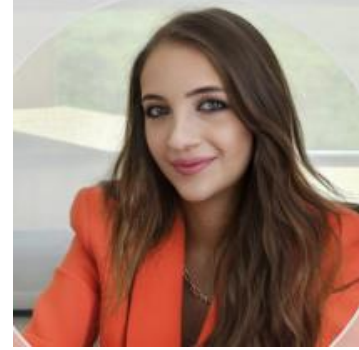


Noura S. Abou Zeinab
Assistant Professor in Cell Biology and Histology

E-mail: noura.abouzeinab@bau.edu.lb;



Objectives

My current objective is to integrate an academic structure, participate in efficient teaching as well as to conduct independent research.

Personal Information

- 1) **Place and Date of Birth:** Riyadh, Kingdom of Saudi Arabia (KSA)
- 2) **Nationality:** Lebanese
- 3) **Marital status:** Married
- 4) **Gender:** Female

Professional Experiences

Beirut Arab University (BAU):

Faculty of Science, Department of Biological Science, Debbieh-Lebanon

September 2023-present	Full-Time Faculty Staff Member: Assistant Professor in Cell Biology and Histology. Department of Biological Sciences- Faculty of Science.
June 2017-2023	Full-Time Senior Specialist of the Biology Laboratories and Lecturer: Including Biochemistry and Molecular Biology Specialized Laboratory; Tissue Culture Laboratory, and Animal House for postgraduates students and research (Breeding room).
June 2007-2017	Full-Time Head of the Biology Laboratories Unit: Including Zoology, Histology, and Ecology Laboratories for undergraduate students; Molecular Biology for Research Laboratory and Animal House for postgraduates and research.
September 2003-2007	Full-Time Faculty Member to assist academic staff members

Education

Ph.D. Degree in Biology (Cell Biology and Histology).

Beirut Arab University, Debbieh-Lebanon. **November 2010.**

Title of Thesis: Protective Effect of Silymarin on Cisplatin-Induced Tissue Toxicity.

Master Degree (MSc.) in Biology (Cell Biology and Histology).

Beirut Arab University, Beirut-Lebanon. **February 2007.**

Title of Thesis: The Synergetic Interaction of Melatonin and Tamoxifen on Biomarkers of Rat Mammary Gland Cancer.

Diploma Degree in Biology

Beirut Arab University, Beirut-Lebanon. **June 2004.**

91.56/100; Rank 1/8

Bachelor Degree (BSc.) of Sciences in Biology

Beirut Arab University, Beirut-Lebanon. **June 2003.**

90.61/100; Rank 1/17

Awards

Jamal Abdul Nasser Award for Scientific Excellence (Beirut Arab University, Beirut-Lebanon. **June 2003**).

Publications

- 1) Nourhane A. Darwich; **Noura S. Abouzeinab**; Ahmed F. El-Sayed; Rana El Hajj; Mahmoud I. KhalilIn **(2026)**. Vivo Therapeutic Potential of Biologically Synthesized Nanoparticles From Pine Needle Leaf Extract in Streptozotocin-Induced Diabetic Rats. BioMed Research International, 2026, 29. <https://doi.org/10.1155/bmri/1938383>
- 2) **Noura S. Abouzeinab**, Nour Kahil, Mahmoud Khalil. **(2025)**. The Effect of Nanoparticles of Zinc Oxide, Nickel Oxide, or Their Mixture on Rat Testes: A Time-Dependent Study. Journal of Applied Toxicology. DOI: [10.1002/JAT.4985](https://doi.org/10.1002/JAT.4985)
- 3) Rana R. Khalaf, **Noura S. Abouzeinab**, and Mahmoud I. Khalil. **(2025)**. Effects of Lebanese Folk Herbs on Adult Male Rats: Hepatic and Renal Toxicity, Histological, and Biochemical Studies. Nutrients, 17, 875. <https://doi.org/10.3390/nu17050875>.
- 4) Rana R. Khalaf, Salma Khazaal, **Noura S. Abouzeinab**, and Mahmoud I. Khalil. **(2024)**. Evaluation of Selected Folk Herbs on the Fertility of Sprague Dawley Male Rats: Biochemical, Histological, and Molecular Investigations. Life, 14, 1620. <https://doi.org/10.3390/life14121620>.
- 5) Nour Kahil, **Noura S Abouzeinab**, Mohamed A A Hussein, Mahmoud I Khalil. **(2024)**. Intraperitoneal hepatorenal toxicity of zinc oxide and nickel oxide nanoparticles in rats: a systematic review. Nanotoxicology, 18(7):583-598. doi: 10.1080/17435390.2024.2407352.
- 6) **Noura Abouzeinab**, Nour Kahil, Najla Fakhruddin, Ramadan Awad, Mahmoud Khalil. **(2023)**. Intraperitoneal hepato-renal toxicity of zinc oxide and nickel oxide nanoparticles in male rats: biochemical, hematological and histopathological studies. EXCLI journal 22, 619.
- 7) Charab, M.A.; **Abouzeinab, N.S.**; Moustafa, M.E. (2016). The Protective Effect of Selenium on Oxidative Stress Induced by Waterpipe (Narghile) Smoke in Lungs and Liver of Mice. *Biol. Trace Elem. Res.pp.* 1-10. DOI: 10.007/s12011-016-0737-9, PMID: 27178166. [Epub ahead of print].
- 8) **Abouzeinab, N.S.** (2015). Antioxidant Effect of Silymarin on Cisplatin-Induced Renal Oxidative Stress in Rats *Journal of Pharmacology and Toxicology* **10(1)**:1-19.
- 9) **Abouzeinab, N.S.** (2013). Cytoprotective effect and antioxidant properties of silymarin on cisplatin induced hepatotoxicity in rats: A biochemical and histochemical study. *International Journal of Cancer Resreach* **9(1)**:9-23.
- 10) Abdelmeguid, N.E., Chmaisse, H.N., and **Abou Zeinab, N.S.** (2010). Protective Effect of Silymarin on Cisplatin-induced Nephrotoxicity in Rats. *Pakistan Journal of Nutrition* **9 (7)**: 624-636.

- 11) Abdelmeguid, N.E., Chmaisse, H.N., and **Abou Zeinab, N.S.** (2010). Silymarin Ameliorates Cisplatin-Induced Hepatotoxicity in Rats: Histopathological and Ultrastructural Studies. *Pakistan Journal of Biological Sciences* **13(10)**: 463-479.
- 12) Abdelmeguid, N.E., Mostafa, M.H., Abdel-Moneim, A.M., Badawi, A.F., **Abou Zeinab, N.S.** (2008). Tamoxifen and Melatonin Differentially Influence Apoptosis of Normal Mammary Gland Cells: Ultrastructural Evidence and p53 Expression. *International Journal of Cancer Resreach* **4(3)**:81-91.

Conferences and Workshops Attended

- 1) “Team-Based Learning: An Effective Tool for Student Engagement” Workshop. Organized by Quality Assurance Center - Beirut Arab University. *Beirut-Lebanon*. February 16, 2024.
- 2) BioVision (The World Life Sciences Forum), *Foundation University of Lyon, Lyon -France* (March 22nd – 27th, 2013). **Selected among 60 worldwide scientists to participate to the BIOVISION. NEXT fellowship programme.**
- 3) Stress and Time Management Workshop, EL-Meouchy Education Consultancy Company SARL. Beirut Arab University, Beirut-Lebanon (May, 4th -5th, 2012).
- 4) Personal Productivity Workshop. EL-Meouchy Education Consultancy Company SARL. Beirut Arab University, Beirut-Lebanon (February, 10th -11th, 2012).
- 5) Communication Skills Workshop, EL-Meouchy Education Consultancy Company SARL. Beirut Arab University, Beirut-Lebanon (December, 16th -17th, 2011).
- 6) 44th Middle East Medical Assembly at American University of Beirut, Beirut-Lebanon (from 5-8 May, 2010). Attended as a participant.
- 7) *Guidelines for Researchers Workshop* at the Bibliotheca Alexandrina in Alexandria, Egypt (from 27-30 September 2010). Attended and selected as a participant among scientists.
- 8) *TWAS/BioVisionAlexandria.NXT 2010*, Bibliotheca Alexandrina. Alexandria, Egypt. (April, 10th-15th, 2010).
Abstract: Protective Effect of Silymarin on Experimental Cisplatin Hepatotoxicity and Nephrotoxicity in Rats Based on Its Antioxidant Properties. **Abou Zeinab, N.**; Nakkash Chmiasse, H.; Abdelmeguid, N.
- 9) *The 16th International Scientific Conference*. In Association with: The Lebanese Association for the Advancement of Science (LAAS) National Council for Scientific Research- Lebanon (CNRS) Beirut Arab University, Debbieh, Lebanon (November, 13th-15th, 2009).
Abstract and Oral Presentation: Histopathological and Ultrastructural Studies of the Protective Effect of Silymarin on Cisplatin-Induced Tissue Toxicity in Rats. **Noura ABOU ZEINAB**, Hania NAKKASH, Nabila ABDELMEGUILD.
- 10) *Electra Engineering Instrumental Workshop* (Ultracentrifugation; Beckman Coulter, UK), Beirut, Lebanon (2008). Attended and selected as an outstanding candidate.
- 11) *TWAS/BioVisionAlexandria.NXT 2008*, Bibliotheca Alexandrina. Alexandria, Egypt. (April, 2008). Attended as a participant.

Thesis Supervision

Dr. Abou Zeinab has already supervised (1Ph.D. and 3 MSc. Students) and is currently supervising on (4 Ph.D. and 11 Msc. Students).

Teaching Courses

I- Teaching the following courses with a **100% responsibility** at Department of Biological Science, Faculty of Science, Faculty of Health Science, Beirut Arab University, Beirut -Debbieh-Lebanon:

- 1) **Zoology I – BIOL 103** (Faculty of Science – Department of Biological and Environmental Science) – Spring 2006/2007.
- 2) **Comparative Anatomy and Embryology** (Faculty of Science – Department of Biological and Environmental Science) – Spring 2004/2005 and Spring 2005/2006
- 3) **Cell Biology – BIOL 202** (Faculty of Science – Department of Biological and Environmental Science) – Spring 2006/2007.
- 4) **Toxicology and Molecular Genetics – BIOL 404** (Faculty of Science – Department of Biological and Environmental Science) – Spring 2007-till 2012.
- 5) **Biology – BIOL 107** (Faculty of Health Sciences – Department of Nursing, Health Science, Nutrition, and Medical Lab) – Fall 2011/2012.
- 6) **Parasitology –BIOL 306** (Faculty of Science – Department of Biological and Environmental Science) – Spring 2012.
- 7) **Technical Writing and Research Skills (For Master Degree Biology and Biochemistry Students) – BIOL 608** (Faculty of Science – Department of Biological and Environmental Science) – Fall 2011/2012.
- 8) **Biology of Invertebrates– BIOL 205** (Faculty of Science – Department of Biological and Environmental Science) – Spring 2015/2016.
- 9) **Biology I– BIOL 231** (Faculty of Science – Department of Biological Science) – Fall & Spring 2016/2017 till 2019/2027.
- 10) **Biology II– BIOL 232** (Faculty of Science – Department of Biological Science) – Fall & Spring 2017/2018 till 2019/2026.
- 11) **General Biology- BIOL121**(Faculty of Science – Department of Biological Science- Foundation course) – Fall 2021/2023 till Fall and Spring 2025/2026, Fall 2026/2027
- 12) **Histology – BIOL342 (Lecture and Laboratory)** (Faculty of Science – Department of Biological Science) – Fall 2020/2021.-Fall 2024/2025
- 13) **Environmental Issues in Lebanon – ENVI 004** (Faculty of Science – Department of Biological Science – University Elective) – Summer, Fall and Spring 2017-2026.
- 14) **Scientific Thinking – SCTH001** (Faculty of Science – Department of Biological Science – University Elective) – Summer, Fall and Spring 2017 till 2026.
- 15) **Environmental Studies – BIOL 453** (Faculty of Science – Department of Biological Science – Departmental Elective) –Fall 2018 till 2020- Fall 2023/2024.
- 16) **Cell and Tissue Culture -BIOL441** (Faculty of Science – Department of Biological Science – Departmental Elective) -Fall 2023 till 2027
- 17) **Biochemical Principles of Nutrition -(Faculty of Science – Department of Biological Science – Departmental Elective) -Fall 2026/ 2027**
- 18) **Neurobiology (For Master Degree Biology and Biochemistry Students) – BIOL 655** (Faculty of Science – Department of Biological Science – Departmental Elective) – Spring 2017 till Spring 2026.

- 19) Mammalian Toxicology (For Master Degree Biology and Biochemistry Students) – BCHM 616** (Faculty of Science – Department of Biological Science – Departmental Elective) – Fall 2017/2018.-Fall 2024/2025- Fall 2025/2026-Fall 2026/2027
- 20) Quantitative Imaging from Cell to Molecules (For Master Degree Biology and Biochemistry Students) – BIOL643** (Faculty of Science – Department of Biological Science – Departmental Elective) – Fall 2024/2025- Fall 2025/2026, Fall 2026/2027
- 21) BIOL334 Cell and Molecular Biology Laboratory (For BS undergraduate Biology and Biochemistry Students) –** (Faculty of Science – Department of Biological Science – Departmental Elective) – Spring 2020 till 2022.

II- Teaching the following courses with a **10 - 20 % responsibility** among other Faculty Staff Members at the Department of Biological Science, Faculty of Science, Beirut Arab University, Debbieh-Lebanon:

- 22) Technical Writing and Research Skills - GNSC 621 (For Master Degree Biology and Biochemistry Level - New Curriculum (10% responsibility)** (Faculty of Science – Department of Biological Science) - Spring 2015/2016; Fall 2016/2017.
- 23) Research Techniques - BIOL 610- Histological Techniques (For Master Degree Level (20% responsibility)** (Faculty of Science – Department of Biological Science – Departmental Elective) - Fall, 2011/2012.
- 24) Research Techniques – BIOL682 - Histological Techniques and Animal Models Welfare and Handling (For Master Degree Level- New Curriculum (10% responsibility)** (Faculty of Science – Department of Biological Science – Spring 2015/2016; Fall 2016/2017; Spring 2018/2019, Spring 2019/2020, Spring2021/2023, Fall 2023/2024, Fall 2024/2025, Fall 2025/2026, Fall 2026/2027
- 25) Current Topics Seminar - BIOL 612 (For Master Degree Level (10% responsibility)** (Faculty of Science – Department of Biological Science – Departmental Elective -Fall, 2011/2012.
- 26) BIOL652 Advanced Cell Biology Laboratory (For Master Degree Biology and Biochemistry Students) –** (Faculty of Science – Department of Biological Science – Departmental Elective) – Spring 2020 till 2022.
- 27) BIOL680 Individual Studies (For Master Degree Biology and Biochemistry Students) –** (Faculty of Science – Department of Biological Science – Departmental Elective) – Spring 2022 till 2023.

Laboratory and Technical skills

Taught various laboratory-based courses such as Zoology I & II, Cell Biology & Histology, Human Physiology, Medical Entomology, Medical Parasitology, and Clinical Toxicology and Pharmacology in the School of Dentistry, Pharmacy, Health Sciences (Nursing) and Science (Biology & Biochemistry) for both under and postgraduates students.

- 1) **Zoology I & Zoology II:** Dissecting and handling of different animals, teaching students variable biological slides.
- 2) **Animal handling and Anatomical Studies:** of different animals including; rats, mice, rabbit, frogs, fish, birds.
- 3) **Medical Parasitology and Entomology:** Preparation of several parasitological slides, specimens, performing several molecular diagnostic tools.
- 4) **Cell Biology & Histology Microtechniques:** Preparation of paraffin wax-tissue blocks; histological slides using routine and special stains; histopathological analysis, routine fixation, and perfusion fixation techniques. Ultrastructural examination and analysis of electron micrographs accompanied with morphometric measurements.
- 5) **Cell and Molecular Biology (Undergraduate Level) + Advanced Cell Biology (Master Level):** cell and tissue cultures techniques as well as many molecular biology techniques.
- 6) **Clinical Toxicology and Pharmacology:** Pharmacological and toxicological testing on animals, dose-drug interaction, and animal handling.
- 7) **Research Techniques / Cellular & Molecular Biology, and Biochemistry:** DNA, RNA extraction, measuring p53 gene expression (PCR, Real-Time PCR, Western Blotting and Imaging). Measuring enzymatic activities and immune-essays (spectrophotometry, ELISA).
- 8) **Tissue culture:** trained on the basic technical principles in dealing with the cell lines and the machines available at the tissue culture laboratory.

Leadership role

Dr. Abou Zeinab is a member of the following:

Faculty of Science Member at the University Institutional Review Board (IRB) Committee for Academic Year 2025/2026

Secretary of the Faculty Council 2025/2026

Secretary of the Biological Science Department Council 2024-present

Member of the Faculty Course Offering and Exams Committee 2025

Member of the Faculty Laboratories Committee 2016 –Present

Member of the Faculty Quality Assurance Committee 2023-Present

Member of the Faculty Community Service & Alumni Committee 2023-Present

Member of the Faculty Competition Committee 2023

Research skills

Working on animal surgery and handling as well as on laboratory assays and machines protocols in the following research facilities:

- 1) **Biochemistry and Molecular Biology Specialized Laboratory:** including the application of several machines and biochemical and molecular biology essays: Real-time PCR, thermal

cycler, Western blotting and imaging system, ELISA; as well as Histological Techniques and machine including Sectioning histological specimens using Rotary microtome, Tissue Processor, imaging histological and pathological slides.

- 2) **Animal Facility:** breeding experimental animals (rats and mice), animal handling using various routes of administration, as well as animal surgery and dissection.

Research Interests

Dr. Abou Zeinab research interests focus on: i) Evaluating the glycemic effect and anti-oxidant activities of some natural compounds in an in vivo model for diabetes, ii) Assessing possible protective effects of natural herbs in an in vivo model for fertility and spermatogenesis. She is also involved in studies investigating: The toxic effects of several nanoparticles administered to experimental animal models (in vivo) as well as in vitro (Cell culture). Currently she is working on inducing IBD, and Chronic Immobilized Stressed Animal Models and investigating the protective effects of many natural ingredients and plants' extract against such models.

- 1) **Doctoral Research:** Department of Biological Science- Faculty of Science, Beirut Arab University, Beirut, Lebanon, 2007-2010. Studied the protective effect of Silymarin on the liver and kidney of Cisplatin injected from the histological, histopathological, and ultrastructural points of view as well as measuring the oxidative stress at the physiological level.
- 2) **Master Research;** Department of Biological Science - Faculty of Science, Beirut Arab University, Beirut, Lebanon, 2004-2007. Studied the synergistic interaction of melatonin and tamoxifen on normal mammary gland rat tissues at the histological level; besides, measuring p53 expression at the molecular level.

Other skills

- 1) **Languages:** English (Fluent), French (Fair), Arabic (Native speaker).
- 2) **Computer skills:** Microsoft office. Adobe Illustrator CS4; and Adobe Photoshop 7.0 ME. ImageJ. 1.41o. Scion Image Frame Grabber Status Program.
- 3) **Statistical programs:** Megastat 9.1, SPSS version 16 (one way ANOVA, Two-way ANOVA of analysis).

P.S. Any certificate is available upon request.