



BIO

Date of Birth: 23.08.1989

Place of Birth: Ankara, Turkey

Nationality: Germany / Turkey

Languages: German (native), Turkish (native),

English (near native, TOEFL iBT: 116, C2),

Spanish (intermediate, B1)

ACADEMIC FORMATION

Rheinische Friedrich-Wilhelms-Universität Bonn, Germany

22 Nov 2023

Dr. rer. nat. habil. *Venia legendi* in Zoology.

Thesis Title: Integrative Taxonomy and Phylogeny of Annelids

18 Dec 2015

Dr. rer. nat. Zoology.

Thesis Title: Ultrastructure, Formation and Evolution of Chaetae in Annelids

Advisor: Prof. Dr. Thomas Bartolomaeus

20 Jul 2012

MSc. Organismic Evolutionary and Paleobiology.

Thesis Title: Histological Analysis of Cnidocysts in the Digestive Tracts of *Cratena*

peregrina and *Flabellina affinis* (Aeolidioidea, Nudibranchia) and a Molecular Barcode

Analysis of Selected *Flabellina* Species.

Advisor: Prof. Dr. Heike Wägele

10 Sept 2010

BSc. Biology.

Thesis Title: Relation of Digestive Gland and Zooxanthellae in Dorsal Appendices of

Phyllodesmium spp. (Aeolidioidea, Nudibranchia) - A Case Study Using Surface

Measurements with the Programme Reconstruct™ -

Advisor: Prof. Dr. Heike Wägele

CURRENT APPOINTMENTS

Jan 2024 —

Privatdozent (Adjunct Professor) University of Bonn

Jan 2023 —

Curator of Marine Invertebrates

Section Head of Mar. Inv. II at Senckenberg Natural History Museum Frankfurt

PAST EMPLOYMENT

Mar 2021 — Dec 2022

Marie Curie fellow at the University of Copenhagen. PI: Katrine Worsaae

May 2019 — Feb 2021

scientific assistant at the at Institute of Evolutionary Biology, University of Bonn

Apr 2017 — May 2019

postdoctoral fellow at Scripps Institution of Oceanography, UCSD. PI: Greg Rouse

Jan 2016 — Mar 2017

scientific assistant at the at Institute of Evolutionary Biology, University of Bonn

GRANTS & FUNDING

2020
as team-member

International Network Grant Danish Ministry of Higher Education and Science

Advancing developmental biology - combining cutting-edge techniques & non-model organisms — PI: Katrine Worsaae

- 2020 Marie Skłodowska-Curie Individual Fellowship (H2020 – European commission) University of Copenhagen.
Research Topic: Molecular and Morphological Characterization of Chaetogenesis in *Osedax japonicus* 207.312
- 2017 DFG postdoctoral research fellowship
Scripps Institution of Oceanography, UCSD
Research Topic: Phylogenomics of Sabellidae 90.000
- 2014 Short-term PhD exchange fellowship of DAAD
Scripps Institution of Oceanography, UCSD 5.606

AWARDS

- 2021 Reinhard Rieger-Award in Zoomorphology
for the Paper: Comparative ultrastructure of the radiolar crown in Sabellida (Annelida).
Zoomorphology. 140: 27 — 45.
- 2016 Reinhard Rieger-Award in Zoomorphology
for the Paper: Phylogenetic significance of chaetal arrangement and chaetogenesis in
Maldanidae (Annelida). Zoomorphology 134 (3): 383 — 401.

TEACHING

- SS 2024 Integrative Biodiversity Research in Zoology (IntBioDiv EVO-11, Goethe University)
- WS 2023-24 Scientific Communication (OEP-M3, University of Bonn)
- SS 2020, SS 2024 DNA barcoding: Identifying and Describing Biodiversity (OEP-A12, University of Bonn)
- SS 2020, SS 2019,
WS 2016-17 Practical Course on Electron Microscopy (OEP Free 3G, University of Bonn)
- WS 2019-20,
WS 2020-21 Morphology and Evolution of Animals (BP02, University of Bonn)

SUPERVISION

1 MSc (co-supervisor), 1 PhD (co-supervisor)
2021 Pernille Fornitz Marloth, University of Copenhagen, 2022 Julian Müller, University of Bonn

2016–2020 8 undergraduate research projects supervised, all resulting in scientific publications
2020 Nina Neunzig, 2020 Alicia Gerarz, 2019 Anja Schumacher, 2018 Kathryn Feerst, 2016 Benedikt Pauli,
2016 Julian Müller, 2016 Tim Herkenrath, 2016 Schabnam Sermelwall

EXPEDITIONS

- May — June 2024 **R/V Atlantis HOV Alvin AT50-24**
Redefining the footprint of deep ocean methane seepage for benthic ecosystems
- Nov — Dec 2018 **R/V Falkor Cruise FK181031 ROV Subastian**
Interdisciplinary investigation of a new hydrothermal vent field
- Oct — Nov 2018 **R/V Atlantis HOV Alvin AT42-03**
Exploration of Costa Rican methane seeps

MEMBERSHIPS

Deep-Sea Biology Society, International Polychaete Association, International Society for Invertebrate Morphology, German Society of Biological Systematics (GfBS), German Zoological Society (DZG), Global Invertebrate Genomics Alliance (GIGA), European Reference Genome Atlas (ERGA)

ACADEMIC SERVICE

President of the International Polychaete Association (2023 —)
Associate Editor (2023 —) Marine Biodiversity

Peer Review Activity

58 manuscripts (12 in 2023–2024): African Zoology (1), Biodiversity Data Journal (1), Comp. Biochem. and Phys. Part D: Genomics and Proteomics (2), Diversity (2), European Journal of Taxonomy (2), Frontiers in Marine Science (4), Frontiers in Zoology (1), Gene (2), Invertebrate Biology (2), Invertebrate Systematics (2), Journal of Marine Science and Engineering (1), Journal of Morphology (1), Journal of Natural History (1), Journal of Zoological Systematics and Evolutionary Research (1), Marine Biodiversity (2), Marine Biology Research (1), Mitochondrial DNA Part B (6), Molecular Phylogenetics and Evolution (6), Nature Scientific Reports (2), Organisms Diversity and Evolution (3), Royal Society Open Science (2), Plos One (1), Scientific Reports (3), Systematics and Biodiversity (2), Zookeys (2), Zoologica Scripta (3), Zoological Science (1), Zoology (1), Zoosymposia (1), Zootaxa (2)

PUBLICATION PROFILE

ORCID ID: 0000-0003-0463-322X

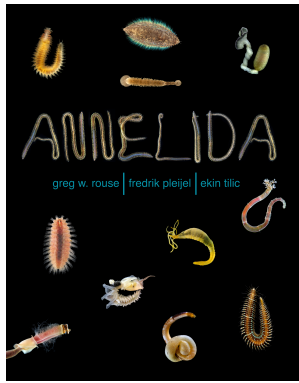
overview 31 peer-reviewed publications
18 as first author, 4 as last author
5 issue covers
citations: 414, h-index: 12 (google scholar)

BOOK Rouse, G.W., Pleijel F. and Tilic, E. (2022) Annelida. Oxford University Press.

JOURNAL ARTICLES

2024 Villalobos-Guerrero, T. F., Huč, S., **Tilic, E.**, Hiley, A. S., and Rouse, G. W. (2024). A remarkable new deep-sea nereidid (Annelida: Nereididae) with gills. Plos one, 19(3), e0297961.

Tilic, E. and Rouse, G.W. (2024) Hardly Venus's servant—morphological adaptations of *Veneriserva* to an endoparasitic lifestyle and its phylogenetic position within Dorvilleidae (Annelida). *Organisms Diversity & Evolution*. 24: 67–83.



- 2023 Payne, C.Y., **Tilic, E.**, Boschen-Rose, R.E., Gannon, A., Stiller, J., Hiley, A.S., Grupe, B.M., Mah, C.L. and Rouse, G.W. (2023). *Xyloplax princealberti* (Asteroidea, Echinodermata): A New Species That Is Not Always Associated with Wood Falls. *Diversity*. 15: 1212.

Mongiardino Koch, N., **Tilic, E.**, Miller, A.K., Stiller, J., and Rouse, G.W. Confusion will be my epitaph: Genome-scale discordance stifles phylogenetic resolution of Holothuroidea. (2023) *Proceedings of the Royal Society B*. 290: 20230988.

Sigwart, J.D., Chen, C., **Tilic, E.**, Vences, M. and Riehl, T. (2023) Why is there no service to support taxonomy? *BioEssays*, e2300070.

Tilic, E., Herkenrath, T., Kirfel, G., Bartolomaeus, T. (2023) The cellular 3D printer of a marine bristle worm – Chaetogenesis in *Platynereis dumerilii* (Audouin & Milne Edwards, 1834) (Annelida). *Cell and Tissue Research* 391, 305-322.

- 2022 Sagorny, C., von Döhren, J., Rouse, G.W. and **Tilic, E.** (2022). Cutting the ribbon: Bathyal Nemertea from seeps along the Costa Rica margin, with descriptions of 2 new genera and 10 new species. *European Journal of Taxonomy*. 845(1), 132–174.

Tilic, E., Stiller, J., Campos, E., Pleijel F. and Rouse G.W (2022). Phylogenomics resolves ambiguous relationships within Aciculata (Errantia, Annelida). *Molecular Phylogenetics and Evolution*. 166: 107339.

Müller, J., Bartolomaeus, T. and **Tilic, E.** Formation and degeneration of scaled capillary notochaetae in *Owenia fusiformis* Delle Chiaje, 1844 (Oweniidae, Annelida) (2022). *Zoomorphology*. 141 (1): 43-56.

- 2021 Müller, J., Schumacher, A., Borda, E. Rouse, G.W., Bartolomaeus, T. and **Tilic, E.** (2021) “Brittleworms”: Ultrastructure and arrangement of the calcified chaetae of *Euphrosine* (Amphinomida, Annelida). *Invertebrate Biology*. e12353

Tilic, E., Neunzig, N. and Bartolomaeus, T. (2021) Hairy and iridescent chaetae of the sea mouse *Aphrodita* (Annelida, Errantia). *Acta Zoologica*. 103(4), 479-491.

Beckers, P. and **Tilic, E.** (2021) Fine structure of the brain in Amphinomida (Annelida). *Acta Zoologica*. 102(4), 483-495.

Geisberger, S., Bartolomaeus, H., Neubert, P., Willebrand, R., Zasada, C., Bartolomaeus, T., McParland, V., Swinnen, D., Geuzens, A., Maifeld, A., Krampert, L., Vogl, M., Mähler, A., Wilck, N., Marko, L., **Tilic, E.**, Forslund, S.K., Binger, K.J., Stegbauer, J., Dechend, R., Kleinewietfeld, M., Jantsch, J., Kempa, S., Müller, D.N. (2021) Salt transiently inhibits mitochondrial energetics in mononuclear phagocytes. *Circulation*. 144:144–158.

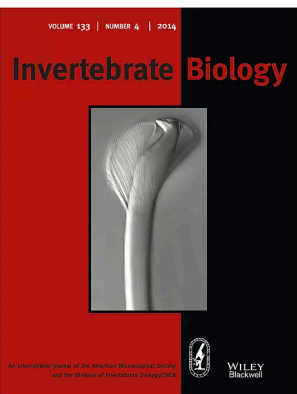
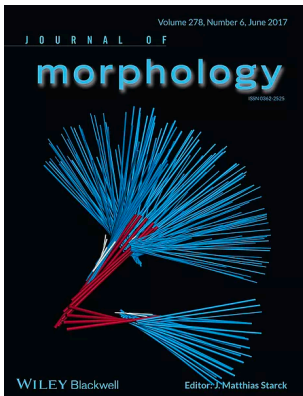
Tilic, E., Geratz, A., Rouse, G.W. and Bartolomaeus T. (2021) Notopodial “spinning glands” of *Sthenelanelia* (Annelida: Sigalionidae) are modified chaetal sacs. *Invertebrate Biology*. e12334.

Goffredi, S.K., Motooka, C., Fike, D.A., Gusmão, L.C., **Tilic, E.**, Rouse, G.W., Rodríguez, E. (2021) Mixotrophic chemosynthesis in a deep-sea anemone from hydrothermal vents in the Pescadero Basin, Gulf of California. *BMC Biology*. 19: 8.

Tilic, E., and Bartolomaeus, T. (2021) Commentary on: “Unravelling the ultrastructure and mineralogical composition of fireworm stinging bristles” by Righi et al. 2020. *Zoology*, 144: 125890.

Tilic, E., Rouse, G.W. and Bartolomaeus, T. (2021) Comparative ultrastructure of the radiolar crown in Sabellida (Annelida). *Zoomorphology*. 140: 27—45.





- 2020 **Tilic, E.**, Atkinson, S. and Rouse, G.W. (2020) Mitochondrial genome of the freshwater annelid *Manayunkia occidentalis* (Sabellida: Fabriciidae). *Mitochondrial DNA Part B*, 5(3): 3313—3315.
- Tilic, E.**, Sayyari, E., Stiller, J., Mirarab, S. and Rouse, G.W. (2020) More is needed — Thousands of loci are required to elucidate the relationships of the ‘flowers of the sea’ (Sabellida, Annelida). *Molecular Phylogenetics and Evolution*, 151: 106892.
- Tilic, E.** and Rouse G.W. (2020) Hidden in plain sight, *Chaetopterus dewysee* sp. nov. (Chaetopteridae, Annelida) — A new species from Southern California. *European Journal of Taxonomy*, 643.
- Stiller, J., **Tilic, E.**, Rousset, V., Pleijel, F. and Rouse, G.W. (2020). Spaghetti to a tree: A robust phylogeny for Terebelliformia (Annelida) based on transcriptomes, molecular and morphological data. *Biology*, 9: 73.
- Goffredi, S.K., **Tilic, E.**, Mullin, S.W., Dawson K.S., Keller, A., Lee, R.W., Wu, F., Levin, L.A., Rouse, G.W., Cordes, E.E. and Orphan, V.J. (2020). Methanotrophic bacterial symbionts fuel dense populations of deep-sea feather duster worms (Sabellida, Annelida) and extend the spatial influence of methane seepage. *Science Advances* 6: eaay8562.
- 2019 Watson, C., **Tilic, E.** and Rouse G.W. (2019) Revision of *Hyalopale* (Chrysopetalidae; Phyllodocida; Annelida): an amphi-Atlantic *Hyalopale bispinosa* species complex and five new species from reefs of the Caribbean Sea and Indo-Pacific Oceans. *Zootaxa* 4671(3).
- Tilic, E.**, Feerst, K. and Rouse, G.W. (2019) Two new species of *Amphiglena* (Sabellidae, Annelida), with an assessment of hidden diversity in the Mediterranean. *Zootaxa* 4648(2).
- Tilic, E.**, Sermelwall, S. and Bartolomaeus, T. (2019) Formation and structure of paleae and chaetal arrangement in Chrysopetalidae (Annelida). *Zoomorphology* 138(2): 209—220.
- 2017 **Tilic, E.**, Pauli, B. and Bartolomaeus T. (2017) Getting to the root of fireworms’ stinging chaetae - chaetal arrangement and ultrastructure of *Eurythoe complanata* (Pallas, 1766) (Amphinomida). *Journal of Morphology*. 278: 865-876.
- 2016 **Tilic, E.** and Bartolomaeus, T. (2016). Structure, function and cell dynamics during chaetogenesis of abdominal uncini in *Sabellaria alveolata* (Sabellariidae, Annelida). *Zoological Letters* 2:1.
- Tilic, E.**, Bartolomaeus, T. and Rouse, G.W. (2016). Chaetal type diversity increases during evolution of Eunicida (Annelida). *Organisms Diversity & Evolution* 16(1): 105—119.
- 2015 **Tilic, E.**, von Döhren, J., Quast, B., Beckers, P. and Bartolomaeus, T. (2015). Phylogenetic significance of chaetal arrangement and chaetogenesis in Maldanidae (Annelida). *Zoomorphology* 134 (3): 383—401.
- Tilic, E.**, Lehrke, J. and Bartolomaeus, T. (2015). Homology and evolution of the chaetae in *Echiura* (Annelida). *PLoS ONE* 10 (3): e0120002.
- 2014 **Tilic, E.**, Hausen, H. and Bartolomaeus, T. (2014). Chaetal arrangement and chaetogenesis of hooded hooks in *Lumbrineris (Scoletoma) fragilis* and *Lumbrineris tetraura* (Eunicida, Annelida). *Invertebrate Biology* 133 (4): 354—370.