



## Mohamed Mostafa Mohamed Kamal

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## Personal Information

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<b>Date of Birth</b>	<b>9<sup>th</sup> November 1978</b>
<b>Place of Birth</b>	<b>Heliopolis, Cairo, Egypt</b>
<b>Marital state</b>	<b>married with 3 daughters</b>
<b>Interests</b>	<b>Reading and football (soccer)</b>
<b>Current position</b>	<b>Associate Professor of Biochemistry, Faculty of Pharmacy, The British University in Egypt (BUE)</b> <b>Director of Center of Drug Research and Development (CDRD), Faculty of Pharmacy, The British University in Egypt (BUE)</b>

## Personal Profile

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Currently, being a Ph.D. holder, Associate. Prof. of Biochemistry and a stem cell/diabetes researcher with a pharmacy background and a firm grasp of biochemistry and metabolism, I am looking forward to utilize and apply my knowledge and expertise in areas of pharmacy, biochemistry and molecular biology in teaching under and post graduate students, performing state-of-art research activities and participate in the growth of whatever academic institute I will be working on.

## Work Experience

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<b>Nov 2017 - Current</b>	<b><u>Associate Professor of Biochemistry, Pharmacology and Biochemistry</u> department, Faculty of Pharmacy, The British University in Egypt (BUE), Cairo, Egypt.</b>
<b>Nov 2019-Current</b>	<b><u>Director</u> of Drug Research and Development (CDRD), Faculty of Pharmacy, The British University in Egypt</b>
<b>June 2017-Nov 2017</b>	<b><u>Associate Prof. of Biochemistry</u>, Biochemistry department, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt</b>
<b>Nov 2011- June 2017</b>	<b><u>Biochemistry Lecturer</u>, Biochemistry department, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt</b>
<b>Fall 2011-Spring 2016</b>	<b><u>Part time Instructor</u>, Misr International University, Cairo, Egypt.</b>

Oct 2014-July 2015      **Fulbright Postdoctoral Fellow**, Department of Genetics, M.D.Anderson Cancer Center, Houston, Texas, USA

May 2008-November 2010    **Ph.D. student**, Department of Genetics, M.D.Anderson Cancer Center, Houston, Texas, USA

Dec 2001- April 2008      **Teaching assistant**, Biochemistry department, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt

## Education

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2007-2011      **Ph.D. of Pharmacy (Biochemistry)**  
*Joint Supervision between M.D. Anderson Cancer Center, Houston, Texas, USA and Faculty of Pharmacy, Ain Shams University, Cairo, Egypt*

2002-2006      **M.Sc. of Pharmacy (Biochemistry)**, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt

1996-2001      **B.Sc. of Pharmacy**, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt

## Teaching Experience

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2017- Current      **Associate Professor of Biochemistry, Pharmacology and Biochemistry** department, Faculty of Pharmacy, The British University in Egypt (BUE), Cairo, Egypt.

Teaching Basic Biochemistry, Clinical Biochemistry and Molecular Biology elective course for B.Sc. Pharmacy students

2011- 2017      **Biochemistry Lecturer**, Biochemistry department, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

Teaching Basic Biochemistry, Clinical Biochemistry and Molecular Biology courses for B.Sc. Pharmacy students

2015- Current      **Biochemistry Lecturer**, Biochemistry department, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

Teaching Molecular Biology and Tissue Chemistry and Genetics practical courses for M.Sc. and Ph.D. Pharmacy students, respectively.

Fall 2014-Current      **Part time Instructor**, Misr International University, Cairo, Egypt.

Teaching Principles of Nutrition course for schools of Mass communication and Business under graduate students.

Fall 2013      **Part time Instructor**, Misr International University, Cairo, Egypt.

Teaching Clinical Nutrition courses for senior B.Sc. Pharmacy students.

**Fall 2012-Spring 2013**            **Part time Instructor, Misr International University, Cairo, Egypt**

Teaching Biochemistry course for B.Sc. pharmacy students.

**Dec 2001- April 2008**            **Teaching assistant, Biochemistry department, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt**

Teaching practical sessions on urine analysis, blood analysis for Biochemistry and Clinical Biochemistry courses for B.Sc. pharmacy students.

## Scholarships/Fellowships

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**2007- 2011**                            **Governmental Scholarship** of Joint Supervision to study my **Ph.D. in M.D. Anderson Cancer Center, University of Texas, Houston, Texas, USA**

**Oct 2014- July 2015**            **Fulbright postdoctoral scholar fellowship** in **M.D. Anderson Cancer Center, University of Texas, Houston, Texas, USA.**

## Research projects and Funds

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**Dec 2013-Dec. 2015**                            **Treatment of Diabetes by generation of insulin producing cells from human umbilical cord stem cells**  
funded by Ain Shams University

**June 2013 – June 2016**                            **Oriented Synthesis and Biological Evaluation of Novel Organic Compounds as Treatment for Type II Diabetes Mellitus (NIDDM) Induced in Rats**  
funded by National Research Center, Giza, Egypt

**June 2016 - July 2017**                            **The Generation of Insulin Producing Cells from Wharton's Jelly Mesenchymal Stem Cells - The Impact of Genetic Manipulation of REST and MafA Transcription Factors**  
funded by Science and Technology Development Fund (STDF)

**December 2018 – May 2020**                            **Role of Fork-Head box proteinO1 (FOXO-1) in generation of Insulin Producing cells (IPCs) from Adipose tissue Mesenchymal stem cells (Ad-MSCs)**  
Young Investigator Research Grant (YIRG) funded by the British University in Egypt (BUE) [Principle Investigator]

Sep 2019 – June 2020

**Isolation and Characterization of Wharton's jelly Mesenchymal stem cells Derived Exosomes**  
Nanotechnology Research Center (NTRC) Facilities  
Grant funded by the NTRC – The British University in Egypt (BUE) [Principle Investigator]

Nov 2020 – Nov 2022

**Investigation of CRISPR-Cas9 mediated knock out of FOXO-1 in human mesenchymal stem cells as a potential novel source for diabetes cell therapy**  
Joint Academy of Scientific Research and Technology (ASRT) and Bibliotheca Alexandrina (BA) Research grant – Cycle-1 [Principle Investigator]

## Conferences and Meetings

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- April 2005      **Annual International Congress Of The Egyptian Society of Biochemistry and Molecular Biology**  
*(talk presentation)*
- March, 2009      **Genes and Development Program Spring Student Retreat, Houston, Texas, USA**
- March, 2010      **Genes and Development program Spring Student Retreat, Houston, Texas, USA**  
*(poster presentation)*
- April, 2012      **BioVision Alexandria, 2012 Conference in Bibliotheca Alexandrina, BA (Library of Alexandria)**  
*(poster presentation)*
- April, 2012      **23<sup>rd</sup> Annual Conference of the Egyptian Society of Laboratory Medicine-ESLM 2012** *(poster presentation)*
- April, 2013      **4<sup>th</sup> Annual Conference of The Clinical and Chemical Pathology Department-Faculty of Medicine-CairoUniversity “Is Regenerative medicine a hope or hype?”**
- April 2013      **1<sup>st</sup> Annual conference of Ain Shams University “The University and the Green Economy-Towards a new sustainability culture”** *(talk presentation)*  
**(selected for being the faculty member with highest impact factor publication)**
- April 2014      **20<sup>th</sup> International Meeting of International Society of Cellular Therapy (ISCT)-Paris-France**  
*(2 posters presentations)*
- May 2014      **EMBO/EMBL Symposium-Translating Diabetes Heidelberg-Germany**  
*(2 posters presentations)*

- October 2014**      **The 17<sup>th</sup> Scientific Congress of The Association of Pharmacy Colleges in The Arab World- Faculty of Pharmacy, Ain Shams University, Cairo, Egypt**  
*(Organizer and poster presentation)*
- April 2015**      **Joint Spring Retreat of Genes & Development and Epigenetics & Molecular Carcinogenesis programs, Navasota, Texas, USA** *(2 posters presentations)*
- November 2016**      **The 59<sup>th</sup> Scientific Congress of Egyptian Society of Clinical Chemistry (ESCC)- Laboratory Medicine Update** *(poster presentation)*
- February 2017**      **The 4<sup>th</sup> Future University in Egypt (FUE) International Conference of Pharmaceutical Sciences** *(talk presentation)*
- March 2018**      **The International conference of the National Committee of Biochemistry and Molecular Biology-held in The German University in Cairo (GUC)**
- January 2019**      **The Arab International Patient Counseling Competition (AIPCC) conference-held in The British University in Egypt (BUE), Cairo, Egypt**  
*(talk presentation)*
- March 2019**      **The Scientific Day of the National Committee of Biochemistry and Molecular Biology-held in Academy of Scientific Research and Technology (ASRT), Cairo, Egypt** *(talk presentation)*
- September 2019**      **International Conference of Recent Trends in Biochemistry and Molecular Biology: Towards Vision 2030 – held in The American university in Cairo (AUC), Cairo, Egypt** *(talk and poster presentations)*
- October 2019**      **The Second Arab African International Cancer Congress- BUE Clinical Pharmacy Workshop- held in Cairo, Egypt** *(talk presentation)*

## Professional Training

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- May 2010**      Unofficially attended **Critical Thinking in Science** course held by **Graduate School of Biomedical Sciences, University of Texas, Houston, Texas, USA**
- June 2013**      **"Entrepreneurial Development"** workshop held by **DAAD Kairo Academie**
- February 2015**      **Writing and Publishing Scientific Article** workshop held by **Department of Scientific Publication, University of Texas, M.D.Anderson Cancer Center, Houston, Texas, USA**
- June 2016**      **"Credit Hours System"** workshop held by **Training and Development Center (Tdc), Ain Shams University**
- September 2016**      **"ILOs and Curriculum Maps"** workshop held by **Quality assurance and Accreditation Center, Ain Shams University**

- May 2017      **"Data Management and Basic statistics"** workshop held by **Training and Development Center (Tdc), Ain Shams University**
- May 2017      **"Problem solving and Decision making"** workshop held by **Training and Development Center (Tdc), Ain Shams University**
- November 2017      **"Strategic Plan for H.E Insitutes"** worshop held be **National Authority for Quality Assurance and Accreditation of Education (NAQAAE) in BUE**
- November 2017      **"Self Evaluation for H.E Faculties and Insitutes"** worshop held be **National Authority for Quality Assurance and Accreditation of Education (NAQAAE) in BUE**
- March 2018      **"Protocols of External Evaluation Visit"** worshop held be **National Authority for Quality Assurance and Accreditation of Education (NAQAAE) in BUE**

## **Associations/Societies**

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### **Member of the following:**

- 1) International Society of Cell Therapy (ISCT): current membership
- 2) International Society of Stem Cell Research: current membership
- 2) Endocrine Society (ENDO): current membership
- 3) The Egyptian Society of Clinical Chemistry (ESCC): current membership

## **Reviewer of Scientific Journals**

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### **Member of review panel of the following journals:**

New England Journal of Medicine (IF: 72.406, NEJM)

Cellular Biochemistry (IF: 3.085 , Wiley Online Library)

Bioanalysis (IF: 2.673, Future Medicine)

BMJ Open Diabetes Research and Care (IF: 5.067, BMJ Journals)

BioMed Research International. (IF: 2.197, Hindawi)

Cell Biochemistry and Biophysics (IF: 1.455, Springer)

Cellular Physiology and Biochemistry (IF: 1.303)

### **Member of the Editorial Board of:**

## List of publications

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1) **REST regulates oncogenic properties of glioblastoma stem cells.** [Mohamed M. Kamal\\*](#), Pratheesh Sathyan\*, Sanjay K. Singh, Pascal O. Zinn, Anantha L. Marisetty, Shoudan Liang, Joy Gumin, Hala Osman El-Mesallamy, Dima Suki, Howard Colman, Gregory Fuller, Fredrick Lang, and Sadhan Majumder (2012) *Stem Cells*, 30:405-414

*\*co-first author*

2) **A comparison of Wharton's jelly versus cord blood as a source of mesenchymal stem cells for diabetes cell therapy.** Rasha F. El-Demerdash, Lamiaa N. Hammad, [Mohamed M. Kamal](#) and Hala O. El-Mesallamy (2015) *Regenerative Medicine*,10(7):841-55. *Epub 2015 Nov 6.*

3) **Mir-21–Sox2 Axis Delineates Glioblastoma Subtypes with Prognostic Impact.** Pratheesh Sathyan\*, Pascal O.Zinn\*, Anantha L.Marisetty\*, Bin Liu\*, [Mohamed Mostafa Kamal\\*](#), Sanjay K. Singh, PierreBady, \* Li Lu, Khalida M.Wani, Bethany L.Veo, Joy Gumin, Dina Hamada Kassem, Frederick Robinson, Connie Weng, Veerabhadran Baladandayuthapani, Dima Suki, Howard Colman, Krishna P. Bhat, Erik P.Sulman, Ken Aldape, Rivka R.Colen, Roel G.W.Verhaak, Zhimin Lu, Gregory N.Fuller, Suyun Huang, Frederick F.Lang, Raymond Sawaya, Monika Hegi, and Sadhan Majumder (2015)*The Journal of Neuroscience-11;35(45):15097-112.*

*\*co-first author*

4) **Resveratrol inhibits inflammatory signaling implicated in ionizing radiation-induced premature ovarian failure through antagonistic crosstalk between silencing information regulator 1 (SIRT1) and poly(ADP-ribose) polymerase 1 (PARP-1).** Said RS, El-Demerdash E, Nada AS, [Kamal MM.](#)(2015) *Biochemical Pharmacology* 1;103:140-50

5) **Association of expression levels of pluripotency/stem cell markers with the differentiation outcome of Wharton's jelly mesenchymal stem cells into insulin producing cells.** Kassem DH\*, [Kamal MM\\*](#), El-Kholy Ael-L, El-Mesallamy HO (2016) *Biochimie.* 127:187-95.

*\*co-first author*

6) **Exendin-4 enhances the differentiation of Wharton's jelly mesenchymal stem cells into insulin-producing cells through activation of various  $\beta$ -cell markers.** Kassem DH\*, [Kamal MM\\*](#), El-Kholy Ael-L, El-Mesallamy HO (2016) *Stem Cell Research and Therapy* 11;7(1):108

*\*co-first author*

7) **Association of serum Pancreatic derived factor (PANDER) with beta-cell dysfunction in type 2 diabetes mellitus** Miral M. Shehata, [Mohamed M. Kamal](#),

Mohamed H. El-Hefnawy and Hala O. EL-Mesallamy (2017) *Journal of Diabetes and its Complications*, 31(4):748-752

**8) Comparing Umbilical Cord Blood Stem cells and Wharton's Jelly Mesenchymal stem cells regarding their differentiation potential to Insulin Producing cells.** [MM Kamal](#), HO EL-Mesallamy, LN-Hammad and RF EL-Demerdash (2014) *Cytotherapy supplement*, 16 (45):S66

**9) Isolation of Wharton's Jelly mesenchymal stem cells and their differentiation into Insulin producing cells** DH Kassem, [MM Kamal](#), HO EL-Mesallamy and A. El-Kholy (2014) *Cytotherapy supplement*, 16 (45):S66

**10) Obestatin can potentially differentiate Wharton's jelly mesenchymal stem cells into insulin-producing cells**

RK El-Asfar, [MM Kamal](#), RS Abd EL-Razek, E EL-Demerdash and HO El-Mesallamy (2018) *Cell and Tissue Research*, 372 (1): 91–98

**11) Serum Vit-D and Its Upregulated Protein, Thioredoxin Interacting Protein, are Associated with  $\beta$ -Cell Dysfunction in Type 1 and Type 2 Diabetic Patients**

Doaa F. Omar, [Mohamed M. Kamal](#), Mohamed H. El-Hefnawy, Hala O. EL-Mesallamy (2018) *Canadian Journal of Diabetes*, 42 (6): 588-594

**12) REST overexpression in mice causes deficits in spontaneous locomotion**

Li Lu, Anantha Marisetty, Bin Liu, [Mohamed Mostafa Kamal](#), Joy Gumin, Bethany Veo, YouQing Cai, Dina Hamada Kassem, Connie Weng, Mark E. Maynard, Kimberly N. Hood, Gregory N. Fuller, Zhizhong Z. Pan, Matthew D. Cykowski, Pramod K. Dash & Sadhan Majumder (2018) *Scientific Reports*, Volume 8

**13) REST-DRD2 mechanism impacts glioblastoma stem cell-mediated tumorigenesis.**

Anantha L Marisetty, Li Lu, Bethany L Veo, Bin Liu, Cristian Coarfa, [Mohamed Mostafa Kamal](#), Dina Hamada Kassem, Khushboo Irshad, Yungang Lu, Joy Gumin, Verlene Henry, Adriana Paulucci-Holthauzen, Ganesh Rao, Veerabhadran Baladandayuthapani, Frederick F Lang, Gregory N Fuller, Sadhan Majumder *Neuro-Oncology*, June 2019, 21(6), pp. 775-785

**14) Coenzyme Q10 mitigates ionizing radiation-induced testicular damage in rats through inhibition of oxidative stress and mitochondria-mediated apoptotic cell death** Said, R.S., Mohamed, H.A., [Kamal, M.M.](#) *Toxicol Appl Pharmacol.* 2019 Nov 15;383:114780.

**15) Wharton's Jelly MSCs: Potential Weapon to Sharpen for Our Battle against DM.**

Kassem, D.H and [Kamal, M.M](#) *Trends in Endocrinology and Metabolism* Volume 31, Issue 4, April 2020, Pages 271-273.



**16) Therapeutic Potential of Wharton’s Jelly Mesenchymal Stem Cells for Diabetes: Achievements and Challenges**

[Kamal, M.M.](#) and Kassem, D.H. *Frontiers in Cell and Developmental Biology*, Volume 8, 29 January 2020, Article number 16

**17) Therapeutic efficacy of umbilical cord-derived stem cells for diabetes mellitus: a meta-analysis study**

Dina H. Kassem & [Mohamed M. Kamal](#) *Stem Cell Research & Therapy* volume 11, Article number: 484 (2020), November 2020

**18) Mesenchymal Stem Cells and Their Extracellular Vesicles: A Potential Game Changer for the COVID-19 Crisis**

Dina H. Kassem and [Mohamed M. Kamal](#), *Front. Cell Dev. Biol.*, 30 September 2020

**19) Effects of Chronic Caffeine Administration on Behavioral and Molecular Adaptations to Sensory Contact Model Induced Stress in Adolescent Male Mice**

Michael Kamal Ibrahim, [Mohamed Kamal](#), Rajiv Tikamdas, Roua Aref Nouh, Jiang Tian & Moustafa Sayed, *Behavior Genetics*, volume 50, pages374–383, June 2020

**20) A Novel SERPINB1 Single-Nucleotide Polymorphism Associated With Glycemic Control and  $\beta$ -Cell Function in Egyptian Type 2 Diabetic Patients**

Dina H. Kassem, Aya Adel, Ghada H. Sayed and [Mohamed M. Kamal](#) *Front. Endocrinol.*, July 2020 (<https://doi.org/10.3389/fendo.2020.00450>)

## Referees

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