

Curriculum Vitae

Personal Data	<ul style="list-style-type: none">• Name in full : Aya Ahmed Ahmed Mohammed El-Hanafy• Date / place of Birth : 22/8/1982, Mansoura, Dakahlia, Egypt• Present Occupation: Associate professor of Medical Biochemistry & Molecular Biology, <i>Faculty of medicine, Mansoura University, Egypt.</i> /Associate professor of Medical Biochemistry & Molecular Biology, <i>Faculty of Dentistry, Mutah University, Jordan.</i>• Marital status: Widow• Religion: Muslim• Mobile No: +2/ 01151961726• e-mail address: -dr.ayaelhanafy@mans.edu.eg -dr.ayaelhanafy@mutah.edu.jo -dr.ayaelhanafy@yahoo.com• Work Postal Address: Medical Biochemistry & Molecular Biology Department, Faculty of Medicine, Mansoura University, Mansoura 35516, Egypt.
Qualifications	<ul style="list-style-type: none">• Professional Diploma in Medical Education (PDME) (2026), Faculty of Medicine, Tanta University (Egypt).• Ph.D degree in Medical Biochemistry and Molecular Biology- Mansoura university (2017), Faculty of Medicine, Mansoura University (Egypt).• Master Degree in Medical Biochemistry and Molecular Biology (2011), Faculty of Medicine, Mansoura University (Egypt).• MBBCh of Medicine and Surgery (November 2005), Faculty of Medicine, Mansoura University (Egypt): Excellent with honors.

Academic Positions

- **10/2025- now: Associate Professor** of Medical Biochemistry and Molecular Biology, Department of Medical Biochemistry and Molecular Biology, *Faculty of Medicine, Mansoura University, Egypt.*
- **10/2025- now: Associate Professor** of Medical Biochemistry and Molecular Biology, Department of Basic Dental and Medical Sciences, *Faculty of Dentistry, Mutah University, Jordan.*
- **10/2017–9/2025: Assistant Professor** of Medical Biochemistry and Molecular Biology, at Medical Biochemistry and Molecular Biology Department, Faculty of Medicine, **Mansoura University, Egypt.**
- **10/2021-2023: Assistant Professor** of Medical Biochemistry and Molecular Biology, Faculty of Medicine, Department of basic medical science, **New Mansoura University, Egypt (Part time).**
- **10/2023-7/2025: Assistant Professor** of Medical Biochemistry and Molecular Biology, Faculty of Medicine, Department of basic medical science, **New Mansoura University, Egypt (Full time).**
- **10/2011–10/2017: Assistant Lecturer** of Medical Biochemistry and Molecular Biology, at Medical Biochemistry and Molecular Biology Department, Faculty of Medicine, **Mansoura University, Egypt.**
- **5/2007-10/2011: Demonstrator** of Medical Biochemistry and Molecular Biology, at Medical Biochemistry and Molecular Biology Department, Faculty of Medicine, **Mansoura University, Egypt.**

Teaching experiences

- Teaching lectures of medical biochemistry course for the 1st year undergraduate dentistry students, Faculty of Dentistry, Mutah University, Jordan (2025-2026).
- Teaching lectures of Molecular Genetics course for the 2nd year undergraduate students, Faculty of Dentistry, Mutah University, Jordan (2025-2026).
- Teaching lectures & practical courses of medical biochemistry & molecular biology for the 1st and 2nd year undergraduate students, faculty of Medicine, New Mansoura University (2021-2025).
- Teaching lectures & practical courses of medical biochemistry & molecular biology for the 1st year students, faculty of Dentistry, New Mansoura University (2021-2025).
- Teaching lectures of medical biochemistry, Semester 2, level 1 students, Mansoura Integrated Medical Program for undergraduates, Faculty of Medicine, Mansoura University (2019-2023).
- Teaching lectures of medical biochemistry, Semester 3, level 2 students, Mansoura Integrated Medical Program for undergraduates, Faculty of Medicine, Mansoura University (2019-2023).
- Teaching lectures of medical biochemistry for the level 1 students, Faculty of Nursery, Mansoura University (2019- 2021).
- Teaching lectures of Medical Biochemistry for the level 1 students in the Technical Health Institute, Nursing department, Mansoura, Egypt (2017-2019).
- Teaching lectures of medical biochemistry for the level 1 students, Specialized Diploma in nursing program, Technical Institute, Faculty of Nursery, Mansoura University (2018- 2019).

- Teaching lectures of medical biochemistry for the level 1&2 undergraduates students, Subject-based. Faculty of Medicine, Mansoura University **(2018)**.
- Teaching the practical course of Medical Biochemistry for level 1 & level 2 students, Faculty of Medicine, Mansoura University **(2007-2017)**.
- Teaching the practical course of biochemistry for the level 1 students, faculty of Dentistry, Mansoura University **(2007-2011)**.
- Teaching the practical course of biochemistry for the level 1 students, faculty of Nursery, Mansoura University **(2007-2011)**.
- Teaching lectures and Practical training courses of biochemistry and Molecular biology for Master degree Postgraduate students, faculty of Medicine, Mansoura University.

Activities

- **2023- 2025:** Administrative Coordinator for level 3 undergraduate students, Faculty of Medicine, New Mansoura University, academic year 2023-2024/ 2024-2025.
- **2023- 2025:** Head of the control of Level 3 students, Semester 5 & 6, Integrated Medical Program for Undergraduates, Faculty of Medicine, New Mansoura University, academic year 2023-2024/ 2024-2025.
- **2021-2023:** Coordinator for Medical Biochemistry, Semester 4, Mansoura Integrated Medical Program for Undergraduates, Faculty of Medicine, Mansoura University.
- **2021- 2023:** Coordinator assistant for Semester 7, Mansoura Integrated Medical Program for Undergraduates, Faculty of Medicine, Mansoura University.
- **2021-2023:** CBL tutor for 1st and 2nd year students, Mansoura Integrated Medical Program for Undergraduates, Faculty of Medicine, Mansoura University.
- **2018-2023:** Academic advisor for Level 1&2 medical students, Mansoura Integrated Medical Program for Undergraduates, Faculty of Medicine, Mansoura University.
- **2023:** Member of Quality Assurance team in the Mansoura Manchester Program for Medical Education, Faculty of medicine, Mansoura University.
- **2022-2023:** Member of Mansoura Manchester Research society.
- **2021-2023:** Academic supervisor in Mansoura Manchester program research grant.
- **2021- 2022:** Member in the control of Mansoura-Manchester Program for Medical Education, Level 1, Semester 1& 2, Faculty of Medicine, Mansoura University
- **2020- 2022:** Member in the control of Level 3 students, Semester 5 & 6, Mansoura Integrated Medical Program for Undergraduates, Faculty of Medicine, Mansoura University
- **2021-2022:** Member in the control of Master degree for Postgraduates, Faculty of Medicine, Mansoura University
- **2019-2020:** Member in M.c.q online team for continuous assessment of postgraduate students, Faculty of Medicine, Mansoura University.

- **2019-2020:** Coordination, organisation, online exam preparation of practical courses, Semester 2 & 3, Mansoura Integrated Medical Program for Undergraduates. Mansoura Faculty of Medicine.
- **2008-2009:** Member in control of 6th year, Faculty of Medicine, Mansoura University.
- Attending the scientific discussions of MD and Ph.D thesis at Medical Biochemistry Department, Faculty of Medicine, Mansoura University, Mansoura, Egypt.
- Attending the regular scientific seminars held in Medical Biochemistry Department, Faculty of Medicine, Mansoura University, Mansoura, Egypt.
- Member of Quality Assurance team in the Medical Biochemistry Department, Faculty of medicine, Mansoura University.
- Membership of the Egyptian Medical Syndicate.
- Membership of the Egyptian society of Biochemistry and Molecular Biology (ESBMB).

**Courses, Webinars
and workshops**

➤ **Training Courses of the Faculty and Leadership Development
Project "FLDP":**

- References management & electronic indexing 27-28th **August, 2023.**
- Quality performance in the scientific departments 13-14th **August, 2023.**
- Skills of creativity, innovation, and entrepreneurship 22-23 **Jan, 2023.**
- Scientific search engines and methods of ranking universities **Aug, 2020.**
- Electronic courses design and production 22-23rd **June, 2020.**
- Basics of cord blood stem cells 10-11 **Oct., 2018**
- Statistical analytical skills 29-30 **May, 2016**
- Competing for research funds 13-14 **March, 2016**
- International publishing of scientific research 3-4 **May, 2015**
- Conference Organization 3-4 **June, 2014**
- Strategic Planning 19-20 **Jan., 2014**
- Credit Hours Systems 19-20 **May, 2013**
- Scientific Research Ethics 12-14 **June, 2011**
- Skills of Effective Presentation 22-24 **May, 2011**
- Quality Standards of the Teaching Process 8-10 **March, 2011**
- Communication Skills in various modes of education 24-26 **Oct., 2010**
- Ethics of the Profession 1-3 **Nov., 2009**
- Time and meetings Management 11-13 **Oct., 2009.**

**Courses, Webinars
and workshops
(Cont.)**

➤ **Other Courses, Webinars and workshops :**

- An Introduction to Bioinformatics and their Applications in Biological Data Analysis **28th of October 2025.**
- How Artificial Intelligence is shaping the Future of Assessment in Universities **10th of October 2025.**
- Fundamentals of Digital Transformation. Held on **8 - 9th of Juli 2025.**
- Competency Based Medical Education, Webinar organized under supervision of Manchester-Mansoura Faculty Development program at Faculty of Medicine, Mansoura University. Held on **2nd, 3rd of December 2024.**
- Egyptian Society for Medical Education (ESME) Monthly Webinar titled “AI in Action: Enhancing Medical Education through Intelligent Content and Adaptive Learning”, Held on **4th of November 2024.**
- “Citations and references: do's and don'ts. for Faculty and Researchers” CABI online-platform webinar series in collaboration with the Egyptian Knowledge Bank, **13th September, 2023.**
- “Journal Selection - When and Why: Pre-study, Pre-writing, Pre-submission, and Post-rejection” CABI online-platform webinar series in collaboration with the Egyptian Knowledge Bank, **2nd August, 2023.**
- “Writing Balanced Materials and Methods. for Faculty and Researchers” CABI online-platform webinar series in collaboration with the Egyptian Knowledge Bank, **9th August, 2023**
- “Manage your cited references at a glance using EndNote Online”. Clarivate web of science in collaboration with the Egyptian Knowledge Bank, on **24th July, 2023**
- Normalizing preprints with Preprints Citation Index". Clarivate web of science in collaboration with the Egyptian Knowledge Bank webinar on **26th of July 2023.**
- Statistical analysis using SPSS Program. Nationalism for research, Consultancy and training. **3rd -5th Feb 2023.**

**Courses, Webinars
and workshops
(Cont.)**

- “Professional Peer-review: How to Write Professional Response to Reviewers” CABI online-platform webinar series in collaboration with the Egyptian Knowledge Bank, **21st December, 2022.**
- “Professional Peer-review: How to review your manuscript before submission” CABI online-platform webinar series in collaboration with the Egyptian Knowledge Bank, **7th Dec, 2022.**
- “Preparing your Manuscript”, Taylor & Francis Group in collaboration with the Egyptian Knowledge Bank, on Monday, **15th February, 2022.**
- “Tips and advice for preparation of your paper manuscript” Researcher Academy On Campus, Elsevier Core Research Solutions, at Egyptian Knowledge Bank, **15th March, 2021.**
- “Getting started with Mendeley”, Researcher Academy On Campus, Elsevier Core Research Solutions, at Egyptian Knowledge Bank, **16th March, 2021.**
- “Understanding the peer review and publication processes”, IET webinar in collaboration with the Egyptian Knowledge Bank, **17th February, 2021.**
- “Avoiding Plagiarism & Proper Citations using Mendeley” Researcher Academy on Campus, Elsevier Core Research Solutions, at Egyptian Knowledge Bank, **15th February, 2021.**
- “Exploring EBSCO Academic Search Complete Database” in partnership with Egyptian Knowledge Bank, **10th February 2021.**
- “Professional Manuscript Writing (V1): (3) Conclusions, Abstract, Title & References” CABI online-platform webinar series in collaboration with the Egyptian Knowledge Bank, **8th February, 2021.**
- “Professional Peer-review (V2): (1) Professional co-authors peer-review” CABI online-platform webinar series in collaboration with the Egyptian Knowledge Bank, **15th February, 2021.**
- “Structuring a publishable paper “, Emerald publishing in collaboration with the Egyptian Knowledge Bank, **26th Jan, 2021.**

Courses, Webinars and workshops (Cont.)	<ul style="list-style-type: none"> • Selecting Journals for Publishing using Scopus: CS Quartiles & more. Researcher Academy On Campus, Elsevier Core Research Solutions, at Egyptian Knowledge Bank, 27th January, 2021. • “Web of Science hands-on training”. Clarivate web of science in collaboration with the Egyptian Knowledge Bank, 27th January, 2021. • "Basics of Bioinformatics" Practical Course held at "Medical Experimental Research Center (MERC)", Faculty of Medicine, Mansoura University, (5th -7th February, 2019). • “Preparing an Academic Teacher workshop” held at Mansoura University (31st May 2015- 4th June 2015) • Course titled “Internal Audit for Technical Requirements of ISO 15189:2007”. Held in Medical Biochemistry Department, Faculty of Medicine, Mansoura University (September, 2014). • Awareness of ISO 15189 Medical Laboratories Particular Requirements for quality and Competence, Faculty of Medicine, Mansoura University (March, 2013). • “DNA polymorphism and bioinformatics” training courses hold in Department of Medical biochemistry and Molecular Biology, faculty of Medicine, Mansoura university from (9-14) /2/2013. • Practical Course by "Continuous Medical Education Unit" titled "Updates in Diabetes, Obesity and Diabetic Foot" Held on 16th May 2011 in Mansoura Faculty of medicine. • “Basic Techniques in Molecular Biology” training courses organized in Medical Biochemistry and Molecular Biology, Department, faculty of Medicine, Mansoura University from (27-28th) /10/2010.
Languages	<ul style="list-style-type: none"> ✓ Arabic: Mother tongue. ✓ English: Excellent ✓ German: Beginner

<p>Lab Experience</p>	<ul style="list-style-type: none"> ● Measuring different parameters in biological samples with various techniques by means of: <ol style="list-style-type: none"> 1- Spectrophotometry. 2- Agarose gel Electrophoresis. 3- Competitive binding assays (ELISA) assays. ● DNA extraction from WBCs and tissues and amplify it by using PCR technique. ● RNA extraction from cells and tissues. ● Reverse transcriptase RT- PCR Technique ● Conventional PCR ● Real-time PCR ● Genotyping/Gene polymorphism detection
<p>Conferences attendance</p>	<ul style="list-style-type: none"> ● Mansoura Medical Biochemistry and Molecular Biology Department 5th Annual Conference “Unlocking the Secrets of Cancer” Advances in Molecular Biology and Medical Biochemistry, conducted on 16th October, 2024 ● Empowering Students in the Early Medical Years through Teaching and Learning. The 1st King Salman International University (KSIU) International Virtual Medical Education Conference in partnership with The Association for Medical Education in Europe (AMEE). Held on Thursday 23rd June 2022. ● The 1st scientific conference of Medical Biochemistry Department, Faculty of Medicine, Mansoura University in collaboration with the Egyptian society of Biochemistry and Molecular Biology (ESBMB) titled: Medical Biochemistry and Molecular Biology: New Horizons in Environmental Promotion. Held on 14 february 2008 ● The 2nd scientific conference of Medical Biochemistry Department, Faculty of Medicine, Mansoura University in collaboration with the Egyptian society of Biochemistry and Molecular Biology (ESBMB) titled: New Horizons in Medical Biochemistry and Molecular Biology. Held on 21st February, 2009. ● The Xth Annual Conference of Clinical Pathology Department "Clinical Pathology and Patient Care: A Cross Talk" from 29-30 April, 2009.

Publication

- **Aya A. El-Hanafy**; Omar A. Ammar; Doaa A. El-Hanafy; Sherine Refat; Amr Sameer; Osama Bahy; Maha O. Hammad (2025): **Long Non-Coding RNAs PCAT-1 and FENRR: Diagnostic and Prognostic Potential in Papillary Thyroid Carcinoma**. World Journal of Surgical Oncology. Jun 4;23(1):218.
- Amaal A. Abulkhair, Dalia Shaalan, Muhamad M. A. Said, **Aya A. El-Hanafy (2025): IL-2RA rs2104286 gene Polymorphism among Egyptian population with Multiple Sclerosis: a case control study**. Bulletin of Egyptian Society for Physiological Sciences. 2025: 1-15.
- Omnia S. Erfan; Amira A.H. Ali; Ateya Megahed Ibrahim; Eman Hamza; **Aya A. El-Hanafy**; Engy Risha; Nessma A. Nosser; Neimat Abd Elhakam Yassin; Rasha Hamed Al-Serwi; Mohamed El-Sherbiny; Ola A Habotta; Aml Mohamed Nada; Ehab K Ali; Madaniah Omar Zakari; Nehal M. Elsherbiny; Hany M. A. Sonpol. (2025): **Roasted and green coffee protects against cardiac injury in diabetic rats: Modulation of VEGF, Caspase-3, and RIPK1**, *Cardiovascular Toxicology*, in press. ID a23ff8e6-1b31-4a7a-af8f-b9df20751891.
- Ola A. Habotta, Ahmed Abdeen, **Aya A. El-Hanafy**, Neimet Yassin, Dina Elgameel, Samah F. Ibrahim, Doaa Abdelrahman, Tabinda Hasan, Florin Imbrea, Heba I. Ghamry, Liana Fericean, Ali Behairy, Ahmed M. Atwa, Afaf Abdelkader, Mohamed Refaat, Shaaban A. El-Mosallamy (2023): **Sesquiterpene nootkatone counteracted the melamine-induced neurotoxicity via repressing of oxidative stress, inflammatory, and apoptotic trajectories**. *Biomedicine & Pharmacotherapy*. 165, 115133.
- Riham Eid; Maha Abdelsalam; Aya Ahmed Fathy; Hadil Mohamed Aboelenin; Eman Bakr Elmarghany; **Aya A El-Hanafy**; Nashwa Hamdy; Dina Salama Abd Elmagid; Nermeen Ahmed Niazy; Dina Mahmoud Abdelghaffar (2023): **Bone mineral density in Egyptian children with juvenile idiopathic arthritis: possible correlation to serum RANKL / osteoprotegerin (OPG) ratio and OPG gene polymorphisms**. *Pediatr Rheumatol*.21, 58.
- Sara F Awwad ,Raymonde H Assaf ,Ahmed A Emam ,Amgad A Fouad ,Lamiaa F Arafa, **Aya A El-Hanafy (2023): NLRP3 Inflammasome Activation By 17 β -estradiol as a Potential Therapeutic**

	<p>Target in Hepatocellular Carcinoma Treatment. <i>Medical Oncology</i>, 40 (3), 94.</p> <ul style="list-style-type: none"> • Eid, R., Hammad, A., Abdelsalam, M., Fathy, A. A., Abd-El Ghafaar, D. M., Elmarghany, E. B., <u>El-Hanafy, A. A.</u>, Mostafa, N., Niazey, N. A., Korkor, M. S., & Hamdy, N. (2021): Tumor necrosis factor receptor II and PTPN22 genes polymorphisms and the risk of systemic lupus erythematosus in Egyptian children. <i>Lupus</i>, 30(9), 1449–1458. • Eid, R., Abdelsalam, M., Fathy, A. A., Abd-El Ghaffar, D. M., Elmarghany, E. B., <u>El-Hanafy, A. A.</u>, Mostafa, N., Hamdy, N., Niazy, N. A., Hammad, A., & Abolenein, H. M. (2021): Predictors of decreased bone mineral density in childhood systemic lupus erythematosus: possible role of osteoprotegerin gene polymorphisms. <i>Journal of pediatric endocrinology & metabolism</i>, 35(1), 79–87. • <u>El-Hanafy A. A.</u>, Assaf R, Baiomy A, Shoma A, Abo El-khair S (2017): Gene expression of autophagy related markers as prognostic biomarkers in breast cancer. <i>Arab. J. Lab. Med.</i> 42(1): 301-314
<p>Thesis supervision</p>	<ul style="list-style-type: none"> • PhD thesis “Molecular study of inflammasome components in hepatocellular carcinogenesis” • Master degree thesis “Association of IL2RA and CTLA4 Genes Polymorphism with multiple sclerosis in Egyptian population”
<p>Personal skills</p>	<ul style="list-style-type: none"> • Advanced IT and computer skills : LMS, SIS, Mc Graw Hill, Microsoft teams, question bank generation, electronic exams generation. • Excellent communication skills • Effective presentation skills. • Creative Team Leadership. • Active team player, co-operative with team members. • Organize and prioritize workloads to meet targets and deadlines. • Responsibility and commitment in work. • Able to solve problems with self-motivation and able to motivate others.