

ACADEMIC CARREER PATH

Junior Group Leader at the Institute for Integrative Cell Biology and Physiology at the University of Münster.	Since 2025
Walter Benjamin Fellow (DFG) and Postdoc in the Peifer Lab at UNC Chapel Hill.	2022 – 2025
Transitional postdoc in the Bogdan Lab and parental leave .	2020 – 2021
Doctoral thesis: New Principles in Collective Cell Migration during <i>Drosophila</i> Organ Development. <i>summa cum laude</i> . Advisors: Prof. Dr. Sven Bogdan, Prof. Dr. Renate Renkawitz-Pohl	2020
Graduate School , Research Training Group RTG (GRK) 2213 Membrane Plasticity in Tissue Development and Remodeling, Philipps-Universität Marburg, Germany.	2016 – 2020
Master's thesis: Transcriptional Regulation of Laminin B2 During the Development of <i>Drosophila melanogaster</i> . Advisors: Dr. Anne Holz, Prof. Dr. Adriaan Dorresteijn.	2016
Bachelor's and Master's program , Biology, at Justus-Liebig-University (Gießen, Germany).	2011 – 2016

RESEARCH INTERESTS

Morphogenesis, developmental biology, cell biology, biomechanics in development, organogenesis, *Drosophila* development, cell motility, collective cell migration, cell-matrix-adhesion, cell-cell adhesion, cytoskeleton, actin dynamics, collective cell migration, extracellular matrix, live-cell imaging, high resolution microscopy.

ACADEMIC SOCIETY MEMBERSHIPS

GFE (*Gesellschaft für Entwicklungsbiologie*, German Society for Developmental Biology)
DGZ (*Deutsche Gesellschaft für Zellbiologie*, German Society for Cell Biology)
SDB (Society for Developmental Biology)
ASCB (American Society for Cell Biology)

SELECTED TALKS AT CONFERENCES

Cambridge Morphogenesis Seminar Series , Online	June 2025
Gordon Research Conference: Directed Cell Migration , Lucca, Italy	January 2025
Cell Bio 2024 ASCB/EMBL , San Diego, United States	December 2024
International Developmental Mechanics Seminar Zoom Seminar Series	October 2024
Joint International GfE/DSDB Meeting , Osnabrück, Germany	March 2024

PRICES AND FELLOWSHIPS

MBoC 2025 Early Career Award	2025
Nikon <i>Small World in Motion</i> , Honorable mention	2025
Holder of a DFG (<i>German Research Foundation</i>) Walter-Benjamin Scholarship	2022 – 2023
Holder of a German National Academic Foundation Scholarship (<i>Studienstiftung des deutschen Volkes</i>).	2014 – 2016

PROFESSIONAL EXPERIENCE

Head of conference organization: “ <i>International PhD Symposium 2019</i> ”. of the RTG 2213, https://www.uni-marburg.de/en/grk-2213/events-activities/international-phd-symposium-2019	2019
Students’ representative of the RTG 2213.	2017 – 2018
Organizer of the “Career Coaching Day 2018” of the RTG 2213. https://www.uni-marburg.de/en/grk-2213/events-activities/career-coaching-day-2018	2018

REFERENCES

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LIST OF PUBLICATIONS

- 2025 -

Bischoff, M. C., & Mayor, R. (2025). Patterning in motion: Cell interfaces guide mesenchymal collective migration and morphogenesis. *Journal of Cell Biology*, 224(11), e202505198.
(Corresponding author)

Jensen, C. C., Gurley, N. J., Mathias, A. J., Wolfsberg, L. R., Xiao, Y., Zhou, Z., Bischoff, M. C., Clark, S. E., Slep, K. C., Peifer, M. (2025). A key role of Canoe's intrinsically disordered region in linking cell junctions to the cytoskeleton. *Journal of Cell Biology*, 224(12), e202505135.

Bischoff, M. C., Norton, J. E., Clark, S. E., & Peifer, M. (2025). Plexin/Semaphorin antagonism orchestrates collective cell migration and organ sculpting by regulating epithelial-mesenchymal balance. *Science Advances*, 11(25), eadu3741.
(Co-Corresponding author)

Bischoff, M. C., J. E. Norton, E. A. Munguia, N. J. Gurley, S. E. Clark, R. Korankye, E. Addai Gyabaah, T. Encarnacion, C. Serody, C. Jones, M. Peifer. (2025). A large reverse-genetic screen identifies numerous regulators of testis nascent myotube collective cell migration and collective organ sculpting. *Molecular Biology of the Cell*, 36(2), ar21.
(Co-Corresponding author)

Preußner, M., Bischoff, M. C., & Önel, S. F. (2025). mir-276a Is Required for Muscle Development in *Drosophila* and Regulates the FGF Receptor Heartless During the Migration of Nascent Myotubes in the Testis. *Cells*, 14(5), 368.

- 2024 -

Rötte, M., M. Höhne, D. Klug, K. Ramlow, C. Zedler, F. Lehne, M. Schneider, M. C. Bischoff, S. Bogdan. (2024) CYRI controls epidermal wound closure and cohesion of invasive border cell cluster in *Drosophila*. *Journal of Cell Biology*, 223(12), e202310153.

- 2023 -

Bischoff, M. C., Bogdan, S. (2023). Dissecting Collective Cell Behavior in Migrating Testis Myotubes in *Drosophila*. In Cell Migration in Three Dimensions (pp. 117-129). *Methods in Molecular Biology*, Volume 2608.

- 2022 -

Bischoff, M. C., Peifer, M. (2022). Cell biology: Keeping the epithelium together when your neighbor divides. *Current Biology*, 32 (20), R1025–R1027.

- 2021 -

Bischoff, M. C., Bogdan, S. (2021). Collective cell migration driven by filopodia–New insights from the social behavior of myotubes. *BioEssays*, 43 (11), 2100124.

Bischoff, M. C., S. Lieb, Renkawitz-Pohl, R. Bogdan, S. (2021). Filopodia based contact stimulation of cell migration drives tissue morphogenesis. *Nature communications*, 12 (1), 1–18.

- before 2020 -

Töpfer, U., Bischoff, M. C., Bartkuhn M., Holz, A. (2019). Serpent/dGATAb regulates Laminin B1 and Laminin B2 expression during *Drosophila* embryogenesis. *Scientific reports*, 9 (1), 1–9.

Rothenbusch-Fender, S., Fritzen, K., Bischoff, M. C., Buttgerit, D., Önel S. F., Renkawitz-Pohl, R. 2017. Myotube migration to cover and shape the testis of *Drosophila* depends on Heartless, Cadherin/Catenin, and myosin II. *Biology open*, 6 (12), 1876–1888.