CURRICULUM VITAE

DANIELA WETZEL, Ph.D.

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EDUCATION

PhD, Microbiology, *magna cum laude*, Department of Microbiology, University of Rostock, Germany, January 2016.

Dissertation: SspA, a small acid-soluble spore protein, is essential for the outgrowth of *Clostridium acetobutylicum* endospores
PI: Prof. Dr. Hubert Bahl

Diploma biologist, graduated with Honors, Institute of Biological Science, University of Rostock, Germany, January 2012.

Undergraduate thesis: SASP mutant strains of *Clostridium acetobutylicum*
PI: Prof. Dr. Hubert Bahl

RESEARCH ACTIVITY

From 05/2017 to present	Prof. Dr. Shonna M. McBride, Emory University, Atlanta, GA, USA Project: Environmental trigger of *Clostridioides difficile* sporulation
From 01/2016 to 03/2017	Prof. Dr. Uwe Groß, University Medical Center, Göttingen, Germany Project: Epidemiology of clinical *Clostridium difficile* isolates in communities of Africa, Indonesia and Germany
From 6/2012 to 5/2015	Prof. Dr. Hubert Bahl, University of Rostock, Rostock, Germany Project: Characterization of small acid-soluble spore protein and germination proteases in *Clostridium acetobutylicum*
From 3/2012 to 5/2012	Prof. Dr. Hubert Bahl, University of Rostock, Rostock, Germany Project: Systems biology of butanol producing *Clostridium acetobutylicum*
From 3/2011 to 1/2012	Prof. Dr. Hubert Bahl, University of Rostock, Rostock, Germany Project: Generation of SASP mutant strains in *Clostridium acetobutylicum*
From 12/2009 to 1/2010	Prof. Dr. Renate Horn, University of Rostock, Rostock, Germany Project: The impact of drought stress on *Helianthus annuus*

PEER-REVIEWED PUBLICATIONS

Wetzel D., McBride S.M. The impact of pH on *Clostridioides difficile* sporulation and physiology. *Applied and Environmental Microbiology*. PMID 31811041 DOI: 10.1128/AEM.02706-19

Garrett E.M., Sekulovic O., **Wetzel D.**, Jones J.B., Edwards A.N., Vargas-Cuebas G., McBride S.M., Tamayo R. Phase variation of a signal transduction system controls *Clostridioides difficile* colony morphology, motility, and virulence. Plos Biology. 17: e3000379. PMID 31658249 DOI: 10.1371/journal.pbio.3000379

Nawrocki, K.L., **Wetzel**, **D**., Jones, J.B., Woods, E.C., McBride, S.M. (2018). Ethanolamine is a valuable nutrient source that impacts *Clostridium difficile* pathogenesis. *Environ Microbiol*. doi: 10.1111/1462-2920.14048.

Woods, E.C., **Wetzel**, **D.**, Mukerjee, M., McBride, S.M. Examination of the *Clostridioides* (*Clostridium*) *difficile* VanZ ortholog, CD1240. *Anaerobe* 53. doi: 10.1016/j.anaerobe.2018.06.013

Groß U., Brzuszkiewicz E., Gunka K., Starke J., Riedel T., Bunk B., Spröer C., **Wetzel D.**, et al. (2018). Comparative genome and phenotypic analysis of three *Clostridioides difficile* strains isolated from a single patient provide insight into multiple infection of *C. difficile*. *BMC Genomics* 19:1. doi:10.1186/s12864-017-4368-0.

Riedel T., **Wetzel D.**, Hofmann J. D., Plorin S. P. E. O., Dannheim H., Berges M., et al. (2017). High metabolic versatility of different toxigenic and non-toxigenic *Clostridioides difficile* isolates. *Int. J. Med. Microbiol.* 307 311–320. 10.1016/J.IJMM.2017.05.007

Janssen I., Cooper P., Gunka K., Rupnik M., **Wetzel D.**, Zimmermann O., and Groß U. (2016). High prevalence of nontoxigenic *Clostridium difficile* in rural Ghana: a cross-sectional, single-centre study. *Int. J. Med. Microbiol*., doi: 10.1016/j.ijmm.2016.09.004.

Wetzel D., and Fischer R.J. (2015) Small acid-soluble spore proteins of *Clostridium acetobutylicum* are able to protect DNA *in vitro* and are specifically cleaved by germination protease GPR and spore protease YyaC**.** *Microbiology* doi: 10.1099/mic.0.000162.

ORAL PRESENTATIONS

Wetzel D.: The impact of the environmental trigger pH on *Clostridioides difficile* physiology. 20th International Conference on Bacilli and Gram-Positive Bacteria, Washington, D.C., USA, July 24, 2019.

Wetzel D.: The impact of the environmental trigger pH on *Clostridioides difficile* sporulation and physiology. Lunch and Learn Seminar, Emory University School of Medicine, Atlanta, GA, USA, Feb 06, 2019.

Wetzel D.: Mutiple und Sequentielle *Clostridium difficile* – Infektionen. 14. bioMérieux Symposium “Wissen verbindet”, Kassel, Germany, Jan 22, 2016.

Wetzel D., and Fischer R.J.: Analysis of small acid-soluble spore proteins in *Clostridium acetobutylicum*. Annual Conference 2013 of the Association for General and Applied Microbiology (VAAM), Bremen, Germany, Mar 12, 2013.

POSTER PRESENTATIONS

Wetzel D., and McBride, S.M. The impact of varying pH conditions on *Clostridioides difficile* growth, physiology and adaptation. Southeastern Branch ASM Annual Meeting, Atlanta, GA, USA, Nov 30 – Dec 02, 2018.

Wetzel D., and McBride, S.M. Environmental triggers of *Clostridium difficile* sporulation. ASM microbe 2018, Atlanta, GA, USA, June 7-11, 2018.

Wetzel D., and McBride, S.M. Environmental triggers of *Clostridium difficile* sporulation. ASM - 103rd Southeastern Branch Annual Meeting, St. Petersburg, FL, USA, Nov 10-12, 2017.

Wetzel D., and McBride, S.M. Environmental triggers of *Clostridium difficile* sporulation. Emory PostDoc Symposium, Atlanta, GA, USA, Sep 21, 2017.

Wetzel D., Plorin P., von Müller L., Rupnik M., Gunka K., Zimmermann O., Groß U. Prevalence of potential zoonotic originated *Clostridium difficile* strains in Germany, Indonesia, Ghana and Tanzania. National Symposium on Zoonoses Research 2016, Berlin, Germany, Oct 13-14, 2016.

Wetzel D., Cooper P., Daniel R., Gunka K., Hasibuan I., Janssen I., et al. Current status of *Clostridium difficile* infection epidemiology in communities of Africa, Indonesia and Germany. 68th Annual Conference German Society for Hygiene and Microbiology (DGHM), Ulm, Germany, Sep 11-14, 2016.

Wetzel D., Groß U., Cooper P., Daniel R., Gunka K., Hasibuan I., et al. A cross-sectional multi-centre study on *Clostridium difficile* infections in representative regions of Germany, Ghana, Tanzania and Indonesia. ePoster presentation, 26th ECCMID 2016, Amsterdam, Netherlands, Apr 09, 2016.

Wetzel D., and Fischer R.J.: Properties of Small acid-soluble spore proteins of *Clostridium acetobutylicum*. Annual Conference 2015 of the Association for General and Applied Microbiology (VAAM), Magdeburg, Germany, Mar 01-04, 2015.

Wetzel D., Lunze A., and Fischer R.J.: Germination proteases of *Clostridium acetobutylicum*. 4th Conference of the Association for General and Applied Microbiology (VAAM) and the Society of Hygiene and Microbiology (DGHM), Dresden, Germany, Oct 05-08, 2014.

Wetzel D., and Fischer R.J.: A small acid-soluble spore protein is essential for germination of *Clostridium acetobutylicum* spores. Clostridium XII Conference, Nottingham (GB), Sep 10-12, 2012.

Wetzel D., and Fischer R.J.: A small acid-soluble spore protein is essential for germination of *Clostridium acetobutylicum* spores. Annual Conference 2012 of the Association for General and Applied Microbiology (VAAM), Tübingen, Germany, Sep 18-21, 2012.

RESEARCH SUPERVISION

2018-2019, supervised 1 undergraduate student

2016-2017, supervised 4 MD/ PhD students and 1 lab rotation

2012-2015, supervised 4 MSc and 1 BSc student

FELLOWSHIPS, HONORS & AWARDS

6/2019	Igor Stojiljkovic Memorial Travel Award, Emory University School of Medicine, Atlanta, GA, USA
6/2012 to 5/2015	PhD scholarship granted by the state of Mecklenburg-Western Pomerania, Rostock, Germany
10/2014	Poster prize, Microbiology and Infection 2014, 4th Conference of the Association for General and Applied Microbiology (VAAM) and the Society of Hygiene and Microbiology (DGHM), Germany
1/2013	Faculty prize, best student at the Institute of Biological Sciences of the University of Rostock 2011/2012, Rostock, Germany

PROFESSIONAL MEMBERSHIPS

2019 – present	Atlanta Society of Mentors (ASOM), USA
2018 – present	American Society for Microbiology, USA
2012 – 2017	Association for General and Applied Microbiology (VAAM), Germany