Curriculum Vitae



Ahmed Fathi Soliman Mohamed Assistant Professor of Biochemistry

Personal data

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Current position

Assistant Professor of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt

Major academic discipline

Biochemistry

Specialization

Cancer Biology and Molecular Biology

Educational background

- 1. **Bachelor of Science (B.Sc.)** in Biochemistry (*very good with honor*) from the Faculty of Science, Ain Shams University, Cairo, Egypt (2002).
- 2. **Master of Science (M.Sc.)** in Biochemistry from the Faculty of Science, Ain Shams University, Cairo, Egypt (2007). The thesis was entitled "A Molecular Study on Deoxyribonucleic Acid Methylation Associated with Ovarian Cancer".
- 3. **Doctor of Philosophy** (**Ph.D.**) in Science in Biochemistry from the Faculty of Science, Ain Shams University, Cairo, Egypt (2013). The thesis was entitled "**The Gene Expression Level of Transforming Growth Factor-beta (TGF-beta) and Significance of Survivin in Hepatocellular Carcinoma".**

Academic positions

With more than 22 years of experience, including 12 years after Ph.D., I rose through the academic ranks as follows: -

- 2003-2007: Demonstrator, Department of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt. Teaching practical courses to undergraduate and postgraduate students.
- 2007-2013: Assistant Lecturer of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt. Supervising and contributing to teaching practical courses to undergraduate and postgraduate students.
- 2013-2020: Lecturer of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt. Supervising and contributing to teaching theoretical and practical courses to undergraduate and postgraduate students.

• **2020-present:** Assistant Professor of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt. Supervising and contributing to teaching theoretical and practical courses to undergraduate and postgraduate students.

Publications

I co-authored 23 research articles published. Among, 22 were published in international journals indexed in Scopus and/or Web of Science.

- 1. Circulating 25-hydroxy vitamin D correlates with serum level of anti-Müllerian hormone in male patients with chronic kidney disease. Fatma F Abdel Hamid, **Ahmed F Soliman**, Fatma ES Lashin. *Andrologia* 2018; 50(4): e12972.
- 2. Association of *MTHFR* C677T and *ABCA1* G656A polymorphisms with obesity among Egyptian children. Ibrahim H Borai, **Ahmed F Soliman**, Hadeer M Ahmed, Gihan F Ahmed, Samar K Kassim. *Gene Rep* 2018; 11: 143-149.
- 3. Cardioprotective effect of zingerone against oxidative stress, inflammation, and apoptosis induced by cisplatin or gamma radiation in rats. **Ahmed F Soliman**, Lobna M Anees, Doaa M Ibrahim. *Naunyn Schmiedebergs Arch Pharmacol* 2018; 391(8): 819-832.
- 4. Short-term impact of laparoscopic sleeve gastrectomy on serum cartonectin and vaspin levels in obese subjects. Doaa M Ibrahim, Nagwa R Mohamed, Tarek A Fouad, **Ahmed F Soliman**. *Obes Surg* 2018; 28(10): 3237-3245.
- 5. Platelet-rich plasma as a potential therapeutic approach against lead nitrate- and/or gamma radiation-induced hepatotoxicity. Salma M Abdel Fattah, Mostafa Saif-Elnasr, **Ahmed F Soliman**. *Environ Sci Pollut Res* 2018; 25(34): 34460-34471.
- 6. Platelet-rich plasma ameliorates gamma radiation-induced nephrotoxicity via modulating oxidative stress and apoptosis. **Ahmed F Soliman**, Mostafa Saif-Elnasr, Salma M Abdel Fattah. *Life Sci* 2019; 219: 238-247.
- 7. A combined treatment of curcumin, piperine, and taurine alters the circulating levels of IL-10 and miR-21 in hepatocellular carcinoma patients: a pilot study. Hala M Hatab, Fatma F Abdel Hamid, **Ahmed F Soliman**, Tamer A Al-Shafie, Yahia M Ismail, Motawa E El-Houseini. *J Gastrointest Oncol* 2019; 10(4): 766-776.
- 8. Cyclophilin A and matrix metalloproteinase-9: Their relationship, association with, and diagnostic relevance in stable coronary artery disease. Hala F Ebrahim, Fatma F Abdel Hamid, Mohamed A Haykal, **Ahmed F Soliman**. *Vascular* 2020; 28(2): 212-221.
- 9. Evaluation of *E2F3* and *Survivin* expression in peripheral blood as potential diagnostic markers of prostate cancer. Ahmed M Wadaa Allah, Fatma F Abdel Hamid, **Ahmed F Soliman**, Noha Ibrahim, Ibrahim Malash, Iman A Abdelgawad. *Turk J Biochem* 2020; 45(5): 525-532.
- 10. Differential expression of miR-21, miR-23a, and miR-27a, and their diagnostic significance in Egyptian colorectal cancer patients. Sally Farouk, Ahmed Khairy, Ahmed M Salem, **Ahmed F Soliman**, Noha G Bader El Din. *Genet Test Mol Biomarkers* 2020; 24(12): 825-834.
- 11. Impact of long-term use of mobile phones on the prostate in human users. Madyha H Mahmoud, Nadia Y Morcos, Khadiga S Ibrahim, Amal S Hussein, Noha H Ibrahim, **Ahmed F Soliman**. *OnLine J Biol Sci* 2020; 20(4): 270-277.
- 12. Influence of genetic variants in asparaginase pathway on the susceptibility to asparaginase-related toxicity and patients' outcome in childhood acute lymphoblastic leukemia. Yomna H Youssef, Sara M Makkeyah, **Ahmed F Soliman**, Nefissa H Meky. *Cancer Chemother Pharmacol* 2021; 88(2): 313-321.
- 13. Relative expression and prognostic significance of *forkhead box P3* in childhood B-cell acute lymphoblastic leukemia. Hossam El-Din A Abdelhafeez, Fatma F Abdel Hamid,

- Naglaa M Hassan, Magda M Assem, **Ahmed F Soliman**. *Pediatr Blood Cancer* 2021; 68(10): e29129.
- 14. Chitosan and solid lipid nanoparticles enhance the efficiency of alpha-lipoic acid against experimental neurotoxicity. Heba H Metwaly, Shadia A Fathy, Mehrevan M Abdel Moneim, Manal A Emam, **Ahmed F Soliman**, Mehrez E El-Naggar, Enayat A Omara, Mona A El-Bana. *Toxicol Mech Methods* 2022; 32(4): 268-279.
- 15. Association of *MTHFR* and *TYMS* gene polymorphisms with the susceptibility to HCC in Egyptian HCV cirrhotic patients. Hany MM Abdel Allah, Walid E Zahran, Samir A El-Masry, Mahmoud El-Bendary, **Ahmed F Soliman**. *Clin Exp Med* 2022; 22(2): 257-267.
- 16. Association of *TRPV5*, *CASR*, and *CALCR* genetic variants with kidney stone disease susceptibility in Egyptians through main effects and gene–gene interactions. Fahmy T Ali, Eman M Abd El-Azeem, Hala F A. Hekal, Mayada M El-Gizawy, Mohamed S Sayed, AbdAllah Y Mandoh, **Ahmed F Soliman**. *Urolithiasis* 2022; 50(6): 701-710.
- 17. Assessment of serum levels of bone morphogenetic proteins as sensitive biomarkers for early prediction of acute myocardial infarction. Fahmy T Ali, Nahla S Hassan, Rehab R Abdraboh, Samia A Hassan, Mostafa A Elnozahi, **Ahmed F Soliman**. *Egypt J Pure Appl Sci* 2023; 61(1): 28-39.
- Clinical assessment of *TGFB1* and *HP* relative gene expression in the peripheral blood of prostate cancer patients. Mohammed S Yahya, Fatma F Abdel Hamid, Noha H Radwan, Iman A Abdelgawad, **Ahmed F Soliman**. *Asian Pac J Cancer Prev* 2024; 25(2): 709-717.
- 19. Correlations between beclin-1 and transforming growth factor-β1 in letrozole induced polycystic ovary syndrome. Nermin M Hamdy, Hala M Ghanem, Mervat M Mohamed, Fawzia AA Abd El-Rahman, **Ahmed F Soliman**. *Indian J Exp Biol* 2024; 62(5): 332-340.
- 20. Rs12039395 variant influences the expression of hsa-miR-181a-5p and PTEN toward colorectal cancer risk. Wael A El-korany, Walid E Zahran, Mohamed A Alm El-Din, Hanan A Al-Shenawy, **Ahmed F Soliman**. *Dig Dis Sci* 2024; 69(9): 3318-3332.
- 21. Network pharmacology prediction and experimental validation of ferulic acid's protective effects against diclofenac-induced liver injury. Fatema S Alatawi, Awatif ME Omran, Mohsen S Alatawi, Eman Rashad, Noha AE Yasin, **Ahmed F Soliman**. *J Food Biochem* 2024; 2024: 5592390.
- 22. Targeting refractory diffuse large B cell lymphoma by CAR-WEE1 T-cells: In vitro evaluation. Hadeer M Ahmed, Said S Moselhy, Magda I Mohamad, **Ahmed F Soliman**, Marwa NM Hassan, Nashwa El-Khazragy. *Ann Hematol* 2025, doi: 10.1007/s00277-024-06134-8. Online ahead of print
- 23. Rutin attenuates bleomycin-induced acute lung injury via miR-9-5p mediated NF-κB signaling inhibition: network pharmacology analysis and experimental evidence. Fatema S. Alatawi, Awatif M.E. Omran, Eman Rashad, Omnia N. Abdel-Rahman, **Ahmed F. Soliman**. *Front Pharmacol* 2025, 16: 1522690.

Peer review activities

With more than 100 verified reviews, I had the privilege of being a reviewer for 44 international journals indexed in Web of Science as follows: -

- 3 Biotech
- Acupuncture in Medicine
- Acta Oncologica
- Aging
- Annals of Human Biology
- Archives of Physiology and Biochemistry
- Biochemistry and Biophysics Reports

- Gene
- Gene Reports
- Infection and Drug Resistance
- Journal of Bioenergetics and Biomembranes
- Journal of Food Biochemistry
- Journal of Inflammation Research
- Journal of Interventional Cardiology

- **BioMed Research International**
- **Biomedical and Environmental Sciences**
- **BMC Cancer**
- **BMC Cardiovascular Disorders**
- Brazilian Archives of Biology and Technology
- **British Journal of Haematology**
- **Cancer Biomarkers**
- Cancer Reports
- Chemistry and Biodiversity
- Clinical and Experimental Gastroenterology
- Clinical Medicine Insights: Oncology
- **Discover Oncology**
- **DNA and Cell Biology**
- **Environmental Sciences and Pollution Research**
- Evidence-Based Complementary and Alternative Medicine World Journal of Pediatrics

- **Journal of Translational Medicine**
- **Medical Science Monitor**
- Medicine
- Minerva Medica
- **Molecular Biology Reports**
- **Natural Product Communications**
- **Oncology Letters**
- Oxidative Medicine and Cellular Longevity
- **Pharmaceutical Biology**
- Pharmacogenomics and Personalized Medicine
- **Scientific Reports**
- The Journal of Biomedical Research
- **Toxicology Mechanisms and Methods**
- Translational Andrology and Urology

Scientific and applied activities

1. Academic teaching

By giving theoretical lectures, I participated in teaching biochemistry courses to the students of Biochemistry and other departments/programs.

Second year/level students

- 2017-present: Lipid Metabolism (BIOC 210) for second level Biochemistry/Chemistry program students (Credit hours system).
- **2021-present:** Instrumental Analysis (BIOT 201) for second level Applied Biotechnology program students (Credit hours system).

Third year/level students

- **2013:** Basic Biochemistry (361 Bioch) for third year Zoology students.
- **2013-2015:** Basic Biochemistry (351 Bioch) for third year Entomology students.
- **2014-2016:** Food Biohazards (304 Bioch) for third year Biochemistry major students.
- **2014:** Vitamins (301 Bioch) for third year Biochemistry/Chemistry students.
- (301 for third 2018: Vitamins Bioch) year Biochemistry/Chemistry and Biochemistry/Microbiology students.
- **2015-2017:** Vitamins (301 Bioch) for third year Biochemistry major students.

Fourth vear/level students

- 2015-2017: Environmental Biology (410 Bioch) for fourth year Biochemistry/Chemistry students.
- **2017-2019:** Environmental Biology (410 Bioch) for fourth year Biochemistry/Chemistry and Biochemistry/Microbiology students.
- **2013-2020:** Chromatography (402 Bioch) for fourth year Biochemistry major students.
- 2021-2024: Biochemical Separation and Analytical Techniques (BIOC 404) for fourth level Biochemistry program students (Credit hours system).

Postgraduate students

- 2014-2017: Bio-statistical Analysis (523 Bioch) for Diploma of Analytical Biochemistry
- 2017-2022: Instrumental Analysis (521 Bioch) for Diploma of Analytical Biochemistry
- 2022-present: Instrumental and Analytical Techniques (BIOC 537) for students of Biochemical Analysis Diploma program (Credit hours system).
- **2020-2022:** Bioenergetics (643 Biophy) for Biophysics Pre-master's students.

• **2024-present:** Recombinant DNA Technology (BIOC 615) for Biochemistry and Molecular Biology Pre-master's students (Credit hours system).

Further, I am participating in the practical study by supervising the practical laboratories of

Undergraduate students

- Participate in supervising the second-year laboratory for the Biology division.
- Participate in supervising the second-level laboratories for the Biochemistry and Biochemistry/Chemistry programs (Credit hours system).
- Participate in supervising the third-year laboratories for the Biochemistry and Biochemistry/Chemistry students.
- Participate in supervising the third-level laboratories for the Biochemistry and Biochemistry/Chemistry programs (Credit hours system).
- Participate in supervising the fourth-year laboratories for the Biochemistry and Biochemistry/Chemistry students.

Postgraduate students

- Participate in supervising the laboratories of Diploma of Analytical Biochemistry.
- Participate in supervising the laboratories of Biochemical Analysis Diploma program (Credit hours system).

2. Supervision on M.Sc. and Ph.D. theses

I had the chance to be one of the supervisors of many graduate students. My role included but was not limited to designing the study, suggesting experiments, helping with performing some practical analysis, analyzing and interpreting the results, etc.

- Supervision on Ph.D. theses in Biochemistry Department, Faculty of Science, Ain Shams University
- Madyha Hassan Mahmoud: The Probability of Prostate Cancer Due to Misuse of Mobile Phone. (Earned)
- Hany Mohamed Mohamed Abdalla: Genetic Polymorphism of Selected Genes as Susceptible Risk Factors in the Progression of Hepatitis C Viral Infection to Hepatocellular Carcinoma. (Earned)
- Wael Ahmed El-Sayed: Effect of Single Nucleotide Polymorphism in miRNA-181a Encoding Gene on PTEN Protein Expression in Patients with Colorectal Cancer. (Earned)
- Sally Farouk Abdel-Aziz: Study the Expression of Some miRNA in Tissues of Egyptian Colorectal Cancer Patients. (Earned)
- **Rehab Reda Abdraboh:** Long Non-Coding RNAs and Bone Morphogenetic Proteins as Novel Diagnostic Biomarkers for Myocardial Infarction. (**Earned**)
- Hala Fawzy Ahmed: Assessment of Selected Genetic Polymorphisms in Egyptian Patients with Kidney Stone Disease. (Earned)
- **Fatma El-Said Said:** Assessment of Adropin, Salusin-α, and -β Levels in End-Stage Renal Disease Patients with Cardiovascular Complications.
- **Hadeer Mohamed Ahmed:** Targeting Refractory Diffuse Large B-cell Lymphoma by Engineered T-Cells. (**Earned**)
- **Heba Hassan Metwaly:** Possible Therapeutic Effect of Alpha-lipoic Acid Nanoparticles and Alpha-lipoic Acid Coated with Nanoparticles on an Experimental Model of Neurotoxicity. (**Earned**)

- **Haidy Morsy Ebrahi:** Effect of *Chiliadenus montanus* (Vahl) Brullo Extract-Loaded Chitosan Nanoparticles on the Expression of Two MiRNAs in Human Breast Cancer Cell Line.
- Supervision on M.Sc. theses in Biochemistry Department, Faculty of Science, Ain Shams University
- Fatma El-Said Said: Assessment of Anti-Müllerian Hormone Level in Male Patients with Chronic Kidney Disease. (Earned)
- **Hadeer Mohamed Ahmed:** Assessment of Methylene Tetrahydrofolate Reductase and ATP-binding Cassette Transporter A1 Gene Polymorphism in Obese Egyptian Children. (**Earned**)
- **Nermin Mohammed Hamdy:** Assessment of the Relation between Autophagy and Transforming Growth Factor-beta1 (TGF-β1) in Polycystic Ovarian Syndrome (PCOS) Rat Model. (**Earned**)
- Hala Mohamed Hatab: Effect of Natural Products' Combination on MicroRNAs Expression Level in Patients with Hepatocellular Carcinoma. (Earned)
- **Hala Fayez Ebrahim:** Evaluation of Cyclophilin A in Type II Diabetic Patients with Coronary Artery Disease. (**Earned**)
- **Hossam El Din Ahmed Abdelhafeez:** Evaluation of FOXP3 Gene Expression Level in Childhood Acute Lymphoblastic Leukemia. (**Earned**)
- Ahmed Mahmoud Wadaa Allah: Evaluation of Survivin and E2F3 mRNAs in Blood of Prostate Cancer Patients. (Earned)
- **Mohammed Sherif Yahya:** Evaluation of Transforming Growth Factor-beta1 and Haptoglobin mRNAs in Blood of Prostate Cancer Patients. (**Earned**)
- Yomna Hassan Hassouna: Evaluation of Gliclazide Loaded Chitosan Nanoparticles in Type 2-Induced Diabetic Rats.
- Supervision on Ph.D. theses in other departments, Faculty of Science, Ain Shams University
- Yomna Hesham Youssef: Hematological and Biochemical studies on the Prospective Role of Grape Seed Extract Incorporated in Chitosan Nanoparticles in a Diabetic Rat Model.
- Supervision on M.Sc. theses in other departments, Faculty of Science, Ain Shams University
- Yomna Hesham Youssef: Relation between Genetic Variance of Some Selected Genes and Therapeutic Effect of Asparaginase in Childhood Acute Lymphoblastic Leukemia. (Earned)

Membership

Member of the Egyptian Society for Biochemistry and Molecular Biology.

Membership in Department/Faculty committees

- Member of the internal examination controller office for the fourth year and diploma students in the department (2014-2020).
- Member of the internal examination controller office for the fourth level and pre-master students in the department.
- Member of the committee of the devices, laboratories, and safety in the department.
- Member of the committee of printing the practical notes in the department (2018-2020).
- Member of the committee of revising the exam paper in the department.

- Supervisor and member of the examiner committee of graduation essays for fourth/level year students in the department.
- Member of the oral examiner committee of first, second, third, and fourth year/level students in the department.
- Member of the examination controller office for the Biological programs in the faculty.
- Member of the examination controller office for master's degree (2016-2022).

Conferences and workshops attended

Conferences

- ➤ The annual conference of the National Committee for Biochemistry and Molecular Biology
 - The 12th national conference entitled "Role of Biochemistry and Molecular Biology in Drug Discovery and Disease Diagnosis" held on 15-17/3/2015.
 - The 14th national conference entitled "Advances in Biomarkers, Genetic Diagnosis, and Laboratory Medicine of Diseases" held on 29-30/3/2017.
 - The 16th international conference entitled "Recent Trends in Biochemistry and Molecular Biology: Towards Vision 2030" held on 14-15/9/2019.
 - The 17th international conference entitled "COVID-19: Preparing for the Next Pandemic" held on 14-15/9/2021.
 - The 18th international conference entitled "**Towards a Better Future for Humanity**" held on 16-17/9/2023.
- The annual national scientific conference of the Egyptian Society of Biochemistry and Molecular Biology and the Egyptian Society of Tumor Markers Oncology entitled "Recent Advances in Biochemistry, Molecular Biology, and Tumor Markers" held on 5-6/5/2016.
- The 5th scientific conference of Ain Shams University entitled "**Egypt and Making the Future: Towards Intellectual and Scientific Vision**" held on 12-14/4/2016.
- ➤ The 11th annual Ain Shams University international conference entitled **"Knowledge Economy for Better Life"** held on 10-11/5/2023.
- ➤ The 13th international Breast Gynecological & Immunooncology cancer conference (BGICC) entitled "Challenging the Impossible" held on 21-22/1/2021.
- ➤ Children's Cancer Hospital, 57357, conference entitled "Technological Frontiers of Biomedical Research" held on 12/5/2023.

Workshops

- ➤ Training course entitled "**DNA Sequencing**" held by the Central Laboratory, Faculty of Science, Ain Shams University on 4-8/7/2004.
- ➤ Training course entitled "First Aids" held by Faculty of Science, Ain Shams University on 28/11/2012.
- Workshop entitled "Education Outputs and Curriculum Maps" held by the Quality Assurance and Accreditation Center, Ain Shams University on 17/9/2014.
- ➤ Workshop entitled "Academic Standards and Educational Programs" held by the Quality Assurance and Accreditation Center, Ain Shams University on 28-29/10/2015.
- ➤ Virtual workshop entitled "Effective Post-Submission Publishing Strategies" held by Nature Research Academies in collaboration with the Egyptian Knowledge Bank (EKB) on 18/1/2022.
- ➤ Webinar entitled "Regulation of Bacterial Virulence as an Approach to Combat the Problem of Antibiotic Resistance" held by Faculty of Pharmacy, Helwan University on 24/1/2022.

- Webinar entitled "Journal Publishing Process EKB (PS0401MEA): The Publication Criteria for Structuring an International Journal" held by Emerald Publishing in collaboration with the Egyptian Knowledge Bank (EKB) on 18/11/2024.
- Webinar entitled "**Editor's Role in International Journals**" held by Emerald Publishing in collaboration with the Egyptian Knowledge Bank (EKB) on 25/11/2024.
- Webinar entitled "Leveraging AI to Foster Active Learning: Innovative Strategies for Educators" held by Britannica Digital Learning, a division of Encyclopaedia Britannica Inc., in collaboration with the Egyptian Knowledge Bank (EKB) on 17/3/2025.
- Webinar entitled "AI for Grant Proposal Writing" held by Britannica Digital Learning, a division of Encyclopaedia Britannica Inc., in collaboration with the Egyptian Knowledge Bank (EKB) on 27/3/2025.

Training courses of Faculty Members and Leaders Development (FLDP)

- 1. Lifelong education.
- 2. Thinking skills.
- 3. Communication skills.
- 4. Credit hours system.
- 5. Using technology in teaching.
- 6. Methods of scientific research.
- 7. Organizing scientific conferences.
- 8. Local and international competitive research projects.
- 9. Financial and legal aspects.
- 10. Leadership.
- 11. Scientific writing level 1.
- 12. Effective teaching.
- 13. Examination systems and student assessment.
- 14. E-learning by moddle.

Quality work and tasks in Department/Faculty

- Coordinator of the Biochemistry/Chemistry program in Biochemistry Department (2014-2020).
- Coordinator of the academic advising for Biochemistry and Biochemistry/Chemistry Programs (2024-present).
- Member of the internal committee to review the conformity and application of academic standards for the Biochemistry program courses with the credit-hour system.
- Coordinator of the standard of financial resources and financial facilities supporting the educational process for Biochemistry and Biochemistry/Chemistry programs with the credit-hour system during the application for programmatic accreditation from the National Authority for Quality Assurance of Education and Accreditation.
- Participated in preparing a proposal for the regulations of the credit-hour system for the master's programs in the Biochemistry Department.
- Participate in attending meetings related to quality work and tasks in the department and faculty.

Student activities

Member of the Organizing Committee of the third annual conference of the Biochemistry Department held on 7-8/5/2017 at the guest house, Ain Shams University.

Other activities

- Participated in the preparation of the practical note of Diploma of Analytical Biochemistry.
- Participated in the preparation of the Department's project proposal "Preparation of a Laboratory in the Field of Advanced Biotechnology Research at the Department of Biochemistry, Faculty of Science, Ain Shams University" as one of the competitive projects for the excellence of higher education institutions, which was put forward through the Higher Education Development Projects Management Unit, Excellence Support Department, Ministry of Higher Education and Scientific Research (2013-2014).