

CURRICULUM VITAE

PERSONAL DETAILS



Dr. rer. nat. Dina Raafat Gouda FOUAD

Date, place of Birth: 09. July 1978, in Alexandria, EGYPT

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EDUCATIONAL QUALIFICATIONS AND ACADEMIC BACKGROUND

Academic Degrees

10/2005 – 10/2008 Institute for Medical Microbiology, Immunology and Parasitology (IMMIP),
Pharmaceutical Microbiology Unit, University of Bonn, GERMANY
Degree: **Ph.D. in Pharmaceutical Microbiology**; Title of Thesis: "*Chitosan as an antimicrobial compound: Modes of action and resistance mechanisms*".
→ Grade: **magna cum laude**

05/2002 – 11/2004 Faculty of Pharmacy, Alexandria University, EGYPT
2004 Qualifying Exams for the Master's degree passed with distinction
Degree: **M.Sc. in Pharmaceutical Sciences (2004)**; Pharmaceutical Microbiology; Title of Thesis: "*Evaluation of the effect of chitosan on the activity of some antimicrobial agents*".

Undergraduate Studies

09/1996 – 05/1997 Faculty of Science, Alexandria University, EGYPT
09/1997 – 06/2001 Faculty of Pharmacy, Alexandria University, EGYPT
Degree: **Bachelor's Degree (B.Sc.) in Pharmaceutical Sciences (June 2001)**;
→ Overall average grade: distinction with honor

High School

1982 – 1996 German School of the Sisters of Mercy of St. Borromeo (Deutsche Schule der Borromäerinnen, DSB), Alexandria, EGYPT
Certificate High School Diploma /**Allgemeine Hochschulreife (Abitur)**;
→ Overall average grade: 1.3.

PROFESSIONAL EXPERIENCE

Current position	Assistant Professor; Department of Microbiology and Immunology, Faculty of Pharmacy, Alexandria University, EGYPT Postdoctoral Researcher; Institute of Immunology, University Medicine Greifswald, GERMANY
02/2014 – 01/2015	Assistant Professor; Department of Microbiology and Immunology, Faculty of Pharmacy, Ain Shams University, Cairo, EGYPT
2012-2014	Member; preselection committee for DAAD/Sawiris Foundation Scholarships (DAAD Cairo Office)
01/09 – 30/11/2013	Postdoctoral Fellow; Institute for Medical Microbiology, Immunology and Parasitology (IMMIP), Pharmaceutical Microbiology Section, University of Bonn, GERMANY
10/2009 - 05/2010	Member of the Executive Board of the Development of Students' Assessment Systems Project (DSASP), Alexandria University, EGYPT
06/2009 - 05/2010	Consultant; Microbiology Lab (Quality Control Department), Arab Company for Gelatin and Pharmaceutical Products, Alexandria, EGYPT
01/2005 – 10/2008	Assistant lecturer; Department of Microbiology and Immunology, Faculty of Pharmacy, Alexandria University, EGYPT
09/2001 – 12/2004	Demonstrator; Department of Microbiology and Immunology, Faculty of Pharmacy, Alexandria University, EGYPT

TRAINING OF EARLY CAREER RESEARCHERS (CO-/SUPERVISED SCIENTIFIC WORK)

• B.Sc. Thesis

- 2021 **Leonie Schröder**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: „Erregerspezifische Antikörperantwort bei periprothetischen Infektionen“
- 2020 **Chiara Drechsler**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: „Erreger-spezifische Antikörperantwort bei Sepsis“
- 2019 **Kristin Knauth**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: „Kann man klinische *Staphylococcus aureus*-Isolate für die Analyse der T-Zellantwort mittels FluoroSpot einsetzen?“

• M.Sc. Thesis

- 2022 **Nathalie Zahran**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: „Bestimmung der Antikörperantwort gegen *S. epidermidis* in periprothetischen Infektionen“
- 2021 **Chiara Drechsler**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: „Erregerspezifische Antikörperantwort bei infektiöser Endokarditis“
- 2021 **Luise Herzog**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: „Herstellung und Charakterisierung von humanen monoklonalen Antikörpern gegen *Staphylococcus aureus*-Proteine“
- 2020 **Jan Drusendahl**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: „Charakterisierung humanisierter monoklonaler Antikörper gegen die Phospholipase C von *Staphylococcus aureus*“

- 2019 **Frieder Schmiedeke**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: "Charakterisierung von humanisierten monoklonalen Antikörpern gegen ausgewählte Biofilm-assoziierte *Staphylococcus aureus* Virulenzfaktoren"
- 2018 **Nico Wittmann**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: "Herstellung und Charakterisierung muriner monoklonaler Antikörper gegen *Staphylococcus aureus*-Proteine"
- 2018 **Jannis Beitz**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: "Hochdurchsatzanalyse der erregerspezifischen Antikörperantwort in Patienten mit schweren bakteriellen Infektionen"
- 2017 **Kevin Reppschläger**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: "Charakterisierung der humoralen Immunantwort auf konservierte immunogene *Staphylococcus aureus* Antigene"
- 2013 **Asmaa Ashour**, Department of Pharmaceutics, Faculty of Pharmacy, University of Alexandria, EGYPT.
Title of thesis: "Formulation and evaluation of noble metal particulate systems for selected medical applications".
- 2013 **Hend Zeitoun**, Department of Microbiology and Immunology, Faculty of Pharmacy, University of Alexandria, EGYPT.
Title of thesis: "A comparative study of the use of conventional versus molecular methods in the microbiological quality testing of some pharmaceuticals".

• PhD Thesis

- 2021 **Jawad Iqbal**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: "Pathogen-specific antibody response in infective endocarditis, and the characterization of antibacterial monoclonal antibodies"
- 2021 **Kevin Fichtner**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: "The human B cell response to *Staphylococcus aureus* – analysis at the single-cell level"
- 2020 **Nicole Normann**, Institute of Immunology, University Medicine Greifswald, GERMANY.
Title of thesis: "Erreger-spezifische Antikörpersignaturen bei Patienten mit bakterieller Sepsis"

SKILLS

- Languages
 - Arabic:** Mother tongue
 - German:** Fluent in reading, writing and speaking
 - English:** Fluent in reading, writing and speaking
 - French:** Very good in reading, writing and speaking
- Computer (IT)
 - Excellent knowledge of:**
 - **Operating Systems:** Windows
 - **Office:** Microsoft Word, Excel, PowerPoint
 - **GraphPad Prism**
 - **Internet use and navigation**

COURSES, SEMINARS, WORKSHOPS AND TRAINING PROGRAMS

21/10 – 22/10/2020	Workshop "Strategisches Management und Unternehmerisches Denken", Graduate Academy at the University of Greifswald, GERMANY.
04/06 – 05/06/2020	Seminar "Effizient kommunizieren in Führung und Team", Graduate Academy at the University of Greifswald, GERMANY.
03/02 – 04/02/2020	Workshop „Kompetenzorientiert prüfen und Alternative Prüfungsformen“, Hochschuldidaktische Fortbildungsveranstaltung, University of Greifswald, GERMANY.
03/12/2019	Workshop „Visualisierungstechniken für Flipcharts“, Hochschuldidaktische Fortbildungsveranstaltung, University of Greifswald, GERMANY.
18-19/11/2019	Workshop „Interdisziplinarität in der wissenschaftlichen Nachwuchsförderung“, Akademie der Wissenschaften in Hamburg, Elsa Brändström Haus, Hamburg, GERMANY.
17/07/2019	Online Course: Foundational ICH-Good Clinical Practice (GCP) E6 (R2) Training, European Centre For Clinical Research Training (ECCRT), Brussels, Belgium.
13/02 – 14/02/2019	Workshop „Core Unit Cytometry – UMG“, University Medicine Greifswald, GERMANY.
19/11/2018	Workshop „Gute wissenschaftliche Praxis; Publikation und Autorschaft“ , University of Greifswald, GERMANY.
05/07 – 06/07/2018	Workshop „Methodenwerkstatt für aktive Lehre“, Hochschuldidaktische Fortbildungsveranstaltung, University of Greifswald, GERMANY.
05/06/2018	Veranstaltung "Wissenschaft managen: Projektanträge schreiben und Projektbudgets kalkulieren", Graduate Academy at the University of Greifswald, GERMANY.
31/05 – 01/06/2018	Workshop "Von der Theorie zur Praxis - Praxisbezüge in die eigene Lehre integrieren“, Hochschuldidaktische Fortbildungsveranstaltung, University of Greifswald, GERMANY.
17/04/2018	Veranstaltung "Fördermöglichkeiten für Postdocs", Graduate Academy at the University of Greifswald, GERMANY.
12/04/2018	Mini-symposium "Complement and Allergy"; Institute of Immunology, University Medicine Greifswald, GERMANY.
20/02/2018	Workshop „Kommunikations- und Konflikttraining“, KarriereWegeMentoring (Mentoring Programm der Universitäten Greifswald und Rostock), Festsaal des IBZ, Greifswald, GERMANY.
21/02/2017	
16/01 – 17/01/2018	Workshop „Führung - Von der Kollegin zur Vorgesetzten“, KarriereWegeMentoring , Festsaal des IBZ, Greifswald, GERMANY.
12/01/2018	Workshop „Selbstführung im Spannungsfeld von Wissenschaft, Karriereentwicklung und Dual Career“, KarriereWegeMentoring, Festsaal des IBZ, Greifswald, GERMANY.
10/01/2018	Workshop „Karriereförderung und Förderinstrumenten der DFG“, Universität Greifswald, GERMANY.

12/12 – 13/12/2017	Workshop “Netzwerktraining in der Wissenschaft”, KarriereWegeMentoring, Festsaal des IBZ, Greifswald, GERMANY.
17/08 – 18/08/2017	Hochschuldidaktische Fortbildungsveranstaltung “Vorlesungsrhetorik”, University of Greifswald, GERMANY.
10/07 – 11/07/2017	Projektleiterkurs nach § 15(4) der Gentechnik-Sicherheitsverordnung, TÜV NORD Akademie, University of Greifswald, GERMANY.
07/07/2017	Hochschuldidaktische Fortbildungsveranstaltung "Umgang mit Prüfungssituationen und Prüfungsangst", University of Greifswald, GERMANY.
04/04/2017 and 05/04/2017	Workshop “Lehrportfolio konzipieren und ausarbeiten”, KarriereWegeMentoring, Festsaal des IBZ, Greifswald, GERMANY.
03/04 – 12/07/2017	Course „Laboratory Animal Science“, Central Service and Research Facility for Laboratory Animals, University of Greifswald, GERMANY.
09/02/2014	Regional Launch of Horizon 2020: Meeting EuroMed Common Challenges – Research and Innovation Cooperation, Sofitel Cairo El Gezira Hotel, Cairo, EGYPT.
13/11/2013	"Perspektiven und Chancen für NachwuchswissenschaftlerInnen: Fördermöglichkeiten in Deutschland und Europa"; Festsaal der Universität Bonn, Bonn, GERMANY.
26 – 27/05/2013	DIES (Dialogue on Innovative Higher Education Strategies)-Seminar: “Quality Assurance in Research – Ethics and Science” by DAAD and ANQAHE (Arab Network for Quality Assurance in Higher Education), Four Seasons Hotel – Cairo at Nile Plaza, Cairo, EGYPT.
25/03/2013	Module: “Communicating Science and Academic Research” of the domain “Academic Skills” within the DAAD Kairo Akademie, DAAD Cairo, Cairo, EGYPT.
16, 17, 18 and 22/10/2012	Workshop: “Training of the Trainers” within the DAAD Kairo Akademie, DAAD Cairo, Cairo, EGYPT.
07/10/2012	Module: “Principles of Good Teaching in Higher Education” of the domain “Teaching in Higher Education” within the DAAD Kairo Akademie, Hilton Zamalek, Cairo, EGYPT.
18/02/2010	Continuous Education Program for Pharmacists: “Patient Counseling in Pharmacy Practice”, accredited by the ACPE (Accreditation Council for Pharmacy Education), Misr International University, Cairo, EGYPT.
11/2009 – 02/2010	Training courses at the Faculty and Leadership Development Center (FLDC), University of Alexandria, EGYPT: <ul style="list-style-type: none"> • International Publishing of Scientific Research • Use of Technology in Teaching • Conference Organization • Exams and Students Evaluation Systems • Legal and Financial Aspects in University Environment • Credit hour systems

21/ 11/2006	“DFG Focus Initiative”: “Biomimetic antimicrobial macromolecules: from membrane-active antibacterial peptides/ proteins to synthetic antimicrobial oligomers/polymers”, Hamburg, GERMANY.
23/09/2006	Microbiological Symposium, Institute for Microbiology and Biotechnology, University of Bonn, Bonn, GERMANY.
06 – 08/09/2006	Courses during the Annual Meeting of PhD students (DPhG 2006): <ul style="list-style-type: none"> • LC-MS/MS (Theory and Practice) • Clinical Pharmacy: A visit to the oncology station of the clinic of Nürnberg • Pharmacokinetics - What is really important for the non-pharmacokineticist
30/06/2006	Workshop: „Production of high-quality chitosan“, Center for Environmental Research and Sustainable Technology, University of Bremen, Bremen, GERMANY.
04 –07/2005	Training courses at the Faculty and Leadership Development Center (FLDC), University of Alexandria, Alexandria, EGYPT: <ul style="list-style-type: none"> • Effective Teaching • Researching Methodology • Communication Skills • Presentation Skills • Thinking Skills • Code of Ethics
13 – 17/04/2003	Intensive training course on "Principles of Genetic Engineering" at the Department of Bioscience and Technology, Institute of Graduate Studies and Research (IGSR), Alexandria University, Alexandria, EGYPT.
08/2000	Orientation program in Quality Affairs Division, Production and Packaging, at Gulf Pharmaceutical Industries (Julphar), Ras El-Khaimah, UNITED ARAB EMIRATES.
07/2000	Internship (120 hrs) at Pharco Pharmaceuticals Company, Alexandria, EGYPT.

CONFERENCES ATTENDED

03/04 – 07/04/2022	PROTEOMIC FORUM 2022; XIV. Annual Congress of the European Proteomics, Leipzig, Germany.
12/09 – 14/09/2021	73rd Annual Conference of the German Society for Hygiene and Microbiology [DGHM], digital edition.
30/06 – 03/07/2021	World Immune Regulation Meeting – XV, „Immune Activation, Effector Functions and Immune Tolerance with a special focus on Autoimmunity and Allergy“; digital edition.
14/01/2021	Microbiological symposium, University of Greifswald, Greifswald, GERMANY.
12 – 14/09/2021	73 rd Annual Conference of the German Society for Hygiene and Microbiology (DGHM); digital edition.
01/06/2021	Annual General Assembly of COMBACTE; digital edition.
05 – 06/11/2019	xMAP Connect Amsterdam 2019, Amsterdam, NETHERLANDS.
11 – 14/06/2019	14 th European Meeting on the Molecular Biology of the Pneumococcus (Europneumo 2019), Greifswald, GERMANY.
27 – 29/03/2019	23 rd Symposium: „Infektion und Immunabwehr“, Burg Rothenfels, GERMANY.
12 – 14/03/2019	Annual General Assembly of COMBACTE, Hotel Intercontinental, Bucharest, ROMANIA.

20 – 22/03/2018	Annual General Assembly of COMBACTE, Hotel Grande Bretagne, Athens, GREECE.
01 – 03/11/2017	1 st International Conference on Respiratory Pathogens (ICoRP), Radisson Blu Hotel, Rostock, GERMANY.
14 – 17/09/2017	19 th International Conference on Lymphatic Tissues and Germinal Centres in Immune Reactions, San Servolo Island, Venice, ITALY.
14 – 16/03/2017	Annual General Assembly of COMBACTE, Hotel Crowne Plaza Le Palace, Brussels, BELGIUM.
03 – 06/11/2016	11 th Biomedical Students' Symposium "Immunology – Diseases at Cellular and Molecular Level", University of Greifswald, GERMANY.
15 – 17/09/2016	3 rd International Conference Pathophysiology of Staphylococci, Neue Aula (Audi Max), Tübingen, GERMANY.
08 – 10/03/2016	Annual General Assembly of COMBACTE, Hotel NH Collection, Seville, SPAIN.
25 – 27/11/2013	2. International Symposium of the DFG Research Unit 854 On the Current Trends in Antibacterial Research, Bonn Röttgen, GERMANY.
27 – 29/03/2011	7 th World Life Sciences forum (BioVision Lyon 2011), Convention Center, Cité Internationale, Lyon, FRANCE.
03 – 05/11/2010	International Conference on Antimicrobial Research (ICAR2010), Valladolid, SPAIN.
11 – 15/04/2010	BioVisionAlexandria 2010 conference, Bibliotheca Alexandrina Conference Center (BACC), Alexandria, EGYPT.
27 – 29/10/2009	4 th International Conference of the High Institute of Public Health (Alex Health 2009), under the title: "Patient Safety", Hilton Green Plaza Hotel, Alexandria, EGYPT.
29 – 30/07/2009	First Scientific Conference on the Quality of Education, Cairo University, Cairo, EGYPT.
08 – 11/10/2008	Annual Conference of the German Pharmaceutical Society (DPhG), Bonn, GERMANY.
09 - 11/03/2008	Joint Annual Conference of the Association for General and Applied Microbiology (VAAM) and the German Society for Biochemistry and Molecular Biology (GBM), Frankfurt/Main, GERMANY.
08 – 11/09/2007	8 th International Conference of the European Chitin Society (EUCHIS'07), Antalya, TURKEY.
20 – 25/04/2007	Pre-Satellite Meeting for Ph.D. students and 3 rd Pharmaceutical Sciences World Congress (PSWC 2007), Amsterdam, NETHERLANDS.
01 – 04/04/2007	Annual Conference of the Association for General and Applied Microbiology (VAAM), Osnabrück, GERMANY.
06 – 08/09/2006	Meeting of PhD students of the German Pharmaceutical Society (DPhG), Nürnberg-Heroldsberg, GERMANY.
19 - 22/03/2006	Annual Conference of the Association for General and Applied Microbiology (VAAM), Jena, GERMANY.

RESEARCH PUBLICATIONS (ORCID iD: 0000-0002-3610-9863)

1. Normann, N.; Czoske, G.; **Raafat, D.**; Schmidt, F.; Steil, L.; Scharf, C.; Dhople, V.M.; Hoff, K.; Völker, U.; Bröker, B.M. Using differential immunoproteomics to discriminate between systemic infections with *Staphylococcus epidermidis* and *S. aureus* – in preparation
2. Normann, N.; **Raafat, D.**; Franikowski, P.; Mrochen, D.; Beitz, J.; Holtfreter, S.; Michalik, S.; Meyer, T.; Gründling, M.; Völker, U.; Bröker, B. Simultaneous quantification of pathogen-specific IgG levels in sepsis patients using a Luminex® assay and complex bacterial protein extracts – in preparation
3. Vlaeminck, J.; **Raafat, D.**; Surmann, K.; Timbermont, L.; Normann, N.; Sellmann, B.; van Wamel, W.; Malhotra-Kumar, S. (2020). Exploring Virulence Factors and Alternative Therapies against *Staphylococcus aureus* Pneumonia, *Toxins*; 12(721); DOI: 10.3390/toxins12110721.
4. Mrochen, D.M.; Fernandes de Oliveira, L.M.; **Raafat, D.**; Holtfreter, S. (2020). *Staphylococcus aureus* host tropism and its implications for murine infection models. *International Journal of Molecular Sciences*; 21(19):7061; DOI: 10.3390/ijms21197061.
5. Nicolai, O.; Pötschke, C.; **Raafat, D.**; van der Linde, J; Quosdorf, S.; Laqua, A.; Heidecke, C.-D.; Berek, C.; Darisipudi, M.N.; Binder, C.J.; Bröker B.M. (2020). Oxidation-specific epitopes (OSEs) dominate the B cell response in murine polymicrobial sepsis. *Frontiers in Immunology*; 11:1570; DOI: 10.3389/fimmu.2020.01570.
6. Nicolai, O.; Pötschke, C.; Schmoeckel K., Darisipudi M.N., van der Linde, J.; **Raafat, D.**; Bröker B.M. (2020) Antibody production in murine polymicrobial sepsis — kinetics and key players. *Frontiers in Immunology* 11:828; DOI: 10.3389/fimmu.2020.00828.
7. Normann, N.; Tietz, G.; Kühn, A.; Fuchs, C.; Balau, V.; Schulz, K.; Kolata, J.; Schuerholz, T.; Petersmann, A.; Stentzel, S.; Steil, L.; Kuhn, S.O.; Meissner, K.; Völker, U.; Nauck, M.; Steinmetz, I.; **Raafat, D.**; Gründling, M.; Bröker, B.M (2020). Pathogen-specific antibody profiles in patients with severe systemic infections – *European cells & materials* 39:171-182; DOI: 10.22203/eCM.v039a11.
8. **Raafat, D.**; Mrochen, D.M.; Al’Sholui, F.; Heuser, E.; Ryll, R.; Pritchett-Corning, K.R.; Jacob, J.; Walther, B.; Matuschka, F.-R.; Richter, D.; Westerhüs, U.; Pikula, J.; van den Brandt, J.; Nicklas, W.; Monecke, S.; Strommenger, B.; van Alen, S.; Becker, K.; Ulrich, R.G.; Holtfreter, S. Molecular Epidemiology of Methicillin-Susceptible and Methicillin-Resistant *Staphylococcus aureus* in Wild, Captive and Laboratory Rats: Effect of Habitat on the Nasal *S. aureus* Population. *Toxins* 2020, 12, 80; DOI: 10.3390/toxins12020080.
9. **Raafat D.**, Otto M., Reppschläger K., Iqbal J. and Holtfreter S. (2019). Fighting *Staphylococcus aureus* biofilms with monoclonal antibodies. *Trends in Microbiology*; pii: S0966-842X(18)30285-3; DOI: 10.1016/j.tim.2018.12.009.
10. **Raafat D.**, Leib N. , Wilmes M., François P., Schrenzel J. and Sahl H.-G. (2017). Development of *in vitro* resistance to chitosan is related to changes in cell envelope structure of *Staphylococcus aureus*. *Carbohydrate Polymers* 157: 146–155; DOI: 10.1016/j.carbpol.2016.09.075.
11. Zeitoun H., Kassem M., **Raafat D.**, AbouShlieb H. and Fanaki N. (2015) Microbiological testing of pharmaceuticals and cosmetics in Egypt. *BMC Microbiology* 15:275; DOI: 10.1186/s12866-015-0609-z.
12. Ashour A.A., **Raafat D.**, El-Gowell H.M. and El-Kamel A.H. (2015). Green synthesis of silver nanoparticles using cranberry powder aqueous extract: characterization and antimicrobial properties. *International Journal of Nanomedicine* 10: 7207—7221; DOI: 10.2147/IJN.S87268.

13. Mohamed N.M. and **Raafat D.** (2011). Phenotypic and Genotypic Detection of Metallo-beta-lactamases in Imipenem-resistant *Acinetobacter baumannii* Isolated from a Tertiary Hospital in Alexandria, Egypt. *Research Journal of Microbiology* 6 (10): 750 – 760; DOI: 10.3923/jm.2011.750.760.
14. **Raafat D.** and Sahl H.G. (2009). Chitosan and its antimicrobial potential – a critical literature survey. *Microbial Biotechnology* 2: 186 - 201; DOI: 10.1111/j.1751-7915.2008.00080.x.
15. **Raafat D.**, von Bargen K., Haas A. and Sahl H.G. (2008). Insights into the mode of action of chitosan as an antibacterial compound. *Applied and Environmental Microbiology* 74: 3764 - 3773; DOI: 10.1128/AEM.00453-08.
16. Aggag M.E., Fawzi M.A., Fanaki N.H., Omar H.G.E.-D. and **Raafat D.** (2006). Some factors affecting the antimicrobial activity of chitosan. *National Egyptian Journal of Microbiology* 14: 1 - 17.

Selected contributions to international conferences and conference proceedings

1. Schröder, L.; Janz, V.; Rakow, A; Hofer, A.; Wiebe, S.; Schoon, J.; Wassilew, G.; Bröker, B.M.; **Raafat, D.** (2022). A bead-based immunoproteomic assay (Infection Array) to monitor pathogen-specific antibody responses in periprosthetic joint infection (PJI). PROTEOMIC FORUM 2022; XIV. Annual Congress of the European Proteomics; 03.04. – 07.04.2022, Leipzig, Germany.
2. Normann, N.; Gründling, M.; Meyer, T.C.; Michalik, S.; Völker, U.; Bröker, B.M.; Holtfreter, S.; **Raafat, D.** (2021). Using a culture-independent serology-based approach (infection array) to screen pathogen-specific antibody signatures in sepsis patients – a proof of principle study. 73rd Annual Meeting of the German Society for Hygiene and Microbiology e. V. (DGHM); 12.09.-14.09.2021; digital edition.
3. Normann, N.; Gründling, M.; Meyer, T.C.; Michalik, S.; Völker, U.; Bröker, B.M.; Holtfreter, S.; **Raafat, D.** (2021). Infection array – using the xMAP® technology for developing an immunological tool to screen antibody signatures of major bacterial pathogens. World Immune Regulation Meeting – XV, „Immune Activation, Effector Functions and Immune Tolerance with a special focus on Autoimmunity and Allergy“, 30.06 – 03.07.2021; digital edition.
4. Normann, N.; Gründling, M.; Meyer, T.C.; Michalik, S.; Völker, U.; Bröker, B.M.; Holtfreter, S.; **Raafat, D.** (2021). Using a culture-independent serology-based approach (infection array) to screen pathogen-specific antibody signatures in sepsis patients – a proof of principle study. 73rd Annual Conference of the German Society for Hygiene and Microbiology (DGHM), 12–14 September 2021; digital edition.
5. Normann N., Gründling M., Michalik S., Meyer T., Abdurrahman G., Völker U., Bröker B.M., Holtfreter S., **Raafat D.** (2019). Screening antibody signatures against major bacterial pathogens using the “Infection Array”, a high-throughput assay based on the xMAP® technology. xMAP Connect Amsterdam 2019, 05. – 06.11.2019, Amsterdam, NETHERLANDS.
6. Normann N., Beitz J., Gründling M., Kühn A., Fuchs C., Kolata J., Meyer T., Michalik S., Schulz K., Steinmetz I., Nauck M., Meissner K., Völker U., Bröker B.M., Holtfreter S., **Raafat D.** (2019) Infection array - Developing an immunological tool to detect antibody signatures of major pneumonia-related pathogens. 14th European Meeting on the Molecular Biology of the Pneumococcus (Europneumo 2019), 11. – 14.06.2019, Greifswald, GERMANY.

7. Normann, N.; Beitz, J.; Gründling, M.; Kühn, A.; Fuchs, C.; Kolata, J.; Meyer, T.; Michalik, S.; Schulz, K.; Steinmetz, I.; Nauck, M.; Meissner, K.; Völker, U.; Bröker, B.M.; Holtfreter, S.; **Raafat, D.** (2019). Infection array - Using antibody signatures for developing an immunological tool to complement pathogen-targeted diagnostics, 23. Symposium: „Infektion und Immunabwehr“, 27. – 29.03.2019, Burg Rothenfels, GERMANY.
8. Reppschläger, K.; Müller, H.-P.; Bröker B.M. and **Raafat, D.** (2017) Detection of low frequency B cells specific for immunodominant virulence factors of *Staphylococcus aureus*. 1st International Conference on Respiratory Pathogens (ICoRP), 01. – 03.11.2017, Radisson Blu Hotel, Rostock, GERMANY.
9. Reppschläger, K.; Müller, H.-P.; Bröker B.M. and **Raafat, D.** (2017) A needle in a haystack? On the search for rare B cells specific for conserved immunogenic *Staphylococcus aureus* proteins. 19th International Conference on Lymphatic Tissues and Germinal Centres in Immune Reactions, 14.–17.09.2017, San Servolo Island, Venice, ITALY.
10. **Raafat, D.**; Leib, N.; Wilmes, M.; François, P.; Schrenzel, J. and Sahl, H.-G. (2016). Phenotypic and molecular characterisation of *in vitro* resistance development to chitosan using *S. aureus* SG511 as a model organism. 3rd International Conference Pathophysiology of Staphylococci, 15.– 17.09.2016, Tübingen, GERMANY.
11. Kassem, M.; **Raafat, D.**; AbouShlieb, H. and Fanaki, N. (2014). Biochemical versus molecular methods in the detection of bacterial contaminants in some Egyptian pharmaceuticals in Egypt. Annual International Conference on Pharmaceutical Sciences, 05.–08.05.2014, Athens, GREECE.
12. **Raafat, D.**; Leib, N.; Wilmes, M.; François, P.; Schrenzel, J. and Sahl, H.-G. (2010). (2010). *In vitro* selection for chitosan-resistant *Staphylococcus aureus* - phenotypic and molecular characterisation of resistance development. International Conference on Antimicrobial Research (ICAR2010), 03–05.11.2010, Valladolid, SPAIN (abstract code: 386).
13. **Raafat, D.**; von Barga, K. and Sahl, H.-G. (2008). Selection and characterization of Chitosan-resistant *Staphylococcus aureus*. Annual Conference of the German Pharmaceutical Society (DPHG), 08–11.10.2008, Bonn, GERMANY.
14. **Raafat, D.**; von Barga, K. and Sahl, H.-G. (2008). Resistance of *Staphylococcus aureus* to Chitosan: Selection and characterization of Chitosan-resistant *Staphylococcus aureus*. Joint Annual Conference of the Association for General and Applied Microbiology (VAAM) and the German Society for Biochemistry and Molecular Biology (GBM), 09–11.03.2008, Frankfurt/Main, GERMANY.
15. **Raafat, D.** and Sahl, H.-G. (2007). Chitosan as an antibacterial compound: Insights into its mode of action. In: Advances in Chitin Science. S. Şenel, K. M. Vårum, M. M. Şumnu, and A. A. Hıncal (Eds.), Alp Ofset, Ankara, Vol X, pp: 326 - 332. 8th International Conference of the European Chitin Society (EUCHIS'07), 08–11.09.2007, Antalya, TURKEY.
16. **Raafat, D.** and Sahl, H.-G. (2007). Chitosan as a pharmaceutical excipient: a microbiological point of view. 3rd Pharmaceutical Sciences World Congress (PSWC 2007), 22–25.04.2007, Amsterdam, NETHERLANDS.

17. **Raafat, D.** and Sahl, H.-G. (2006). The antimicrobial action of the biopolymer chitosan. Meeting of PhD students of the German Pharmaceutical Society (DPhG), 06–08.09.2006, Nürnberg-Heroldsberg, GERMANY.
18. **Raafat, D.;** Fanaki, N.H. and Sahl, H.-G. (2006). Chitosan – a versatile biopolymer with antimicrobial potential? Annual Conference of the Association for General and Applied Microbiology (VAAM), Biospektrum, Special Edition 2006, Abstract PP 02, 19–22.03.2006, Jena, GERMANY.

Selected contributions to national conferences and conference proceedings

1. Ashour, **A.A.;** **Raafat, D.** and El-Kamel, A.H. (2012). Green synthesis of silver nanoparticles using cranberry aqueous extract and evaluation of their antimicrobial activities. FUE International Conference on Pharmaceutical Technologies, 06–09.02.2012, Cairo, EGYPT.
2. Ashour, **A.A.;** **Raafat, D.** and El-Kamel, A.H. (2011). Green synthesis of silver nanoparticles using Fenugreek seeds' extracts and evaluation of their antimicrobial activities. 32nd International Conference of Pharmaceutical Sciences, 20–22.12.2011, Cairo, EGYPT.

REVIEWING ACTIVITIES

Reviewer of manuscripts for the following peer-reviewed journals:

- Acta Biochimica et Biophysica Sinica (ABBS),
- Applied and Environmental Microbiology (AEM),
- Carbohydrate Research,
- International Journal of Food Microbiology,
- Journal of Basic Microbiology
- Journal of Infection and Public Health
- PLOS ONE
- International Journal of Scientific Reports

PROFESSIONAL AFFILIATIONS

- 2019 Chamber of Pharmacists in Mecklenburg-Vorpommern (Apothekerkammer-MV; AK-MV), Germany
- 2016 German Society of Immunology e. V. (Deutsche Gesellschaft für Immunologie e. V., DGfI)
- 2006 German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft; DPhG)
- 2006 Association for General and Applied Microbiology (Vereinigung für Allgemeine und Angewandte Mikrobiologie e.V.; VAAM), Germany
- 2001 General Syndicate of Pharmacists, Egypt

FELLOWSHIPS / GRANTS AND THIRD PARTY FUNDED PROJECTS

- 2020 **Anschubfinanzierung;** Forschungsverbund Molekulare Medizin (FVMM) of the University Medicine Greifswald (10,000€; project-ID: FOVB-2020-07).
- 2013 **Postdoctoral scholarship;** German Academic Exchange Service (Deutscher Akademischer Austausch Dienst; DAAD).
- 2005 **PhD scholarship;** German Academic Exchange Service (DAAD).

AWARDS AND HONORS

- 2021 **GSK Best Poster Presentation Award**; World Immune Regulation Meeting XV, 30 June - 3 July 2021 (digital edition).
- 2006 **Best scientific poster**; Annual Conference of PhD students of the German Pharmaceutical Society (DPHG), 06. – 08. September 2006, Nürnberg-Heroldsberg, GERMANY.
- 2001 **Outstanding Student Award**; University of Alexandria, EGYPT.

PROFESSIONAL LICENSES AND CERTIFICATIONS

- 2019 Certificate of Achievement with Excellence (ECCRT ref: 1497_E22ELE), Foundational ICH-**Good Clinical Practice (GCP)** E6 (R2) Training, European Centre For Clinical Research Training (ECCRT), Brussels, Belgium.
- 2019 Erteilung der **Approbation als Apothekerin**; Landesamt für Gesundheit und Soziales in Mecklenburg-Vorpommern.
- 2017 Federation of European Laboratory Animal Science Associations (**FELASA, category B**); German Society of Laboratory Animal Science (GV-SOLAS).
- 2017 **Projektleiterkurs** nach § 15(4) der Gentechnik-Sicherheitsverordnung, TÜV NORD Akademie, University of Greifswald, GERMANY.