CURRICULUM VITAE

Name: Hend Okasha Ahmed

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Occupation: Associate Professor and Technical manager of CerBioP

Department: Biochemistry and molecular biology. **Organization:** Theodor Bilharz Research Institute.

Address: P. O. Box 30 Imbaba, Giza 12411, Egypt.

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Degree: Ph.D. Biochemistry Ain Shams University, Cairo Egypt 2017.

M. Sc. Biochemistry (molecular biology) Ain Shams University, Cairo Egypt 2011.

B. sc. Biochemistry and Chemistry, Ain Shams University, Cairo Egypt 2003.

Specialization: Molecular biology and genetic engineering in biotechnology.

Scopus Author ID: 57211778289/ *h*-index: 9

A- Expertise:

1. Gene synthesis using Bioinformatics tool and two steps PCR assembly.

2. Designing anticancer peptides using a bioinformatics tool.

- 3. Molecular diagnosis of HCV, HBV, and EBV using qualitative and quantitative PCR.
- 4. Molecular cloning of different genes (e.g. human interferon-gamma, HCV Core) into cloning and expression vectors.
- 5. Lab-scale and process development for limited pilot-scale production of recombinant human interferon-gamma and human interferon alfa 2b.
- 6. Batch and Fed-batch fermentation technology (e.g. *E. coli* strain). Benchtop Bioreactor establishment.
- 7. Purification of recombinant therapeutic and diagnostic proteins using fast protein liquid chromatography (FPLC) and high-pressure liquid chromatography (HPLC).
- 8. Phage display technology and nanobody technology platform
- 9. Preclinical animal models (e.g. Mice, Rats)
- 10. Detection of biological activity of recombinant human therapeutic proteins using mammalian cell culture and cytopathic inhibition assay (CPE)
- 11. *In vitro* cytotoxicity and anti-inflammatory of natural and synthetic compounds.
- 12. Protein mass spectrometery.



B- Abstracts:

- 1. Mohamed Saber, Hanaa Hammad, Soad El-Sherif, Rasha Shabaan, Marwa Nassar, Samy Nasr, <u>Hend Okasha</u>, and Ehab El-Dabaa (2010). Lab-scale production of recombinant pharmaceutical proteins: established skills for R&D and innovative research. The 3rd ANDI Stakeholders Meeting, United Nations Office (UNON), Nairobi, Kenya .11-13 October 2010.
- Mohamed Saber, Mahmoud Hassan Romeih, Hanan Abdel-Moneem Ismaeil Mohamed Refky, Enass Mostafa, Mostafa Mostafa, and <u>Hend Okasha</u> (2016). Large-scale production of recombinant human interferon-gamma. The 3rd International Cairo Exhibition for Innovation. 19-20 November 2016. Egypt
- 3. Mohamed Saber, Mahmoud Hassan Romeih, Hanan Abdel-Moneem Ismaeil Mohamed Refky, Enass Mostafa, Mostafa Mostafa, and <u>Hend Okasha</u> (2017). Large-scale production of recombinant human interferon-gamma. The 4th International Cairo Exhibition for Innovation. 21-23 November 2017. Egypt
- 4. Abdullah Elsayed Gouda, Amina Mohamed Medhat, Eman Mohamed Saleh, <u>Hend Okasha Ahmed</u>, and Mohamed Abbas Shemis. (2019). Recombinant Expression of HCV Genotype-4 Core Antigen in Prokaryotic *E. coli* System for using in Diagnostic Assays. The 8th Scientific Conference of Ain Shams University. 1-3 April 2019. Egypt
- 5. <u>Hend Okasha</u>, Marwa Hassan, Tarek Aboushousha, and Safia Samira (2019). Effect of Interferon-Beta on the Expression of Tumor Suppression and Proliferation Genes in Human Liver Cancer Cell Line. United Conference of Hepatogastroentrology and Infectious Disease 2019 (UCHID-2019). 25-28 September 2019. Egypt
- 6. Eman Abdullah Morsi, <u>Hend Okasha</u>, Heba Abdel Hady, Mortada El-Sayed, and Mohamed Abbas Shemis (2019). Gas Chromatography-Analysis, Antioxidant, Anti-Inflammatory, and Anticancer Activities of Some Extracts and Fractions of *Linum usitatissimum*. International Conference on Pharmacy and Pharmacological Sciences. November 2019. Dubai, UAE.
- 7. Reda Abdallah Mohamed, OhoudM. Abdel-Hay, Dalia Ibrahim Badran, <u>Hend Okasha</u> (2022). A newly designed micromolecule (peptide) using bioinformatics and its potential anticancer effect on HCC. TBRI Annual Conference December 2022, Egypt
- 8. Ehab El-Dabaa, <u>Hend Okasha</u>, Sami Mohamed Nasr, Safia Samir, Omnia Ali Mohamed, Hadeer Adel El-Kalamawy, and Mohamed Ali Saber (2022). Process for high-level Production of Active Recombinant Streptokinase in E. coli Using Batch Fermentation strategy. TBRI Annual Conference December 2022, Egypt
- 9. Sami Mohamed Nasr, Safia Samir El-Naggar, <u>Hend Okasha</u> (2022). Designing an optimized process for production of high-yield purified rhGH using *E. coli* expression. TBRI Annual Conference December 2022, Egypt

- Safia Samir, Amira El-Far, <u>Hend Okasha</u>, Rania Mahdy, Fatima Samir, and Sami Nasr (2022). Bacteriophages against Methicillin-resistant Staphylococcus aureus: New and Potential Alternate Therapy. TBRI Annual Conference December 2022, Egypt
- 11. Safia Samir, <u>Hend Okasha</u>, Tarek M. Diab, Amr Mostafa, Hesham A. Elmeligy, Amira Kamel, Heba Khalil (2022). Epstein-Barr Virus and Gastric Cancer: A Distinct Molecular Subtype. TBRI Annual Conference December 2022, Egypt
- 12. <u>Hend Okasha</u>, Heba Dahroug, Abdullah E. Gouda, Mohammed Abbas (2023). Antibacterial activity of nanoparticles loaded with the recombinant Cec-B peptide against clinical isolates of Gram-negative bacteria. 5th Annual Conference of Medical Microbiology and Microbiology Departement, March 2023, Faculty of Medicine, Ain Shams University, Egypt
- 13. <u>Hend Okasha</u>, Sami Mohamed Nasr, Ehab Hafiz, Safia Samir (2023). A produced Cecropin-B peptide with Recombinant DNA Technology Ameliorates Hepatocellular Carcinoma Suppression Through Induction of Apoptotic Pathway. 1st international conference of cancer treatment and diagnosis. October 2023, NRC, Egypt
- 14. <u>Hend Okasha</u>, Maha B. Salem, Mohamed R. Habib, Mohamed Elzallat, Samah I. Ghoname, Olfat Hammam, Ehab El-Dabaa, and Ahmed A.A. Hussein (2024). Exploring the Potential Anticancer Efficacy of Snail Soft Tissue Peptides: From Identification to Therapeutic Implications via Advanced Mass Spectrometry Techniques. 2nd international conference of cancer treatment and diagnosis. October 2024, NRC, Egypt

C- Publications:

- **1.Saber Mohamed Ali, Mohamed Nadia Abdullah, Mohamed Eman Abd Al- Azeem, and Okasha Hend Ahmed (2016).** Application of Biotechnology for Production of Recombinant Human Interferon Gamma. *Journal of Pure and Applied Science*. 54 (3): 1-7.
- **2. Mohamed Saber, <u>Hend Okasha Ahmed</u>, Magdy Mahmoud Mohamed, and Mahmoud Hassan Romeih (2017).** Production of recombinant human interferongamma by batch fermentation in *E.coli* system. *Arab Journal of Biotechnology.* 20 (1): 21-32.
- 3. <u>Hend Okasha</u>, Marwa Hassan, Tarek Aboushousha, & Safia Samir (2019). Effect of Interferon-Beta (IFN-β) on tumor suppressor and apoptotic markers in hepatocellular carcinoma cell line. International Journal of Research in Pharmaceutical Sciences, 10(4), 2936–2943. https://doi.org/10.26452/ijrps.v10i4.1574
- **4. Okasha, H., and Samir, S. (2020).** Synthesis and molecular cloning of antimicrobial peptide chromogranin A N-46 gene using conventional PCR. *Gene Reports*, 18, 100571. https://doi.org/10.1016/j.genrep.2019.100571

- **5.** Okasha, H. (2020). Interferon and p53 Tumor Suppressor Marker in Hepatocellular Carcinoma. *International Journal of Pharmaceutical Research*, 12(02). https://doi.org/10.31838/ijpr/2020.12.02.0008
- **6. Morsi, E. A., <u>Ahmed, H. O.,</u> Abdel-Hady, H., El-Sayed, M., and Shemis, M. A. (2020).** GC-analysis, Antioxidant, Anti-inflammatory, and Anticancer Activities of some extracts and fractions of *Linum usitatissimum*. *Current Bioactive Compounds*, 16(9), 1306–1318. https://doi.org/10.2174/1573407216666200206095954
- 7. Lamiaa A. Ahmed, Maha B. Salem, Sayed H. Seif el-Din, Naglaa M. El-Lakkany, Hend O. Ahmed, Sami M. Nasr, Olfat A. Hammam, Sanaa S. Botros, Samira Saleh. (2020). Gut microbiota modulation as a promising therapy with metformin in rats with non-alcoholic steatohepatitis: Role of LPS/TLR4 and autophagy pathways. *European Journal of Pharmacology*, Volume 887, 173461. doi.org/10.1016/j.ejphar.2020.173461
- **8. Saber, M. A., Okasha, H., Khorshed, F., & Samir, S. (2021**). A Novel Cell-based In vitro Assay for Antiviral Activity of Interferons α, β, and γ by qPCR of MxA Gene Expression. *Recent Patents on Biotechnology*, 15(1), 67–75. https://doi.org/10.2174/1872208314666201112105053
 - 9. Seif El-Din SH, Salem MB, El-Lakkany NM, Hammam OA, Nasr SM, Okasha H, Ahmed LA, Saleh S, Botros SS. (2021). Early intervention with probiotics and metformin alleviates liver injury in NAFLD rats via targeting gut microbiota dysbiosis and p-AKT/mTOR/LC-3II pathways. Hum Exp Toxicol. 8:960327121999445. Doi: 10.1177/0960327121999445.
- 10. Okasha, H., Nasr, S. M., & Samir, S. (2021). Recombinant Expression of Cec-B Peptide in Escherichia coli with a Significant Anticancer Effect on Hepatocellular Carcinoma. *Current Pharmaceutical Biotechnology*, 22(9), 1235–1245. DOI: 10.2174/1389201022666210104121709
 - 11. Okasha, Hend, Safia Samir, and Sami Mohamed Nasr (2021). Purified Recombinant Human Chromogranin A N46 Peptide with Remarkable Anticancer Effect on Human Colon Cancer Cells. *Bioorganic Chemistry*, 115, 105266 DOI: 10.1016/J.BIOORG.2021.105266
 - **12. Saleh, Eman M., Abdullah E. Gouda, Amina M. Medhat, <u>Hend O. Ahmed,</u> and Mohamed A. Shemis (2021). Expression of HCV Genotype-4 Core Antigen in Prokaryotic E. Coli System for Diagnosis of HCV Infection in Egypt.** *Protein Expression and Purification***, 105965 <u>DOI: 10.1016/J.PEP.2021.105965</u>**
 - 13. Okasha, Hend, Asmaa Abdel-Motleb, and Marwa Tamim A. Abdel-Wareth (2021). Metallothionein Expression in Aspergillus Exposed to Environmentally Relevant Concentrations of Heavy Metals at Different PH Levels. *Environmental Science and Pollution Research*, 28:36, 49936–48 DOI: 10.1007/S11356-021-14237-2

- 14. Mohamed, Tamer Samy, Laila Abdel-Ghany Refahy, Mahmoud Hassan Romeih, Manal Mortady Hamed, Hend Okasha Ahmed, and Maher Abdel-Aziz El-Hashash (2021). Chromatographic Isolation and Characterization of Certain Bioactive Chemical Ingredients of Phyllanthus Emblica Extracts and Assessment of Their Potentials as Antiviral and Anticancer Agents. *Egyptian Journal of Chemistry*. DOI: 10.21608/EJCHEM.2021.79403.3902
- **15. Abdelmonsef, A. H., Abdelhakeem, M. A., Mosallam, A. M., Temairk, H., El-Naggar, M., Okasha, H., & Rashdan, H. R. M. (2021).** A search for antiinflammatory therapies: Synthesis, in silico investigation of the mode of action, and in vitro analyses of new quinazoline-2,4-dione derivatives targeting phosphodiesterase-4 enzyme. *Journal of Heterocyclic Chemistry*. https://doi.org/10.1002/JHET.4395
- 16. Saleh, H.A., Gaber, H.S., Mohamed, H.M., Khayat, E.-, Abdel-motleb, A., Mohammed, W.A., and Okasha H. (2022). Influences of Dietary Supplementation of *Chlorella vulgaris* and *Spirulina platensis* on Growth-Related Genes Expression and Antioxidant Enzymes in *Oreochromis niloticus* Fish Exposed to Heavy Metals. *Aquaculture Studies*, 22(2), QUAST793. http://doi.org/10.4194/AQUAST793
- 17. El-Dabaa, E., Okasha, H., Samir, S., Adel El-Kalamawy, H., Mohamed Nasr, S., & Ali Saber, M. (2022). Optimization of high expression and purification of recombinant streptokinase and in vitro Evaluation of its thrombolytic activity. Arabian Journal of Chemistry, 103799. https://doi.org/10.1016/J.ARABJC.2022.103799
- 18. Samir, S., El-Far, A., Okasha, H., Mahdy, R., Samir, F., Nasr, S., (2022). Isolation and characterization of lytic bacteriophages from sewage at an Egyptian tertiary care hospital against methicillin-resistant Staphylococcus aureus clinical isolates. Saudi J. Biol. Sci. 29. https://doi.org/10.1016/j.sjbs.2022.03.019
- 19. El-Maadawy, W. H., Hafiz, E., Okasha, H., Osman, N. A., Ali, G. H., & Hussein, R. A. (2022). Phycocyanin stimulates ulcerative colitis healing via selective activation of cannabinoid receptor-2, intestinal mucosal healing, Treg accumulation, and p38MAPK/MK2 signaling inhibition. Life Sciences, 305, 120741. https://doi.org/10.1016/J.LFS.2022.120741
- 20. Okasha, H., Abdel-Hady, H., Morsi, E.A. et al. (2022). In Vitro Cytotoxic Activity and Identification of Bioactive Compounds Isolated from Olea europaea and Syzygium aromaticum Plants. Pharm Chem J 56, 1123–1132. https://doi.org/10.1007/s11094-022-02761-5
- **Okasha H, Aboushousha T, Coimbra MA, Cardoso SM, Ghareeb MA. (2022).** Metabolite Profiling of *Alocasia gigantea* Leaf Extract and Its Potential Anticancer Effect through Autophagy in Hepatocellular Carcinoma. Molecules. Dec 3;27(23):8504. doi: 10.3390/molecules27238504.
- 22. Huda R M Rashdan, <u>Hend Okasha</u>, Maha M Salem 3, Bothaina M Abd El-Hady 4, Basma Ekram (2023). Investigation of novel HCV therapies: Boscia angustifalia & Boscia senegalensis extracts loaded on galactosylated chitosan

- nanoparticles synthesized by eco-friendly method for HCV treatment. Int J Biol Macromol. 21;245:125420. doi: 10.1016/j.ijbiomac.2023.125420.
- 23. Almurshidi BH, Fahmy Z, El-Shennawy A, Selim EAH, Hammam OA, Okasha H, Al-Hajj W, Mahmoud SA, Abuelenain GL (2023). A multimodality therapeutic application on Toxoplasma gondii encephalitis utilizing Spiramycin and 'de novo' Ferula asafetida in immunodeficient mice. Parasite Immunol. 45(12):e13014. doi: 10.1111/pim.13014.
- 24. <u>Hend Okasha</u>, Heba Dahroug, Abdullah E. Gouda, and Mohamed Abbas Shemis (2023). A novel antibacterial approach of Cecropin-B peptide loaded on chitosan nanoparticles against MDR Klebsiella pneumoniae isolates. Amino Acids. doi.org/10.1007/s00726-023-03356-4.
- **Nasr SM, Samir S, and Okasha H** (2024). Interdisciplinary gene manipulation, molecular cloning, and recombinant expression of modified human growth hormone isoform-1 in E. coli system. Int J Biol Macromol. doi: 10.1016/j.ijbiomac.2023.128637.
- **Amina M. Ibrahim, Abdullah E. Gouda, <u>Hend Okasha</u>, Heba Dahroug, Mohamed A. Shemis (2024).** Anti-microbial, Anti-inflammatory and Anti-cancer Potentials of *Eobaniavermiculata* (Müller, 1774) Mucin-conjugated Gold Nanoparticles. Egyptian Journal of Medical Microbiology. 33(4): 1-10. <u>DOI:</u> 10.21608/ejmm.2024.311650.1304.
- **Heba R. Mohamed, Manal M. Hamed, Eman A. El-Wakil, <u>Hend Okasha</u> (2024). GC-MS analysis, anti-inflammatory and anti-proliferative properties of the aerial parts of three** *Mesembryanthemum* **spp. Toxicology Reports. 13 (2024) 101829. <u>DOI:</u> 10.1016/j.toxrep.2024.101829.**
- 28. Hadeer Adel El-Kalamawy, Mohammed H. Awwad, Tarek M. Diab, Hend Okash, Amal M. Abdel-Kareim, Marawan A. Marawan, Salma A. Shoulah and Ehab El-Dabaa (2024). Construction of Camelus dromedaries Immune Single Domain Antibodies Library for Development of Schistosoma mansoni Specific Nanobodies Using Phage Display Strategy. Recent Patents on Biotechnology. 19: 69 83. DOI: 10.2174/0118722083275669231227063413.
- 29. Reda Abdallah Mohamed, Ohoud Mohammed Marie, Dahlia Ibrahim Badran, Olfat Ali Hammam and Hend Okasha Ahmed (2025). Development of a Novel Peptide with RGD Tumor Homing Motif: Evaluation of its Anticancer Potential in Hepatocellular Carcinoma and Colon Cancer Cells. Recent Patents on Biotechnology. 19: 128-141. DOI: 10.2174/0118722083300452240315035722.
- 30. Sara Maher, Shimaa Atta, Manal Kamel, Olfat A. Hammam, and Hend Okasha (2025). Therapeutic Potential and Mechanistic Insights of a Novel Synthetic α-Lactalbumin-Derived Peptide for the Treatment of Liver Fibrosis. Journal of Clinical and Experimental Hepatology. 15(3): 102488. DOI: 10.1016/j.jceh.2024.102488.

D- National Research projects:

- 1. <u>ASRT (ID 96)</u> production of recombinant human interferon-gamma in prokaryotic expression system (*E. coli*) (2004-2012). PI: Assistant Professor Dr. Soaad Ali Sherif.
- STDF (ID 1454)
 Development of production and pegylation of interferon-alpha (2010 -2013). PI: Prof. Dr. Ehab El-Dabaa.
- 3. Strategic Projects (ID 12 ac)

Scaling Up Production of Recombinant Human Interferon Gamma in Prokaryotic System (2014-2019). PI: Prof. Dr.Mohamed Ali Saber.

4. <u>STDF (ID 33390)</u>

Isolation and identification of lytic bacteriophages against methicillin resistance staphylococcus aureus (2019-2021). PI: Dr. Safia Samir El- Naggar. Co-PI: Dr. Hend Okasha Ahmed.

5. STDF (ID 33430)

Process development for industrial production of human growth hormone (2019-2021). PI: Dr. Sami Mohamed Nasr. Co-PI: Dr. Hend Okasha Ahmed.

6. STDF (ID 31257)

Centre of Excellence in bioinformatics guided development and characterization research in recombinant pharmaceutical proteins (2019-2021). PI: Prof. Dr. Ehab El-Dabaa.

7. STDF (ID 47731)

Incidence of Cryptosporidium Infection Among Egyptian Cancer Patients: Epidemiological Investigation and Vaccine Development (2023- running). PI: Ass. Prof. Hend Okasha.

8. STDF (ID 47476)

Efficacy and safety of new therapeutic approaches for combating multi-drug resistant Gram-negative bacteria in urinary tract infections (2023- running). PI: Ass. Prof. Walaa Hamido.

E-Internal Research Project:

1. TBRI internal project (ID 16k)

Biochemical studies on purified recombinant interferon-gamma produced in *E. coli* (2014-2016). PI: Prof. Dr.Mohamed Ali Saber. Co-PI: Dr. Hend Okasha Ahmed.

2. TBRI internal project (ID 28k)

Recombinant Production of two anticancer peptides using prokaryotic expression system (2018). PI: Dr.Hend Okasha Ahmed.

3. TBRI internal project (ID 30k)

Production of recombinant antibodies against *Schistosomiasis mansoni* using phage display technique (2018). PI: Prof. Dr.Tarek Mahmoud Diab.

4. TBRI internal project (ID 117Th)

Impact of short-chain fatty acids production adjustment using gut microbiota alone or in combination with metformin on modulation of autophagy and insulin resistance in non-alcoholic fatty liver disease-induced rats (2018). PI: Prof. Dr. Sayed Hassan.

5. TBRI internal project (ID 128Th)

Isolation and Evaluation of Syzygium aromaticum and Olea europaea leaves as Anticancer and Antiviral agents (2018). PI: Prof. Dr. Eman ElWakeel.

6. TBRI internal project (ID 134 ε)

Potential implications of some drugs (natural and synthetic) on the Gut-Liver-Brain axis in rats with hepatic encephalopathy (2022). PI: Dr. Maha Badr.

7. TBRI internal project (ID 133 s)

Phytoconstituents investigation and the possible therapeutic potential of some Ficus species against parasitic infections: In vitro and in vivo studies (2022). PI: Prof El-Sayed Saleh.

F- Thesis supervision:

- 1. Detection of Hepatitis C virus Genotype-4 using nucleic acid aptamers. M.Sc. Thesis. Faculty of Science- Ain Shams University. Approved. (Internal supervision).
- 2. Evaluation of the Antimicrobial Activities of Shepherin II Peptide Produced by Recombinant DNA Technology. Faculty of Science- Ain Shams University. Current. (Internal supervision).
- 3. Lab Scale Process Development for Production of Recombinant Human Growth Hormone (rHGH). Faculty of Science- Cairo University. Current. (Internal supervision).
- 4. In-vitro evaluation of the anticancer effect of denovo-designed peptide on liver and colon cancer cell lines. Faculty of Science- Suez Canal University. Current.
- 5. Molecular assessment of the potential therapeutic effect of surfactin in NAFLD-animal model. Faculty of Science- Cairo University. Current.
- 6. Evaluation of the therapeutic potential of nisin A peptide against experimentally-induced liver carcinogenesis in mice. Faculty of Science- Ain Shams University. Current.
- 7. Development of antigen-specific panels of recombinant single chain fragment nanobodies: A phage display platform application. Faculty of Science-Banha University. Approved. (Internal supervision).
- 8. Molecular and Bio-Analytical Characterization of Recombinant Interferon Gamma. Faculty of Science-Helwan University. Current. (Internal supervision).

G- Attended conferences:

- 1. The Second International Seminar in Microbiology. Theodor Bilharz Research Institute and Beaujon Hospital (France). October 2009. Cairo, Egypt.
- 2. The First International Biotechnology Innovation Conference. Faculty of Science, Cairo University. November 2010. Cairo, Egypt.
- 3. The Second Annual Conference of Industrial Biotechnologies. Association of Biotechnologies. Union of Arab Scientific Research Councils. July 2011. Cairo, Egypt.
- 4. TWAS/Biovision Alexandria Nxt. Alexandria, Library of Alexandria. April 2014. Alexandria, Egypt.
- 5. The Eighth Annual Scientific Conference on Hepatogastroentrology. Theodor Bilharz Research Institute and Beaujon Hospital (France). April 2016. Cairo, Egypt.
- 6. The Ninth Annual Scientific Conference on Hepatogastroentrology. Theodor Bilharz Research Institute and Beaujon Hospital (France). March 2017. Cairo, Egypt.
- 7. The 5th Annual Conference of Ain Shams Tropical Medicine Department. November 2017. Cairo, Egypt.
- 8. The 10th HOPE meeting. March 2018. Yokohama, Japan.
- 9. The 10th Annual Scientific Meeting in Hepatogastroenterology Between Theodor Bilharz Research Institute (Egypt) and Beaujon Hospital (France). May 2018. Cairo, Egypt.

- 10. The 10th Annual Conference of National Hepatology and Tropical Medicine Research Institute (NHTMRI). September 2018. Cairo, Egypt.
- 11. The 2nd Symposium within the Framework of MOU between TBRI and University of Basque Country, Spain. January 2019. Cairo, Egypt.
- 12. TBRI 2020 Virtual Annual Conference under the theme of Research and Clinical Practice. 10-12 December 2020. Virtual
- 13. 18th Annual International Congress of the Egyptian Association for The Study of Liver and Gastrointestinal Diseases (EASLGD 2022). 1-3 March 2022. Garand Nile Tower. Cairo, Egypt
- 14. 11th International Gastrointestinal Liver and Uro-oncology Conference IGILUC 21-22 July 2022. Cairo, Egypt
- 15. Annual TBRI conference under the theme: Emerging Technology in Health and Environment 1st to 3rd December 2022
- 16. 11th Annual Ain Shams University International Conference. 10th-11th May 2023
- 17. 1st international conference of cancer treatment and diagnosis. 15th-16th October 2023.

H- Training courses (workshops):

- 1. How to Present Scientific Data, of the further domain "Communicating and Presenting". DAAD Kairo Akademie. DAAD Cairo. April 2017.
- 2. Linking to Industry: Meet the End User. Technology Innovation Commercialization Office. Theodor Bilharz Research Institute. May 2017.
- 3. Proposal Writing for Post Docs. DAAD Kairo Akademie. DAAD Cairo. September 2017.
- 4. Interviews-Methods for Data Collection. DAAD Kairo Akademie. DAAD Cairo. October 2017.
- 5. Research Processes: Overview and Principles. DAAD Kairo Akademie. DAAD Cairo. October 2017.
- 6. Steps for Successfully Submitting Your Scientific Article. National Research Centre. March 2018.
- 7. Introduction to Patent Workshop. Clarivate Analytics. Egyptian Petroleum Research Institute. September 2018.
- 8. Presentation Skills. DAAD Kairo Akademie. DAAD Cairo. September 2018.
- 9. Project management. DAAD Kairo Akademie. TBRI. 22nd October 2018
- 10. The Symposium entitled: Multi-disciplinary Approaches for the Chemistry of Amino Acids and Peptides and their Medicinal Applications. National Research Centre. October 2018.

- 11. The Second Symposium within the Framework of MOU between TBRI and University of Basque Country, Spain. 15th January 2019.
- 12. "Enhance your research using NANO Research Solution" Session. 14 February 2019.
- 13. Biosciences symposium. Academy of Scientific Research. 16th March 2019
- 14. TBRI/National Institute of Parasitic Diseases Scientific Meeting "Trends in the Diagnostics, Control, and Prevention of Tropical Diseases. 14th April 2019.
- 15. How to publish the top 20 high-impact journals. 3rd December 2019.
- 16.SPSS for the Beginner (online course). Virtual. April 2020.
- 17.A webinar entitled: Taming the Viral Beast: Applying LC and LC-MS Technologies to the Analysis of rAAV Viral Vectors. SelectScience. 16 December 2020.
- 18.A webinar entitled: Profile host response in COVID-19 patients: Using the ELLA SimPlex in association with viral load in plasma. 26th February 2021.
- 19.A webinar entitled: Climbing the peaks of GC intelligence: Discover the smart new features of Agilent GCs. 3rd March 2021.
- 20.A webinar entitled: Increasing CRSPER knockout and screening efficiency with predesigned synthetic guide RNAs. 12th March 2021.
- 21.A webinar entitled: The Power of (U)HPLC Selectivity for diverse pharmaceutical methods, 20th June 2021.
- 22.A webinar entitled: mRNA Vaccines: Development, Manufacturing, and How NanoDrop Eight Can Help. 27 October 2021.
- 23.A webinar entitled: Troubleshooting in bioprocessing. 8 December 2021.
- 24. Advanced Scientific Research and Medical Malacology. TBRI. 1st March 2022.
- 25. Biobanking for better health and research. 5th July 2022, TBRI
- 26.A webinar entitled: Earn your black belt with Nunchuck's LNP-making Skills. 7th September 2022.
- 27.A webinar entitled: Scientific thefts in research-its concept and control mechanisms. 13th September 2022.
- 28.A webinar entitled: Secrets of Peer Review. 7th January 2023.
- 29.A webinar entitled: Photocontrolled Delivery of miRNA-34a Mimics Drive Apoptosis of Esophageal Cancer Cells and Regression of Tumors InVivo. 25th January 2023.
- 30.A webinar entitled: Systematic Reviews and Meta-analyses. 30th January 2023.
- 31.The Egypt-Japan Science Forum Health and Artificial Intelligence post-COVID era. 18th February 2023. NARIAC, Helwan, Egypt

- 32.A webinar entitled: Schistosomiasis Control in Egypt and China: Where We Stand? 23rd February 2023.
- 33. Workshop entitled: Biopharma analysis by UHPLC and high resolution Orbitrap[™] mass spectrometry. 9–13 July 2023. TBRI

I- Skills:

1. Lecturer and Trainer:

- o Trained in the Course Titled: Methods and Techniques in Biotechnology "Hands-on". From 7-8-2017 to 12-9-2017.
- Trained in the Course Titled: Methods and Techniques in Biotechnology "Hands-on". From 8-2018 to 9-2018.
- Trained in the Course Titled: Recombinant Protein Preparation "Hands-on".
 From 8-2018 to 8-2018.
- o Trained in the Course Titled: Methods and Techniques in Biotechnology "Hands-on". From 7-2019 to 9-2019.
- Speaker in the Workshop Tiltled: Biotechnology in Production of Recombinant Biopharmaceutical Proteins. 15 March 2022, TBRI
- Speaker in Egypt-Japan Scientific meeting Titled: 10th HOPE meeting and introduction to Center of Excellence in recombinant biopharmaceutical proteins. 23rd November 2023
- Speaker in the Workshop Titled: Introduction to Real-time PCR (Absolute and relative quantification, Data Analysis, and Gene expression analysis). 30th November 2022, TBRI
- o Speaker in the 3rd Workshop Titled: Biotechnology in Production of Recombinant Biopharmaceutical Proteins. 12th September 2023, TBRI
- Speaker in Italy Egypt Cooperation The 1st International Conference on Cancer (Treatment & Diagnosis). Title: Studying the anticancer activity of recombinant Cec-B on HCC murine model. 15-16 October 2023, NRC.
- Speaker in the 2nd International Conference on Cancer (Treatment & Diagnosis). Exploring the Potential Anticancer Efficacy of Snail Soft Tissue Peptides: From Identification to Therapeutic Implications via Advanced Mass Spectrometry Techniques. 22-23 October 2024, NRC.

2. Examiner

• Examined graduation projects of students of October University for Modern Science and Arts (MSA University).

3. Editorial tasks:

 Editorial Board Member - International Conference on Oncology and Cancer Research. ID: 5909. www.pencis.com

4. Review tasks:

- o Egyptian Journal of Chemistry
- o World Journal of Surgical Oncology
- o Biomarkers
- o International Journal of Pharmaceutical Research
- o Biotechniques
- Biochemistry and Molecular Biology

J- Prizes:

- 1. Theodor Bilharz Research Institute Encouragement Award (2022).
- 2. 4th place in the number of publications of TBRI in 2021.
- 3. 8th place in the number of publications of TBRI in 2020.