

## CURRICULUM VITAE

**Rasha EL-Sherif Hassan Ibrahim**  
**Assistant professor of Biochemistry**



### Personal data:

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**Birth date:** 1/9/1979

**Nationality:** Cairo, Egypt.

**Current position:** Assistant professor of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt.

**Major Academic Discipline:** Biochemistry

**Specialization:** Protein chemistry and Enzymology.

### Educational background:

1. **Bachelor of Science (B.Sc.)** (Biochemistry, *very good with honor*) Faculty of Science , Ain Shams University (2000).
2. **Master of Science (M.Sc).** (Biochemistry/Enzymology) Faculty of Science, Ain Shams University, Cairo, Egypt (2005). The thesis title: "*Purification of LDH isoenzyme-5 from Camel liver*".
3. **Philosopher Doctor of Science (PhD.)** (Biochemistry/Enzymology) Faculty of Science, Ain Shams University, Cairo, Egypt (2009) . The thesis title: "*Physicochemical and kinetic properties of purified arginase from camel and bovine liver cytosol*"

## Academic Positions:

- **2000-2005:** Demonstrator, Department of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt. Teaching practical courses of the undergraduate students.
- **2005-2009:** Assistant lecturer, Department of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt. Supervising and contributing in teaching practical courses of the undergraduate students
- **2009-2018:** lecturer, Department of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt. Supervising and contributing in teaching theoretical and practical courses of the undergraduate and post graduate students.
- **2018-present:** Assistant professor, Department of Biochemistry, Faculty of Science, Ain Shams University, Cairo, Egypt. Supervising and contributing in teaching theoretical and practical courses of the undergraduate and post graduate students.

## Computer skills:

- ICTP “Information and communication Technology Project” certificate in (**concepts of IT, word processing, database, presentations, information and communication, web publishing using front page and using computer and managing files**).(2007)
- ICDL “International computer driving Licence” **19/9/2007**.

## Publications:

1- **Expression of aquaporin gene (*Os PIP1-3*) in salt-stressed rice (*Oryzasativa L.*) plants pre-treated with the neurotransmitter (dopamine).** Amal F. Abdelkader Sahar El-khawas, Nahla Amin Safaa El-Din El-Sherif, Raifa A. Hassanein, Manal Asem Emam, **Rasha El-Sherif Hassan**. POJ 5(6):532-541 (2012).

2- **Biocompatibility and Gene Expression Associated with Streptococcus Infection in Myocarditis.** Soha S. S. Abdou, Kholoud S. Ramadan, Iman M. K. Abumourad, **Rasha E. Hassan**. International Journal of Genetic Engineering 2012, 2(1): 1-11 DOI: 10.5923/j.ijge.20120201.01.

3- **The effect of experimental streptococcus infection in myocarditis on some biochemical and inflammatory markers in albino rats.** Kholoud SR, Iman MKA, **Rasha EH**, Soha SSA. African Health Sciences. 2013,13, 4.

4- **Relation between C-reactive protein and Selected Cardiovascular Risk factors in a Rat Model of Induced Atherosclerosis.** KS Ramadan, **RE Hassan**, AA Deghedy Pensee 2014,76 (2).

5- **Comparison of Lipopolysaccharide binding protein and C-reactive protein gene expression levels in a rat model of induced atherosclerosis.** KS Ramadan, **RE Hassan**, B Abd El Rahman, AA Deghedy. The Egyptian Journal of Hospital Medicine . 2011, 45:457-477

6-**Biological study of the effect of water soluble [N-(2-hydroxybenzyl)-l-aspartato] gallium complexes on breast carcinoma and fibrosarcoma cells.** A Mohsen, C Saby, P Collery, GM Sabry, **RE Hassan**, A Badawi, ... JBIC Journal of Biological Inorganic Chemistry 2016, 21 (7), 837-849.

7-**Pineapple juice supplementation activates thyroid gland and attenuates hyperlipidemia in rats.** AmrY Esmat Magda K. Ezz, **Rasha E. Hassan**, International journal of biosciences 2017, 10 (3), 173-184.

8- **A new gallium complex inhibits tumor cell invasion and matrix metalloproteinase MMP-14 expression and activity.** Ahmed Mohsen, Philippe Collery, Roselyne Garnotel, Bertrand Brassart, Nicolas Etique, Gilane Mohamed Sabry, **Rasha Elsherif Hassan**, Pierre Jeannesson, Didier Desmae'le and Hamid Morjani. Metallomics. 2017; 9, p.1176-1184.

9- **Antiatherogenic potency of canola oil and/or wheat germ oil in association with the expression of some inflammatory marker in rats.** **Rasha E. Hassan**, Manal A. Emam. International Journal of Biosciences. 2017, 11, (5), p. 319- 336.

10- **Unique properties of arginase purified from camel liver cytosol.** Tahany M. Maharem, Walid E. Zahran, **Rasha E. Hassan**, Mohamed M. Abdel Fattah. International Journal of Biological Macromolecules 2018,(108) 88–97.

11- **Physicochemical characteristics and oxidative stability of Egyptian corn germ oil produced by aqueous enzymatic extraction.** A.Y. Esmat , **R.E. Hassan**, G.A. Abo-ElWafa, M.M. Abou-ElSoud and M.G. Megahed. GRASAS Y ACEITES 69 (4) 2018, e275.

12- **Therapeutic effect of mesenchymal stem cells in acute kidney injury: implication of inflammatory and oxidative stress pathways.** Rehab E. Selim, Gilane M. Sabry, Hanaa H. Ahmed, Somia H. Abd Allah, **Rasha E. Hassan**, Aziza B. Shalby and Nehal S. Abouhashem. Bioscience Research, 2018,15 (4) 4020-4037.

13- **Mesenchymal Stem Cells: a Promising Therapeutic Tool for Acute Kidney Injury.** Rehab E. Selim, Hanaa H. Ahmed, Somia H. Abd-Allah, Gilane M. Sabry, **Rasha E. Hassan** ,Wagdy K. B. Khalil, Nehal S. Abouhashem. Applied biochemistry and biotechnology. 2019

14- **Ramadan diurnal intermittent fasting modulates SOD2, TFAM, Nrf2, and sirtuins (SIRT1, SIRT3) gene expressions in subjects with overweight and obesity.** Mohamed I. Madkour, Ahmed T. El-Serafi , Haitham A. Jahrami , Naglaa M. Sherif ,**Rasha E. Hassan** , Samir Awadallah , “Mo’ez Al-Islam” E. Faris. Diabetes Research and clinical practice. 2019 (155), 107801-11.

15- **Insights on the Role of Mesenchymal Stromal Cells Infusion in Enhancing the Inhibitory Network and Synaptic Plasticity in Chronic Epileptic Rats.** Rania S. Salah, Hanaa H. Ahmed, Somia H. Abd-Allah, **Rasha E. Hassan**, Wagdy K.B. Khalil, Gilane M. Sabry. 2020,

16- **Modulation of bone turnover aberration: A target for management of primary osteoporosis in experimental rat model.** Enas A. Fouad-Elhady , Hadeer A. Aglan , **Rasha E. Hassan** , Hanaa H. Ahmed, Gilane M. Sabry. Heliyon. 2020, (6), e03341.

17- **Relevance of circulating MiRNA-21 and MiRNA-181 in prediction of glioblastoma multiforme prognosis.** Esraa M. Labib, Lobna R. Ezz El Arab, Hala M. Ghanem, **Rasha E. Hassan**& Menha Swellam. Archives of Physiology and Biochemistry. 2020, (126),3

18- **The Anti-epileptic Efficiency of Mesenchymal Stem Cells Against Pilocarpine Model of Acute Epilepsy.** Rania S. Salah, Hanaa H. Ahmed, Somia H. Abd-Allah, **Rasha E. Hassan**, Wagdy K.B. Khalil, Ahmed A. Abd-Rabou, Gilane M. Sabry. Research J. Pharm. and Tech. 14(3): March 2021.

19- Larvicidal and pathological effects of green synthesized silver nanoparticles from Artemisia herba-alba against Spodoptera littoralis through feeding and contact application. Raghda S. El-Ashmouny, Magda H. Rady, Bouthaina A. Merdan, T. A. A. El- Sheikh, **Rasha E. Hassan** & El Gohary E El Gohary. Egyptian Journal of Basic and Applied Sciences. 2022, VOL. 9, NO. 1, 239–253.

20- Neuroprotective effect of sodium alginate against chromium-induced brain damage in rats. Eman M. Saleh, Germine M. Hamdy, **Rasha E. Hassan**. Plos One

21- **Nanoplatforms for Promoting Osteogenesis in Ovariectomy-Induced Osteoporosis in the Experimental Model.** Enas A. Fouad-Elhady; Hadeer A. Aglan; **Rasha E. Hassan**; Gilane M. Sabry; Hanaa H. Ahmed. Current Nanomedicine. Current Nanomedicine.

## Scientific and Applied Activities:

### 1. Academic teaching:

- **2009-2011:** Tissue chemistry (306 BIO) for third year Biochemistry/Chemistry students-
- **2017-2020:** Tissue chemistry (203 BIOC) for second year Biochemistry major ,and Biochemistry/Chemistry students (Credit hours) .
- **2009-2011:** Basics of Biochemistry (351BIO) for third year entomology students.
- **2012- 2020:** Biochemistry of some diseases (305 BIO) for third year Biochemistry major students.
- **2013-2015:** Environmental biology (405 BIO) for fourth year Biochemistry major students.
- **2014-2015:** Environmental biology (410 BIO)
- **2014-2016:** Quality Management (523 BIO) post graduate Diploma of analytical biochemistry students.
- **2014- till now:** Quality control (407 BIO)for fourth year Biochemistry major students.
- **2015-2016:** Immunology (441BIO) for fourth year biophysics students.
- **2015-2019:** Basic Biochemistry (Proteins and enzymes) (201BIO).for second year Biology students.
- **2019-2020:** Body fluids (309 Bio) for third year Biochemistry major and Biochemistry/Chemistry students (Credit hours).

- **2019- till now: Quality control (401 BIO) fourth year biochemistry students (credit hours).**
- **2020-till now: Body fluids (424 Bio) for fourth year Microbiology major students (Credit hours).**
- **2020-till now: Enzymes (520 BIOC) Analytical biochemistry Diploma**
- **2020-till now: Quality measurements ( 618BIOC ) premaster**

## 2. Supervision on MS.c and Ph.D. students:

### **Supervision on Ph.D. students in the Biochemistry department, Faculty of Science, Ain Shams University**

- **Ahmed Mohsen Mohamed Mussa**, Biochemical study on the effect of some prepared gallium complex(es) on metallo-collagenase activity.
- **Enas Ahmed Fouad**, Utilization of nanocomposites and a nanoparticle as osteogenic and bone mineralizing biomaterials in osteoporotic rat model.
- **Soha Saad El-Din Abduo**, Insulin like growth factor-1, cholesterol, and some metals as early markers of hepatocarcinogenesis in Egyptian patients with hepatitis C infection.
- **Samar Mohamed Kamel Hassan**, Biochemical Studies On Some Chitinases As Active Biopesticides.
- **Wissam Abd El-hamid Mohamed Elsagher**, Cross sectional study of the toxicity and endocrine disruption of two types of pesticides in male albino rats.
- **Marwa Fouad Abd El-Fatah Ramadan**, Effect of Aloin Treatment on the Expression of Some Cardioprotective Heat Shock Proteins and Micro RNAs in Rats.
- **Marwa Esmat Abd-El Baset Khalil**, Molecular assessment of the ameliorating effects of phenolic antioxidants with low doses of  $\gamma$ -irradiation against platinum complex toxicity in rats.
- **Rania Saeid Salah Mohammed**, Study the Therapeutic Role of Mesenchymal Stem Cells in Lithium-Pilocarpine Model: A Model of Temporal Lobe Epilepsy".
- **Rehab Selim saied Abo Hashem**, Study of the possible mechanisms for the role of mesenchymal stem cells in treating acute kidney injury in a rat model.
- **Mohammed Ibrahim Ali Madkour**, The Role of Haptoglobin polymorphism in Gene Expression of CD163 Receptors in Type 2 Diabetes mellitus.

### **Supervision on Ph.D. students in other Departments and institutes,, Ain Shams University**

- **Raghda Said Abd El-Hakim El-Ashmoney**, Toxicological assessment of green synthesized silver nanoparticles using *Artemisia* sp. plant extract against the cotton leaf worm *Spodoptera littoralis*

(Noctuidae- Lepidoptera) and its mechanism of action. (Department of Entamology , Faculty of Science).

- **Ibrahim Helmi Ibrahim Ahmed Borghsh**, Assessment of toxicity and biochemical changes resulting from liquid petroleum gas exposure. **Institute for Environmental Studies and Research Environmental Basic Science Department.**

### **Supervision on M.Sc. students in the Biochemistry Department, Faculty of Science, Ain Shams University**

- **Asmaa Abd El Fattah**, Comparison of Lipopolysaccharide-Binding Protein and C-reactive Protein gene expression in a Rat Model of induced Atherosclerosis.
- **Soha Saad El-Din Sayed Abdou**, C- Reactive Protein and Cytokines: Biocompatibility and Gene Expression Associated with Streptococcus Infection In Cardiovascular Diseases.
- **Aya Fahmy Mostafa**, Biochemical study on the anti- atherogenic Activity of Sea Cucumber (*Holothuria Atra*) in rats.
- **Esraa Mohammad Labib**, Predictive Prognostic Role of miRNA21 and miRNA181 in Adult Patients with Glioblastoma.
- **Ibrahem Ahmed El Desoky**, The potential role of cyclophosphamide –biopolymeric based composite(s) against nephrotoxicity in rats.
- **Mahmoud Mohamed Abou El-Soud Ghareeb**, Characteristics and Composition of Some Oils Extracted from Oil Seeds by Enzymatic Extraction.
- **Shadwa mohamed Ali elesawy**, Window for biomarkers in diagnosis of acute kidney injury disease.
- **Samar Mostafa Mahmoud**, Biochemical study on the adverse effect of orally administered Titanium Dioxide Nanoparticles on the Kidney of Rats.
- **Eman Gomaa Ali, Astragalus spinosus**: Molecular Fingerprinting and potential anti-metabolic stress in obese Mice.

### **Supervision on M.Sc. students in other departments**

- **Amina Mohamed Abd El Salam**, The potential ameliorative effect of Quercetin and/or L-arginine against liver inflammation induced by copper oxide nanoparticles in adult male mice. (Department of Zoology).

### **3- Other activities:**

- Member in Fourth year control in Faculty of Science.

- Supervision on essay projects of Fourth year students.
- Member in the examiner Committee of Fourth year graduate essays.
- Member in the oral examiner committee of second, third and fourth year students.

### Research projects:

**Co-researcher in the project : Study on the protective effect of using Sea cucumber aqueous extract (*Holothoria Atra*) as a food supplement against atherosclerosis.**

### Membership

- Member in Egyptian Society for Biochemistry and Molecular Biology.

### Membership In The Committees:

- Member in “**research laboratory and E-learning committee**” in the Biochemistry Department Faculty of Science Ain Shams University.
- Member in the seminar committee of Biochemistry department
- Member in revising exam paper committee.

### Conferences And Workshops Attended

#### \*Conferences

- Symposium on “**The new strategies in teaching biological sciences**” 14/5/2007.
- Symposium on “ **New horizons of stem cell therapy**” 28/2/2009.
- Attending the Annual Scientific Conferences of Biochemistry of the Egyptian Society of Biochemistry and Molecular Biology in **19-20/4/2007** and **14-15/4/2010** “**Present and Future**”.
- The 11<sup>TH</sup> national conference for biochemistry and molecular biology titled “**Diagnosis of diseases and health care**” held on 30 Mar -1Apr /2014.
- Symposium on “**MicroRNA in health and disease**” held on 8/11/2014 at the German University in Cairo.
- The 12<sup>th</sup> annual congress of medical Sciences on “**Medical break through technologies towards a healthy community**” held on 17-18/12/2014 at the National center for research ,cairo, Egypt.
- Symposium on “**Non traditional therapy**” held on 12/11/2015 at Heliopolis University.
- The 12<sup>th</sup> National conference for Biochemistry and Molecular Biology “**Role of Biochemistry and Molecular Biology in Drug Discovery and Disease Diagnosis**” 15-17/3/2015.

- The annual scientific conference of ESBMB and ESTMO titled “ **Recent advances in biochemistry, molecular biology and tumor markers**” held on 5-6/ 5/2016.
- The 1<sup>st</sup> annual conference on Molecular Biology and Biotechnology “Advances in Genomics, NGS and RNA Sequencing” 14-15/10/2017.
- The International conference of “Biochemistry and molecular biology in the 21<sup>st</sup> century bridges to translational medicine and pharmaceutical technology”.24-25/3/2018.
- The 7<sup>th</sup> Annual international Ain Shams University conference “Internationalization and Mobility” 2-5 /4/2018.
- Symposium on” Biological sciences and human efforts towards development and progress”16/3/2019.
- The international conference of “Recent trends in Biochemistry and Molecular Biology: Towards vision 2030”14-15/9/2019 at AUC in Cairo.
- The 1<sup>st</sup> Egyptian international conference on “Microbiota and Microbiome in health and disease”26-27/11/2019.
- The 13<sup>th</sup> Breast-Gynecological and immunooncology international cancer conference “Challenging the impossible”21-22/1/2021.

### \*Workshops

- Training program number 33 for preparing universities lecturers held at Faculty of Women, Ain Shams University, Cairo, Egypt.(9/2006).
- workshop on “**Real time PCR**” 25/11/2008 held at MIU Al Azhar University.
- Attended a workshop titled “ Bioinformatics principles and applications” held on 7-9/2/2016 at Delta company.
- Attended a workshop “**Novel disease markers**” held on 12/11/2016 at Faculty of Pharmacy BUE.
- Workshop “**Scientific day for Guidelines for Fulfillment of Technical Requirements of ISO15189:2012 for Medical Laboratory Accreditation**” 18/4/2017.

### \*Workshops of faculty members and leaders development (FLDP)

- Attended **FLDP** workshops held at Faculty of Alsun, Ain Shams University titled:
  - 1- **Development of thinking skills (12/2004).**
  - 2- **Effective teaching (5/2006).**
  - 3- **Effective communication skills (5/2006).**
  - 4- **Credit hours (6/2006).**

**5- Course specification (7/2006).**

**6- Learning forever (8/2006).**

**7- Evaluation of teaching (8/2006).**

- Attended *FLDP* workshops held at center of the development of faculty members and leaders at , Ain Shams University titled:
  - 1- Time management, meetings 8-10/6/2010**
  - 2- Management of the research team 13-15/7/2010**
  - 3- International publication 9-11/7/2011**
  - 4- Standards of quality in teaching 24-26/9/2011**

### **\*Quality And Qualifying For Accreditation Programs**

- Attended Symposium on the Course specification **22/9/2010**.
- Attended Workshop on **Effective leadership** held on **11-12/10/2010** in Faculty of Science, Ain Shams University.
- Participated in Workshop on **“How to put the strategic plan of Faculty of Science Ain Shams University”6/2010**.
- Attended Workshop titled **“Education outputs and curriculum maps”** held on 17/ 9/2014 at quality assurance and accreditation center ASU.
- Attended Workshop titled **“Academic standards and educational programs”** held on 28-29/10/2015 at quality assurance and accreditation center ASU.
- Attended Training course **“Systems of program accreditation”** 12-13/2/2020.
- Coordinator of the Biochemistry major program, Faculty of science, Ain Shams University.
- Member of the Biochemistry committee for revising course files of Chemistry Department (2013).
- Member of the files preparation team for program accreditation, Department of Biochemistry, Faculty of Science, Ain Shams (2020-now).
- Member of the internal committee for reviewing the conformity and application of academic standards for courses, Department of Biochemistry, Faculty of Science, Ain Shams University (2021-).
- Member of the committee of measurement and assessment in the Biochemistry department, Faculty of Science, Ain Shams University.

### **\*Other Activities:**

- Participated in the preparation of the practical note of analytical biochemistry Diploma (2014-2015).
- Participated in the preparation of the practical note of nutrition chemistry Diploma (2016-2017).
- Reviewer in:

- Nanotechnology reviews
- Radiation research and applied sciences