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Education:

2007 **Doctorate**, University of Silesia, Polen / Research Center Borstel, Leibniz Lung Center, Germany
2002 Studies Socrates/Erasmus Programm, Agriculture University of Athens, Greece
1998-2003 **Studies of Biology**, University of Silesia, Polen

Academic positions:

Since 2021 **Head of the Division of Biofunctional metabolites and structures**, Priority Area Chronic Lung Diseases at the Research Center Borstel, Leibniz Lung Center, Borstel, Germany
2016 - 2020 **Head of the Junior Group of Allergobiochemistry** at the Research Center Borstel, Leibniz Lung Center, Borstel, Germany
Since 2015 **Lecturer** at the Borstel Biomedical Research School
Since 2015 **Lecturer** within Erasmus+ programme, Staff mobility for teaching and training activities
Since 2018 **Lecturer** at the University of Lübeck, course Molecular Life Science, Infection Biology
Since 2023 **Lecturer** at the Christian-Albrechts-University, Kiel, course Bachelor Biology
2012 - 2015 **Scientist and project leader** at the Division of Structural Biochemistry, Research Center Borstel, Germany
2009 - 2012 **Post doctoral fellow** within DFG, Division of Structural Biochemistry, Research Center Borstel, Germany
2008 - 2009 **Scholarship holder**, Division of Structural Biochemistry, Research Center Borstel, Germany
2003 - 2007 Assistant at the University of Silesia, Department of Microbiology, Poland

Scientific activities:

2013 International Endotoxin and Innate Immunity Society (Organizer)
Since 2017 Guest editor for Frontiers in Immunology, Research Topic: Role of Lipids in the Dynamics of Allergic Airway Inflammation
Since 2021 Guest editor for Biomolecules, Special Issue Project: Bacterial Metabolites and Structures in Asthma

Funding:

2016 - 2020 BMBF, German Center for Lung Research (DZL), Phase 2.0; 1.142.700 Euro
2021 - 2023 BMBF, German Center for Lung Research (DZL), Phase 3.0; 336.000 Euro

Reviewer Activities:

Carbohydrate Polymers, Carbohydrate Research, Biosensors, Marine Drugs, Beneficial microbes, Microbiology

Selected publications:

Di Lorenzo F, Nicolardi S, Marchetti R, Vanacore A, Gallucci N, **Duda K**, Nieto Fabregat F, Nguyen HNA, Gully D, Saenz J, Giraud E, Paduano L, Molinaro A, D'Errico G, Silipo A. 2023. Expanding Knowledge of Methylo-trophic Capacity: Structure and Properties of the Rough-Type Lipopolysaccharide from *Methylobacterium extorquens* and Its Role on Membrane Resistance to Methanol. *JACS Au*. doi: 10.1021/jacsau.3c00025. PMID: 37006758; PMCID: PMC10052234.

Di Lorenzo F., **Duda K.A.**, Lanzetta R., Silipo A., De Castro C., Molinaro A. 2022. A Journey from Structure to Function of Bacterial Lipopolysaccharides. *Chem Rev*. doi: 10.1021/acs.chemrev.0c01321. PMID: 34286971

Du X., Larsen J., Li M., Walter A., Slavetinsky C., Both A., Sanchez Carballo P.M., Stegger M., Lehmann E., Liu Y., Liu J., Slavetinsky J., **Duda K.A.**, Krismer B., Heilbronner S., Weidenmaier C., Mayer C., Rohde H., Winstel V., Peschel A. 2021. *Staphylococcus epidermidis* clones express *Staphylococcus aureus*-type wall teichoic acid to shift from a commensal to pathogen lifestyle. *Nat Microbiol*. 6(6):757-768. doi: 10.1038/s41564-021-00913-z. PMID: 34031577

Li C., **Duda K.A.**, Elverdal P.L., Skovsted I.C., Kjeldsen C., Teze D., Duus J.Ø. 2021. 2021 Structural, biosynthetic and serological cross-reactive elucidation of capsular polysaccharides from *Streptococcus pneumoniae* serogroup 28. *Carbohydr Polym*. 254:117323. doi: 10.1016/j.carbpol.2020.117323.

Marchetti R., Fabregat F.N., Pallach M., Gully D., Giraud E., Molinaro A., **Duda K.A.**, Silipo A. 2021. The peculiar structure of *Acetobacter pasteurianus* CIP103108 LPS core oligosaccharide. *Chembiochem*. 16(1):147-150, doi: 10.1002/cbic.202000597.

González Roldán, N., Engel, R., Düpow, S., Jakob, K., Koops, F., Orinska, F., Vigor, C., Oger, C., Galano, J-M., Durand, T., Jappe, U., **Duda, K.A.** 2019. Lipid mediators from Timothy grass pollen contribute to the effector phase of allergy and prime dendritic cells for glycolipid presentation. *Front Immunol*. ;10:974. doi: 10.3389/fimmu.2019.00974. eCollection 2019

Jappe U., Schwager C., Schrom A., González Roldán N., Stein K., Heine H & **Duda K A.** 2019, 'Lipophilic allergens, different modes of allergen-lipid interaction and their impact on asthma and allergy' *Front Immunol*. 10:122. doi: 10.3389/fimmu.2019.00122. eCollection 2019.

Bönisch, E., Oh, Y.J., Anzengruber, J., Hager, F.F., López-Guzmán, A., Zayni, S., Hinterdorfer, P., Kosma, P., Messner, P., **Duda, K.A.***, Schäffer, C*. 2018. Lipoteichoic acid mediates binding of a *Lactobacillus* S-layer protein. *Glycobiology*. 1;28(3):148-158. doi: 10.1093/glycob/cwx102.

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Steffens T.*, **Duda K.** *, Lindner B., Vorhölter F.J., Bednarz H., Niehaus K., Holst O. 2017. The lipopolysaccharide of the crop pathogen *Xanthomonas translucens* pv. *translucens*:

chemical characterization and determination of signaling events in plant cells. *Glycobiology*. 27(3):264-274

* Contributed equally

Duda K.A., Petersen S., Holst O. 2016. Structural characterization of the lipoteichoic acid isolated from *Staphylococcus sciuri* W620. *Carbohydr Res.* 430:44-47. doi: 10.1016/j.carres.2016.04.026

Pinta E*, **Duda KA***, Hanuszkiewicz A*, Kaczyński Z, Lindner B, Miller WL, Hyytiäinen H, Vogel C, Borowski S, Kasperkiewicz K, Lam JS, Radziejewska-Lebrecht J, Skurnik M, Holst O. 2009. Identification and role of a 6-deoxy-4-keto-hexosamine in the lipopolysaccharide outer core of *Yersinia enterocolitica* serotype O:3. *Chemistry*. 2009 Sep 28;15(38):9747-54. doi: 10.1002/chem.200901255.

*equal contribution