

## Suher Kamal Zada, Ph.D.

**PROFESSOR OF IMMUNOLOGY**  
**BIOLOGY DEPARTMENT**  
SCHOOL OF SCIENCES AND ENGINEERING  
AMERICAN UNIVERSITY IN CAIRO

**Address:** New Cairo Campus, AUC Avenue,  
P.O. Box 74, New Cairo 11835, Egypt  
**Telephone:** +202 2615 29 09  
**E-mail:** [suzada@aucegypt.edu](mailto:suzada@aucegypt.edu)  
**Webpage:** <http://www.aucegypt.edu/fac/suherzada>



---

*Professor of Biology and Immunology with over 50 years of academic, administrative and research experience. both in Egypt and abroad. Keen towards understanding and solving problems related to the immune system like infectious diseases with common public health threats in Egypt and worldwide using advanced and new research techniques in biotechnology, nanotechnology and computational Studies.*

---

## Employment

---

<b>Employer</b>	<b>Position</b>	<b>Dates</b>
Department of Biology, American University in Cairo, Egypt	Tenured Full Professor	<b>2004 – Present</b>
School of Sciences & Engineering, American University in Cairo, Egypt.	Chair of the SSE Academic Affairs Committee	<b>2007 - 2016</b>
Department of Biology, American University in Cairo, Egypt.	Chair of the Department	<b>2004 – 2006</b>
Department of Biology, American University in Cairo, Egypt.	Full Professor (Full-time)	<b>1998- 2004</b>
Department of Biology, American University in Cairo, Egypt.	Full Professor (Part-time)	<b>1991 - 1998</b>
Faculty of Science, Cairo University.	Full Professor of Immunology and Embryology	<b>1989 - 1998</b>
Faculty of Science, Cairo University.	Assistant Professor	<b>1980- 1989</b>
Faculty of Science, Cairo University.	Lecturer	<b>1975 - 1980</b>
Faculty of Science, Cairo University.	Assistant Lecturer	<b>1972 - 1975</b>
Faculty of Science, Cairo University.	Demonstrator	<b>1965- 1972</b>

## Educational Background

---

<b>Faculty of Science, Cairo University</b> <u>Thesis title:</u> “The Fully Formed Chondrocranium, Embryonic and Adult Osteocranium of <i>Agama pallida</i> ” <u>Examiners:</u> Professor Dr. Angus Bellairs, St. Mary’s Hospital Medical School, London and Professor Dr. Fox.	<i>PH.D.</i>	<b>1975</b>
<b>Faculty of Science, Cairo University</b> <u>Thesis title:</u> “The Early Development of the Chondrocranium of <i>Agama pallida</i> ”	<i>M.Sc.</i>	<b>1969</b>
<b>Faculty of Science, Cairo University</b> <u>Majors:</u> Chemistry and Zoology	<i>B.Sc.</i> with high honors	<b>1965</b>

## Postdoctoral Research Experience

---

<b>Institut d'Embryologie Cellulaire et Moléculaire du Centre National de la Recherche Scientifique" (C.N.R.S.), et du Collège de France</b> <i>“Cellular and Molecular Embryology Laboratory, National Center of Scientific Research. Lab of Professor Nicole le Douarin, Member of the French Academy of Science”</i>	Nogent sur Marne, France	1986-1987
<b>Faculty of Medicine, University of Singapore</b>	Singapore	1976

## Awards

---

- ❖ Recipient of “Chevalier de L'Ordre National du Merite” Knight of the National Order of Merit, Decoration awarded by President Francois Mitterrand of France. 1982.
- ❖ Recognized for her dedicated service as Chair of the Biology Department, 2006.
- ❖ Recognized by the former Dean of School of Sciences and Engineering, the American University in Cairo, Dr. Medhat Haroun for the outstanding contributions of the Academic Affairs Committee in promoting and advancing the school’s Academic programs, 2007.
- ❖ Honoured by the former Dean of School of Sciences and Engineering, the American University in Cairo, Dr. Ezzat Fahmy as recognition for the outstanding efforts as Chair of the School Academic Affairs Committee, 2011.

1. Rabie, Eman A., Inas SM Sayed, Khalda Amr, Hoda A. Ahmed, Mostafa I. Mostafa, Nehal F. Hassib, Heba El-Sayed, **S. Zada**, and Ghada El-Kamah. "Confirmation of a Phenotypic Entity for TSPEAR Variants in Egyptian Ectodermal Dysplasia Patients and Role of Ethnicity." *Genes* 13, no. 6 (2022): 1056. <https://doi.org/10.3390/genes13061056>
2. Mahmoud, Mohamed, Maha RA Abdollah, Mohamed E. Elsey, Dalal A. Abou El Ella, **S. Zada**, and Mai F. Tolba. "The natural isoflavone Biochanin-A synergizes 5-fluorouracil anticancer activity in vitro and in vivo in Ehrlich solid-phase carcinoma model." *Phytotherapy Research* 36, no. 3 (2022): 1310-1325. <https://doi.org/10.1002/ptr.7388>
3. Hoda A. Ahmed, Ghada Y. El-Kamah, Eman Rabie \*, Mostafa I. Mostafa, Maha R. Abouzaid, Nehal F. Hassib, Mennat I. Mehrez, Mohamed A. Abdel-Kader, Yasmine H. Mohsen, **S. Zada**, Khalda S. Amr \*, Inas S.M. Sayed (2021) Gene Mutations of the Three Ectodysplasin Pathway Key Players (EDA, EDAR, and EDARADD) Account for More than 60% of Egyptian Ectodermal Dysplasia: A Report of Seven Novel Mutations *Genes* 2021, 12, 1389. <https://doi.org/10.3390/genes12091389>
4. Eman Rabie, Khalda Amr, **S. Zada**, Heba EL-Sayed, Mohamad El Darouti, Ghada El-Kamah, February (2021) "Clinical and Mutational Spectrum of Xeroderma pigmentosum in Egypt: Identification of Six Novel Mutations and Implications for Ancestral Origins" (As part of a Special Issue on Genetic Disease in Mediterranean Region). *Genes* 2021, 12(2), 295. <https://doi.org/10.3390/genes12020295>
5. Walaa A. Abbas, Basamat S. Shaheen, Loujain G. Ghanem, Ibrahim M. Badawy, Mohamed M. Abodouh, Shrouk M. Abdou, **Suher Zada**, and Nageh K. Allam (2021), "Cost-Effective Face Mask Filter Based on Hybrid Composite Nanofibrous Layers with High Filtration Efficiency \*," *The financial support of this work as an award by the American University in Cairo (Pandemic and Post-Pandemic Research and Innovation Initiative Grant) is highly appreciated*, 37, 7492-7502, ([Langmuir](https://doi.org/10.1021/acs.langmuir.1c00926) 2021, 37, 24, 7492–7502 Publication Date: June 8, 2021 <https://doi.org/10.1021/acs.langmuir.1c00926> Copyright © 2021 American Chemical Society, Eds.), United States, ACS
6. Mohamed Mahmoud, Marwa A Ali, **S. Zada**, Dalal A Abou El Ella and Mai F Tolba August 24 (2020) Molecular Modeling Studies on Biochanin-A as a Potential Dual Hit for VEGFR2 and Cyclin D1-CDK-4 Complex. *Cancer Therapy & Oncol Int J.*2020,16(5)555947
7. Nahla O. Mousa, Ahmed Abdellatif, Nagia Fahmy, **S. Zada**, Hassan El-Fawal, Ahmed Osman. February (2020) Circulating MicroRNAs in Duchenne Muscular Dystrophy. *Clinical Neurology and Neurosurgery* <https://doi.org/10.1016/j.clineuro.2019.105634>
8. Nahla O. Mousa, Ahmed Osman, Nagia Fahmy, Ahmed Abdellatif, **S. Zada** and Hassan El-Fawal. (2020) *Book Chapter: Rare Diseases : Duchenne Muscular Dystrophy (DMD) Diagnosis: Past and Present Perspectives* January (1st Quarter/Winter) 8, 2020
9. Elsayed NA, **S. Zada**, Allam NK (2019) Mineralization of electro spun gelatin/CaCO<sub>3</sub> composites: A new approach for dental applications. (2019) *Mater Sci Eng C Mater Biol Appl.* <https://doi.org/10.1016/j.msec.2019.03.049>
10. Lobna Mourad, Eman El-Ahwany, Mona Zoheiry, Hoda Abu-Taleb, Marwa Hassan, Amged Ouf, Ali Abdel Rahim, Moataz Hassan and **S. Zada**. (2018) Expression Analysis of Liver-Specific Circulating microRNAs in HCV-Induced Hepatocellular Carcinoma in Egyptian Patients. *Cancer Biology & Therapy* 19, (5) <http://doi.org/10.1080/15384047.2018.1423922>
11. Abdel-Al, A., El-Ahwany, E., Zoheiry, M., Hassan, M., Ouf, A., Abu-Taleb, H., Abdel Rahim, A., El-Talkawy, M. and **S. Zada** (2018). miRNA-221 and miRNA-222 are promising biomarkers for the progression of liver fibrosis in HCV Egyptian Patients. *Virus Research*, 253, pp.135-139. <https://doi.org/10.1016/j.virusres.2018.06.007>

12. Eman G. E. El-Ahwany, Lobna Mourad, Mona M. K. Zoheiry, Hoda Abu-Taleb, Marwa Hassan, Raafat Atta, Moataz Hassanien, **S. Zada** (2017) MicroRNA-122a as a non-invasive biomarker for HCV genotype 4-related hepatocellular carcinoma in Egyptian patients (October 2017) *Archives of Medical Science* 15(6) DOI: [10.5114/aoms.2019.86621](https://doi.org/10.5114/aoms.2019.86621)
13. Eman El-Ahwany, Lobna Mourad, Mona Zoheiry, Hoda Abu-Taleb, Faten Nagy, Raafat Atta, Moataz Hassan, **S. Zada** (2017) Serum MiRNAs as biomarkers for HCV –induced Hepatocellular Carcinoma in Egyptian patients *Pathology & Oncology Research*.
14. ElHefnawi, M., Kim, T., Kamar, M., Min, S., Hassan, N., El-Ahwany, E., Kim H., **Zada, S.**, Amer M. and Windisch M. (2016). In Silico Design and Experimental Validation of siRNAs Targeting Conserved Regions of Multiple Hepatitis C Virus Genotypes. *PLOS ONE*, 11(7). <http://dx.doi.org/10.1371/journal.pone.0159211>
15. Youssef, M., Tolba, M., Badawy, N., Liu, A., El-Ahwany, E., Khalifa, A., **Zada, S.** and Abdel-Naim A. (2016). Novel combination of sorafenib and biochanin-A synergistically enhances the anti-proliferative and pro-apoptotic effects on hepatocellular carcinoma cells. *Scientific Reports*, 6. <http://dx.doi.org/10.1038/srep30717>
16. E. Al-Ahwany, F. Nagy, M. Zoheiry, M. Shemis, M. Nosseir, H. Abu Taleb, M. ElGhannam, and R. Atta, **S.K. Zada** (2016). Circulating miRNAs as predictor markers for activation of hepatic stellate cells and progression of HCV-induced liver fibrosis. *Electronic Physician Journal*, 8 (1).
17. E. Al-Ahwany, F. Nagy, M. Zoheiry, M. ElGhannam, M. Shemis, M. Aboul-Ezz and **S. K. Zada** (2016). The role of microRNAs in response to interferon treatment of chronic Hepatitis C patients. *Electronic Physician Journal*, 8 (2).
18. W. M. Eldehna, M. Fares, H. S. Ibrahim, M. H. Aly, **Zada, S. K.**, M. M. Ali, S. M. Abou-Seri, H. A. Abdel-Aziz, and D. A. Abou El Ella (2015). Indoline ureas as potential anti-hepatocellular carcinoma agents targeting VEGFR-2: Synthesis, in vitro biological evaluation and molecular docking. *European Journal of Medicinal Chemistry*, 100. <http://dx.doi.org/10.1016/j.ejmech.2015.05.040>
19. El-Ahwany E., Nagy F., Zoheiry M., El Ghannam M., El Khashab M., Ahmadi W., El-Refaiy M., **Zada S.**, Shaker Z. (2015). Role of T Regulatory Cells in Chronic HCV Infected Egyptian Patients and Their Impact on The Response to Pegylated Interferons Therapy. *J Egypt Soc Parasitol*, 45(2).
20. M. Amer, M. Elhefnawi, E. El-Ahwany, A. F. Awad, N. Abdel Gawad, **S. Zada**, and FM Abdel Tawab (2014). Hsa-miR-195 targets PCMT1 in hepatocellular carcinoma that increases tumor life span. *Tumor Biology*, 35(11). <http://dx.doi.org/10.1007/s13277-014-2445-4>
21. E. EL-Ahwany, I. Rabia, F. Nagy, M. Zoheiry, T. Diab, **S. Zada** (2012). Protective Role of Purified Cysteine Proteinases against *Fasciola gigantica* Infection in Experimental Animals. *Korean Journal of Parasitology*, 50(1).
22. El -Ahwany E, Bauomy IR, Nagy F, Zalat R, Mahmoud O, **Zada S.** (2012). T Regulatory Cell Responses to Immunization with a Soluble Egg Antigen in *Schistosoma mansoni*-Infected Mice. *Korean Journal of Parasitology*, 50(1).
23. E. El-Ahwany, M. Fawzi, **S. Zada** (2011). mRNA Survivin expression in high-grade hepatocellular carcinoma patients. *Hepatology*, 5(1).
24. E. El-Ahwany, H. Marie, R. Atta, **S. Zada** (2011). ANA as a Marker for the Induced HCV Chronicity in HCV and *S. mansoni* Co-infected Patients. *Hepatology*, 5(1).
25. Elhefnawi M, Alaidi O, Mohamed N, Kamar M, El-Azab I, **Zada S**, Siam R (2011). Identification of novel conserved functional motifs across most Influenza A viral strains. *Virology* 8(44).
26. El-Ahwany E, Rabie I, Nagy N, Zalat R, Mahmoud O, **Zada S** (2010). Role of T regulatory cells and Th17 in murine *Schistosoma mansoni* infection. *The Egyptian Journal of Medical Science*, 31 (2).
27. A. El Bassiouny, M. Nosseir, M. Zoheiry, M. Amen, A. Abdel-Hadi, I. Mostafa, **S. Zada**, A. Saad El Deen and N. Bassiouni (2010). Differential expression of some cell cycle regulatory molecules in Hepatitis C-Related Hepatocellular Carcinoma. *World Journal of Hepatology*, 2(1).

28. ElHefnawi MM, **Zada S**, El-Azab IA. (2010). Prediction of prognostic biomarkers for Interferon-based therapy to Hepatitis C Virus patients: a meta-analysis of the NS5A protein in subtypes 1a, 1b, and 3a. *Virology Journal*, 7(130).
29. El-Bassiouny AI, El-Ahwany EG, Abou-Shousha TS, Moussa MM, El-Bassiouni NI, Maher KM, Galli AY, Youssef MM and **Zada S**. (2009). Hepatic mRNA Expression of Histone (H3): An early predictor of tumorigenic changes in chronic hepatitis C. *Archives of Medical Science*, 5(4).
30. M. El-Hefnawi, W. El-Behaidy, A. A. Youssif, A.Z. Ghalwash, L. El-Housseiny and **S. Zada** (2009). Natural Genetic Engineering of Hepatitis C Virus NS5a Protein for Immune System Counterattack. *Natural Genetic Engineering and Natural Genome Editing: Annals of the New York Academy of Sciences*, 1178.
31. A. El-Bassiouny, E. El-Ahwany, T. Abou-Shousha, M. Moussa, N. El-Bassiouni, K. Maher, A. Galli, M. Youssef, **S. Zada** (2006). Hepatic mRNA expression of Histone (H3): An early predictor of tumorigenic changes in Chronic Hepatitis C. *Journal of Gastroenterology and Hepatology*, 21(2).
32. El Genghi N., **Zada S**, and El Demellawy M. (2004). Immune Response to *Schistosoma mansoni* Calreticulin in Schistosomiasis Resistant individuals. *The Egyptian Journal of Immunology/Egyptian Association of Immunologists*, 11(2).
33. Hanallah SB, El-Ahwany EG, Doughty B, **Zada S**, Badir B, Badawy A and Hassanein HI (2003). Immunolocalization of B7-2 and CD28 costimulatory molecules in schistosomal soluble egg antigen-induced granulomatous hypo responsiveness. *Egypt. J. Schistosomiasis & Endemic Infectious Diseases*, 25.
34. H.M.Ragab, **S.Zada**, E.Ashour, Y. Shaker, M.Hermann, R.Proctor, and G.Peters. (2002). Effect of extracellular slime substance from *Staphylococcus epidermidis* on the opsonic activity of human neutrophils and monocytes. *Egyptian Medical Journal of the National Research Center*, 1.
35. El Sayed, N., **Zada, S.**, and Othman, A. (2002). Cytodifferentiation and Distribution of Endocrine cells in the Gastrointestinal tract of the lizard *Chalcides ocellatus*. *Egyptian Journal of Zoology*, 38.
36. Hassanein, H., Hanallah, S., El-Ahwany, E. G., Doughty, B., El-Ghorab, N., Badir, B., Sharmy, R. and **Zada, S.** (2001). Immunolocalization of intercellular adhesion molecule-1 and leukocyte functional associated antigen-1 in schistosomal soluble egg antigen-induced granulomatous hypo responsiveness. *Acta Pathologica Microbiologica et Immunologica Scandinavica*, 109.
37. El-Ahwany, E.G., Hanallah, **S. K., Zada, S.**, El Ghorab, N.M., Badir, B., Badawy, A., Sharmy, R. & Hassanein, H.I. (2000) Immunolocalization of macrophage adhesion molecule-1 & macrophage inflammatory protein-1 in schistosomal soluble egg antigen-induced granulomatous hypo responsiveness. *International Journal of Parasitology*, 30.
38. Hassanein, H. I., Kamel, M., Badawy, A., El Ghorab, N., Abdin, H., **Zada S.**, El Ahwany, E. G. and Doughty, B. L. (1999). Antimiracidial effect of recombinant glutathione-s-transferase 26 and soluble egg antigen on immune responses in murine schistosomiasis. *Acta Pathologica Microbiologica et Immunologica Scandinavica*, 107.
39. El Ridi, R., **Zada, S.** and Mansour, M. (1991). Immunoglobulins of the snake *Pseustes sibilans*. Studies using a Monoclonal Antibody. *Immunobiology*, 184.
40. El Ridi, R. and **Zada, S.** (1989). Studies on Snake immunoglobulins using Monoclonal Antibodies. I. Serological Investigations. *Bull. Fac. Sci. Cairo Univ.*, 57(1).
41. El Ridi, R., **Zada, S.** and Mansour, M. (1989). Studies on Snake immunoglobulins using Monoclonal Antibodies. II. Biochemical Investigations." *Bull. Fac. Sci. Cairo Univ.*, 57(1).
42. **Zada, S.** (1989). Table of development of *Chalcides ocellatus* (Reptilia, Sauria, Scincidae). *Proc. Zool. Soc. A. R. Egypt*, 17.
43. **Zada, S.**, Coltey, M. and Le Douarin, N. (1988). An analysis of surface and cytoplasmic glycoprotein expression by neural and glandular tissues in Reptiles. *C. R. Academie des Sciences*, 307(111).

44. Tucker, G., Delarue, M., **Zada, S.**, Boucaut, J. C. and Thiery, J. P. (1988). Expression of the HNK-1/ NC-1 epitope in early Vertebrate Neurogenesis. *Cell Tissue Research*, 251.
45. El Ridi, R., **Zada, S.**, Afifi, A., El Deeb, S., El Rouby, S., Farag, M. and Saad, A. H. (1988). A Review: Cyclic changes in the differentiation of lymphoid cells in Reptiles. *Cell Differentiation*, 24.
46. **Zada, S.** (1988). Notes on the Colubrid Chondrocranium. *Proc. Zool. Soc. A. R. Egypt*, 15.
47. **Zada, S.** (1988). Monoclonal Antibodies HNK-1 and GLN-1 Immunoreactivity with *Chalcides ocellatus* tissues. Distribution and Biochemical properties of the antigen." *Proc. Zool. Soc. A. R. Egypt*, 15.
48. **Zada, S.** (1988). A Human Natural Killer Monoclonal IgM Antibody reacting with Reptilian glandular tissues. *Proc. Zool. Soc. A. R. Egypt*, 15.
49. El Deeb, S., El Ridi, R. and **Zada, S.** (1986). Ontogenesis of differentiation antigens on lizard T and B lymphocytes. *Proc. Zool. Soc. A. R. Egypt*, 11.
50. El Deeb, S., El Ridi, R. and **Zada, S.** (1986). The development of lymphocytes with T or B membrane determinants in the lizard embryo. *Dev. Comp. Immunol.*, 10.
51. Hussein, M. F., **Zada, S.** and Kamal, A. M. (1985). The common characters of the chondrocranium of skinks. *Bull. Fac. Sci., Cairo Univ.*
52. Hussein, M. F., **Zada, S.** and El Ridi, R. (1985). Immunologic competence of the newly-born lizard, *Chalcides ocellatus*. *Bull. Fac. Sci., Cairo Univ.*, 53.
53. El Deeb, S., **Zada, S.** and El Ridi, R. (1985). Ontogeny of hemopoietic and lymphopoietic tissues in the lizard *Chalcides ocellatus*. (*Reptilia, Sauria, Scincidae*)." *J. Morphology*, 185.
54. Hussein, M. F., Badir, N., **Zada, S.**, El Ridi, R. and Zahran, W. (1984). Effect of seasonal changes on the immune system of the toad, *Bufo regularis*. *Bull. Fac. Sci., Cairo Univ.*, 52.
55. Hussein, M. F., **Zada, S.** and El Ridi, R. (1984). Humoral response of lizards in winter. *Bull. Fac. Sci. Cairo Univ.*, 52.
56. Saad, A. H., El Ridi R., **Zada, S.**, and Badir, N. (1984). Effect of hydrocortisone on the immune system of the lizard, *Chalcides ocellatus*. I. Response of lymphoid tissues and cells to in vivo and in vitro hydrocortisone. *Dev. Comp. Immunol.*, 8.
57. Saad, A. H., El Ridi R., **Zada, S.** and Badir, N. (1984). Effect of hydrocortisone on the immune system of the lizard, *Chalcides ocellatus*. II. Differential action on T and B lymphocytes." *Dev. Comp. Immunol.*, 8.
58. **Zada, S.** and El Deeb S. (1984). Ontogeny of lymphoid tissues and cells in the lizard, *Chalcides ocellatus*. *Aspects of Developmental and Comparative Immunology*, 2.
59. Saad, A. H., El Ridi, R. and **Zada, S.** (1984). Seasonal mixed leukocyte reaction (MLR) in the lizard, *Chalcides ocellatus*. *Aspects of Developmental and Comparative Immunology*, 2.
60. Sminia T. and **Zada, S.** (1984). Cellular Recognition Events III Summaries and abstracts of contributed papers. *Aspects of Developmental and Comparative Immunology*, 2.
61. Saad, A. H., El Ridi, R., **Zada, S.** and Badir, N. (1983). Differential effect of hydrocortisone on T and B cells of the lizard, *Chalcides ocellatus*. *Dev. Comp. Immunol.*, 7.
62. **Zada, S.** (1981). The Fully Formed Chondrocranium of the lizard, *Agama pallida*. *J. Morphology*, 170.
63. El Ridi, R., **Zada, S.** and Kandil, O. (1981). Lymphocyte structural heterogeneity in the lizard *Chalcides ocellatus*. *Aspects of Developmental and Comparative Immunology*, 1.
64. El Ridi, R., El Deeb, S. and **Zada, S.** (1981). The gut-associated lymphoepithelial tissue (GALT) of lizards and snakes. *Aspects of Developmental and Comparative Immunology*, 1.
65. **Zada, S.** (1976). The inter-relationship between the neural elements, cartilage and bone in the embryonic lower jaw. *Bull. Fac. Sc., Cairo Univ.*, 49.

66. Kamal, A. M. and **Zada, S.** (1973). The Early Developmental Stages of the Chondrocranium of *Agama pallida*. *Acta Morphol. Neerl. Scand.*, 11.
67. Kamal, A. M. and **Zada, S.** (1970). The Phylogenetic position of the family *Agamidae* in the light of the study of the Chondrocranium. *Zool. Anz.*, 184.

## Conferences

---

1. Eman Rabie, Inas Sayed, Ghada El-Kamah, **Suher Zada**, Hoda Radwan, Nehal Hassib· Mostafa Mostafa, Khalda Amr. Identification of rare novel TSPEAR variants in autosomal recessive ectodermal dysplasia using whole exome sequencing. The 55th Annual European Human Genetics (ESHG) Conference, Vienna, Austria from Saturday June 11 to Tuesday June 14, 2022. The abstracts will be published in April 2023 as part of the Abstracts Collections of the European Journal of Human Genetics (EJHG, Springer Nature, Impact factor=4.71)
2. Dina Fares, **Suher Zada**, Mohamed Fares. A significant drop in Sperms DNA fragmentation in a complete teratozoospermic patient post smoking cessation and its impact on ART: a case control study: Poster presentation in the European Society of Human Genetics (ESHG), Vienna, 11-14 June 2022.
3. Inas Sayed, Ghada El-Kamah, Hoda Radwan, Eman Rabie, **Suher Zada**, Mostafa Mostafa, Nehal Hassib, Mennat Mehrez, Khalda Amr . Likely pathogenic and known variants in EDA, EDAR and NECTIN4 in Egyptian families with different forms of Ectodermal dysplasia. The 55th Annual European Human Genetics (ESHG) Conference, Vienna, Austria from Saturday June 11 to Tuesday June 14, 2022.
4. Hoda Abdalla Ahmed Radwan , Khalda Sayed Amr ,Eman Rabie , Ghada El-Kamah , Inas Sayed , Mennat Mehrez , Nehal Hassib , **Suher Zada** , Maha Abuzaid , Mohamed Abdel-Kader , Mostafa Mostafa, Yasmine Mohsen. Targeted next generation sequencing of Hypohidrotic ectodermal dysplasia in Egyptian pedigrees . The 54th Annual European Human Genetics (ESHG) Conference, Virtual conference, August 28-31, 2021.The abstract was published in the Abstracts Collection of the European Journal of Human Genetics (2022) 30:88–608; <https://doi.org/10.1038/s41431-021-01026-1>
5. Khalda Amr, Eman Rabie, Ghada El- Kamah, Hala Naser, **Suher Zada**, Khaled Gaber (2017) First report of prenatal diagnosis for severe genodermatoses in Egypt 50th European Society of Human Genetics (ESHG) conference, Copenhagen, Denmark. May 27-30
6. Noha Samir Ismail, Nageh K. Allam, **Suher Zada**, Ashish Kulkarni, Shiladitya Sengupta, ( 2016) Fluorescently Surface Charged Nano-Liposomes Reveal unexpected Internalization pattern among various Immune cells: A Step Towards Better Targeted Cancer Nano-immunotherapy, *Material Research Society (MRS) Fall meeting & Exhibit (November 27-December 2, 2016) Boston, Massachusetts.*
7. Noha Samir Ismail, Nageh K. Allam, **Suher Zada**, Ashish Kulkarni, Shiladitya Sengupta, Engineering Pegylated Nano-Liposomes as a Novel Delivery Platform for Anthraquinone based STAT3 inhibitor: Towards efficient activation of Dendritic Cells in Tumor Microenvironment, *Material Research Society (MRS) Fall meeting & Exhibit (November 27-December 2, 2016) Boston, Massachusetts.*
8. Noha Samir Ismail, Nageh K. Allam, **Suher Zada**, Ashish Kulkarni, Shiladitya Sengupta, Novel Engineered Nano-liposomes for Altering Immune Response: A Promising Targeting Platform in Cancer Immunotherapy Applications, *Sustainable Nanotechnology Organization Conference (November 10 – November 12) Orlando, Florida.*
9. Eman Rabie, Khalda Amr, Ghada El-Kamah and Suher Zada (2016) May 2-7Molecular Medicine helps Orphan Diseases: a study on Xeroderma Pigmentosum in Egypt. AUC Research Day, Cairo, Egypt



10. Eman Rabie, Khalda Amr, Ghada El Kamah and **Suher Zada** (May 2016) *5<sup>th</sup> course in next Generation Sequencing, European School of Human Genetics (ESHG), Bertinoro, Italy*
11. L. Mourad, E. Alahwany, M. Zoheiry, H. Abu-Taleb, F. Nagy, M. ElGhannam, and M. Hassan, **S.K. Zada** (2015). Circulating mRNA-122 as a biomarker for HCV-induced hepatocellular carcinoma. *International Liver Cancer Association (ILCA), Paris, France.*
12. M. H. Aly, M. F. Tolba, I. M. Ayoub, **Zada, S. K.**, A. N. B. Singab, and M. M. Elmazar (2015). Hepatoprotective activity of *Dietes bicolor* leaf extract: Role of Vitexin. *The Society Of toxicology (SOT), San Diego, California, USA.*
13. **S. K. Zada**, I. A. Khalil, E. R. Abdulghany, and I. R. Bauiomy (2015). Development of Triclabendazole-Loaded PLGA Poly (D, L lactide-co-glycolide) Nanoparticles for Control of Parasitic Diseases. *3<sup>rd</sup> FUE International Conference on Pharmaceutical Sciences (3<sup>rd</sup> FUE-ICPS), Cairo, Egypt.*
14. N. N. Farrag, M. M. Youssef, M. F. Tolba, M. A. Alsherbiny, M. M. Shabana, M. A. Abdel-Kawy, E. El-Ahwany, **S. K. Zada** (2014). Solamargine; a potential promising anti-tumor agent? Exploring and comparing its potency with nitroso-solamargine and solanine. *American Association for Cancer Research (AACR), Shanghai, China.*
15. E. R. Abdul-Ghany, **S.K. Zada**, G. A. Awad, R. O. Ahmed (2014). Improvement of Antischistosomal Activity of Praziquantel by Incorporation into Poly (D, L lactide-co-glycolide) (PLGA) Nanoparticles. *AAPS Annual Meeting and Exposition conference, San Diego, California, USA.*
16. M. Zoheiry, E. El-Ahwany, S. Hasan, H. Abu Taleb, M. Magdy, S. Meshaal, M. El-Ansari, I. Raafat, **S. Zada** (2014). Evaluation of Epithelial Mesenchymal Transition Markers as Predictors to HCV-induced Liver Fibrosis and Carcinogenesis. *Conference of the Asian Pacific Association for the Study of the Liver (APASL), Cairo, Egypt.*
17. E. EL-Ahwany, M. Zoheiry, M. Nosseir, M. El-Ghanam, **S. Zada** (2013). Circulating microRNAs as potential biomarkers for HCV-mediated liver fibrosis. *The Liver Meeting, Washington, DC, USA.*
18. N. El-Bassiouni, M. Zoheiry, E. El-Ahwany, M. Nosseir, R. Ibrahim, H. Abu Taleb, **S. Zada**, A. El Bassiouny (2013). Clinical Significance of Both Serum Connective Tissue Growth Factor and Transforming Growth Factor-Beta 1 in HCV-Induced Liver Fibrosis and Carcinogenesis. *Conference of the Asian Pacific Association for the Study of the Liver (APASL), Singapore.*
19. M. Amer, E. E El-Ahwany, M. Elhefnawi, A.F. Awad, N. Abdel Gawad, **S. Zada**, F. Abdel Tawab (2013). Prediction of microRNA target genes involved in liver cancer pathways and its validation. *The International Liver Congress of the European Association for the Study of Liver (EASL), Amsterdam, Netherland.*
20. E. El-Ahwany, M. Zoheiry, M. El-Ghanam, I. Sedky, **S. Zada** (2012). The levels of several circulating miRNAs increased in the responders to the combination of pegylated interferon plus ribavirin for the treatment of chronic hepatitis C. *The EASL/AASLD Special Conference, Prague, the Czech Republic.*
21. E. G. Ahwany, M. K. Zoheiry, M. El-Ghanam and **S. K. Zada** (2012). Serum MiRNA as a Novel Non-Invasive Diagnostic Tool for HCV –induced Hepatocellular Carcinoma. *The International Liver Congress of the European Association for the Study of Liver (EASL), Barcelona, Spain.*
22. E. G. Ahwany, M. K. Zoheiry, M. El-Ghanam and **S. K. Zada** (2012). Increased the expression of regulatory T cells in non-responders to the combination of pegylated interferon and ribavirin for the treatment of hepatitis C. *The International Liver Congress of the European Association for the Study of Liver (EASL), Barcelona, Spain.*
23. **Zada, S. K.**, Rabie I., Newire E., Edris S. and Ahwany E. (2012). Novel Expression and mRNA Sequence Detection of *Schistosoma mansoni* Cathepsin L1 in Egypt; Suggesting Potential Target for Chemotherapy and Vaccine Development. *BIT's 4<sup>th</sup> World Congress of Vaccine (WCV), Beijing, China.*
24. A. Bassiony, E. Ahwany, M. Zoheiry, M. Nosseir, R. Ibrahim, **S. Zada**, N. El Bassiouni (2011). Circulating bone marrow derived fibrocytes contribute to the expression of myo-fibroblast pool in HCV-mediated liver fibrosis. *The International Liver Congress of the European Association for the Study of Liver (EASL), Berlin, Germany.*



25. ElHefnawy, M., **Zada, S. K.**, Amer, M. (2011). Novel targets for Hepatoma-deregulated miRNAs portray the hall marks of cancer. *10th International Conference on Bioinformatics InCoB, Kuala Lumpur, Malaysia.*
26. ElHefnawy, M., **Zada, S. K.**, Omar, M. (2011). Novel Inhibitors of the RNA Dependent RNA polymerase of Hepatitis C Virus. *International Conference on Drug discovery and Innovation (ICDD), Dubai, UAE.*

## Patents

---

1. **S. Zada**, I. Rabie, A. Ramadan and M. Sallam (2013). Single-Domain Antibodies and Graphene Coated Magnetic Metal Nanoparticles Conjugate and Methods for Using the Same. American University in Cairo, Publication No. WO/2013/014538.
2. **Zada, S. K.**, ElHefnawy M., Ahwany E., Windicsh, M. P. (2012). Optimal in silico design of small interfering RNA molecules targeting the Egyptian genotype 4 of Hepatitis C Virus. The Egyptian Patent Office EGPO, Ministry of Scientific Research, Academy of Scientific Research and Technology, Patent Cooperation Treaty, Egypt.

## Theses

---

1. Dina Faris (2023) DNA Integrity in Absolute Teratospermia Patients and Its Impact on Assisted Reproductive Technology. Granted her Ph. D. Spring 2023 *Biotechnology Graduate Ph.D. Program Advisor*
2. Eman AbdelAlim Rabie (2023) Molecular Diagnosis of non-X -linked Ectodermal Dysplasia's using Targeted Next generation Sequencing. Granted her Ph.D. Spring 2023 *Biotechnology Graduate Ph.D. Program Advisor*
3. Nahla Osama Mohamed Moussa (2020) Circulating microRNA in Neuromuscular Disorders "*Biotechnology Graduate Ph.D. Program. Co Advisor*
4. Sarah Halawa (2020) Profiling Genome-Wide DNA Methylation in Human Aortic and Mitral Valves, *Sir Magdy Yacoub Center Ph.D. Thesis Internal Examiner*
5. Marwa Badawy (2020) "The Anti-Diabetic potential of the African Adansonia digitata L. Plant Extract"  
a. *Biotechnology Graduate Program, Master's Thesis Examiner*
6. Mayada Mazher (2020) "Autophagic Reprogramming of Bone Marrow-Derived Macrophages" *Biotechnology Graduate Program, Master's Thesis Examiner*
7. Nehal Ghoneim (2020) Three -Dimensional Scaffolds and Stromal Stem Cells to Facilitate Regeneration following Spinal Cord Injury *Biotechnology Graduate Program, Master's Thesis Internal Examiner*
8. Mohamed Mahmoud (2019) Pharmacological and Molecular modeling studies on the effect of Biochanin -A in colon cancer cells Student from Ain Shams University *Co-Advisor (granted MSc)*
9. Lobna Mourad (2017). Serum mRNAs as a Novel Non-invasive tool for HCV induced Hepatocellular Carcinoma. *Biotechnology Graduate Ph.D. Program. Served as Advisor.*
10. Doaa Abd El Gayd (2017). Response of T regulatory Cells and Th17 to the Immunization with Fatty Acid Binding Protein Antigen in Murine Schistosomiasis. *Graduate Ph.D. Program, Ain Shams University. Served as Co- Advisor.*
11. Nihal AbdelNabi (2016). Calcified gelatin nanofibers for guided tissue regeneration using water based benign solvent, an investigation for periodontal applications. *Biotechnology Graduate Master Program. Served as Advisor.*
12. Eman Rabie Abdul-Ghany (2016) Development of Immuno- Nanoparticles for Targeting *Schistosoma* Parasites. *Biotechnology Graduate Master Program. Served as Advisor.*

13. Eman AbdelAeem Rabie (2016) Identification of XPA and XPC gene mutations in patients with *Xeroderma Pigmentosum*. *Biotechnology Graduate Master Program*. Served as *Advisor*.
14. Samia Salah Hammouda (2016). Quality by design approach for the optimization of the loading characteristics of Rosiglitazone Maleate drug in PLGA microparticles for the treatment of pulmonary arterial hypertension. *Chemistry Graduate Master Program*. Served as *Internal Examiner*.
15. Marwa Zahra (2016). Transcriptional Regulatory Networks for differentially expressed genes in HCV-induced HCC. *Biotechnology Graduate Master Program*. Served as *Internal Examiner*.
16. Noha Samir Ismail (2015). Lipid-based nanoparticles for altering immune response: A step towards targeted cancer immunotherapy. *Nanotechnology Graduate Master Program*. Served as *Co-advisor*.
17. Noha Nagdy Farrag (2015). Promising antitumor therapeutics of herbal origin: Exploring cytotoxic activity of glycoalkaloids and unraveling underlying mechanisms. *Biotechnology Graduate Master Program*. Served as *Advisor*.
18. Mohi El-Din Youssef (2015). A Study on the Potential Chemo modulatory Effects of Biochanin-A in Hepatocellular Carcinoma Cells. *Pharmacology and Toxicology Graduate Master Program, Ain Shams University*. Served as *Co-Advisor*.
19. Amanda Abdel-Al. MicroRNAs as non- invasive biomarkers for the detection of different stages of liver fibrosis in HCV patients. *Biotechnology Graduate Master Program*. Served as *Advisor*.
20. Mohamed Aly (Running). Studies on the potential chemo modulatory effects of vitexin. *Biotechnology Graduate Master Program*. Served as *Advisor*.
21. Nouran Adly Evaluation of cytotoxic potential of combined antihistaminic drugs: Cyproheptadine and Loratidine in Hepatocellular Carcinoma Cell Lines. *Biotechnology Graduate Master Program*. Served as *Advisor*.

## Research Interest

---

- ❖ *Immunology Infectious Diseases - Cancer Research.*
- ❖ *Nanocarriers - Drug Delivery:* Use of Bio-Nanotechnology for improving the currently available therapeutics through design and development of smart drug delivery systems "DDS" for targeting and treatment of epidemic infectious parasitic diseases, Hepatitis C virus and different types of cancer.
- ❖ *Vaccines – microRNAs:* Use of biotechnology & bioinformatics for discovery and validation of new therapeutics "specifically RNA interference (RNAi)-based strategies" & vaccines for the treatment of such diseases.
- ❖ *Cellular and Molecular Embryology - Developmental and Comparative Immunology.*

## Research Projects

---

1. Nageh Allam (Principal Investigator) and **Suher Zada** (Co-Pi) (2020), Novel composite nanofibers for Face Mask: Cost effective biomaterials for healthcare workers and publics. Pandemic and Post-Pandemic Research and Innovation Initiative. Office of the Associate Provost for Research, Innovation and Creativity, AUC

2. **Zada, S.K.** (Principal Investigator) Ongoing Research “Development of Natural Cytotoxic-Loaded Nanoparticles as Complimentary Therapy for Liver Cancer.” American University in Cairo.
3. **Zada, S.K.** (PI), Rabie, I. (Co-PI), ElAhwany, E. (Supporting), ElHefnawy, M., Nanoparticles as a delivery system targeting Schistosomiasis and Fascioliasis. A pilot study using nanotechnology and bioinformatics. Yousef Jameel Science and Technology Research Center “YJ-STRC” and Theodore Bilharz “TBRI
4. **Zada, S. K.** (PI), ELAhwany, E. (Co-PI), Rabie, I. (Co-PI) Different circulating markers and Micro-RNAs as novel diagnostic and therapeutic tools in HCV-induced liver fibrosis and hepatocellular carcinoma.
5. Nanobody-Nanoparticle conjugates against parasitic diseases: Schistosomiasis.
6. The Cytokine and chemokine Profiles in Egyptian Hepatitis C Virus Genotype-4 in Relation to Liver Disease Progression. *American University in Cairo.*
7. MicroRNA as a novel therapeutic tool in HCV-induced liver fibrosis. *American University in Cairo.*
8. A therapeutic trial for HCV infection using small Interfering RNA (siRNA) targeting the viral genome. *American University in Cairo.*
9. T<sub>reg</sub> cells, a new lymphocyte subpopulation with a key role in the immune response against *Schistosoma mansoni* infection. *American University in Cairo.*
10. Optimal Drug Design of Specific Therapeutic small Interfering RNAs (siRNA) for Hepatitis C Virus. *YJ-STRC.*
11. Cloning expression of target antigen (Cathepsin L1&L2) from *Schistosoma mansoni* and *Fasciola gigantica*. *YJ-STRC.*
12. Investigating the 3D Structure and Functional motifs relationship between Hepatitis C Virus NS5a protein and response to IFN therapy and interactions with the immune system.
13. Apoptotic Markers: Progress of chronic liver disease and development of Hepatocellular Carcinoma in Hepatitis C virus infection
14. Early prediction of tumorigenic changes in cell cycle genes in chronic Hepatitis C.
15. Preparation and Screening of a *Fasciola gigantica* cDNA Library.
16. Identification of an immunoprotective antigen from the surface membrane of adult *Schistosoma mansoni* worms.

## Highlights

---

- ❖ Chair of the Academic Affairs Committee (September 2007-2016)
- ❖ Member of the Deans Council for the Promotion and Tenure cases (2017-2021)
- ❖ Developed Biology Major at AUC “The program has flourished, and the first students graduated in 2000”. News@AUC Article: Biology Program Blooms Under Dedicated Professor.
- ❖ Developed and taught courses, both lectures and labs, new to the biology program at AUC: Molecular Cell Biology (BIOL 211/2230), Microbiology (307/3310), Comparative Anatomy (BIOL 312/3326), Selected Topics in Biology (BIOL 408/4930), Current Health Issues (BIOL 130/1410), and Immunology (BIOL 415/4230).
- ❖ Coordinated and taught the multi-sectional Unity of Life lectures (BIOL 104) and labs.
- ❖ Reviewer, Ad Hoc Reviewer, Citadel Fellowship for Master candidates’ interviewing and selection. (March 2015 - Present).
- ❖ Program Coordinator, Donation of valuable collection of rare books from Dr. Boutros Boutros Ghaly to the Library of the AUC. (January 2014 - 2016).
- ❖ Participant in the round table discussion on the progress and ethics of gene editing and its possible implications on human life, Library of Alexandria, Shatby 21526 Alexandria, (October 2015 - December 2015).
- ❖ Committee Member, Biology and Psychology Collaborative work committee.

- ❖ Committee Member, NAQUAA.
- ❖ Program Coordinator, ASM Small Grants for Early Career Researchers in Egypt, initiated by Mrs. Enas Newire, *M.Sc.*, a Biology graduate student and ASM Young Ambassador and Consultant to Egypt of American Society for Microbiology “ASM”, USA. (January 2015 -2017)
- ❖ Contributor, Bio Resource Centre BRC at the Biology Department at AUC as a result of collaboration between AUC and ASM “The American Society for Microbiology”. (January 2015 -2017)
- ❖ Student Charity Organization Advisor, Hand in Hand (HIH) Society at AUC. (September 2013 - 2018).  
(Non-Professional Org), Hand IN Hand.
- ❖ Member, Egypt's Society for Culture & Development.
- ❖ Member, Association for Spouses of Egyptian Diplomats.
- ❖ Member, Integrated Care Society.