dietetics. July – 2017.
- 4 CPEUs workshop “**Nutrition and Diabetes Complications**” accredited by the Academy of Nutrition and Dietetics – 2016.
- 10-hr course in “**Statistical analysis using SPSS**”. University of Jordan - 2016.
- 4 CPEUs workshop “**Nutrition and Diabetes Complications**” accredited by Academy of Nutrition and Dietetics – 2016.
- 18-hr course in “**Logical Reasoning**” – JU student deanship - 2014.
- Short course “**Introduction to Basic Principles of Conventional and Real-Time PCR - Laboratory demonstration & training session**”. Faculty of Medicine - 2012.
- 18-hr **Photoshop** course - Deanship of the University of Jordan – 2011.
- 25-hr course in “**Communication Skills**” - 2008.
- 90- hr **ICDL** course – Alquds College – 2007.
- Graduate Examination Exam (**GRE**): **training course** – AMID East - 2006.
- 25- hr course in **Autism** - Deaf Charity Center- 2005.
- 10-hr course in using **ESHA** (food analysing software): Agriculture Engineers Association – 2004.
- 40- hr **French language** course – Deanship of the University of Jordan - 2001.

Referees:

➤ **Ahmad Telfah, PhD.**

Associate Researcher of Physical Chemistry, NMR and Nanotechnology.
Fachhochschule Dortmund – Germany.
University of Jordan - Nanotechnology Center (NTC).
Tel.: +4917684306779
a.telfah@ju.edu.jo

➤ **Walhan Alshaer, Ph.D.**

Research Scientist in NanoBiotechnology and Drug Delivery Systems
Cell Therapy Center - The University of Jordan - Amman-Jordan
Phone: +96265355000; ext: 23960
walhan.alshaer@ju.edu.jo

➤ **Shtaywy Saleh Abdallh, Prof.**

Professor of Physiology.
Faculty of Science - Department of Biological Sciences - University of Jordan
Tel.: +962777490010.
shtaywy@ju.edu.jo

➤ **Wael ElRayes, MD, PhD, MS, FACHE**

Assistant Professor and Director of Middle East and North Africa (MENA) Region
Department of Health Services Research & Administration - University of Nebraska Medical Center
(UNMC) - College of Public Health.
Tel.: +402-559-1981
Email: wael.elrayes@unmc.edu

➤ **Johannes Etzkorn, PhD.**

Scientist – Chemistry and Material Science.
University of Applied Sciences and Arts, Dortmund – Germany.
johannes.etzkorn@fh-dortmund.de