
Name: [Moustafa Sarhan](#)

Specialization Molecular Biology

Current Position Assistant professor

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Academic **Degree/year/university/country** **PhD/ 2008/ Okayama University/ Japan**

Qualifications **Degree/year/university/country** **MSc/ 2000/ Al-Azhar University/ Egypt**

Experience Teaching

- 1- 30 years' experience of teaching biology courses for undergraduate Science students.
- 2- Teaching Molecular biology and Genetic engineering courses for postgraduate Science students.
- 3- Supervise 30 Master and PhD thesis.

Courses Taught and Teaching in KFU

- 1- Biochemistry-1& Immunology for undergraduate students, COCP
- 2-Advanced Biostatistics, Scientific lab & Advanced pharmaceutical Biotechnology for Master pharmaceutical science students, COCP

Research Interests

Molecular biology

Venomous animals and their venoms (Scorpions, Snakes, Spiders, Wasps, Cone snails, Honeybee etc...)

Antiviral peptides from animal venom

**Research
Grants
Received**

- 1- A research project funded by the Deanship of Scientific Research at Al-Jouf University, KSA entitled: Antiviral Peptides, 2022
- 2- A research project funded by the Egyptian Science, Technology and Innovation Funding Authority entitled “Documenting Egyptian wild plants using DNA barcode technology” 2021
- 3- A research project funded by the Deanship of Scientific Research at Al-Jouf University, KSA entitled: Proteomic analysis of the cone shell *Conus teniatus* from the Red Sea, 2020
- 4- A research project funded by the Egyptian Ministry of Higher Education and Scientific Research entitled: Study of the effect of Egyptian animal venoms on hepatitis B virus, a joint cooperation between Al-Azhar University and the Japanese University of Kobe, 2019.
- 5- A research project funded by the Egyptian Ministry of Higher Education and Scientific Research entitled: Study of the effect of Egyptian animal venoms on hepatitis C virus, a joint cooperation between Al-Azhar University and the Japanese University of Kobe, 2015.
- 6- A student project funded by the Egyptian Ministry of Higher Education and Scientific Research entitled: Study of biodiversity with toxins from cone snails in the Red Sea. Joint cooperation between Al-Azhar University and Kyoto University in Japan 2015.
- 7- A student project funded by the Egyptian Ministry of Higher Education and Scientific Research entitled: Study of the effect of Egyptian scorpion venom on hepatitis C virus, a joint cooperation between Al-Azhar University and Kobe University of Japan, 2014.
- 8- A student project funded by the Egyptian Academy of Scientific Research entitled: Using small RNAs in early detection of bladder tumors ,2014
- 9- A student project funded by the Egyptian Academy of Scientific Research entitled: Using free nucleic acids in early detection of bladder tumors, 2014
- 10- A research project funded by the Japan Society for the Promotion of Science (JSPS) to study the role of the transcription factor Blimp-1 2008-2010, Okayama University, Japan

Publications

- 1- Germoush, M.O., Fouda, M., Aly, H., Saber, I., Alrashdi, B.M., Massoud, D., Alzwain, S., Altyar, A.E., Abdel-Daim, M.M. and Sarhan, M., 2024. Proteomic analysis of the venom of *Conus flavidus* from Red Sea reveals potential pharmacological applications. *Journal of Genetic Engineering and Biotechnology*, 22(2), p.100375.
 - 2- El-Tabakh, M.A., Azab, A.M., Khalaf-Allah, H.M., Sarhan, M., Abdelwarith, M.S., Besar, M.H., Zeina, A.F., Alabssawy, A.N., Bashar, M.A., Abo-Taleb, H.A. and Attallah, M.A., 2024. Unveiling Diversity in Shark Fin Characteristics: A Comparative Study Across Order Carcharhiniforms. *Egyptian Journal of Aquatic Biology & Fisheries*, 28(2).
 - 3- Sarhan, M., Miyagawa, K. and Ueda, H., 2023. Domain analysis of *Drosophila* Blimp-1 reveals the importance of its repression function and instability in determining pupation timing. *Genes to Cells*, 28(5), pp.338-347.
 - 4- Afifi, M.A.M., Sarhan, M., Khalaf-Allah, H.M., Alabssawy, A.N., Abbas, M.M.M., Abdel-Hamid, F. and El-Tabakh, M.A.M., 2023. DNA barcoding supports life stages of wrasse fish, *Novaculichthys taeniourus* (Family Labridae) in the Hurghada Red Sea, Egypt. *Zoologischer Anzeiger*, 304, pp.84-93.
 - 5- Basuony, A.E., Saleh, M., Sarhan, M., Younes, M., Abdel-Hamid, F., Rodriguez Fernandes, C., Vercammen, P., Aboshaala, F., Bounaceur, F., Chadwick, E.A. and Hailer, F., 2023. Paraphyly of the widespread generalist red fox (*Vulpes vulpes*): introgression rather than recent divergence of the arid-adapted Rüppell’s fox (*Vulpes rueppellii*)?. *Biological Journal of the Linnean Society*, 138(4), pp.453-469.
 - 6- Badry, A., Salehi, M., Sarhan, M., Youness, M., Lourenço, W.R. and Ythier, E., 2023. A new species of *Leiurus* Ehrenberg (Scorpiones: Buthidae) from Sinai, Egypt and comments on its relationships with *L. quinquestriatus* and *L. hebraeus* using morphological and molecular evidence. *Faunitaxys*, 11(54), pp.1-10.
 - 7- Abd-Allah, M., Abdelwahab, M., Aly, N.S., Amer, O.S. and Sarhan, M., 2022. In Vitro schistosomicidal activity of five common species of Red Sea Cone snail muscle extracts. *Al-Azhar Bulletin of Science*, 33(2-C), pp.111-119.
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- 8- Zekri Wissame, Abdelhamid Moussi, Salah Eddine Sadine and Moustafa Sarhan (2022). *Buthus Leach, 1815 (Scorpiones: Buthidae): taxonomic status of species in Algeria with their morphological and molecular study in Aures region. SERKET The Arachnological Bulletin of the Middle East and North Africa* 18(3):400-415
 - 9- Abdel-Hafez, M.A., Abdel Rahman, M.A., Elshaer, H.S. and Sarhan, M., 2022. The spermicidal effect of the honeybee *Apis mellifera* venom and its major component melittin. *Al-Azhar Bulletin of Science*, 33(2-C), pp.99-110.
 - 10- Abu Elmagd, H.A., Hassan, E.A., Sarhan, M. and Abu-Elnaga, N., 2022. A Modified ICSI Technique: Using *Zona Pellucida* as A Natural Bait. *The Egyptian Journal of Hospital Medicine*, 89(1), pp.5075-5082.
 - 11- Sheaba, M.H., Gadel-Rab, A.G., EL-Bitar, A.M. and Sarhan, M., 2022. Total And Mitochondrial Cell Free DNA Quantification in Day 5 Embryos Culture Media Reflect Embryos Quality. *The Egyptian Journal of Hospital Medicine*, 89(1), pp.4346-4352.
 - 12- Massoud, Daaa, Maged Fouda, Moustafa Sarhan, Shaimaa Gamal Salama, and Heba Saied Khalifa. "Topical application of Aloe gel and/or olive oil combination promotes the wound healing properties of streptozotocin-induced diabetic rats." *Environmental Science and Pollution Research* (2022): 1-9.
 - 13- Sarhan M, El-Bitar AM, Mohammadien A, Elshehaby M and Hotta H. Virucidal Activity of Oriental Hornet "*Vespa orientalis*" Venom against Hepatitis C Virus. *JVATITD-2021-39*.
 - 14- Fouda M, Abdel-Wahab M, Mohammadien A, Germoush M and Sarhan M. Proteomic analysis of Red Sea *Conus taeniatus* venom revealed potential biological applications. *JVATITD- 2021-23*.
 - 15- Sarhan M, Abdel-Wahab M, Hamdy Aly and Maged Fouda. DNA barcoding of seven cone snail species from Red Sea coast of Egypt. January 2021, *Egyptian Journal of Aquatic Research*
 - 16- Sarhan M, El-Bitar AM and Hotta H. Potent virucidal activity of honeybee "*Apis mellifera*" venom against Hepatitis C Virus. October 2020 *Toxicon* 188
 - 17- Sarhan M, Badry A, Younes M and Saleh M. Genetic diversity within *Leiurus quinquestriatus* (Scorpiones: Buthidae) populations in Egypt as inferred from 16S rDNA sequence analysis. *Zoology in the Middle East*, July 2020, *Zoology in the Middle East* 66(3):1-8
 - 18- El-Bitar A, Sarhan M, Abdel-Rahman MA, Quintero-Hernandez V, Aoki-Utsubo C, Moustafa MA, Possani LD, Hotta H. Smp76, a scorpine-like peptide isolated from the venom of the scorpion *Scorpio maurus palmatus*, with a potent antiviral activity against hepatitis C virus and dengue virus. *International Journal of Peptide Research and Therapeutics*. 2020 Jun;26(2):811-21.
 - 19- Abd El-Atti M, El-Qassas J, Gadel-Rab A, Sarhan M and Desouky M. Morphology, histology, histochemistry and fine structure of venom apparatus of the medically relevant Scorpion, *Leiurus quinquestriatus*. *Bioscience Research*, 2020 17(2): 1274-1288.
 - 20- Cheng Y, Sun F, Li S, Gao M, Wang L, Sarhan M, Abdel-Rahman MA, Li W, Kwok HF, Wu Y, Cao Z. Inhibitory activity of a scorpion defensin BmKDFsin3 against Hepatitis C virus. *Antibiotics*. 2020 Jan;9(1):33.
 - 21- Rabey M, Aly H, Fouda M, Behnsawy H, Sarhan M. A Multiplex PCR-Based Assay for Detection of Plasma Cell Free DNA Integrity as a Marker of Bladder Cancer. *The Egyptian Journal of Hospital Medicine*. 2020 Jan 1;78(1):177-81.
 - 22- Sarhan M, Azab AM, Khalaf-Allah HM, Afifi MA. DNA barcoding supports sexual dimorphism in two Labrid species; *Cheilinus lunulatus* and *Halichoeres hortulanus* (Family Labridae) in Red Sea, Egypt. *The Egyptian Journal of Aquatic Research*. 2019 Nov 15.
 - 23- Elsayed AN, Badawy AI, Abdel-Aziz A, Sarhan M. Molecular Differentiation of *Haemonchus longistipes* Railliet & Henry, 1909 (Nematoda: Trichostrongyloidea) of Female Morphotypes and Male Worms Infecting the Dromedary *Camelus dromedarius* Using RAPD Technique. *Egyptian Academic Journal of Biological Sciences, E. Medical Entomology & Parasitology*. 2019 Jun 1;11(2):15-23.
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- 24- Abdel-Hamid F, Sarhan M, Younes M, Saleh M. Molecular phylogenetic relations of mammals of the genus canis in Egypt. *Al-Azhar Bulletin of Science*. 2019 Jun 9;30(1-C):9-23.
 - 25- Yusuke Yoshimoto, Masahiro Miyashita, Mohammed Abdel-Wahab, Moustafa Sarhan, Yoshiaki Nakagawa, Hisashi Miyagawa (2019). Characterization of Insecticidal Toxins from the Venom of the North African Scorpion, *Buthacus leptochelys*. *Toxins* 11(4), 236.
 - 26- Abdel-Hamid, F., Sarhan, M., Younes, M. and Saleh, M., 2019. Molecular Phylogenetic Relations Of Mammals Of The Genus Canis in EGYPT. *Al-Azhar Bulletin of Science*, 30(1-C), pp.9-23.
 - 27- El Mekawy, H.A., El-Sayed, A.A.M., Amer, M.A. and Sarhan, M., 2019. Revision of Families Veneridae and Mactridae (Mollusca: Bivalvia) From the Suez Gulf, Egypt. *Egyptian Academic Journal of Biological Sciences. B, Zoology*, 11(2)
 - 28- Mostafa Saleh, Mahmoud Younes, Moustafa Sarhan & Fouad Abdel-Hamid (2018) Melanism and coat colour polymorphism in the Egyptian Wolf *Canis lupaster* Hemprich & Ehrenberg (Carnivora: Canidae) from Egypt, *Zoology in the Middle East*, 64:3, 195-206.
 - 29- Ahmed Badry, Mahmoud Younes, Moustafa M. H. Sarhan & Mostafa Saleh (2018). On the scorpion fauna of Egypt, with an identification key (Arachnida: Scorpiones). *Zoology in the Middle East*, 1-13.
 - 30- Abdel-Wahab M, Miyashita M, Ota Y, Juichi H, Okabe R, Sarhan M, Fouda M, Abdel-Rahman M, Saber S and Nakagawa Y. (2017). Isolation structural identification and biological characterization of two conopeptides from the *Conus pennaceus* venom. *Biosci Biotechnol Biochem*. 81(11):2086-2089.
 - 31- Moustafa Sarhan, Ahmed Mostafa, Serag Eldin Elbehiry, Abdelbaset M. A. Abd el Reheem and Samy A. Saber (2017). Intersexual Variation in Tail Length, Venom Composition, Toxicity, and Anticancer Activity of *Cerastes cerastes* (Viperidae). *The Egyptian Journal of Hospital Medicine* (Jan. 2017) Vol. 66, Page 81-90
 - 32- Mostafa A. Saleh and Moustafa Sarhan. Phylogeography of the egg-eating snake (*Dasypeltis*: Colubridae) of Faiyum, Egypt with the description of a new species. *Bull. Soc. Herp. Fr.* (2016) 160: 25-48
 - 33- Kazutaka Akagi, Moustafa Sarhan, Abdel-Rahman Sultan, Haruka Nishida, Azusa Koie, Takumi Nakayama and Hitoshi Ueda (2016). A biological timer in the fat body comprising Blimp-1, β Ftz-f1 and Shade regulates pupation timing in *Drosophila melanogaster* *Development*, 143: 2410-2416; doi: 10.1242/dev.133595
 - 34- Mohammed Abdel-Wahab, Masahiro Miyashita, Atsushi Kitanaka, Hironori Juichi, Moustafa Sarhan, Maged Fouda, Mohamed Abdel-Rahman, Samy Saber and Yoshiaki Nakagawa (2016). Characterization of the venom of the vermivorous cone snail *Conus fulgetrum*. *Biosci, Biotechnol, Biochem.*, 20:1-4.
 - 35- Maged Fouda, Moustafa Sarhan and Makio Takeda (2016). Crustacean cardioactive peptide (ccap) and corazonin (crz) as putative circadian clock output signals in the central nervous system of the terrestrial isopod, *Armadillidium vulgare* (Latreille). *International Journal of Advanced Research* 4(3):205-217 .
 - 36- Moustafa M. H. Sarhan, Islam Saber, Mohamed El-shehaby and Samy Saber (2015). Molecular phylogenetic relationship among three *Acanthodactylus* species (Reptilia: Lacertidae) in Egypt based on 18S rRNA Sequences. *Egypt. Acad. J. Biolog. Sci.*, 7(1): 39 – 49
 - 37- Alaa MH El-Bitar, Moustafa MH Sarhan, Chie Aoki, Yusuke Takahara, Mohsen A Moustafa and Hak Hotta. (2015). Virocidal activity of crude venoms obtained from Egyptian scorpions against hepatitis C virus. *Virology Journal*, 12:47 doi:10.1186/s12985-015-0276-6.
 - 38- Moustafa M. H. Sarhan (2014). Molecular analysis of interaction partners of the transcriptional repressor blimp-1 in *Drosophila melanogaster* by a proteomics approach. *Al-Azhar Bulletin of Science* Vol. (25) No.1, June 1-10.
 - 39- Moustafa Sarhan, Ahmed Badry Sayed, Mohsen Abdel Hafez Mostafa and Ahmed Essa Yasin. (2013). 2-Prey-capture behaviour of the Egyptian scorpion *Scorpio maurus palmatus* (Ehrenberg, 1828) (Scorpiones: Scorpionidae). *Serket*, vol. 13(3/4).
 - 40- Moustafa M. H. Sarhan (2013). Ribosomal DNA sequences reveal a parasitic septate gregarine (Apicomplexa: Gregarinia) in the scorpion *Leiurus quinquestriatus* in Egypt. *Egypt. Acad. J. Biolog. Sci.*, 5(1): 123– 129.
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	<p>41- Moustafa Sarhan, Maged M.A. Fouda, Alaa M.H. Elbetar, Hamdy A.M. Aly and Ahmed B. Sayed (2012). Variation of protein profile among consecutive stings of the scorpion <i>Pbrabuthus leiosoma</i> (FAMILY: BUTHIDAE) from Egypt, supports the venom-metering hypothesis in scorpions. <i>Al-Azhar Bull. Sci.</i> Vol. 23, No. 1 (Dec.): pp. 61-71.</p>
<p>Presentations and abstracts</p>	<p>1- Sarhan, Moustafa. Microbiome and Drug metabolism. Guest speaker at KSAPT2024, 5 international Conference- KSAPT 2024, Al Khobar, Eastern province, Kingdom of Saudi Arabia</p> <p>2- Sarhan, Moustafa. Animal venoms from life-threatening toxins to life-saving therapeutics. 5th international conference in clinical pathology, toxicology and IVF. Damanhur. SFA, Feb. 2022</p> <p>3- Sarhan, Moustafa. Cell free DNA as early diagnostic biomarker for cancer. 2nd international conference in clinical pathology and cancer diagnosis. Damanhur. SFA, Feb. 2018</p> <p>4- Moustafa Sarhan, Alaa M. H. El-Bitar, Mohsen A. Moustafa, and Hak Hotta. Anti-hepatitis C virus activities of crude venoms obtained from Egyptian scorpions as a potential therapeutic modality. 6th International Conference on Natural Toxins Ismailia – Egypt 15 – 16 December 2014.</p> <p>5- Moustafa Sarhan, Ahmed B. Sayed, Mohsen A. Moustafa and Ahmed E. Yassen. Prey-capture behaviour of the Egyptian scorpion <i>Scorpio maurus palmatus</i> (Ehrenberg, 1828) (Scorpiones: Scorpionidae). The first international conference “New horizons in basic and applied science” (ICNHB AS). 21-23 September 2013, Hurgada, Egypt</p> <p>6- Moustafa Sarhan, Kazutaka Akagi and Hitoshi Ueda. A transcriptional repressor Blimp-1 works as an hourglass in a biological timer system to determine developmental timing at the onset of metamorphosis in <i>Drosophila</i>. First International Conference of Biological Sciences, ICBS-1, 4th -5th March 2009 Assiut, Egypt.</p>
<p>Works hops / Seminars attended</p>	<p>1- Sarhan, Moustafa. Rolling Circle DNA Amplification, principles & applications. non-based PCR machine DNA amplification Workshop. Molecular biology research lab. Faculty of Science, Assiut University, Egypt. 20-21 April 2019.</p> <p>2- Sarhan, Moustafa. Western blotting technique, principles & applications. Western blotting Workshop, Faculty of vet. Medicine central lab., Ismailia, Egypt. 20-21 Feb. 2019</p> <p>3- Sarhan, Moustafa. Cell free DNA as early diagnostic biomarker for cancer. 2nd international conference in clinical pathology and cancer diagnosis. Damanhur. SFA, Feb. 2018</p> <p>4- Sarhan, Moustafa. Molecular basis of DNA isothermal amplification. Workshop on DNA isothermal amplification, MRC, Assiut University, Egypt. 14-15 April 2018.</p> <p>5- Moustafa Sarhan. Antibodies and their applications in modern detection techniques, Workshop in modern detection techniques in biology. Department of zoology, faculty of science Al-Azhar University Assuit, Egypt, March 29-31/2014</p>