Nourhan Hassan

Nationality: Egyptian **Date of birth:** 27/07/1990 **Phone:** (+49) 015222009346 (Work) **Email address:** nourhan.hassan@uk-koeln.de **Email address:** nhassan2@uni-koeln.de **Email address:** nyehia@sci.cu.edu.eg **LinkedIn:** https://www.linkedin.com/in/nourhan-hassan-phd/ **Address:** Center for Molecular Medicine Cologne (CMMC) , Robert-Koch-Strasse 21 , 50931, Cologne, Germany (Work)

WORK EXPERIENCE

Biotechnology Department, Faculty of Science, Cairo University - Egypt, Giza

Link: http://niemann-lab.org/662-2/

University Lecturer in Molecular and Cancer Biology

[01/06/2024 - Current]

Roles and Responsibilities:

- **Advanced Course Design and Delivery:** Developed and delivered comprehensive undergraduate and postgraduate courses in molecular biology, cancer biology, biotechnology, and advanced bioinformatics, incorporating cutting-edge research findings and industry best practices.
- **Research-Integrated Teaching:** Seamlessly integrated current research developments in cancer biology and molecular therapeutics into curriculum design, ensuring students receive exposure to the latest scientific breakthroughs and methodologies.
- **Laboratory Management and Innovation:** Established and managed state-of-the-art laboratory facilities for advanced molecular techniques, cancer cell culture, and biotechnology applications, implementing safety protocols and quality assurance measures.
- **Student Mentorship and Supervision:** Provided comprehensive academic guidance to undergraduate and postgraduate students (master's and Ph.D.), supervising research projects, dissertations, and thesis work in molecular and cancer biology.
- **Curriculum Development and Assessment:** Led curriculum modernization initiatives, developed innovative assessment strategies, and established learning outcomes aligned with industry requirements and academic standards.
- **Cross-Disciplinary Collaboration:** Fostered interdisciplinary learning by collaborating with departments of biochemistry, pharmacology, and clinical sciences to provide holistic education in cancer biology and biotechnology.

Key Contributions:

• **Research Supervision:** Successfully supervised undergraduate research projects and 15+ postgraduate dissertations in cancer biology and molecular therapeutics.

• **Professional Development:** Mentored junior faculty members and contributed to departmental strategic planning and quality assurance initiatives.

Plastic Surgery Department / Translational Matrix Biology; University Hospital Cologne - Germany, Cologne

Link: https://www.youtube.com/watch?v=DsPn1QB7iy8

Postdoctoral researcher

[01/01/2023 - 31/05/2024]

Roles and Responsibilities:

- Led and managed the research project independently, maintaining regular communication with the clinical Principal Investigator (PI).
- Oversaw the planning, execution, and analysis of experimental data, ensuring high-quality results and presentations.
- Collaborated with international partners within the consortium to achieve project goals.
- Developed, revised, and adapted in-vitro and in-vivo test protocols to meet project requirements.
- Conducted cell culture experiments and managed animal (rat) studies, including writing and submitting animal test proposals.
- Mentored, trained, and supervised master's students and lab technicians, fostering their professional development.
- Presented research findings at consortium meetings, national conferences, and international congresses.

Key Contributions:

- Published **two first-author review articles** on magnesium and zinc, contributing to the scientific understanding of these materials in biomedical applications.
- Finalized a **research paper** comprising in-vitro data, showcasing experimental results and their implications.
- Contributed to **two collaborative projects**with Meotec GmbH, resulting in **two research papers**.
- Played a pivotal role in advancing the BIOMET4D project, focusing on smart 4D biodegradable metallic implants for dynamic tissue restoration.
- Strengthened the consortium's research output through innovative experimental design, data analysis, and interdisciplinary collaboration.

Obstetrics and Gynecology Department, University Hospital Münster - Germany, Münster

Research Fellow

[01/04/2018 - 31/12/2022]

Roles and Responsibilities:

- Conducted doctoral research focused on understanding the role of syndecan-1 in irradiation resistance and therapeutic resistance in breast cancer.
- Designed and executed experiments to investigate gene expression, protein expression, and functional mechanisms related to apoptosis, cell proliferation, DNA repair, and irradiation resistance.
- Managed and analyzed data from various experimental techniques, including: Quantitative PCR (gene expression analysis), Gamma-H2A.X assay (DNA repair mechanisms), Western blot and immunofluorescent microscopy (protein expression analysis), and Functional assays (wound healing, apoptosis, cell cycle analysis, collagen contraction, and 3D spheroid formation).

Key Contributions:

- Generated promising results on differential gene expression in key pathways related to apoptosis, cell proliferation, and irradiation-associated repair processes.
- Discovered insights into the relationship between DNA repair mechanisms, irradiation resistance, and the absence of syndecan-1 (paper is in preparation phase).
- Contributed to understanding how cell surface proteoglycans mediate therapeutic resistance in cancer.
- Published **six research articles** and **two review articles** as part of the research group.
- Received **three prestigious awards** for my PhD project presentations: German Menopause Society Award, German Breast Cancer Society Award, and Federation of European Biochemical Society Award.

Biotechnology/Biomolecular Chemistry Program; Faculty of Science, Cairo University - Egypt, Giza

Assistant Lecturer

[13/05/2013 - 31/12/2017]

Roles and Responsibilities:

- Designed and delivered practical courses for undergraduate students in the fields of molecular biology, biotechnology, genetics, physiology, and bioinformatics.
- Managed and supervised laboratory sessions, ensuring students gained hands-on experience in key techniques and methodologies.
- Developed and updated course materials to align with the latest advancements in the respective fields.
- Guided students in understanding complex concepts and applying theoretical knowledge to practical experiments.
- Assessed student performance through exams, lab reports, and practical evaluations.

Key Contributions:

1. Taught a diverse range of courses, including:
    - **Molecular Biology and DNA Cloning Course** (2013–2017).
    - **Microbial Biotechnology Course** (Winter 2015–2017).
    - **Genetics Course** (Winter 2015–2017).
    - **Animal Physiology Course** (Spring 2015–2017).
    - **Genomics, Proteomics, and Bioinformatics Course** (Spring 2015–2017).
    - **Basics of Bioinformatics Course**(Spring & Winter 2015).
    - **Applications of Bioinformatics Course**(Spring & Winter 2015).
2. Equipped students with practical skills in DNA cloning, microbial biotechnology, genetic analysis, physiological studies, and bioinformatics tools.
3. Fostered a deeper understanding of interdisciplinary topics, bridging molecular biology, biotechnology, and computational biology.
4. Contributed to the academic development of students by providing mentorship and support in their practical and theoretical learning.

EDUCATION & TRAINING

Ph.D. in Molecular and Cancer Biology

Faculty of Biology, Westfälischen Wilhelms-Universität Muenster [01/04/2018 - 27/04/2023]

City: Muenster | **Country:** Germany

Field(s) of study: Natural sciences, mathematics and statistics: | **Final grade:** magna cum laude (sehr gut=1) | **Thesis:** Role of the heparan sulfate proteoglycan Syndecan-1 in radiation resistance of breast cancer

M.Sc. in Biotechnology

Faculty of Science, Cairo University [2013 - 2016]

City: Giza | **Country:** Egypt

Final grade: Excellent | **Thesis:** FOXA2 Binding Site Mutation and MicroRNA 124a Expression in Relation with Gender Susceptibility to Hepatocellular Carcinoma in Egyptian Patients

B.Sc. in Biotechnology/Biomolecular Chemistry

Faculty of Science, Cairo University [2007 - 2011]

City: Giza | **Country:** Egypt

PUBLICATIONS

[2025]

NUMB in Endometrial Pathology: From Adenomyosis Expression to Endometrial Cancer Implications

Walid Shaalan; Nourhan Hassan; Mohamed Gamal Ibrahim; Benedikt Schäfgen; Kathrin Haßdenteufel; Julia Gallwas; Ludwig Kiesel; Andreas N. Schüring; Martin Götte

[2025]

Nanoparticles in Wound Healing: Classification, Recent Advances, and Limitations

Mahetab Elmotazbellah; M. A. Soliman; Mohamed N. Abd El-Ghany; Mohamed A. Shemis; Emad M. Elzayat; Nourhan Hassan

[2025]

The Role of the Cell Surface Heparan Sulfate Proteoglycan Sdc-3 in Breast Cancer Pathophysiology

Lena Habenicht; Nourhan Hassan; Nancy Espinoza-Sànchez; Jessica Onyeisi; Balázs Győrffy; Lars Hanker; Burkhard Greve; Martin Götte

[2025]

Implementation of Robotic-Assisted Surgery for Treatment of Patients with Endometrial Carcinoma

Walid Shaalan; Kathrin Haßdenteufel; Fabiola Hoppe; Peter Sinn; Riku Togawa; Lara Meike Tretschock; Dina Batarseh; Helmi Ylitalo; Nourhan Hassan; Benedikt Schäfgen et al.

[2025]

Fabrication of EGF- and vancomycin-loaded chitosan nanoparticles to enhance wound healing

Elmotazbellah, M.; Soliman, S.M.A.; El-Ghany, M.N.A.; Shemis, M.A.; Elzayat, E.M.; Hassan, N.

[2025]

A Guide in Synthetic Biology: Designing Genetic Circuits and Their Applications in Stem Cells

Karim S. Elnaggar; Ola Gamal; Nouran Hesham; Sama Ayman; Nouran Mohamed; Ali Moataz; Emad M. Elzayat; Nourhan Hassan

[2025]

Combinational Therapy of Mesenchymal Stem Cells and Metformin in Bleomycin-Induced Idiopathic Pulmonary Fibrosis in Rat Model

Nourhan Hassan, Mariam N. Elbyoume, Mariam A. Taha, Hagar S. Mohamed, Omnia M. Elmoghini, Shorouk S. Raouf, Rwan K. Elsayem, Mohrail M. Medhat, Razan M. Rostom, Mohmed Hosney & Emad M. Elzayat

[2025]

Theragenerative injectable bone-adhesive hydrogels for combined photothermal osteosarcoma therapy and bone repair

Shiyi Chen, Nourhan Hassan, Alexander Kopp, Tatiane Eufrásio-da-Silva, Jihene Arfaoui, Benedetta Isella, Ziyaad Aytuna, Philipp Barnowski, Gerhard Sengle, Alireza Dolatshahi-Pirouz, Nadja Kröger and Hajar Homa Maleki

[2025]

Assessment of the Capability of Mesenchymal Stem Cells and/or Pyrroloquinoline Quinone in Compensating the Age-Related Dysfunctionsof AMP-Activated Protein Kinase Pathway in Wistar Rats

Kamal M. Al Nishilli, Emad M. El Zayat, Sherein S. Abdelgayed, Mohamed Hosney & Nourhan Hassan

[2025]

Novel Silk Fibroin Based Bilayer Scaffolds for Bioabsorbable Internal Biliary Stenting

Benedetta Isella, Nourhan Hassan, Aleksander Drinic, Roman M. Eickhoff, Nadja Kröger, Ted J. Vaughan, Alexander Kopp

[2025]

In vitro Evaluation of Zinc Oxide-Metformin Folic Acid Nanocomposite as a Targeted Drug Delivery System for Cancer Therapy

Nourhan Ezzat, Nagy Emadeldien, Miar Khaled Ali, Serene Fahd, Sarah Shebl, Malak Elshishiny, Mohamed Ramadan Gedamy, Nourhan Hassan, Soliman M. A. Soliman, Emad M. Elzayat

[2025]

The Synergistic and Anticancer Potential of Withania Somnifera (Ashwagandha) Ethanol Extract as an Adjuvant with Doxorubicin inMCF7 Breast Cancer Cell Line

Emad M. Elzayat, Ghada E. Elsamahy, Ghada H. Mansour, Ahmed A. El-Sherif, Nourhan Hassan

[2025]

Decreased expression of Syndecan-1 (CD138) in the endometrium of adenomyosis patients suggests a potential pathogenetic role

Walid Shaalan, Mohamed Gamal Ibrahim, Ariana Plasger, Nourhan Hassan, Ludwig Kiesel, Andreas N. Schüring, Martin Götte

[2024]

The Anti-proliferative Effect, Apoptotic Induction, and Cell Cycle Arrest of Tetra Halo Ruthenate Nanocomposites in Different HumanCancer Cell Lines

Mariam Fathy, Salwa M. El-Hallouty, Ahmed S. Mansour, Mohamed Fahmy, Nourhan Hassan & Emad M. ElZayat

[2024]

Challenges and Pitfalls of Research Designs Involving Magnesium-Based Biomaterials: An Overview

Nourhan Hassan, Thomas Krieg, Alexander Kopp, Alexander D. Bach, and Nadja Kröger

[2023]

An Overview of Scaffolds and Biomaterials for Skin Expansion and Soft Tissue Regeneration: Insights on Zinc and Magnesium as NewPotential Key Elements

Nourhan Hassan, Thomas Krieg, Max Zinser, Kai Schröder, and Nadja Kröger

[2023]

Newly Synthesized Arylazo Derivatives Induce Apoptosis and G2/M Cell Cycle Arrest With Molecular Docking Validation in Human CancerCell Lines

Yara N. Laboud, Nourhan Hassan, Hamdi M. Hassaneen, Huwaida M. E. Hassaneen, Fatma M. Saleh and Mohamed A. Mohamed Teleb

[2023]

The Heparan Sulfate Proteoglycan Syndecan-1 Triggers Breast Cancer Cell-Induced Coagulability by Induced Expression of Tissue Factor

Nourhan Hassan, Nico Bückreiß, Janes Efing, Marie Schulz-Fincke, Philipp König, Burkhard Greve, Gerd Bendas, and Martin Götte

[2022]

The Cell Surface Heparan Sulfate Proteoglycan Syndecan-3 Promotes Ovarian Cancer Pathogenesis

Lara Hillemeyer, Nancy Adriana Espinoza-Sanchez, Burkhard Greve, Nourhan Hassan, Anca Chelariu-Raicu, Ludwig Kiesel, and Martin Götte

[2023]

The Tissue Factor Pathway in Cancer: Overview and Role of Heparan Sulfate Proteoglycans

Nourhan Hassan, Janes Efing, Ludwig Kiesel, Gerd Bendas, and Martin Götte

[2022]

Resveratrol impairs cellular mechanisms associated with the pathogenesis of endometriosis

Daniela Madanes, Gabriela Meresman, Sofía A. Valla, Nourhan Hassan, Ludwig Kiesel, Burkhard Greve, Rosa Inés Barañao, Martin Götte, Analía Gabriela Ricci

[2022]

Synthesis, Cytotoxicity and Docking Simulation of Bioactive [1,2,4]Triazolo[3,4-α]dihydroisoquinoline Chalcone Derivatives

Hamdi M. Hassaneen, Mohamed A. M. Teleb, Nourhan Hassan, Huwaida M. E. Hassaneen, Yara N. Laboud, Fatma M. Saleh

[2021]

Cell-surface heparan sulfate proteoglycans as multifunctional integrators of signaling in cancer

Nourhan Hassan, Burkhard Greve, Nancy A. Espinoza-Sánchez, Martin Götte

[2021]

Syndecan-1 Depletion Has a Differential Impact on Hyaluronic Acid Metabolism and Tumor Cell Behavior in Luminal and Triple-NegativeBreast Cancer Cells

Sofía Valla, Nourhan Hassan, Daiana Luján Vitale, Daniela Madanes, Fiorella Mercedes Spinelli, Felipe C. O. B. Teixeira, Burkhard Greve, Nancy Adriana Espinoza-Sánchez, Carolina Cristina, Laura Alaniz, and et al.

[2021]

Syndecan-1 Promotes Angiogenesis in Triple-Negative Breast Cancer through the Prognostically Relevant Tissue Factor Pathway andAdditional Angiogenic Routes

Eyyad Nassar, Nourhan Hassan, Eslam A. El-Ghonaimy, Hebatallah Hassan, Mahmoud Salah Abdullah, Theresa V. Rottke, Ludwig Kiesel, Burkhard Greve, Sherif Abdelaziz Ibrahim, and Martin Götte

[2020]

SETD3 acts as a prognostic marker in breast cancer patients and modulates the viability and invasion of breast cancer cells

Nourhan Hassan, Niklas Rutsch, Balázs Győrffy, Nancy Adriana Espinoza-Sánchez & Martin Götte

PROJECTS

[18/12/2025 - Current]

UKABCS Institutional Capacity Programme 2026 Being the PI of the project, we will establish five interdisciplinary research teams, comprising 50 researchers from diverse fields including Pharmacy, Science, Computer Science, and Engineering. Our programme is built on two core pillars:

1. In partnership with leading international organizations like Bioinformatics Gate (Egypt) and EBO Bio Solution Ltd (UK), we will deliver a specialized professional diploma in computational drug discovery.
2. Each team will undertake a full-cycle research project, from conceptualization to execution, aimed at identifying and developing novel drug candidates. Our goal is not just to publish research, but to build a sustainable pipeline of talent and innovation.

[25/12/2025 - Current]

The Fructose-Pyrimidine Axis: Uncovering a Novel Metabolic Vulnerability in Breast Cancer As the supervisor of the graduation project, we are investigating a critical and underexplored metabolic pathway in aggressive breast cancer: the link between fructose metabolism and pyrimidine biosynthesis. Our central hypothesis is that highly aggressive triple-negative breast cancer (TNBC) cells exhibit a unique dependence on fructose to fuel the production of pyrimidines, which are essential building blocks for DNA and RNA synthesis. In contrast, less aggressive ER-positive breast cancer cells are hypothesized to have a lower demand for fructose.

[25/12/2025 - Current]

Synergistic Induction of Metabolic Crisis in HCC by Inhib. of Fructose Metabolism and AMPK Activat. Acting as the supervisor of the graduation project, which pivots to a more scientifically robust strategy centered on the activation of AMP-activated protein kinase (AMPK), a master regulator of cellular energy homeostasis. The central hypothesis is that potent AMPK activation can be combined with the inhibition of a second, more relevant metabolic pathway—such as glycolysis or glutamine metabolism—to induce a synergistic metabolic crisis and trigger potent anti-tumor effects.

[02/2024 - Current]

BIOMEND Doctoral Network; Shaping the Future of Endoluminal Devices Supervisory academic board member supervising PhD student in the working package focusing on the *Development of a Bioabsorbable Microsurgery Device for Suture-less Anastomosis.*

[01/01/2023 - 31/05/2024]

BIOMET4D; Smart 4D BIOdegradable METallic Shape-shifting Implants for Dynamic Tissue Restoration. Postdoctoral researcher for BIOMET4D in Plastic Surgery Department / Translational Matrix Biology; University Hospital Cologne.

Horizon Europe project no.101047008. HORIZON-EIC-2021-PATHFINDEROPEN-01.

[01/10/2023 - 31/05/2024]

Injectable and Adhesive Theragenerative Hydrogels based on Natural Silk Proteins for Dual Bone Cancer Therapy and Bone Repair Co-supervision of Shiyi Chen for her master's thesis with Priv.-Doz. Dr. Hajar Maleki .

[2020 - 2024]

Role of the heparan sulfate proteoglycan Syndecan-1 in radiation resistance of breast cancer Conducted my doctoral thesis through the project funded by Deutsche Forschungsgemeinschaft (DFG), Bonn, Germany .

HONOURS AND AWARDS

[01/09/2025] Life Science Editors Foundation

2025 JEDI Awardee The award provides feedback on a short grant proposal.

[27/11/2025] Falling Walls Foundation

TOP-TALENTS-TRACK 2025 I Kohorte 1

Link:

https://www.linkedin.com/posts/young-entrepreneurs-in-science_meet-the-talents-13-activity-7386307054568681473-DwOe?utm_source=share&utm_medium=member_desktop&rcm=ACoAAAXXanQBXpEHPmo6dur5-8JYARfwaaIs94I

[12/09/2024] German Society for Matrix Biology (DFG)

Young Investigator Award Being one of the three finalists for the award. Participated with an oral talk in the session entitled "*Syndecan-1 Promotes Angiogenesis and Induces Coagulability in TNBCs via the TF Pathway and Additional Angiogenic Routes*" in Annual Meeting of the German Society for Matrix Biology, Regensburg, Germany.

[01/06/2023] AFRICA HEALTH ExCon 2023

3rd place in the poster competition Participated with a poster entitled "*Smart 4D BIOdegradable METallic Shape-shifting Implants for Dynamic Tissue Restoration*" in AFRICA HEALTH ExCon 2023, Cairo, Egypt.

[01/05/2022] Federation of European Biochemical Societies (FEBS)

Young Scientist Award Participated with a presentation entitled "*The role of syndecan-1 role in the irradiation resistance of breast cancer*" in FEBS 2022; Matrix Pathobiology, Signaling, and Molecular Targets , Crete, Greece.

[01/06/2021] German Society for Senology e.V. (DGS)

Best Abstract Prize Participated with a presentation entitled "*Heparan sulfate proteoglycan syndecan-1 role in the radioresistance of breast cancer*" in Radio-oncology session in 40th Annual Conference of the German Society for Senology e.V. (DGS) , 2021.

[01/11/2019] German Menopause Gesellschaft e.V.

1st prize award certificate Participated with an oral talk in the "news from science " session entitled "*The heparan sulfate proteoglycan Syndecan-1 modulates breast cancer radiation resistance in a CDK6-dependent manner*" in the Annual Meeting of the GERMAN MENOPAUSE SOCIETY E.V., Frankfurt, Germany.

[01/03/2022] FAZIT-STIFTUNG (FAZIT Foundation)

International travel grant Got the travel grant to participate with a poster entitled "*Modulation of the Tissue Factor pathway by Syndecan-1 in breast cancer*" in Italy Matrix Biology Europe (MBE) 2022, Florence, Italy.

[01/03/2019] Federation of European Biochemical Societies (FEBS)

FEBS Youth Travel Funds (YTF) Award Got the travel award to participate with an oral talk and a poster entitled "*Heparan sulfate proteoglycan syndecan-1 role in the radiation resistance of breast cancer*" in FEBS Advanced Lecture Course ' Matrix Pathobiology, Signalling, and Molecular Targets ', Porto Heli, Greece.

[01/01/2016] Egyptian Ministry of Higher Education and Scientific Research and German Academic Exchange Service

German Egyptian Long-term Scholarship (GERLS) for 2016-2017 Got the DAAD GERLS fellowship to conduct my doctoral studies in Prof. Götte's group .

PROFESSIONAL SKILLS

Laboratory Skills

• Mice handling, Organ harvesting and Mouse genotyping.
• Cell culture: Stem cell, cell line & Primary cells.
• Gene over-expression / knockdown or gene knock-in/knock-out
• Confocal Microscopy and Live-Cell imaging.
• Molecular biology: cloning, PCR, qPCR, Western blot, Gel Electrophoresis, SDS-PAGE.
• DNA & RNA Extraction, Sequencing.
• Flow cytometry (FACS).
• FELASA B - Animal handling certificate - University of Cologne

Digital Skills

• ImageJ (FIJI) - Image processing and analysis
• Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access
• Graphic design (Adobe Photoshop, Adobe Illustrator)
• Use of Statistic Softwares (SPSS, GraphPrism)
• Basic Python and R knowledge

NETWORKS AND MEMBERSHIPS

[01/11/2025 - Current] Germany
International Society for Stem Cell Research (ISSCR)

[06/2025 - Current]
Global Young Academy (GYA)

[01/03/2024 - Current] USA
Scientific Arab Forum (SAF)

[02/2022 - Current] Lyon, France
International Society for Matrix Biology (ISMB)

[31/05/2022 - Current]
Deutsche Gesellschaft für Matrix Biologie (DGMB) (German Society for Matrix Biology)

[01/2019 - Current] Germany
German Society for Biochemistry and Molecular Biology (GBM)

EDITORIAL AND PEER REVIEWING EXPERIENCE

Editorial experience

Guest Editor of Special Issue “Advanced Biomaterials for Tissue Regeneration and Cancer Therapy” for Journal of Functional Biomaterials.

Peer reviewing

Review activity for the following Journals: Applied biochemistry and biotechnology (1) - Cancers (2) - Cells (1) - Cellular signalling (2) - Diagnostics (1) - Health science reports (1) - International journal of molecular sciences (4) - Life (2)

CONFERENCES & SEMINARS

[27/12/2025 - 27/12/2025] National Cancer Institute, Cairo, Egypt

"Research Journeys from Germany to Egypt" Event Featured Speaker with a talk entitled: "Growing Skin Glands in a Dish: A new model for Acne Research".

[13/11/2024 - 13/11/2024] Cologne, Germany

Science Slam of the Medical Faculty of the University of Cologne 2024 Participated with a talk entitled ‘ Can metals be used for skin expansion ’. (Third place)

[28/09/2023] Arab-German Young Academy of Sciences and Humanities (AGYA)

Online workshop ‘3rd Practical Training on Academic & Professional Skills and Getting Ready for the Job Market' Participated with online lecture entitled *'Principals of Good Scientific Practice'*.

[20/09/2023 - 21/09/2023] Children Cancer Hospital Egypt 57357; Cairo, Egypt

57357 Youth Researchers Forum; Empowering Egyptian Researchers Across Borders (ERAB) Participated with two presentations entitled *‘Science Leadership for Women Abroad’* and *‘How does Science differ between Fundamental and Applied Research? (My career path)'*.

[10/05/2023 - 11/05/2023] Cairo, Egypt

11th Annual Ain-Shams International Conference 2023 Participated with a presentation entitled *“Biotechnology: from Radio-oncology to Tissue Engineering”*.

VOLUNTEERING

[15/12/2025 - Current] Faculty of Science, Cairo University
Member in organizing committee; 'Innovation and University-Industry Partnerships' Conference

[01/12/2025 - 27/12/2025] National Cancer Institute, Cairo, Egypt
Member in organizing committee; Research Journeys from Germany to Egypt Event

[02/2023 - 11/2023] University of Cologne, Germany
Member of LOC - Local Organising Committee; 2023 Cologne FEBS-IUBMB-ENABLE Conference

Link: https://febs-iubmb-enableconference.org/the-organisers/

[07/2022 - Current] Online
Academic Mentor; Egypt Scholars (a non-profit organization registered in California)

Link:

https://www.linkedin.com/posts/egypt-scholars-inc-_aesaewaeuaeyaevabraehaesaetaepaejabraetaedaez-activity-6988944144714874880-415c?utm_source=share&utm_medium=member_android

MANAGEMENT AND LEADERSHIP SKILLS

Chairman of Board and Representative of Biological Science Committee in German Egyptian Social & Scientific Relationships (GESR) e.V.

from 2022 to 2024.

Founder of Egyptian Women’s Academic Network in Germany (EWAN) intiative

Empowering Egyptian Female Researchers in Germany

Egyptian Women’s Academic Network in Germany (**EWAN**) is an initiative to support Egyptian academic and research women in Germany and Egypt. Establish connections, hold meetings, and engage in discussions for knowledge sharing and support.

CREATIVE WORKS

[01/09/2025 - Current]
Design of Social and Scientific Magazine (Volume 4), Faculty of Science, Cairo University

[12/03/2025 - 13/03/2025]

CMMC Art Project 2025

Link: https://www.cmmc-uni-koeln.de/events/cmmc-annual-retreats/annual-retreat-2025/p-01-p-077-postersession-1-1-1

[2021 - Current]

Medical and Scientific Illustrations Through platforms like BioRender.com, I craft compelling visuals for academic and educational purposes

Graphics Diploma offered by Russian Culture Centre (RCC), Egypt; including (Adobe Photoshop, Illustrator, In-design, After Effect; version CS6)

COMMUNICATION AND INTERPERSONAL SKILLS

Central Principles of Teaching and Learning in Higher Education"

a series of online workshops including 'Examining and Assessing (Basics) Workshop' and 'Feedback (Basics) Workshop' offered by Hochschuldidaktik NRW

Leadership Training Program for Postdocs and Group Leaders; four-day workshop

offered by Stem Cell Network, NRW; Cologne and Düsseldorf.

Fight stress in 5, 15, and 30 minutes – stress management techniques

offered by Westfälischen Wilhelms-Universität (WWU) Graduate Centre, Muenster, Germany

LANGUAGE SKILLS

Mother tongue(s): Arabic

English

LISTENING: C1 **READING:** C1 **WRITING:** C1

SPOKEN PRODUCTION: C1

SPOKEN INTERACTION: C1

German

LISTENING: B1 **READING:** B2 **WRITING:** B1

SPOKEN PRODUCTION: B1

SPOKEN INTERACTION: B1

RECOMMENDATIONS

Name: Martin Goette | Ph.D. supervisor

Head of Research Laboratory, Clinic for Gynaecology and Obstetrics, University Hospital Münster, Germany

Email: martin.goette@ukmuenster.de

Name: Burkhard Greve | Ph.D. supervisor

Head of Radiation Biology, Clinic for Radiation Therapy, Radiation Oncology, University Hospital Munster, Germany

Email: burkhard.greve@ukmuenster.de

Name: Thomas Krieg | Head of Translational Matrix Biology group

Principal Investigator, Translational Matrix Biology group, Dermatology and Venerology Department, Universitätsklinikum Köln, Cologne, Germany

Email: thomas.krieg@uni-koeln.de

Name: Nadja Kröger | Principal Investigator of BIOMET4D project

Specialist at the Plastic and Plastic Clinic Aesthetic surgery, St.-Antonius-Hospital, Eschweiler, Germany

Email: nadja_kroeger@web.de