

## CURRICULUM VITAE

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### Personal Data:

- Date of birth: 13/07/1983
- Marital status : Married
- Work Address: 23 Kasr Al-Aini Street, Cairo, Egypt.
- Home Address: 42 Shamal Sina Street, Zahraa El Maadi, Cairo, Egypt.

### Educational Degrees:

- **PhD degree in Pharmaceutical Sciences (Biochemistry)**, Faculty of Pharmacy, Cairo University (2014 - 2016).  
Thesis title: **“MicroRNA expression as a predictor of the success of pegylated interferon-ribavirin therapy against chronic Hepatitis C in Egyptian Patients”**.
- **Master degree in Pharmaceutical Sciences (Biochemistry)**, Faculty of Pharmacy, Cairo University (2007 - 2013).  
Thesis title: **“Effect of angiotensin-converting enzyme inhibition and angiotensin receptor blockade on diabetic rat kidney”**.
- **Bachelor Degree in Pharmaceutical Sciences**, Faculty of Pharmacy, Cairo University (May 2005) with an overall grade of **“Excellent with honors”** and ranked the **4th**.

### Academic and Work Experience:

#### Full-time

- Associate Professor of Biochemistry, Biochemistry Department, **Faculty of Pharmacy and Drug Technology, Egyptian Chinese University** (September 2022 till now).
- Associate Professor of Biochemistry, Biochemistry Department, **Faculty of Pharmacy, Cairo University** (November 2021 to August 2022).

- Lecturer of Biochemistry, Biochemistry Department, **Faculty of Pharmacy, Cairo University** (September 2016 to October 2021).
- Assistant Lecturer of Biochemistry, Biochemistry Department, **Faculty of Pharmacy, Cairo University** (February 2014 to August 2016).
- Teaching Assistant of Biochemistry, Biochemistry Department, **Faculty of Pharmacy, Cairo University** (October 2005 to February 2014).

### Part-time

- **Faculty of Pharmacy, Misr International University (MIU)** (Fall 2017/2018 to Summer 2021/2022).
- **Faculty of Pharmacy and Drug Technology, Egyptian Chinese University** (Spring 2021/2022).
- **Faculty of Pharmacy, Future University in Egypt** (Fall 2021/ 2022).
- **Faculty of Pharmacy, October 6 University** (Fall 2020/2021).
- **Faculty of Pharmacy, Heliopolis University for Sustainable Development** (Spring 2016/2017 to Spring 2020/2021).

### Teaching:

#### 1) Faculty of Pharmacy, Cairo University

##### Undergraduate

- **Course coordinator** of **Biochemistry-2** course for the third-year students of the General Program (Spring 2021/2022).
- A teaching member of **Biochemistry-1, Biochemistry-2, Clinical Biochemistry and Molecular Biology and Clinical Nutrition** courses for the students of the General Pharmacy Program (2016 - 2022).
- A teaching member of **Clinical Biochemistry and Clinical Nutrition** courses for the students of the Clinical Pharmacy Program (2016 -2022).

##### Postgraduate

- **Course coordinator** of **Clinical Nutrition** course for the postgraduate “Master” students (Biochemistry) (Spring 2021/2022).
- **Course coordinator** of **Laboratory Analysis** course for postgraduate Hospital Pharmacy Diploma students (2019 - 2022).
- A teaching member of **Lab Techniques** and **Clinical Nutrition** courses for the postgraduate “Master” students (Biochemistry) (2016 - 2022).
- A teaching member of **Nutrition in Cancer and Neurodegenerative Diseases** and **Nutrition in ICU** courses for the postgraduate **Clinical Nutrition Diploma** students (Fall 2020/2021).
- A teaching member of **Advanced Biochemistry, Chemical Pathology,** and **Clinical Nutrition** courses for the postgraduate Biochemistry Diploma students (2017 - 2021).

## **2) Faculty of Pharmacy, Misr International University (MIU):**

- A teaching member of **Biochemistry-1 and Biochemistry-2** courses for the second and third-year students (Spring 2017/2018 to Summer 2021/2022).
- **Course coordinator** of **Cell Biology** course for the first-year Pharm D clinical students (Spring 2021/2022).
- **Course coordinator** of **Clinical Nutrition** course for the fifth-year students (Fall 2017/2018 to Summer 2020/2021).
- **Course coordinator** of **Clinical Biochemistry** course for the fourth-year students (Summer 2018/2019, Summer 2021/2022).
- A teaching member of **Biology** course for the first-year students (Summer 2017/2018, Fall 2018/2019).

## **3) Faculty of Pharmacy, Egyptian Chinese University:**

- **Course coordinator** of **Biochemistry-1** course for the second-year Pharm D students (Spring 2021/2022).

## **4) Faculty of Pharmacy, Future University:**

- A teaching member of **Advanced Biochemistry, Chemical Pathology, and Biochemical Methods and Techniques** courses for the **postgraduate** Master students (Biochemistry) (Fall 2021/2022).

## **5) Faculty of Pharmacy, October 6 University:**

- A teaching member of **Clinical Biochemistry** course for the fourth-year students (Fall 2020/2021).

## **6) Faculty of Pharmacy, Heliopolis University:**

- A teaching member of **Clinical Biochemistry** course for the fourth-year students (Spring 2016/2017 to Spring 2020/2021).

## **Online Teaching**

- Make interactive online sessions for undergraduate and postgraduate students using ZOOM, Blackboard, Microsoft teams, Google Meet and Big Blue Button.

## **Administrative and Faculty Activities:**

- **Assistant of the Vice Dean of Education and Student Affairs, Faculty of Pharmacy, Cairo University (2016 - 2021).**
- **Faculty coordinator of "Youth Care and Student Activities" at Cairo University (2018 - 2021).**
- **Member of "Precautionary Measures for COVID-19 Committee" (2019/2020).**

- **Academic Advisor for Clinical Pharmacy Program students, Faculty of Pharmacy, Cairo University (2016 - 2022).**
- **Academic Advisor for Pharm D students, Faculty of Pharmacy, Cairo University (2019 - 2022).**
- **Member of the “Academic Support Committee” for General Program students, Faculty of Pharmacy, Cairo University (2016 - 2020).**
- **Member of “Crisis and Disaster Committee” of the Faculty of Pharmacy, Cairo University (2016 - 2022).**
- **Member of the “Instruments Committee” and “Biochemistry Department Research Plan Committee” in Biochemistry Department, Faculty of Pharmacy, Cairo University (2016 - 2022).**
- Participation in the duties of examination and Clinical Pharmacy Program Exam Control in Faculty of Pharmacy, Cairo University.
- Participation in the preparation of the annual report and the annual conference and processing of quality files for Biochemistry Department, Faculty of Pharmacy, Cairo University.

## **Scientific Publications:**

**Published 22 international publications (Web of Science).**

***h*-index (scopus)= 11**

***i*10-index= 12**

**Number of citations=383 (till September 2022)**

1. Motawi TK, El-Maraghy SA, **Senousy MA**. Angiotensin-converting enzyme inhibition and angiotensin AT1 receptor blockade downregulate angiotensin-converting enzyme expression and attenuate renal injury in streptozotocin-induced diabetic rats. *J Biochem Mol Toxicol*. **2013** Jul;27(7):378-87.
2. Motawi TK, Shaker OG, El-Maraghy SA, **Senousy MA**. Serum MicroRNAs as Potential Biomarkers for Early Diagnosis of Hepatitis C Virus-Related Hepatocellular Carcinoma in Egyptian Patients. *PLoS One*. **2015** Sep 9;10(9):e0137706.
3. Motawi TK, Shaker OG, El-Maraghy SA, **Senousy MA**. Serum interferon-related microRNAs as biomarkers to predict the response to interferon therapy in chronic hepatitis C genotype 4. *PLoS One*. **2015** Mar 19;10(3):e0120794.
4. Shaker OG, **Senousy MA**. Serum microRNAs as predictors for liver fibrosis staging in hepatitis C virus-associated chronic liver disease patients. *J Viral Hepat*. **2017** Aug; 24(8):636-644.
5. Shaker OG, **Senousy MA**, Elbaz EM. Association of rs6983267 at 8q24, HULC rs7763881 polymorphisms and serum lncRNAs CCAT2 and HULC with colorectal cancer in Egyptian patients. *Sci Rep*. **2017** Nov 24;7(1):16246.
6. Elbaz EM, **Senousy MA**, El-Tanbouly DM, Sayed RH. Neuroprotective effect of linagliptin against cuprizone-induced demyelination and behavioural dysfunction in mice: A pivotal role of AMPK/SIRT1 and JAK2/STAT3/NF-κB signalling pathway modulation. *Toxicol Appl Pharmacol*. **2018** Jun 1. pii: S0041-008X(18)30246-1.

7. Shaker OG, **Senousy MA**. Association of SNP-SNP Interactions Between RANKL, OPG, CHI3L1, and VDR Genes With Breast Cancer Risk in Egyptian Women. *Clin Breast Cancer*. **2019** Feb;19(1):e220-e238.
8. Saad MA, El-Sahar AE, Sayed RH, Elbaz EM, Helmy HS, **Senousy MA**. Venlafaxine Mitigates Depressive-Like Behavior in Ovariectomized Rats by Activating the EPO/EPOR/JAK2 Signaling Pathway and Increasing the Serum Estradiol Level. *Neurotherapeutics*. **2019** Apr;16(2):404-415.
9. **Senousy MA**, Helmy HS, Fathy N, Shaker OG, Ayeldeen GM. Association of MTMR3 rs12537 at miR-181a binding site with rheumatoid arthritis and systemic lupus erythematosus risk in Egyptian patients. *Sci Rep*. **2019** Aug 23;9(1):12299.
10. **Senousy MA**, El-Sahar AE, Sayed RH, Saad MA, Elbaz EM. Aberrations of miR-126-3p, miR-181a and sirtuin1 network mediate Di-(2-ethylhexyl) phthalate-induced testicular damage in rats: The protective role of hesperidin. Helmy HS, *Toxicology*. **2020** Mar 30;433-434:152406.
11. Abd-Elmawla MA, Hassan M, Elsabagh YA, Alnaggar ARLR, **Senousy MA**. Deregulation of long noncoding RNAs ANCR, TINCR, HOTTIP and SPRY4-IT1 in plasma of systemic sclerosis patients: SPRY4-IT1 as a novel biomarker of scleroderma and its subtypes. *Cytokine*. **2020** May 13;133:155124.
12. **Senousy MA**, Shaker OG, Sayed NH, Fathy N, Kortam MA. LncRNA GAS5 and miR-137 Polymorphisms and Expression are Associated with Multiple Sclerosis Risk: Mechanistic Insights and Potential Clinical Impact. *ACS Chem Neurosci*. **2020** Jun 3;11(11):1651-1660.
13. **Senousy MA**, El-Abd AM, Abdel-Malek RR, Rizk SM. Circulating long non-coding RNAs HOTAIR, Linc-p21, GAS5 and XIST expression profiles in diffuse large B-cell lymphoma: association with R-CHOP responsiveness. *Sci Rep*. **2021** Jan 22;11(1):2095.
14. Arab HH, Eid AH, Mahmoud AM, **Senousy MA**. Linagliptin mitigates experimental inflammatory bowel disease in rats by targeting inflammatory and redox signaling. *Life Sci*. **2021** May 15;273:119295.
15. Radwan AF, Shaker OG, El-Boghdady NA, **Senousy MA**. Association of MALAT1 and PVT1 Variants, Expression Profiles and Target miRNA-101 and miRNA-186 with Colorectal Cancer: Correlation with Epithelial-Mesenchymal Transition. *Int. J. Mol. Sci*. **2021**, 22(11): 6147.
16. Fathi D, Abulsoud AI, Saad MA, Nassar NN, Maksimos MM, Rizk SM, **Senousy MA**. Agomelatine attenuates alcohol craving and withdrawal symptoms by modulating the Notch1 signaling pathway in rats. *Life Sci*. **2021**; 284: 11904.
17. Motawi TK, Shaker OG, Hassanin SO, Ibrahim SG, **Senousy MA**. Genetic and epigenetic control on clock genes in multiple sclerosis. *J Genet Genomics*. 2022 Jan;49(1):74-76.
18. Abdelazim SA, Shaker OG, Aly YAH, **Senousy MA**. Uncovering serum placental-related non-coding RNAs as possible biomarkers of preeclampsia risk, onset and severity revealed MALAT-1, miR-363 and miR-17. *Sci Rep*. 2022 Jan 24;12(1):1249.
19. **Senousy MA**, Hanafy ME, Shehata N, Rizk SM. Erythropoietin and Bacillus Calmette-Guérin Vaccination Mitigate 3-Nitropropionic Acid-Induced Huntington-like

Disease in Rats by Modulating the PI3K/Akt/mTOR/P70S6K Pathway and Enhancing the Autophagy. ACS Chem Neurosci. 2022 Mar 16;13(6):721-732.

20. Habib SA, Kamal MM, El-Maraghy SA, **Senousy MA**. Exendin-4 enhances osteogenic differentiation of adipose tissue mesenchymal stem cells through the receptor activator of nuclear factor-kappa B and osteoprotegerin signaling pathway. J Cell Biochem. 2022 May;123(5):906-920.21.

21. Motawi TK, Al-Kady RH, Abdelraouf SM, **Senousy MA**. Empagliflozin alleviates endoplasmic reticulum stress and augments autophagy in rotenone-induced Parkinson's disease in rats: Targeting the GRP78/PERK/eIF2 $\alpha$ /CHOP pathway and miR-211-5p. Chem Biol Interact. 2022 Aug 1;362:110002.

22. Motawi TK, El-Maraghy SA, Sabry D, Nady OM, **Senousy MA**. Cromolyn chitosan nanoparticles reverse the DNA methylation of RASSF1A and p16 genes and mitigate DNMT1 and METTL3 expression in breast cancer cell line and tumor xenograft model in mice. Chem Biol Interact. 2022 Aug 9:110094. doi: 10.1016/j.cbi.2022.110094. Epub ahead of print.

### Master and PhD Thesis Supervision:

**Total number of thesis supervision= 14.**

Participating in supervision on **8 master students** and **6 PhD students** at the Biochemistry department, Faculty of Pharmacy, Cairo University.

### Scientific Membership

- **Assistant member at Cancer Epigenetic Society (CES) from December 2017 (I.D.1470).**

### Research Projects:

- **Working on a Cairo University research project (2019-2021) "Role of long non-coding RNAs in colorectal cancer" (Grant number 2017-181).**

### Scientific Conferences:

1. Attended the 3<sup>rd</sup> International Scientific Conference of Faculty of Pharmacy Cairo University on "Good Pharmacy Practice", April 25<sup>th</sup>-26<sup>th</sup>, 2012 and presented a "Poster" under the title of "**Possible Protective Mechanisms Against Renal Damage in STZ-Induced Diabetic Rats**" T.K. Motawi, S.A. El-Maraghy and M.A. Senousy. **2012.**
2. Attended the 5<sup>th</sup> International Scientific Conference of Faculty of Pharmacy Cairo University "Pharmacy at the Cutting-edge: Facing Future Challenges", April 23<sup>th</sup>-24<sup>th</sup>, **2014.**
3. Organized and actively participated in the 6<sup>th</sup> International Scientific Conference of Faculty of Pharmacy Cairo University "2020 Vision of Pharmacy in Egypt", April 25<sup>th</sup>-26<sup>th</sup>, **2015.**
4. Organized the 8<sup>th</sup> International Scientific Conference of Faculty of Pharmacy Cairo University "Pharmacy in Egypt: Ensuring Access to Health", April 22<sup>th</sup>, **2017.**

5. Attended the 9<sup>th</sup> International Scientific Conference of Faculty of Pharmacy-Cairo University “Towards Globally Recognized Egyptian Pharmaceutical Ingredients: A National Priority”, April 25-26<sup>th</sup>, **2018**.
6. Participated in publishing a conference abstract in Cytotherapy Journal “ISCT conference” entitled “Exendin-4 enhances osteogenic differentiation of adipose tissue mesenchymal stem cells through RANK/RANKL/OPG axis”. Volume 3, Issue 5, Page S51, 1 May **2021**.
7. Attended the 10<sup>th</sup> International Scientific Conference of Faculty of Pharmacy-Cairo University “Reshaping Pharma Sustainability and Innovation for Better Pandemic Response”, July 6-7<sup>th</sup>, **2021**.

### Reviewing Scientific Manuscripts:

Served as a reviewer for 47 manuscripts in the following international scientific journals:

Journal	Number of Manuscripts	Journal	Number of Manuscripts
International Journal of Cancer	1	DNA and Cell Biology	1
Viral immunology	1	Oncotarget	4
World Journal of Gastroenterology	4	Molecular Medicine Reports	5
World Journal of Clinical Oncology	1	Annual Research & Review in Biology	1
Biomedicine & Pharmacotherapy	4	Cytokine	2
World Journal of Gastrointestinal Pharmacology and Therapeutics	1	International Journal of Immunopathology and Pharmacology	1
Clinics and Research of Hepatology and Gastroenterology	2	Clinical Chemistry and Laboratory Medicine	3
Aging	2	Cancers (MDPI)	1
Journal of Clinical Laboratory Analysis	1	Journal of Clinical Medicine (MDPI)	1
Biomed Research International.	1	Biomolecules (MDPI)	1
International Journal of Molecular Medicine	1	Experimental and Therapeutic Medicine	2
Plos One	1	Analytical Cellular Pathology	1
International Journal of Biochemistry Research & Review	1	Journal of International Medical Research	1
Bulletin of Faculty of Pharmacy Cairo University	1	European Journal of Pharmacology	1

### Awards and Recognition:

1. A Certificate of Appreciation from Faculty of Pharmacy, Cairo University for **the best Master Thesis in Biochemistry 2013** awarded in 5<sup>th</sup> International Scientific Conference of Faculty of Pharmacy Cairo University “Pharmacy at the Cutting-edge: Facing Future Challenges”, April 23<sup>th</sup>-24<sup>th</sup>, 2014.
2. Certificates of Appreciation from Cairo University for publishing distinguished research in international scientific journals in 2017.
3. A Certificate of Appreciation in the 9<sup>th</sup> International Scientific Conference of Faculty of Pharmacy-Cairo University for **the outstanding participation in the committees of Performance Appraisal and Quality Assurance** in 2018.

## Training Courses and Workshops:

1. **Performance Appraisal and Quality Assurance Workshops:**
  - “Course Specifications and Course Report” in Performance Appraisal and Quality Assurance Unit, Faculty of Pharmacy, Cairo University (2014).
  - Performance Appraisal and Quality Assurance Specialized Training Workshop, Faculty of Pharmacy, Cairo University (2021).
2. **Fundamentals of Digital Transformation Certificate (FDTC):** Word, Presentations and Operating Systems courses (2021).
3. **FLDC Training Workshops:**
  - “Time and Conference Management” (2011).
  - “International Publishing of Research” (2011).
  - “Use of Technology in Teaching” (2011).
  - “E-Learning” (2013).
  - “Research Ethics” (2013).
  - “Exams and Students Evaluation Systems” (2013).
  - “Conference Organization” (2015).
  - “University Code of Ethics” (2015).
  - “Competing for Research Funds” (2016).
  - “Quality Standards in Teaching” (2016).
  - “Fundamentals of Clinical Trials” (2016).
  - “Crisis Management” (2016).
  - "Biomedical and Experimental Statistical Analysis" (2019)
  - "Positive Thinking" (2019).
  - “Strategic Planning” (2020).
  - “Communications Skills” (2021).
  - “Fundamentals of Blended Learning” (2021).
  - “Critical Thinking” (2021).
  - “Effective Presentation Skills” (2022).
4. **Online Workshops:**
  - H-index, Impact factor and Citation (2020).
  - Mendeley Citation Manager Software (2021).
  - Egyptian Knowledge Bank (2021).
  - Academic Advising and Credit Hours (2021).
5. **Online Webinars**
  - Enteral and parenteral nutrition in oncology patients (2020).
  - AstraZeneca Session - Selling Skills (2020).
  - Obesity, Overweight and risk for cardiovascular diseases in women (2022).
  - Regulation of bacterial virulence as an approach to combat the problem of antibiotic resistance (2022).
6. “Real-time PCR” workshop in Faculty of Pharmacy, Cairo University (2012).



## Laboratory experience:

### Have a good experience in the following techniques:

- Extraction of DNA and RNA from cells/blood/serum.
- Reverse transcription.
- PCR (conventional and Real-time) and PCR data analysis.
- Western blotting.
- ELISA.
- Gel electrophoresis.
- Enzyme kinetics.
- Spectrophotometric techniques and other experimental procedures.
- Statistical analysis using multiple statistical programs (GraphPad Prism, SPSS, XLSTAT, INSTAT and DTREG).

## Language Skills:

- **Arabic:** Mother tongue (Egyptian)
- **English:**
  - **GRE Test:** Verbal: 420, Quantitative: 240, Analytical Writing: 1, exam taken at Amideast, Cairo in 2008.
  - **ATEFL Test:** score 570, exam taken at Cairo University in 2015.

## Computer Skills:

- Completed ICDL courses on Information and Communication Technology, Windows, Internet use, and Microsoft office (word, excel, power point, and access) with excellent degree (2016).
- Moodle and Blackboard
- SPSS, INSTAT and Graphpad Prism Statistical Softwares
- Endnote

## Job Skills:

- Communicate effectively, both orally and in writing.
- Work effectively with a multiple diverse community.
- Have program planning and implementation skills.
- Create, compose and edit written materials.
- Develop and deliver presentations.
- Have knowledge of computerized student information systems.

## Personal Skills:

- Quick-learner, studious, hard-worker, and highly-committed.
- Trustworthy, reliable, and responsible.
- Ambitious, self-motivated, persistent, practical, and cooperative.
- Patient, cheerful, and optimistic.

## References:

- All references are available whenever required.