Curriculum Vitae

Last name, First name: Ohnesorge, Nils **Gender**: male

Nationality/ies: German

Overall Scientific Expertise:

I am a biochemist with a strong background in molecular and developmental biology. My main area of expertise is working with zebrafish. At my institute, I am the person responsible for zebrafish husbandry, which I built from the ground up. As part of my employment at the German Centre for the Protection of Laboratory Animals, my focus is on zebrafish research in the area refinement 3 R and more specifically on the subject of reducing pain and suffering of fish. In addition, I am interested in standardizing and improving husbandry conditions for fish used in research.

Professional Experience

Years employed from – to	Title of position	Employer – name and location	Areas of professional specialisation♠
2016-now	Scientist	German Federal Institute for Risk Assessment, German Centre for the Protection of Laboratory Animals, Berlin, Germany	Zebrafish, pain refinement, 3R, neurology, husbandry, alternative methods, toxicology
2015-2016	Postdoc	St. Vincent's University Hospital, Dublin, Ireland	Zebrafish, mutations, miRNA, angiogenesis, inflammation
2015-2015	Postodc	Kalvista Pharmaceuticals, Salisbury, Great Britain	cell culture, angiogenesis, drug development, cell migration
2014-2015	Postdoc	University College Dublin, Dublin, Ireland	Zebrafish, drug development, drug screens, angiogenesis, eye development, eye diseases, husbandry
2010-2013	Postdoc	Max Planck Institute for Molecular Biomedicine, Münster, Germany	Zebrafish, angiogenesis, liver development
2005-2009	PhD student	University Hospital Mannheim, Germany	Cell culture, angiogenesis, cell signalling, dermatology

Specific expertise in the field of the call

- Expertise in current German and European legislation and accompanying frameworks, that regulate animal experiments, specifically zebrafish

- Expertise in current European and world wide standards for zebrafish husbandry conditions, including water parameters, nutrition, breeding schemes, environmental forms of refinement like structural enrichment, common fish diseases and health standards
- Expertise in diagnosis of pain and suffering in zebrafish, using neurological and behaviour analysis and treatments via anaesthetics and analgesics
- In addition, expertise in methods of euthanasia for zebrafish, especially in anaesthetics overdose and rapid cooling

Educational Background

Year	Degree awarded	Educational Institution – name and location	Areas of educational specialisation*
2010	Dr.	Heidelberg University, Medical Faculty Mannheim, Germany	cell biology, molecular biology, venereology, dermatology
2005	Diploma	Christian Albrechts University, Kiel, Germany	biochemistry, cell biology, molecular biology, pharmaceutical chemistry

Memberships in Scientific Advisory Bodies/Committees/Panels *(if any)***:**
none

Memberships in Learned Societies *(if any)***:**
none

Memberships in Editorial Boards *(if any)***:**
none

List of Publications:

8 publications: 7 research articles, 1 review

1. Ohnesorge, N., C. Heinl, and L. Lewejohann, *Current Methods to Investigate Nociception and Pain in Zebrafish.* Frontiers in Neuroscience, 2021. **15**(378).
2. Lange, M., et al., *Distinct Vegfa isoforms control endothelial cell proliferation through PI3 kinase signalling mediated regulation of cdkn1a/p21.* bioRxiv, 2020: p. 2020.04.01.018796.
3. Wade, S.M., et al., *Dysregulated miR-125a promotes angiogenesis through enhanced glycolysis.* EBioMedicine, 2019. **47**: p. 402-413.
4. Ohnesorge, N., et al., *Orthogonal Drug Pooling Enhances Phenotype-Based Discovery of Ocular Antiangiogenic Drugs in Zebrafish Larvae.* Front Pharmacol, 2019. **10**: p. 508.
5. Ohnesorge, N., et al., *Erk5 activation elicits a vasoprotective endothelial phenotype via induction of Kruppel-like factor 4 (KLF4).* J Biol Chem, 2010. **285**(34): p. 26199-210.
6. Spiering, D., et al., *MEK5/ERK5 signaling modulates endothelial cell migration and focal contact turnover.* J Biol Chem, 2009. **284**(37): p. 24972-80.
7. Klein, D., et al., *Wnt2 acts as an angiogenic growth factor for non-sinusoidal endothelial cells and inhibits expression of stanniocalcin-1.* Angiogenesis, 2009. **12**(3): p. 251-65.
8. Scheller, J., N. Ohnesorge, and S. Rose-John, *Interleukin-6 trans-signalling in chronic inflammation and cancer.* Scand J Immunol, 2006. **63**(5): p. 321-9.