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EDUCATION

Doctor of Philosophy (2014-2018)

Institute of Clinical and Molecular Virology,
Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Erlangen, Germany.
Thesis Title: Harnessing T helper cell responses induced by licensed vaccines for improving virus-like particle based vaccination against HIV.

FELASA-B certificate (2014-2015)

Faculty of Medicine, Ruhr-University Bochum, Germany.

MSc (Microbiology, 2006-2010)

Faculty of Science, Zagazig University, Egypt. Thesis Title: Immunological study of novel peptide vaccines for Hepatitis C Virus infection in experimental animals.

B.Sc. (Microbiology, 2001-2005)

Faculty of Science, Zagazig University, Egypt. Very Good with degree of Honor.

PROFESSIONAL SOCIETIES

German Society for Immunology (DGFI),
Membership no. 4478.

Egyptian Society of Virology (ESV)

PROFESSIONAL EXPERIENCE

Research Assistant (Oct 2005 – April 2010)
Department of Biomedical Technology,
National Research Centre, Egypt.

Researcher (Dec 2018- present)

Department of Microbial Biotechnology, Genetic Engineering and Biotechnology Division, National Research Centre, Egypt.

PhD student (Oct 2015 – Nov 2018)

Institute of Clinical and Molecular Virology (Klaus Überla's Lab), Universitätsklinikum Erlangen, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany.

Postdoctoral scientist (July–August 2019)

Translational Research Center, Chirurgische Klinik, Universitätsklinikum Erlangen, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany.

RTG-1949 (April 2014 – Sep 2015)

Associate member of Research Training Group 1949- Immune Response in Infectious Diseases; Department for Molecular and Medical Virology (Klaus Überla's Lab), Institute for Hygiene and Microbiology, Ruhr-University Bochum, Germany.

Research Associate (May 2010 –Nov 2018)

Department of Microbial Biotechnology, Genetic Engineering and Biotechnology Division, National Research Centre, Egypt.

Instructor of Microbiology (2008 – 2010)

Instructor of Practical Medical Microbiology and Immunology for First and Third Year Undergraduate students, **Microbiology Department, Faculty of Dental Medicine, October 6 University, Egypt.**

HONORS AND AWARDS

- I. EFIS-EJI Travel Grant: The 5th European Congress of Immunology, 2–5 September 2018, Amsterdam, The Netherlands.
- II. DAAD Scholarship: Full PhD fellowship from April 2014-September 2017, Institute of Clinical and Molecular Virology, Universitätsklinikum Erlangen, FAU, Germany.
- III. Partnership and Ownership Initiative Scholarship: January-July 2012 at Dr. Wu's Lab, Gastroenterology Division, School of Medicine, University of Connecticut Health Center, USA.

MAJOR PUBLICATIONS

1. Rehab I Moustafa, Ahmed H.I. Faraag , Reem El-Shenawy, Mona M. Agwa, **Hassan Elsayed**. Harnessing Immunoinformatics for developing a multi-epitope peptide-based vaccination approach against SARS-CoV-2 Spike Protein . In press, SJBS. <https://doi.org/10.1016/j.sjbs.2023.103661>
2. **Hassan Elsayed**, Rehab Moustafa, Reem Fathy, Sherine N. Khattab, Mona M. Agwa, Eman Mahmoud, Mohammed A. Sarhan, Mohamed Mostafa Abdel Ghafar, Mohamed El-Shiekh, Ahmed A. Yousif, Maysa Hanfi Shaker, Mohamed Elkassas, Ahmed H. Farag, Weam Goda , Ali Zaki. Immunogenicity and safety profiling for Multi-Epitope Peptide based-vaccination against SARS-CoV2 infection . (Manuscript in preparation).
3. **Hassan Elsayed**, Stephan Klessing, Vladimir Temchura, Sandra Müller, and Klaus Überla. Prior HBsAg T-helper cells induced by vaccination improve HIV-1 Env antibody responses (Manuscript in preparation).
4. Mona M Agwa, Marwa M Abu-Serie, Doaa A Abdelmonsif, Nermine Moussa, **Hassan Elsayed**, Sherine N Khattab, Sally Sabra. Vitamin D3/phospholipid complex decorated caseinate nanomicelles for targeted delivery of synergistic combination therapy in breast cancer. International Journal of Pharmaceutics 607, 120965. DOI: [10.1016/j.ijpharm.2021.120965](https://doi.org/10.1016/j.ijpharm.2021.120965)
5. Mohamed El Kassas, Noha Asem, Amr Abdelazeem, Ahmed Madkour, Hamdy Sayed, Ahmed Tawheed, Ahmed Al Shafie, Mahmoud Gamal, **Hassan Elsayed**, Mohamed Badr, Mohamed Hassany, Dalia Omran, Amr El Fouly. "Clinical features, Comorbidities and Laboratory Characteristics of Patients Hospitalized with COVID-19: Early Report from Egypt" The Journal of Infection in Developing Countries 14 (12), 1352-1360.
6. Yasser A Attia, Ashwaq M Al Nazawi, **Hassan Elsayed**, Mahmoud W Sadik. Carbon nanotubes catalyzed UV-trigger production of hyaluronic acid from Streptococcus equi. Saudi Journal of Biological Sciences, 2021, 28 (1), 484-491. <https://doi.org/10.1016/j.sjbs.2020.10.032>
7. M Samer, EM Abdelsalam, S Mohamed, **H Elsayed**, Y Attia. Impact of photoactivated cobalt oxide nanoparticles addition on manure and whey for biogas production through dry anaerobic co-digestion, Environment, Development and Sustainability 24 (6), 7776-7793.
8. **Hassan Elsayed**, Ghulam Nabi, William J. McKinstry, Keith K. Khoo, Johnson Mak, Andres M. Salazar, Matthias Tenbusch, Vladimir Temchura, and Klaus Überla. Infrastructure help: Harnessing T-helper cell responses induced by licensed vaccines for improvement of HIV Env antibody responses to virus-like particle vaccines. Journal of Virology, 2018, 92: e00141-18. DOI: [10.1128/JVI.00141-18](https://doi.org/10.1128/JVI.00141-18).
9. Tabli AA, Moustafa RI, El Abd YS, Bader El Din NG, El-Shenawy R, **Yousef H**, Hussein M, Dawood RM, Omran MH and El-Awady MK. Mouse monoclonal antibody towards E1 specific epitope blocks viral entry and intracellular viral replication In Vitro. J Immunoassay Immunochem. 2014; 35(1): 60-73. <https://doi.org/10.1080/15321819.2013.792831>
10. El-Awady MK, Tabli AA, **Yousif H** , El-Abd Y, Reda M, Khalil S, El-Zayady A, Shaker M. and Bader El Din NG. Murine neutralizing antibody response and toxicity to synthetic peptides derived from E1 and E2 proteins of Hepatitis C virus. Vaccine 2010 Dec 6; 28(52): 8338-8344. DOI:[10.1016/j.vaccine.2009.11.059](https://doi.org/10.1016/j.vaccine.2009.11.059)
11. El-Awady MK, Tabli AA, El-Abd YS, **Yousif H**, Hegab M, Reda M, El-Shenawy R, Moustafa R, Degheidy N and Bader El Din NG. Conserved peptides within the E2 region of Hepatitis C virus induce humoral and cellular responses in goats. Virology Journal, 2009 27, 6(1):66. Doi: [10.1186/1743-422X-6-66](https://doi.org/10.1186/1743-422X-6-66).

SCIENTIFIC MEETINGS AND CONFERENCES

1. **Hassan Elsayed**, Rehab Moustafa, Reem Fathy, Sherine N. Khattab, Mona M. Agwa, Eman Mahmoud, Mohammed A. Sarhan, Mohamed Mostafa Abdel Ghafar, Mohamed El-Shiekh, Ahmed A. Yousif, Maysa Hanfi Shaker, Mohamed Elkasas, Ahmed H. Farag, Weam Goda , Ali Zaki. **Innovative Vaccination Strategy against COVID-19 bases on Multi-Epitope Peptide and Nanoparticle Technology.** JOINT MEETING 2022. September 7- 10, 2022. Hannover Medical School (MMH)/ Germany. ([Oral presentation](#)).
2. **Hassan Elsayed**, Rehab Moustafa, Reem Fathy, Sherine N. Khattab, Mona M. Agwa, Eman Mahmoud, Mohammed A. Sarhan, Mohamed Mostafa Abdel Ghafar, Mohamed El-Shiekh, Ahmed A. Yousif, Maysa Hanfi Shaker, Mohamed Elkasas, Ahmed H. Farag, Weam Goda , Ali Zaki. **Harnessing Peptide and Nanoparticle Technology for Developing Innovative Vaccination Strategy against COVID-19.** Humboldt Kolleg Jordan 2022. German-Jordan University. Amman, Jordan. ([Oral presentation](#)).
3. **Hassan Elsayed**, Rehab Moustafa, Reem Fathy, Sherine N. Khattab, Mona M. Agwa, Eman Mahmoud, Mohammed A. Sarhan, Mohamed Mostafa Abdel Ghafar, Mohamed El-Shiekh, Ahmed A. Yousif, Maysa Hanfi Shaker, Mohamed Elkasas, Ahmed H. Farag, Weam Goda , Ali Zaki. **Developing Innovative vaccination strategy against COVID-19 based on multi-epitope peptide and nanotechnology.** 27-29 October 2020. Royal Maxim Palace Kempinski Hotel, New Cairo, Egypt. 62ndAnnual International Congress, Egyptian Society of Chest Diseases and Tuberculosis. ([Oral presentation](#)).
4. **Hassan Elsayed**, Ghulam Nabi, Matthias Tenbusch, Vladimir Temchura, Klaus Überla. **Infrastructure help: Improving virus-like particles vaccination approach against infectious diseases.** Cairo Science Forum: Science Diplomacy and Recent developments in Biology 19-21 November 2019 Cairo-Egypt ([Oral presentation](#)).
5. **Hassan Elsayed**, Ghulam Nabi, Matthias Tenbusch, Vladimir Temchura, Klaus Überla. **Infrastructure help: Improving virus-like particles vaccination approach against infectious diseases.** Cairo Science Forum: Science Diplomacy and Recent developments in Biology 19-21 November 2019 Cairo-Egypt ([Oral presentation](#)).
6. **Hassan Elsayed**, Ghulam Nabi, William J. Mckinstry, Matthias Tenbusch, Vladimir Temchura, Klaus Überla. **Harnessing T-helper cell responses induced by licensed vaccines for HIV vaccine development.** 5th European Congress of Immunology, 2–5 September 2018, Amsterdam, Netherlands ([Oral presentation](#)).
7. **Hassan Elsayed**, Ghulam Nabi, William J. Mckinstry, Jason Rice, Freda K. Stevenson, Andres M. Salazar, Matthias Tenbusch, Vladimir Temchura, Klaus Überla. **Harnessing T-helper (Th) cell responses induced by licensed vaccines for HIV vaccine development.** 28th Annual Meeting of the Society for Virology, 14–17 March 2018, Würzburg, Germany ([Oral presentation](#)).
8. **Hassan Elsayed**, Vladimir Temchura, Ghulam Nabi, Matthias Tenbusch, Klaus Überla. **Infrastructure help: harnessing pre-existing T helper cells induced by licensed vaccines to improve HIV-1 Env antibody responses to virus-like particle vaccines.** 47th Annual Meeting of the German Society for Immunology, 12–15 September 2017, Erlangen, Germany ([Poster presentation](#)).
9. **Hassan Elsayed**, Vladimir Temchura, Ghulam Nabi, Matthias Tenbusch, Klaus Überla. **Infrastructure help: harnessing pre-existing T helper cells induced by licensed vaccines to improve HIV-1 Env antibody responses to virus-like particle vaccines.** 9th Autumn School Current Concepts in Immunology, 08-13 October 2017, Merseburg, Sachsen-Anhalt, Germany ([Poster presentation](#)).
10. **Hassan Abdou Yousif Elsayed**, Ghulam Nabi, Vladimir Temchura, and Klaus Überla. **Improving HIV Env specific antibody responses by infrastructure help from adjuvanted protein vaccines.** 15th Workshop of the GfV study group “Immunobiology of Viral Infections” Hotel St. Michael, Tauberbischofsheim 28–30 September 2016 ([Oral presentation](#)).
11. **Hassan Abdou Yousif Elsayed**, Ghulam Nabi and Klaus Überla. **Enhancement of HIV Env specific antibody responses by infrastructure help from heterologous T helper cells.** Annual Meeting 2015-Research Training Group 1949-Immune Response in Infectious Diseases—Regulation between Innate and Adaptive Immunity, Hotel Residence Klosterpforte, Harsewinkel, 08–09 June 2015 ([Oral presentation](#)).
12. Mostafa K. El Awady, Mohamed F. Ghaly, Ashraf A. Tabli, Wael T. El-Garf and **Hassan A. Yousif**. **Immunological study of novel peptide vaccine for hepatitis C virus infection in experimental animals.** 3rd International conference of Genetic Engineering and biotechnology Division, Biotechnology for better life. 03-05 November 2009, National Research Centre, Cairo, Egypt.
13. El-Awady MK, Tabli A. and **Yousef H**. **Preclinical toxicity and efficacy of a candidate Peptide vaccine against HCV infection.** 16th International Symposium on Hepatitis C Virus and Related Viruses, Nice, France, 03- 07 October 2009. **P-199**.

TRAINING COURSES & WORKSHOPS

- ✓ **The International Summer School on Bioinformatics (DGFI)**, 25-27th October 2019, Sheikh Zayed City, Nile University in cooperation with Universitätsmedizin Rostock and DAAD.
- ✓ **9th Autumn School Current Concepts in Immunology (DGFI)**, 08-13 October 2017, Merseburg, Sachsen-Anhalt, Germany .
- ✓ **15th "Immunobiology of Viral Infections" Workshop (GfV)**, Hotel St. Michael, Tauberbischofsheim 28–30 September 2016.
- ✓ **12th Spring School on Immunology(DGFI)**, 28 February- 4 March 2016, Kloster Ettal , Ettal, Germany.

RUNNING GRANTS & CURRENT ACTIVITIES

- Principal Investigator :Developing innovative vaccination strategy against COVID19 based on multi-epitope peptide and nanoparticle technology . Funded by ASRT.**
Ideation Fund 7380. Academy of Scientific Research & Technology.
- Principal Investigator : Harnessing Intrastuctural help and Virus-Like Particle technology for developing innovative vaccination strategy against HCV genotype 4 defined from Egyptian patients. Funded by ASRT.** The National strategy for Genetic Engineering & Biotechnology. Academy of Scientific Research & Technology.
- Co-PI : Evaluating the Epigenetic/Genetic signature in HCC Egyptian cohort after HCV treatment with DAAAs. Funded by STDF.**

REFERENCES

1. Prof. Dr. med. Klaus Überla

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2. Prof. Dr. Matthias Tenbusch

Institute of Clinical and Molecular Virology, Universitätsklinikum Erlangen; Friedrich-Alexander-University Erlangen-Nürnberg, Erlangen, Germany.
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3. PD Dr. (Univ. Nowosibirsk) Dr. habil. med. Vladimir Temchura

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