

## TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE \_4928\_

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Scientist- in - o	charge: Pro	of. Pao	lo Gandellin	i 				

# [Mona Kamal Said Abdelaziz Saadeldin]

# **CURRICULUM VITAE**

## PERSONAL INFORMATION

Surname	Saadeldin
Name	Mona Kamal Said Abdelaziz
Date of birth	[10, January, 1985]

## PRESENT OCCUPATION

Appointment	Structure
Postdoctoral fellow	European Institute of Oncology, Department of Experimental Oncology

# **EDUCATION AND TRAINING**

Degree	Course of studies	University	year of achievement of the degree
Postdoctoral fellow	Experimental Oncology	European Institute of Oncology (IEO), Milan, Italy	11/2018 - 4/2021
PhD	Pharmaceutical Sciences (Biochemistry and Molecular Biology	Faculty of Pharmacy, Al-Azhar University, Cairo, Egypt	08/2017
Master	Biotechnology Program	School of Science and Engineering, American University in Cairo, Cairo, Egypt	06/2013
Master	Pharmaceutical Sciences (Biochemistry and Molecular Biology	Faculty of Pharmacy, Al-Azhar University, Cairo, Egypt	06/2013
Diploma	Pharmaceutical Sciences (Clinical Pharmacy)	Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt	2008



Bachelor Sciences	of	Pharmaceutical	Pharmaceutical Sciences	Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt	05/2006
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# REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City
2006		Egyptian Pharmacist Syndicate	Cairo, Egypt

# FOREIGN LANGUAGES

Languages	level of knowledge
English	Fluent
Arabic	Mother tongue
Italian	Basic
French	Basic

# AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
January 2021	Conference Grant from the BGICC 2021 the 13th breast- Gynecological & Immuno-oncology International Cancer Conference, Cairo, Egypt.
November 2018- April 2021	Postdoctoral fellowship on the research project "Piattaforma per l'identifiazione di target di relevanza farmacologica per il trattamento di Patologie del sistema nervosa e oncologiche ad elevato bisogno di cure (NeOn)" under the supervision of Prof. Saverio Minucci, Department of Experimental Oncology, European Institute of Oncology, Milan, Italy
January 2020	Conference Grant from the BGICC 2020 the 12th breast- Gynecological&Immuno-oncology International Cancer Conference, Cairo, Egypt.
November2018	Travel Grant from IUBMB to participate with a poster presentation in ENABLE Conference - The 2 <sup>nd</sup> European PhD and Postdoc Symposium, hosted by University of Copenhagen, Faculty of Health and Medical Sciences, Copenhagen, Denmark.
May 2018	Conference Grant from Faculty of Medicine, Alexandria University to participate with a poster presentation in ESEO Conference- The 21stAnnual International Congress of the Egyptian Society of Endocrinology and Obesity, Alexandria, Egypt.
November 2017	Travel Grant from the Barcelona Institute of Science and Technology (IRB Barcelona) to participate with a poster presentation in ENABLE Conference - The 1stEuropean PhD and Postdoc Symposium, Barcelona, Spain.
2015-2017	PhD fellowship from the Ministry of Health, Cairo, Egypt
2010- 2012	Master fellowship from the Ministry of Health, Cairo, Egypt.
fall 2009 - spring 2011	Master fellowship from the American University in Cairo
2011- 2013	Master research grant from the American University in Cairo
Fall 2011	Conference Grant from the American University in Cairo.



July 2011	Travel Grant from "New England Biolabs to participate in "Molecular Biology Sumn Workshop" in Smith College, Northampton, Massachusetts, USA.	
2001	Top Ranked High School Student Award, Youssef El Sebaie Experimental School, Cairo, Egypt.	
2001	Tenth Place Award among high school students in the Republic of Egypt	

#### TRAINING OR RESEARCH ACTIVITY

I am currently a postdoctoral pharmacologist at the European Institute of Oncology in Milan, Italy where I am working on 3 projects, 2 of them in the field of immunotherapies in a team under the New Drugs Program, where we are aiming at developing new anti-tumor strategies against melanomas, breast cancer and leukemia. The third is in the area of tumor cell metabolism in the context of immunity. In my different projects, the aim is trying to uncover the molecular mechanisms of resistance of cancer cells to targeted anticancer therapies and/or the role that immunity plays in these scenarios. Emphasizing the importance of deciphering the immunotherapy as an anticancer strategy to ultimately prolong the quality of life and overall survival of treated cancer patients, the first 2 projects also aims at the identification of potential antigens only expressed on cancer cells and not normal cells using different genetic and biochemical technologies to devise therapeutic antibodies to attack the cancer cells exclusively without adversely affecting the normal cells and testing them in in vivo mouse models. And now we are working on finalizing the manuscripts stemming from these projects. I have strong technical experience in in vivo studies using different tumor models including health monitoring, tumor transplantation, monitoring of tumor growth/metastasis (using calipers or IVIS Bioluminescence Imaging system) as well as dosing via IP, IV, SC, PO routes, and blood/tissue collection, using different medications for treatment/vaccination. In addition, I have a solid experience in cell biology and molecular biology techniques including Western Blotting, ELISA, Immunoprecipitation, flow cytometry, CRISPER/Cas9 screenings, cell-viability assays, proteins production, transfection, transduction, PCR, RT-PCR and mass spectrometry. During COVID-19 lockdown period I have completed 3 critical tracks namely: "Analyzing Next-Generation Sequencing Data in R", "Data Scientist with R track", and "Statistics fundamentals with R Track". Also, in November 2020, I completed the "Fundamentals of Immunology: Innate Immunity and B-Cell Function" online course, 7 weeks of study, 8 hours/week, RICE University, Texas, USA. Additionally, I have collaborated with medicinal chemists on projects aimed at characterizing and developing novel molecules targeting emerging cancer mutations to surmount the resistance to standard chemotherapy.

Basically, I am a pharmacologist who gained a solid background and expertise in conducting research in the fields of oncology and diabetes mellitus. After graduation from Pharmacy School, Ain Shams University, I obtained a Diploma in Clinical pharmacy from the same university in collaboration with Ain Shams University Specialized Hospital and El-Demerdash Hospital. Then, I pursued my two Masters, my Ph.D. and postdoc projects carried out at the American University in Cairo (AUC) and Al-Azhar University in Egypt. The aims of the vast majority of the projects I am involved in were to identify either a novel potential diagnostic/prognostic tool for the early discovery of cancer and diabetes mellitus or evolve novel therapeutic strategies in an attempt to prevent the occurrence of complications and thus decrease the patients' morbidity and mortality. My master and Ph.D. work were concluded with successfully publishing my results in Frontiers in Genetics in 2015 and PLoS One in 2018, respectively.

As an academic member, I participated in the teaching process at the American University in Cairo with many distinguished professors from the Biology department in several introductory and advanced biology courses. I helped students from different nationalities, backgrounds and cultures to benefit as much as possible from the courses both theoretically and experimentally. At MSA University and before leaving to Italy, beside teaching, I have supervised students in their graduation project who worked on type 2 diabetes aiming to identify and examine the effect of molecules of herbal origins in in vivo STZ rat models to combat complications arising from diabetes mellitus and the results stemming out of their projects are published in Journal of Food Biochemistry (2019) and International Journal of Functional Nutrition (2020). Based on these previous experiences, I am aware of the importance of constructing a realistic research plan, timeline and budget, assembling competent and motivated project members while reinforcing constructive communication



# PROJECT ACTIVITY

Year	Project
2018- Present	Immunotherapy, Metabolism, and Epigenetics
2018-2019	Management of complications of diabetes mellitus in animal models
2010-2017	Novel prognostic and diagnostic markers in type 2 diabetes mellitus
2009- 2013	Novel prognostic and diagnostic molecular markers for urinary bladder and colon cancers

## **CONGRESSES AND SEMINARS**

	DISEMINANS	
Date	Title	Place
November 2, 2020	Fundamentals of Immunology: Innate Immunity and B-Cell Function.	Online course, 7 weeks of study, 5-8 hours/week, RICE University, Texas, USA.
September, 2020	The impact of the COVID-19 crisis on women in science: Challenges and solutions	Virtual EMBL Conference
2020	Data scientist with R track	Online, comprising 22 courses from DataCamp
2020	Analyzing genomic data in R Track	Online, comprising 5 courses from DataCamp
2020	Statistics Fundamentals with R	Online, comprising 5 courses from DataCamp
December2019	Python for Genomic Data Science course	Online course by Johns Hopkins University
October 2019	Introduction to Genomic Technologies	Online course by Johns Hopkins University
December 2019	Introductory Course to Laboratory Animal Science: Mouse	Cogentech, IFOM campus, Milan, Italy
March 2019	5th Workshop on Dendritic Cell Biology: Anti-tumoral immunotherapy, from biology to the clinic.	Champalimaud Foundation, Lisbon, Portugal
February, 2019	Milan Meets Immunology 2019.	Humanitas University, Milan, Italy
December 2018	Fluorescence-activated cell sorting (FACS) course	FACS facility at European Institute of Oncology, Milan, Italy
July 2017	Critical Thinking and creative problem solving workshop	National Training Institute, Cairo, Egypt
July 2017	Oncology Workshop on "Management of EGFR mutant mNSCLC from bench to bedside" held by Critical Appraisal Initiative for Research in Oncology	(C.A.I.R.O) Journal club, Cairo, Egypt
July 2011	Molecular Biology Workshop	New England Biolabs in Massachusetts, USA
April 2010	Bio Vision conference	Bibliotheca Alexandrina, Alexandria, Egypt



#### **PUBLICATIONS**

#### Articles in reviews

Dendritic cell vaccine immunotherapy; the beginning of the end of cancer and COVID-19. A hypothesis.

<u>Saadeldin MK\*</u>, Abdel-Aziz AK, Abdellatif A. Med Hypotheses. 2020 Nov 9:110365. doi: 10.1016/j.mehy.2020.110365

Tuning mTORC1 activity dictates the response of acute myeloid leukemia to LSD1 inhibition. Abdel-Aziz AK, Pallavicini I, Ceccacci E, Meroni G, <u>Saadeldin MK</u>, Varasi M, Minucci S. Haematologica. 2019 Sep 19. pii: haematol.2019.224501. doi: 10.3324/haematol.2019.224501

Preclinical models of breast cancer: Two-way shuttles for immune checkpoint inhibitors from and to patient bedside.

Abdel-Aziz AK, <u>Saadeldin MK</u>, D'Amico P, Orecchioni S, Bertolini F, Curigliano G, Minucci S. Eur J Cancer. 2019 Nov; 122:22-41. doi: 10.1016/j.ejca.2019.08.013

New genetic variants of LATS1 detected in urinary bladder and colon cancer.

<u>Saadeldin MK\*</u>, Shawer H, Mostafa A, Kassem NM, Amleh A, Siam R.Front Genet. 2015 Jan 13;5:425. doi: 10.3389/fgene.2014.00425.

Serum sclerostin and irisin as predictive markers for atherosclerosis in Egyptian type II diabetic female patients: A case control study.

<u>Saadeldin MK\*</u>, Elshaer SS, Emara IA, Maged M, Abdel-Aziz AK.PLoS One. 2018 Nov 7;13(11):e0206761. doi: 10.1371/journal.pone.0206761.

Effects of Turmeric (Curcuma longa) Extract in streptozocin-induced diabetic model.

Essa R, El Sadek AM, Baset ME, Rawash MA, Sami DG, Badawy MT, Mansour ME, Attia H, <u>Saadeldin MK\*</u>, Abdellatif A.J Food Biochem. 2019 Sep;43(9):e12988. doi: 10.1111/jfbc.12988.

Anti-diabetic effects of fenugreek (Trigonellafoenum-graecum): A comparison between oral and intraperitoneal administration-an animal study.

ME Baset, TI Ali, H Elshamy, AM El Sadek, DG Sami, MT Badawy, Abou-Zekry SS, Hana HH, <u>Saadeldin MK\*</u>, Abdellatif A. International Journal of Functional Nutrition. 2020 May 11: 1 (1), 1-1. doi: 10.3892/ijfn.2020.2

Thermal Stability of a Mercuric Reductase from the Red Sea Atlantis II Hot Brine Environment as Analyzed by Site-Directed Mutagenesis.

Maged M, El Hosseiny A, <u>Saadeldin MK</u>, Aziz RK, Ramadan E.Appl Environ Microbiol. 2019 Jan 23;85(3). pii: e02387-18. doi: 10.1128/AEM.02387-18.

### Congress proceedings

"An osteocyte marker as a potential diagnostic/prognostic tool for atherosclerosis in type 2 diabetic patients". ENABLE Conference - The 2nd European PhD and Postdoc Symposium, Copenhagen, Denmark (November 7th - 9th, 2018)

"Soluble P-selectin serum level as a potential novel diagnostic marker for monitoring the diabetic nephropathy, a case control study". ESEO Conference- The 21st Annual International Congress of the Egyptian Society of Endocrinology and Obesity, Alexandria, Egypt (May 9th-11th, 2018).

"A handicapped gene can be used in the diagnosis and/or prognosis of urinary bladder and colon cancers". ENABLE Conference - The 1st European PhD and Postdoc Symposium, Barcelona, Spain (November 15th -17th, 2017)



# OTHER INFORMATION

OTHER INFORMATION
Reviewer Role in Journals
Journal of Food Biochemistry
STAR Protocols
Medical Science Monitor
Frontiers Pharmacology
Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.
The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.
Place and date: _Milan, Italy12, _ March 2021
SIGNATURE
Dr. Mona Suadeldin
Dr Mona Kamal Saadeldin