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Postdoc, 2019-date

Laboratories of Prof. Dr. Claude Desplan, **New York University**, New York, USA
and Prof. Dr. Danny Reinberg, **NYU Grossman School of Medicine**, New York, USA

EDUCATION

International **PhD** program in the Biological Sciences, 2014-2019 (degree awarded in 2020 by Uni Tübingen)
Laboratory of Prof. Dr. Ralf J. Sommer, **Max Planck Institute for Developmental Biology**, Tübingen, Germany
Thesis: "Environmental and genetic regulation of mouth-form plasticity in *Pristionchus pacificus*."

Erasmus Mundus European **Master** of Science in Nematology, 2012-2014

Ghent University, Belgium and **Bielefeld University**, Germany

Thesis: "Ultrastructural investigation of Cu²⁺ effects on the nematodes *C. elegans* and *Acrobeloides nanus*."

Bachelor of Science in Biology, 2008-2012

Taras Shevchenko National **University of Kiev**, Ukraine

PUBLICATIONS

- Shields, E.J., Sorida, M., Sheng, L., **Sieriebriennikov, B.**, Ding, L., Bonasio, R. (2021). Genome annotation with long RNA reads reveals new patterns of gene expression in an ant brain. *bioRxiv*, <https://doi.org/10.1101/2021.04.20.440671>
- **Sieriebriennikov, B.**, Reinberg, D., Desplan, C. (2021). A molecular toolkit for superorganisms. *Trends in Genetics*, <https://doi.org/10.1016/j.tig.2021.05.005>
- Theska, T., **Sieriebriennikov, B.**, Wighard, S.S., Werner, M.S., Sommer, R.J. (2020). Geometric morphometrics of microscopic animals as exemplified by model nematodes. *Nature Protocols*, <https://doi.org/10.1038/s41596-020-0347-z>.
- **Sieriebriennikov, B.**, Sun, S., Lightfoot, J.W., Witte, H., Moreno, E., Rödelberger, C., Sommer, R.J. (2020). Conserved nuclear hormone receptors controlling a novel plastic trait target fast-evolving genes expressed in a single cell. *PLoS Genetics* 16, e1008687.
- Hong, R.L., Riebesell, M., Bumbarger, D.J., Cook, S.J., Carstensen, H.R., Sarpolaki, T., Cochella, L., Castrejon, J., Moreno, E., **Sieriebriennikov, B.**, Hobert, O., Sommer, R.J. (2019). Evolution of neuronal anatomy and circuitry in two highly divergent nematode species. *Elife* 8, e47155.
- Werner, M.S., **Sieriebriennikov, B.**, Prabh, N., Loschko, T., Lanz, C., Sommer, R.J. (2018). Young genes have distinct gene structure, epigenetic profiles, and transcription start site regulation. *Genome Research* 28, 1675-1687.
- **Sieriebriennikov, B.**, Sommer, R.J. (2018) Developmental plasticity and robustness of a nematode mouth-form polyphenism. *Frontiers in Genetics* 9, 382.

- **Sieriebriennikov, B.**, Prabh, N., Dardiry, M., Witte, H., Röseler, W., Kieninger, M.R., Rödelberger, C., Sommer, R.J. (2018). A developmental switch generating phenotypic plasticity is part of a conserved multi-gene locus. *Cell Reports* 23, 2835-2843.
- **Sieriebriennikov, B.**, Markov, G.V., Witte, H., Sommer, R.J. (2017). The role of DAF-21/Hsp90 in mouth-form plasticity in *Pristionchus pacificus*. *Molecular Biology and Evolution* 34, 1644–1653.
- Moreno, E., **Sieriebriennikov, B.**, Witte, H., Rödelberger, C., Lightfoot, J.W., Sommer, R.J. (2017). Regulation of hyperoxia-induced social behaviour in *Pristionchus pacificus* nematodes requires a novel cilia-mediated environmental input. *Scientific Reports* 7, 17550.
- Werner, M.S., **Sieriebriennikov, B.**, Loschko, T., Namdeo, S., Lenuzzi, M., Dardiry, M., Renahan, T., Sharma, D.R., Sommer, R.J. (2017). Environmental influence on *Pristionchus pacificus* mouth form through different culture methods. *Scientific Reports* 7, 7207.
- Sommer, R.J., Dardiry, M., Lenuzzi, M., Namdeo, S., Renahan, T., **Sieriebriennikov, B.**, Werner, M.S. (2017). The genetics of phenotypic plasticity in nematode feeding structures. *Open Biology* 7.
- Sanghvi, G.V., Baskaran, P., Röseler, W., **Sieriebriennikov, B.**, Rödelberger, C., Sommer, R.J. (2016). Life history responses and gene expression profiles of the nematode *Pristionchus pacificus* cultured on *Cryptococcus* yeasts. *PLoS One* 11, e0164881.
- Seroby, V., Xiao, H., Namdeo, S., Rödelberger, C., **Sieriebriennikov, B.**, Witte, H., Röseler, W., Sommer, R.J. (2016). Chromatin remodelling and antisense-mediated up-regulation of the developmental switch gene *eud-1* control predatory feeding plasticity. *Nature Communications* 7, 12337.
- **Sieriebriennikov, B.**, Ferris, H., de Goede, R.G.M. (2014). NINJA: An automated calculation system for nematode-based biological monitoring. *European Journal of Soil Biology* 61, 90–93.

CONFERENCE PRESENTATIONS

- 2021 The Identity and Evolution of Cell Types, Heidelberg, Germany (virtual) – talk
- 2021 Biology & Genomics of Social Insects, Cold Spring Harbor, USA (virtual) – poster
- 2018 Society for Molecular Biology and Evolution, Yokohama, Japan – poster
- 2018 European Society for Evolutionary Developmental Biology, Galway, Ireland – talk
- 2017 Pan-American Society of Evolutionary Developmental Biology, Calgary, Canada – poster
- 2016 Evolutionary Biology of *Caenorhabditis* and Other Nematodes, Cold Spring Harbor, USA – talk

INVITED TALKS

- 2021 University of Utah, Salt Lake City, USA
- 2016 Ghent University, Ghent, Belgium

FELLOWSHIPS AND AWARDS

- 2021 Otto Hahn Medal from the Max Planck Society
- 2020-2023 Long-term fellowship from The Human Frontier Science Program
- 2012-2014 Erasmus Mundus Master's scholarship

TEACHING AND MENTORSHIP EXPERIENCE

New York University

- 2020 Summer undergraduate research program for underrepresented minorities in science – mentor.
- 2019-2021 Mentoring of undergrad students Luis Fernando Hernandez and Hunter Samuel Whitbeck.

Max Planck Institute for Developmental Biology

2018 R for Bioscientists – co-instructor.

2016-2019 Mentoring of PhD students Mohannad Dardiry, Shuai Sun, Sara Wighard, and Tobias Theska.

University of Tübingen

2018 Plant biochemistry lab course – teaching assistant.

2017 Neurophysiology lab course – teaching assistant.

SKILLS

Nucleic acid manipulation including molecular cloning and RNA work, Illumina and PacBio sequencing, bulk and single-cell RNA-seq analysis, phylogenetic analysis, mutant screens and genetic crosses, light microscopy, transmission electron microscopy, nematode taxonomy, statistics, R, python, Unix.

LANGUAGES

English (fluent, IELTS 8.0), German (very good, TestDaF 5,4,4,4), Ukrainian, Russian (mother tongues).

REFERENCES

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Prof. Dr. Wim Bert

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