

Hanna Sophie Angstmann

curriculum vitae

Early Life Origins of Chronic Lung Diseases

Research Center Borstel

Leibniz Lung Center

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Academic Qualification

07/2016 – 01/2020

PhD, Research Center Borstel, Leibniz-Lung Center, Group of Invertebrate Models, Germany

Doctoral thesis – Magna cum laude

“Die funktionelle Relevanz zweier Asthma-assoziiierter Serpine in den Atemwegen von *Drosophila melanogaster*”

2014 – 2016

Master of Science (biology), University of Regensburg, Germany

2010 – 2013

Bachelor of Science (biology), University of Regensburg, Germany

Additional Certificates

2019

Laboratory animals (mouse and rat)

2016

Advanced training course for project managers of genetic engineering work and representatives for biological safety in accordance with §§15 and 17 of the *Gentechnik-sicherheitsverordnung*

Activities

2018

Head of the organizing committee of the NDI₃ conference 2018 (New Developments in Immunology, Inflammation and Infection), Borstel, Germany

Travel Grants

04/2019

60th Annual *Drosophila* Research Conference, Dallas, TX, US (travel costs were covered)

Languages

German - native speaker

English - fluent

Spanish - basic

Work Experience

01/2020 – present

Postdoctoral researcher at Research Center Borstel, Leibniz-Lung Center, Group of Early Life Origins of Chronic Lung Diseases, Germany

07/2016 – 12/2019

PhD researcher at Research Center Borstel, Leibniz-Lung Center, Group of Invertebrate Models, Germany

03/2014

Environmental Protection and Occupational Safety Department, Josef WITT GmbH, Weiden i. d. Opf., Germany

09/2012 – 10/2013

Student assistant, Department of Zoology/Evolutionary Biology, University of Regensburg, Germany

02/2012

Environmental Protection and Occupational Safety Department, Josef WITT GmbH, Weiden i. d. Opf., Germany

03/2011

Customer service and controlling Josef WITT GmbH, Weiden i. d. Opf., Germany

Conferences

01/2020

DZL Annual Meeting, Travemünde, Germany (poster)

04/2019

60th Annual *Drosophila* Research Conference, Dallas, TX, US (poster)

01/2019

DZL Annual Meeting, Mannheim, Germany (poster)

11/2018

Autumn meeting DGP, Essen, Germany (talk)

09/2018

Allergy meets Infection, Lübeck, Germany (poster)

11/2017

NDI₃ conference 2017, Borstel, Germany (poster)

Skills

Microbiological Techniques

- All standard microbiological sterile culture (aerobe and anaerobe) and analysis techniques
- Experience with working in Biosafety Levels 2 containment laboratories
- Experience in the culture of hyperthermophilic archaea and bacteria
- Differentiation test for bacteria
- several staining techniques (Gram, Ziehl-Nelson, Live-Dead, DAPI)
- Production of chemically and electronically competent cells
- Resistance testing

Animal Models

- All standard cultivation and keeping techniques of *Drosophila melanogaster* strains
- RNAi and UAS-ORF models for targeted manipulation of gene expression in *Drosophila*
- targeted crossings of *Drosophila* strains to generate models with new genetic background
- Deep knowledge of *Drosophila* genetics
- Handling of laboratory animals (mouse and rat)
- Implementation of common application techniques (s.c., i.p., i.v., p.o.)
- Application of injection anaesthesia
- euthanasia procedures

Molecular and Cell Biological Techniques

- Immunofluorescence staining of cells and tissues
- Immunofluorescence microscopy, including confocal laser scanning microscopy
- Fixation and staining of cells for Transmission electron microscopy (uranyl-acetate staining)
- Transmission electron microscopy
- Separation of proteins by denaturing poly-acrylamide gel electrophoresis
- Qualitative and quantitative protein analysis by using Western blotting

DNA/RNA Analysis Techniques

- All standard molecular cloning and gene analysis techniques (restriction enzyme digestion, ligation)
- Separation of DNA fragments on Agarose gels
- Isolation of Plasmid DNA from *E. coli*
- Purification of DNA and RNA (bacteria, archaea, *Drosophila melanogaster*)
- cDNA synthesis
- Qualitative and Quantitative (Real-Time) PCR

Bioinformatics and Software

- Experience with bioinformatics tools, including: DNA and protein sequence analysis (DNA Alignment, BLAST, ClustalOmega), primer design software
- ImageJ
- GraphPad Prism 7
- Leica Application Suite AF