



FACULTY FULL NAME: Hussein Sabit

POSITION: Professor of Cancer Epigenetics

Personal Data

Nationality | Egyptian

Date of Birth | July 30 1974

Department | Genetics

Official UoD Email | hhsabit@iau.edu.sa

Language Proficiency

Language	Read	Write	Speak
Arabic	Native	Native	Native
English	Very good	Very good	Very good
French	Fair	Fair	Fair

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2007	PhD	Ain Shams University	Cairo, Egypt
2002	M.Sc	Ain Shams University	Cairo, Egypt
1997	B.Sc	Ain Shams University	Cairo, Egypt

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Molecular Genetic Studies on Bacterial Biodegradation of some Chlorinated Compounds
Master	Biodegradation of some organic Compounds using Genetically-modified Organisms

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Professor of Cancer Epigenetics	Institute of Research and Medical Consultations (IRMC) Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia	2018



Professor of Cancer Epigenetics	College of Biotechnology, Misr University for Science and Technology, Giza, Egypt.	2018
Associate professor of Genetics	College of Biotechnology, Misr University for Science and Technology, Giza, Egypt.	2012-2015
Assistant Professor of Genetics	College of Biotechnology, Misr University for Science and Technology, Giza, Egypt.	2007-2015
TA	College of Dentistry, Misr University for Science and Technology, Giza, Egypt.	2003-20017
Research assistant	Ain Shams Center for Genetic Engineering and Biotechnology (ACGEB), Cairo, Egypt.	1997-2003

Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date
Vice Dean for Community Services	College of Biotechnology, Misr University for Science and Technology, Giza, Egypt.	2014-2018
Member, Accreditation Assurance Committee	College of Biotechnology, MUST, Egypt	2013-2018
Coordinator, Social Affairs Committee	College of Biotechnology, MUST, Egypt	2013-2018
Coordinator, Culture and Media Committee	College of Biotechnology, MUST, Egypt	2012-2018
Member, Conference Organization Committee,	College of Biotechnology, MUST, Egypt	2011-2018
Member, Bioethical Committee	MUST. Egypt	2015-2018
Member, Postgrad Affairs Committee	MUST, Egypt	2012-2018
Member, lab affairs committee	College of Biotechnology, MUST, Egypt	2016-2018

Scientific Achievements

Published Refereed Scientific Researches
(In Chronological Order Beginning with the Most Recent)



#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	<u>Hussein Sabit</u> , Shima E. Abdel-Ghany, Osama A. M. Said, Mohamed A. Mostafa and Mokhtar El-Zawahry. Asian	Metformin Reshapes the Methylation Profile in Breast and Colorectal Cancer Cells.	Pac J Cancer Prev. 19(10), 2018.
2	Emre Cevik, Alaaddin Cerit, Huseyin Tombuloglu, <u>Hussein Sabit</u> , and Huseyin Bekir Yildiz.	Electrochemical Glucose Biosensors: Whole Cell Microbial and Enzymatic Determination Based on 10-(4HDithieno[3,2-b:20,30 -d]Pyrrol-4-yl)Decan-1-Amine Interfaced Glassy Carbon Electrodes.	Analytical Letters. 2018.1521828.
3	Yasmin Y. A. Darwish, Mohamed Abd-Elhakeem, Ahmed Ibrahim Abd El-Maksod, <u>Hussein Sabit</u> and Mokhtar El-Zawahri.	Antitumor Activity of Rosmarinic Acid Encapsulated in Chitosan Nanoparticles.	Academic Journal of Cancer Research 11 (1): 01-08, 2018.
4	Maryam Kotb, Maged Bahgat, Shabaan Hashem, <u>Hussein Sabit</u> and Marwan El-Bagoury.	Using SDS for Plasmid Curing to Study the Antibiotic Resistance of Bacteria Isolated from Acute Suppurative Otitis Media Subjects in Egypt.	Rasayan J. Chem. Vol. 11, No. 1; 41-45, 2018.
5	Hend A. E. Ibrahim, <u>Hussein Sabit</u> , Asma M. Abushady, H. A. El-metwally, A. Z. Abdelsalam, and Alia El-Seoudy.	Variation in Gene Expression of Leptin and Insulin-Like Growth Factor (IGF) in Response to Seasonal Variations in Camel.	Egypt. J. Genet. Cytol., 46: 61-73, 2017.
6	Maryam Kotb, Maged Bahgat, Shabaan Hashem, <u>Hussein Sabit</u> , and Marwan ElBagoury.	Isolation and Characterization of Bacteria Causing Acute Suppurative Otitis Media in Egypt.	Journal of Pure and Applied Microbiology. Vol. 11(4), p. 1833-1837, 2017.
7	<u>Hussein Sabit</u> , Mostafa Fathy, Shima E. Abdel-	Vorinostat Combined with DNA Methyltransferase Inhibitors Epigenetically	International Journal of Science and Research, Volume 6 Issue 7, 2017.



	Ghany, Osama A. M. Said, Mokhtar M. El-Zawahry.	Controls the Proliferation of Lung Cancer Cells A549.	
8	<u>Hussein Sabit</u> , Aya T. El-Garhy, and Mokhtar M. El-Zawahry,	The Role of Sodium Phenylbutyrate in Modifying the Methylation of Breast Cancer Cells.	International Journal of Scientific & Engineering Research, Volume 7, Issue 10, 2016.
	<u>Hussein Sabit</u> , Mariam B. Samy, Osama A. M. Said, and Mokhtar M. El-Zawahri.	Procaine Induces Epigenetic Changes in HCT116 Colon Cancer Cells.	Genetics Research International. Volume 2016, Article ID 8348450, 2016.
9	Sara Sobhy, Abdel-Wahab El-Ghareeb, Sherif Abdel-Aziz, and <u>Hussein Sabit</u> .	Epigenetic Regulation of <i>P21</i> , <i>RASSF1</i> , <i>PTEN</i> , and <i>P53</i> in Human Breast Cancer Cells using Different Chemotherapeutic Drugs.	Academic Journal of Cancer Research 9 (2): 26-34, 2016.
10	Mohamed M. M. Ibrahim, <u>Hussein Sabit</u> , Mohammad A. El-Ghor, Osama A. M. Said, Maye M. A. Khalifa, Nouran A. Yousef, Kholod E. Abo-Elkher, Moez M. Elsaadani, Omar S. Abd El-Ghaffar, Abeer E. Mohamed, Doaa A. Yousef, Marihan A. Ahmed, Silvia G. Kamel, Mounir M. Elsafty, Sahar E. Aoda, Najla Bint Saud Al-Saud, Shima E. Ibrahim, Marwa A. AbdElrahman, Nagwa E. Khaleel and Mokhtar M. El-Zawahri.	Molecular Genetic Diagnosis and Characterization of Egyptian H5N1 Viral Antigenic Genes.	<i>Wulfenia</i> . Vol. 23, No. 1; 2016.
11	<u>Hussein Sabit</u> , Arwa S. Abdel-Sattar, Shima E. Abdel-Ghany, Asmaa M. Abushady, and Osama A. M. Said.	Cyclophosphamide with Adjuvant Chemotherapeutic Drugs Induces Epigenetic Changes in Hepatocellular Carcinoma Cells.	Cancer Biology. 5(4), 2015.



12	Basem Mazaya, Mohamed A Hamzawy, Mahmoud AF Khalil, Wael M Tawkol, and <u>Hussein Sabit</u> .	Immunomodulatory and antimicrobial efficacy of Lactobacilli against enteropathogenic infection of Salmonella typhi: <i>In vitro</i> and <i>in vivo</i> study.	International Journal of Immunopathology and Pharmacology, 1-10, 2015.
13	Layaly G. Mohamed, <u>Hussein Sabit</u> , Salwa Sabet, Reda El-Sayed Salem and Abdel-Wahab El-Ghareeb.	Targeting Apollon <i>via</i> siRNA Induces Apoptosis in Different Human Malignancies.	Academic Journal of Cancer Research 7 (4): 233-238, 2014.
14	Maryam W. Aziz, <u>Hussein Sabit</u> , and Wael Tawakkol.	Biodegradation of Malathion by Pseudomonas Spp. and Bacillus Spp. Isolated From polluted Sites in Egypt.	American-Eurasian J. Agric. & Environ. Sci., 14 (9): 855-862, 2014.
15	<u>Hussein Sabit</u> , Hala B. Al-Sharkawy, Mariam Al-Zaidy, Mohamed A. Abdel-Baseer, Nabil S. Awad, Walid N. Al-Mazny, Najla Bint Saud Al-Saud, Moez M. Elsaadani, Mohamed M.M. Ibrahim, and Osama A.M. Said.	Small Interference RNA-Mediated Down Regulation of Survivin Expression in Breast and Hepatocellular Carcinoma Cell Lines Cell Lines.	World Journal of Medical Sciences 10 (4): 421-426, 2014.
16	<u>Hussein Sabit</u> , Mohamed M.M. Ibrahim and Nabil S. Awad.	SiRNA-mediated Down-regulation of Livin Expression in Breast Cancer Cells.	Academic Journal of Cancer Research 6 (2): 69-73, 2013.
17	Aly Farouk Shamseldin, Shaaban Hashem, Wael Tawakkol, <u>Hussein Sabit</u> , and Ingy Badawy.	Pharmacodynamic Activity of Probiotics on IgG and IgM in Immunodeficient Mice.	Arab Journal of Biotechnology, Vol. 15 (2), 2012.
18	AA Hassan, RM Sayed, EE Ibrahim, <u>Hussein Sabit</u> , SA Ibrahim.	Construction and Genetic Evaluation of Stable Bacterial Biocontrol Agent via Protoplast Fusion.	Environmental and Molecular Mutagenesis. 52, S78-S78.



19	<u>Hussein Sabit</u> , Ali Farouk, Osama Said, Maha Yehia, and Aliaa Bishr.	Molecular Characterization of Bifidobacteria and Lactobacillus and Their Role in Modulating Immune System and Alleviating Ulcerative Colitis in Mice.	Global Journal of Molecular Sciences 6 (1): 09-14, 2011.
20	Nabil S. Awad, <u>Hussein Sabit</u> , Reda Bayoumi, and Salah M. Abo-Aba.	Isolation, Characterization and Fingerprinting of Some Chlorpyrifos-Degrading Bacterial Strains Isolated from Egyptian Pesticides-Polluted Soils.	African Journal of Microbiology Research Vol. 5(18), pp. 2855-2862, 16 September 2011.
21	<u>Hussein Sabit</u> , Osama A.M. Said, Ali F. Shamseldin, and Kholoud Elsayed.	Molecular Identification of <i>Acinetobacter</i> Isolated From Egyptian Dumpsite as Potential Bacteria to Degrade Malathion.	International Journal of Academic Research Vol. 3. No. 4. July 2011.
22	Sahar Mosallam and <u>Hussein Sabit</u> . Journal of	Defensive Effect of Garlic as revealed by Molecular, Biochemical and Ultra Structure Print after Toluene Stress on Mice.	American Science; 7(7). 2011.
23	Mohamed Mostafa, Naser El-Shimy, Zainab El-Bakry, and <u>Hussein Sabit</u> .	Impact of Ultraviolet Radiation on the Genetic Background of Egyptian Freshwater Leech; <i>Barbronia assiuti</i> .	World Applied Sciences Journal 12 (11): 1974-1980, 2011.
24	Mohamed M.M. Ibrahim and <u>Hussein Sabit</u> .	The Use of Real Time PCR Approach for Detecting Human Boca Virus (HBoV).	Arab Journal of Biotechnology, Vol. 13 (2), 2010.
25	Shaaban Hashem, <u>Hussein Sabit</u> , Magdy Amin, Wael Tawakkol, and Aly Farouk Shamseldin.	Molecular Characterization of Egyptian Isolates of Lactobacillus and Bifidobacterium.	Journal of American Science; 6(11) 2010.



#	Name of Investigator(s)	Research Title	Journal	Acceptance Date
1	Hussein Sabit et al.	Expression Profile of Cancer-related miRnome in HeLa Cervix Carcinoma Cells.	--	--
2	<u>Hussein Sabit</u> , Emre Cevik, and Huseyin Oglu.	New Insights in CRISPR/Cas9-based Therapy.	--	--
3	Amany I. Alqosaibi, Shima E. Abdel-Ghany, and <u>Hussein Sabit</u>	miRNA Profiling of Colorectal Cancer Cells Treated with Temozolomide.	--	--

Current Researches

#	Research Title	Name of Investigator(s)
1	CRISPR/Cas9-based Editing of CDK4, p107, and TGFβ1 Genes in Human Cells. Breast and Lung Cancer	<u>Hussein Sabit</u> , Shima Nazir, Shima E. Abdel-Ghany, Osama. A. M. Said, Ashraf El-Zayyat, and Mokhtar El-Zawahri.
2	Poly(ADP-ribose) Polymerase Promoter Hypermethylation Predispose Females to Breast Cancer.	<u>Hussein Sabit</u> , Shima Nazir, Shima E. Abdel-Ghany, Osama. A. M. Said, Ashraf El-Zayyat, and Mokhtar El-Zawahri.

Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	Advances in Breast Cancer Research: Towards Precision Therapy, King	Faisal Specialist Hospital & Research Centre, Riyadh, <u>KSA</u> , 7-8 Nov. 2018.	Poster presentation



2	The first Annual Conference on Molecular Biology and Biotechnology.	Ain Shams University, Cairo, <u>Egypt</u> , 14-15 Oct. 2017.	Speaker
3	The second Danube Epigenetics Conference,	Budapest, <u>Hungary</u> , 4-8 Oct. 2016.	Poster presentation
4	The second Middle East Molecular Biology Society Conference,	Istanbul, <u>Turkey</u> , 17-20 Sep. 2015.	Speaker
5	The sixth MELODI conference,	Barcelona, <u>Spain</u> , 7-9 Oct. 2014.	Poster presentation
6	The seventh International Conference on Environmental Development in the Arab Countries.	Assuit University, <u>Egypt</u> . 23-25 March 2014	Attendee



7	EMBO series: Chromatin and Epigenetics,	Heidelberg, <u>Germany</u> , 8-12 May 2013.	Poster presentation
8	The six th International Molecular Biology and Genetics Congress.	Istanbul, <u>Turkey</u> , August 2012.	Speaker
9	The 42 nd Annual Meeting of the EMS.	Montreal, <u>Canada</u> , 15-19 Oct. 2011.	Poster presentation
10	The third international genetic engineering conference,	Sharm El-Shiekh city, South Sinai, <u>Egypt</u> , 5-8 Oct. 2011.	Speaker
11	The first international conference of innovation in Biotechnology,	Cairo University, <u>Egypt</u> , 2010.	Speaker
12	The second Euro Mediterranean conferences of	NRC, <u>Egypt</u> , 2009.	Attendee



	plant biotechnology,		
13	Biovision, 2008	Alexandria, <u>Egypt</u> , 2008.	Attendee
14	Pan African Environmental Mutagen Society (PAEMS) Fourth International Meeting.	Cape Town, <u>South Africa</u> , 2008.	Poster presentation
15	Ain Shams University First Conference of Biotechnology,	<u>Egypt</u> , 2006.	Organizer
16	Prospective of Biotechnology in the Arab Countries	<u>Egypt</u> , 2006.	Organizer

Membership of Scientific and Professional Societies and Organizations:

1. Member of the International Environmental Mutagenesis Society (EMS), Canada.
2. Member of Egyptian Genetic Society, Egypt.
3. Member of Pan African Environmental Mutagen Society, South Africa.
4. Member of Egyptian Environmental Mutagen Society, Egypt.
5. Member of the Arab society of Biotechnology, Jourdan.

Teaching Activities



Undergraduate

#	Course/Rotation Title	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Principles of Genetics	15
2	Presentation skills	60
3	Commercial Biotechnology	60
4	Microbial Genetics	12
5	Cytogenetics	72
6	Biosafety	12
7	Bioethics	60
8	Comparative Biology	12
9	General Biology II	12
10	General Biology I	12
11	Introduction to Biotechnology	60
12	Cell and molecular biology	12
13	Animal Molecular micro-techniques	60

Postgraduate

#	Course/Rotation Title	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Epigenetics	36
2	Scientific writing	36
3	Environmental mutagenesis	12
4	Cell culture techniques	12



5	Advanced presentation skills	36
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Guest/Invited Lectures for Undergraduate Students

#	Activity/Course Title and Code	College and University or Program	Date
1	Cancer and carcinogenesis	Faculty of Science, Mansoura University, Damietta Branch	12 Apr. 2010
2	Stem cell research ethics.	Faculty of Science, Cairo University	23 April 2011
3	Cell cycle and carcinogenesis	Institute of Animal Production, ARC	27 April 2012
4	Apoptosis: the secret of life	Faculty of Pharmacy, Cairo University	9 Nov. 2012
5	The role of Biotechnology in Pharmaceutical Industry	Faculty of Pharmacy, Cairo University	16 Nov. 2013
6	Student assessment strategies	College of Biotechnology MUST	12 Aug. 2014
7	Epigenetics: is our diet important?	Institute of Animal Production, ARC	17 Sep. 2015
8	Finding a research point	Faculty of Medicine, Al-Azhar University	9 Oct. 2015
9	Epigenetics and genomic imprinting	Faculty of Agriculture, Ain Shams University	6 April 2015
10	Biobusiness: how to make used of Science?	Faculty of Pharmacy, Cairo University	27 April 2015
11	Personalized Medicine	Faculty of Pharmacy, Cairo University	10 Dec. 2015



12	Epigenetics era	Egyptian Atomic Energy Authority	29 Dec. 2015
13	CRISPR technology	National Research Center	17 March 2016
14	Scientific writing and presentation skills	Faculty of Pharmacy MUST	13 and 20 March 2016
15	Genome editing technology	Egyptian Atomic Energy Authority	29 March 2016
16	Human Evolution: an endless debate	College of Biotechnology, MUST	30 March 2016
17	miRNAs: A wide array of potentialities	Arab contractor hospital	21 April 2016
18	Online Webinar on CRISPR/Cas9	MEMBS Educational Program	21 May 2016
19	Epigenetics: deciphering the hidden code	MUST Knowledge Center, Misr University for Science and Technology	12 Dec. 2016
20	CRISPR-mediated disease curing	College of Medicine, Cairo University	2 Feb. 2017
21	Epigenetics: The Unknown is being known	The 2 nd Arab Society for Stem Cell Conference, NRC, Cairo, Egypt	7-9 Feb. 2017
22	Radiation and Epigenetics: concepts and applications	Egyptian Atomic Energy Authority	13 Feb. 2017
23	Genome editing tools	Egyptian Atomic Energy Authority	2 Mar. 2017
24	Biotechnology and the Future of the World	Al-Sawy Culture Wheel, Cairo	9 March 2017



25	Forensic Epigenetics: from theory to application	College of Medicine, Assuit University	8 Mar. 2017
26	Head Transplantation: the genetic implications and beyond	College of Medicine, Misr University for Science and Technology	10 Oct. 2017
27	Dietary Epigenetics	National Center for Clinical and Environmental Toxicology, Cairo University	28 Oct. 2017
28	Circadian Rhythm: the epigenetic role	College of Medicine, Misr University for Science and Technology	10 Nov. 2017
29	CRIPSR advances and future perspectives	MUST Knowledge Center, Misr University for Science and Technology	25 Dec. 2017
30	microRNA: from bench to application	GIS Research Center, Giza	5 Jan. 2018
31	Scientific Research from Lab to Market	MUST Knowledge Center, Misr University for Science and Technology	21 Jul. 2018

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	M.Sc.	18	2011	Now
2	PhD	4	2015	Now

Supervision of Master and/or PhD Thesis

#	Degree Type	Institution	Status
1	M.Sc.	Pharmacy, Beni Suif University, Egypt	Finished
2	M.Sc.	Pharmacy, Beni Suif University, Egypt	Finished
3	M.Sc.	Science, Cairo University, Egypt	Finished
4	M.Sc.	Pharmacy, Beni Suif University, Egypt	Finished



5	PhD.	Agriculture, Ain Shams University, Egypt	Running
6	M.Sc.	Science, Cairo University, Egypt	Finished
7	M.Sc.	Dentistry, Cairo University, Egypt	Finished
8	M.Sc.	Pharmacy, Beni Suif University, Egypt	Finished
9	M.Sc.	Engineering, Cairo University, Egypt	Finished
10	M.Sc.	Science, Alexandria University, Egypt	Running
11	PhD	Science, Benha University, Egypt	Running
12	M.Sc.	Science, Alexandria University, Egypt	Running
13	M.Sc.	Higher Studies, Beni Suif University, Egypt	Running
14	M.Sc.	Higher Studies, Beni Suif University, Egypt	Running
15	M.Sc.	Biotechnology, MUST	Running
16	M.Sc.	Biotechnology, MUST	Running
17	M.Sc.	Biotechnology, MUST	Running
18	M.Sc.	Biotechnology, MUST	Running
19	M.Sc.	Biotechnology, MUST	Running
20	M.Sc.	Biotechnology, MUST	Running
21	PhD	Pharmacy, Beni Suif University, Egypt	Running
22	PhD	Science, Cairo University, Egypt	Running

Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
	PI	Screening the Epigenetic Pattern Changes in Saudi Female Breast Cancer Patients: A Step Forward towards Early Detection”,	MOE, KSA	Current

Other Work

A. Translated books

1. Genetic engineering and its applications. Under publication.
2. Is it in your genes? Under publication.
3. What is life? How chemistry become biology. Addy Pross (2014). Translated for the National Translation Center, 2015.



4. Biological mind: a philosophical introduction. Justin Garson (2015). Translated for the National Translation Center), 2016.
5. Stem cells An Insider's Guide. Paul Knoepfler (2013). Translated for the National Translation Center, 2016.
6. The Age of Science (Cornelia & Michael Bessie Series). Gerard Piel, 2001. Translated for the National Translation Center), 2018.

B. Original books

1. Breast Cancer, diagnosis and treatment (in Arabic), Ibdaa Publication and Translation, 2017.
2. Human Evolution (in Arabic), Ibdaa Publication and Translation, 2018.
3. CRISPR/Cas9 technology and its applications (in Arabic), Academic Library, 2018.
4. CRISPRizing Human: the monsters are looming. Under processing.

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Designing and supervising research points
2	Writing for grants
3	Fluent in English (writing & speaking)
4	Licensed Associate Certified Trainer (IBTC- licensed)

Last Update

20/11/2018