

Curriculum Vitae **Abdallah Haitham**

PERSONAL INFORMATION

Last name	Abdallah	First name	Haitham
Address	Noormannenstraat 68, 3000 Leuven, Vlaams-Brabant, Belgium	Phone number	0489/74.03.52
		E-mail address	haitham.mohamed@aun.edu.eg



EDUCATION

- | | |
|----------------------------------|---|
| 2022-2026
(June, 15) | PhD student at Laboratory of Molecular Bacteriology , KU Leuven, Belgium
<i>Characterization of novel inhibitors against bacteria</i> ; Promoter: prof. A. Economou, Joost Schymkowitz |
| 2020-2021 | Applied for Egyptian scholarship for obtaining PhD as an international fellow in KU Leuven |
| 2018-2020 | Master Thesis at Microbiology and Immunology Dep., faculty of Pharmacy, Assiut University, Egypt (M.Sc. degree) and entitled as assistant lecturer at the pharmacy school .
“Correlation between regulatory B cells and Vitamin D in term and preterm labor”; Promotor: prof. dr. Kh.Hassanein |
| 2016-2018 | Joined the Egyptian Army as a resident pharmacist at the West Cairo hospital, and entitled as a demonstrator at the Microbiology and Immunology department , faculty of Pharmacy, Assiut University, Egypt |
| 2011-2016 | Bachelor degree in Pharmaceutical Science , Faculty of Pharmacy, Assiut university, Egypt. |

AWARDS & HONOURS

- ☐ **Graduated with Highest Distinction (Excellent with Honor)** – Ranked **1st in Class** (B.Sc. and M.Sc.), Assiut University
- ☐ **Top Graduate of the Year (2016)** – Faculty of Pharmacy, Assiut University
- ☐ **Best Master’s Thesis of the Year** – Assiut University
- ☐ **Ph.D. Scholarship Recipient** – Central Department of Missions (Egypt)
- ☐ **Licensed Expert Pharmacist** – Egypt

CONFERENCES/MEETINGS

- Poster presentation and Flash Talk presentation** at the **EMBO meeting 2024**, 21/9-25/9/24, Girona, Spain
- Poster presentation** at the **8th of March BSM Annual Symposium 2024: Milestones in Microbiology**, 8/03/24, Brussels, Belgium
- Poster presentation** at the **Biophysical Methods for Studying Protein (Mis-/Un-)Folding & Dynamics**, 11/9/24, Leuven, Belgium
- Mini symposium** ‘Antibiotic Insights: Tolerance Mechanisms, ABC Transporters and Bacterial Responses’, 23/02/24, Leuven, Belgium
- Fifth Annual Meeting of the Namur Research Pole in Infectiology (NaRePI)**, 4/12/23, UNamur, Belgium
- The 20th one-day symposium on protein folding & assembly**, 1/09/23, Liège, Belgium
- BSM Annual Symposium 2023 Amazing Microbes**, 10/2/23, Brussels, Belgium
- EOS meeting of Biophysics**, 13/12/22, Leuven, Belgium.

LECTURES/WORKSHOPS/PRACTICAL COURSES

1. **Visual Excellence in Academic Publishing** by Mr. Luk Cox and Mrs. Idoya Lahortiga organized by KU Leuven, 25-30/10/24, Leuven, Belgium
2. **Creating effective research posters** by Jean-luc Doumont (Principiae) organized by KU Leuven (SPIE), 28/12/24, Leuven, Belgium
3. **Basic Statistics in R** (32 hours) by: Janick Mathys - VIB Technology Training Coordinator, 2-20/9 /24.
4. **BePa@VIB Proteomics Summer School** (40 hours) organized by VIB, 26-30/8/24, Ghent, Belgium
5. **Introduction to NGS analysis** (20 hours) organized by VIB, 3 - 7/10/24, Ghent, Belgium
6. **Creating effective presentation slides** by Jean-luc Doumont (Principiae) organized by KU Leuven (SPIE), 29/03/24, Leuven, Belgium

PUBLICATIONS

- 1- Saidi, A, **Sedky, H.**, Vermeire, K., Karamanou, S., and Economou, A.
The Disordered C-Tail of SecB Modulates Holdase Activity and Translocase Engagement. **Submitted, 2026**
- 2- **Sedky, H.**, Hamed, M. B., Vermeire, K., Schymkowitz, J., Karamanou, S., and Economou, A.
Integrated omics-based mechanistical insights into a membrane-targeting antibacterial
2026, Under review in *Current Research in Microbial Sciences*.
- 3- **Sedky, H.**, Hamed, M. B., Krishnamurthy, S., Chaltin, P., Marchand, A., Pericolle, V., Versele, M., Karamanou, S. and Economou, A.
A small molecule allosterically activates SecA dependent secretion. ***Communications Biology*, 2026**
- 4- Xu, Y., **Sedky H.**, Smets, D., Smit, J., Karamanou, S., Economou, A, and Vermeire K.
Effect of the Bacterial Chaperones SecB and Trigger Factor (TF) on the Folding Dynamics and In Vitro Translocation of Cytoplasmic and Secretory Model Proteins. ***Int. J. Mol. Sci.* 2025**
- 5- Saddik, M.S.; Elsayed, M.M.A.; El-Mokhtar, M.A.; **Sedky, H.**; Abdel-Aleem, J.A.; Abu-Dief, Al-Hakkani, M.F.; Hussein, H.L.; Al-Shelkamy, S.A.; Meligy, F.Y.; et al. Tailoring of Novel Azithromycin-Loaded Zinc Oxide Nanoparticles for Wound Healing. ***Pharmaceutics* 2022.**
- 6- Meshaal, A.K.; Hetta, H.F.; Yahia, R.; Abualnaja, K.M.; Mansour, A.T.; Al-Kadmy, I.M.S.; Alghamdi, S.; Dabool, A.S.; Emran, T.B.; **Sedky, H.**; et al. In Vitro Antimicrobial Activity of Medicinal Plant Extracts against Some Bacterial Pathogens Isolated from Raw and Processed Meat. ***Life* 2021**

SKILLS

Bioinformatics

Software

Pymol, GraphPad Prism, image analysis-quantitation software (ImageJ), image manipulation software (Adobe illustrator and Adobe Photoshop), Canvas, EndNote, Word, Excel, PowerPoint.

Protein databases

Proteomic & Transcriptomic analysis using R.
Gene Ontology and Enrichment Analysis.

Teaching

Practical courses Bacteriology

teaching microbiology and immunology course and assisting Bachelor students with the practical work

Supervisi

Instructor of rotation students.

Laboratory

Bacterial / Viral / Tissue culture work

Transformations, small and large scale cultures, bacterial cell disruption (ultrasonic cell disrupters, French press), *in vivo* experimental assays (genetic complementation, secretion) Libraries Screening , PCR, biophysical, Biochemical assays. Antibiotic, Antiviral, Antifungal screening. Cytotoxicity, anticancer drugs screening.

Protein chemistry/Biochemistry

Protein expression in bacterial cells, protein, IMVS purification, Native/SDS-PAGE, Western Blot, Enzymatic assays, *In vitro* and *In vivo* secretion assays.

Biophysical methods

SEC- MALS, Tryptophane Fluorescence, ITC, CD.

Language: Arabic (native) **English: Fluent**