

## Curriculum Vitae - Dr. Sabine Gollner

### Personalia

Born on 5<sup>th</sup> of May 1981 in Steyr, Austria  
 Married, two children (2012, 2015)



### Contact information

#### *Work address*

Royal Netherlands Institute for Sea Research (NIOZ)  
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### Professional background – employment & education

08/2017-	Tenure track position as “deep-sea benthic ecologist” at NIOZ, OCS (0.8 fte)
11/2016-08/2017	Managing editor of the journal “Marine Biodiversity” (0.5 fte)
10/2013-10/2016	Post-doc (0.5 and 0.6 fte due to child-care) at the German Center for Marine Biodiversity Research, Senckenberg, Germany; delegated to NIOZ, The Netherlands; (funding MIDAS; employer P. Martinez Arbizu)
07/2012-09/2013	Researcher at the German Center for Marine Biodiversity Research, Senckenberg, Wilhelmshaven & Frankfurt am Main Germany; (funding CEDAMAR; employer P. Martinez Arbizu)
06/2010-06/2012	Post-doc at the German Center for Marine Biodiversity Research, Senckenberg, Wilhelmshaven & Frankfurt am Main; Germany (funding: post-doc fellowship from the Alexander von Humboldt Foundation to Sabine Gollner)
06/2009-05/2010	Post-doc at the Department of Marine Biology, University of Vienna, Austria (funding: FWF: P20190-B17 Meiovent Succession; employer M. Bright)
09/2005-06/2009	PhD thesis at the Department of Marine Biology, University of Vienna, Austria (supervisor Prof. Monika Bright): Meiobenthic community studies from deep-sea chemosynthetic habitats (hydrothermal vents, cold seeps). Graduation Dr. rer. nat. 06.05.2009 (funding: FWF: P20190-B17 Meiovent Succession & FWF: P16774-B03 Community study of hydrothermal vent meiobenthos; employer M. Bright)

2003-2005	Master thesis at the Department of Marine Biology, University of Vienna, Austria (supervisor Prof. M. Bright). Graduation Mag. rer. nat. 21.06.2005
1999-2005	Studies of Biology (Ecology) at the University of Vienna, Austria
1991-1999	High School in Kremsmünster, Austria
1987-1991	Primary School in Sierning, Austria

### **Career breaks**

03/2015-03/2016	maternity leave
09/2012-09/2013	maternity leave

### **Sea-going expeditions**

2010	Cruise to 9°N East Pacific Rise, hydrothermal vents, with the R/V <i>Atlantis</i> and DSV <i>Alvin</i> (chief scientist Prof. Scott Nooner, USA); one dive in DSV <i>Alvin</i>
2009	Cruise to Lau Basin (West Pacific), hydrothermal vents, with R/V <i>Thomas G. Thompson</i> and ROV <i>Jason II</i> (chief scientist Prof. Charles R. Fisher, USA)
2007	Cruise to 9°N East Pacific Rise, hydrothermal vents, with the R/V <i>Atlantis</i> and DSV <i>Alvin</i> (chief scientist Prof. Lauren Mullineaux, USA)
2006	Cruise to 9°N East Pacific Rise, hydrothermal vents, with the R/V <i>Atlantis</i> and DSV <i>Alvin</i> (chief scientist Prof. James Ledwell, USA)
2006	Cruise to 9°N East Pacific Rise, hydrothermal vents, with the R/V <i>Atlantis</i> and DSV <i>Alvin</i> (chief scientist Prof. Andreas Thurnherr, USA); one dive in DSV <i>Alvin</i>
2003	Cruise to 9°N East Pacific Rise, hydrothermal vents, with the R/V <i>Atlantis</i> and DSV <i>Alvin</i> (chief scientist Dr. Janet Voight, USA); one dive in DSV <i>Alvin</i>

### **Languages**

German (mother tongue), English (fluent), Dutch (fluent speaking, good writing), French (basic)

### **Licenses**

Driving license A and B (car and motorcycle)

Diving: SSI open water diver, SSI Diver stress and rescue, SSI EAN nitrox

## Research Grants, Scholarships & Prices

- 2015 Talentförderungsprämie OÖ– Personal price for talented scientists from Austria (5.400 €)
- 2015 Ecomine- Two sides of a coin: balancing ecological risks and economic benefits of deep-sea mining: lessons to be learned from Germany and New Zealand (Senckenberg & BGR, Germany; 29.000 €)
- 2010 Alexander von Humboldt Post-Doc Fellowship (73.000 €)
- 2010 Schroedinger Post-Doc Scholarship (63.700 €) (declined in favor for Humboldt Fellowship)
- 2009 Gollner S, Martinez Arbizu P, Fontaneto D: Phylogeography of vent endemic dirivultid copepods: a first step into their hidden world; research grant by ChEss (10.000 US \$)
- 2008 Grant for conference visit, International communication Vienna (350 €)
- 2006 ChEss Training awards for new investigators (TAWNI), ChEss (4.000 US \$)
- 2006 Promotion grant, research visits, International communication Vienna (650 €)
- 2005 Scholarship of excellence, University of Vienna (730 €)
- 2005 Grant for conference visit, International communication Vienna (650 €)
- 2004 Promotion grant, University of Vienna (1.400 €)
- 2003 Promotion grant, research visits, International communication Vienna (650 €)
- 2003 Scholarship of excellence, University of Vienna (730 €)

## Teaching

### Classes

- 2015- Guest lecturer at University College Utrecht; Global Processes and Sustainability: The deep sea – ecosystems, minerals & mining
- 2014- Guest lecturer at the Utrecht University (The Netherlands); Marine Sciences III: Deep-sea biology and hydrothermal vents (lectures and werkcollege)
- 2014- Lecturer at the Utrecht University (The Netherlands); Marine Sciences II: Sandy and Muddy Shores (lectures, excursion to Zandmotor, laboratory work on meiofauna)
- 2011 Guest lecturer at the University of Oldenburg (Germany), Meiofauna from hydrothermal vents
- 2010 Guest lecturer at the University of Frankfurt (Germany), Deep Sea & Hydrothermal Vents
- 2009-2010 Guest lecturer at the Utrecht University (Netherlands), Marine Sciences I: Deep-sea hydrothermal vents

- 2006-2008 Lector: Introduction to the Fauna and Flora of Marine Ecosystems, laboratory class and field work in Marine Biology (6 hours credit), University of Vienna (Austria)
- 2004-2007 Lector: Laboratory class - Introduction into marine laboratory work I & II (2 x 2 hours credit), University of Vienna (Austria)
- 2005-2006 Teaching assistant at the Institute of Histology and Embryology (4 hours credit), Medical University of Vienna (Austria)

### **Supervision of Students**

- 2015 Utrecht University: Bachelor student: Femke de Boer (Fauna associated with high temperature vents – similarities and dissimilarities in the world oceans)
- 2005-2010 Support supervision of master students from Prof. Monika Bright at the University of Vienna (Barbara Riemer, Renate Degen, Laura Riavitz, Nora Nikolov, Tina Buchegger)

### **Communication, networking and organizational skills**

#### **Service to the scientific community**

Associate editor for Marine Biodiversity

Reviewer for Deep Sea Research II, Marine Ecology Progress Series, Progress in Oceanography, Journal of the Marine Biological Association of the United Kingdom, Journal of Experimental Marine Biology and Ecology, Molecular Ecology, Marine Biodiversity, Marine Ecology, Cahiers de Biologie Marine

Member of Indeep, DOSI, the International Association of Meiobenthologists, the European Geoscience Union, Interridge

#### **Invited Talks**

- 2016 Diepzeemijnbouw van de toekomst, Symposium De toekomst van oceanen (Stichting Toekomstbeeld der Techniek & Deltares), Delft, The Netherlands
- 2014 Volcanoes of the deep – destruction and recovery of hydrothermal vent communities after natural and human induced disturbances. NIOZ colloquia, The Netherlands
- 2009 Size matters: contrasting meio – and macrofauna diversity patterns at deep-sea hydrothermal vents. 4th CBE (International Symposium on Chemosynthesis-Based Ecosystems-Hydrothermal Vents, Seeps and Other Reducing Habitats), Okinawa, Japan (keynote talk)
- 2008 Meiovent – hydrothermal vent meiobenthos along a vent flux gradient from the 9°50'N East Pacific Rise. General Assembly European Geosciences Union, Vienna, Austria (invited talk)
- 2008 Meiofauna from deep-sea hydrothermal vents. Pennsylvania State University, USA (invitation by Prof. C.R. Fisher)

**Workshop organization**

- 2016 Ecomine workshop, 14-16 June, Wilhelmshaven, Germany (Kaiser S., Gollner S., Martinez Arbizu P.)
- 2014 MIDAS WP6 workshop “Response of deep-sea benthic fauna to natural and anthropogenic disturbance”, 11-13 March, Wilhelmshaven, Germany (Kaiser S., Gollner S., Martinez Arbizu P.)
- 2010 “Meiofauna from deep-sea chemosynthetic environments” 17 June, Ghent, Belgium (Gollner S., Vanreusel A., Bright M.; sponsored by ChEss)

**Workshop participation**

- 2016 MIDAS WP8 Environmental Management Workshop, National Oceanography Centre, Southampton, UK
- 2011 Deep Sea and Sub Seafloor Frontier Workshop on “Lithosphere – Biosphere Interaction & Resources”, Paris, France
- 2011 “Beyond 2010” workshop: Building a new international science program beyond the first Census of Marine Life, Aberdeen, Great Britain

**Conferences**

Numerous conference visits (e.g. World Conference on Marine Biodiversity, European Geoscience Union, International Meiofauna Conference, Symposium on Chemosynthesis-Based Ecosystems) with oral and/or poster presentations.

**Public Outreach**

- 2016 Interview for Bureau de Helling, article by Liesbeth Bener: Mijnbouw in de diepzee: schadelijk maar onvermijdelijk (<https://bureaudehelling.nl/artikel/mijnbouw-in-de-diepzee-schadelijk-maar-onvermijdelijk>)
- 2016 Interview for scientias.nl, article by Niels Waarlo: Mijnbouw in de diepzee: een nieuwe aanslag op de natuur (<http://www.scientias.nl/mijnbouw-in-de-diepzee-een-nieuwe-aanslag-op-de-natuur/>)
- 2015 Gollner S (2015) Deep-sea mining: goudkoorts in de diepzee. PanGeo,3, Nr.4: 40-41.
- 2015 Kaiser S, Gollner S, Martinez Arbizu P (2015) Rohstoffsuche im Tiefenrausch – Meerebergbau und die möglichen Folgen fuer das Oekosystem Tiefsee. Senckenberg – natur.forschung.museum 145 (1/2):14-19
- 2014 Kaiser S, Gollner S, Martinez Arbizu P (2014) Bergbau in der Tiefsee: Meereslebensräume mit Schürfwunden. Presseinformation Seckenberg World of Biodiversity, 21.05.2014

- 2006 Participation in “Extreme 4 kids– Expedition to the depths of the oceans”; Kids meet University: a multidisciplinary, interactive program for kids, 3<sup>rd</sup> place in Science Communication Award by the Austrian Science Foundation for educational outreach program “extreme 4 kids”
- 2004 Participation in “Science Week 2004 - Journey to the volcanoes of the deep-sea”; Kids meet University: a multidisciplinary, interactive program for kids Vienna, Austria

## **Peer-reviewed Publications**

- (19) Gollner S, Kaiser S, Menzel L, Jones DOB, van Oevelen D, Menot L, Colaço AM, Brown A, Canals M, Cuvelier D, Durden JM, Gebruk A, Aruoriwo EG, Haeckel M, Mestre NC, Mevenkamp L, Morato T, Pham CK, Purser A, Sanchez-Vidal A, Vanreusel A, Vink A, Martinez Arbizu P (in press) Resilience of benthic deep-sea fauna to mineral mining activities. *Marine Environmental Research*. <http://dx.doi.org/10.1016/j.marenvres.2017.04.010>
- (18) Gollner S, Stuckas H, Kihara TC, Laurent S, Kodami S, Martinez Arbizu P (2016) Mitochondrial DNA analyses indicate high diversity, expansive population growth and high genetic connectivity of vent copepods (Dirivultidae) across different oceans. *PLoS ONE* 11 (10): e0163776
- (17) Durden JM, Billett DSM, Brown A, Dale A, Goulding L, Gollner S, Murphy K, Pape E, Purser A, Rolin J-F, Smith A, Stewart I, Turner PJ, de Wachter T, Weaver P, van Dover CL, Verlaan P, Jones DOB (2016) Report on the MIDAS workshop on environmental management of deep-sea mining. *Research Ideas and Outcomes* DOI: 10.3897/rio.2.e10292
- (16) Gollner S, Govenar B, Martinez Arbizu P, Mills S, Nadine Le Bris, Weinbauer M, Shank T, Bright M (2015) Differences in recovery between deep-sea hydrothermal vent and vent-proximate communities after a volcanic eruption. *Deep Sea Research I* 106:167-182 DOI: 10.1016/j.dsr.2015.10.008
- (15) Klose J, Polz MF, Wagner M, Schimak M, Gollner S, Bright M (2015) Endosymbionts escape dead hydrothermal vent tubeworms to enrich the free-living population. *PNAS* DOI: 10.1073/pnas.1501160112
- (14) Gollner S, Govenar B, Fisher CR, Bright M (2015) Size matters at deep-sea hydrothermal vents: different diversity and habitat fidelity patterns of meio- and macrofauna. *Marine Ecology Progress Series* 520: 57-66
- (13) Plum C, Gollner S, Martinez Arbizu P, Bright M (2015) Diversity and composition of the copepod communities associated with megafauna around a cold seep in the Gulf of Mexico with remarks on species biogeography. *Marine Biodiversity* DOI: 10.1007/s12526-014-0310-8
- (12) Gollner S, Miljutina M, Bright M (2013) Nematode succession at deep-sea hydrothermal vents after a recent volcanic eruption with the description of two dominant species. *Organisms Diversity & Evolution* DOI:10.1007/s13127-012-0122-2
- (11) Degen R, Riavitz L, Gollner S, Vanreusel A, Plum C, Bright M (2012) Community study of tubeworm associated epizootic meiobenthos from deep-sea cold seeps and hot vents. *Marine Ecology Progress Series* 468:135–148
- (10) Gollner S, Fontaneto D, Martínez Arbizu P (2011) Molecular taxonomy confirms morphological classification of deep-sea hydrothermal vent copepods (Dirivultidae) and suggests broad physiological tolerance of species and frequent dispersal along ridge. *Marine Biology* 158:221-231 DOI: 10.1007/s00227-010-1553-y
- (9) Gollner S, Riemer B, Martínez Arbizu P, Le Bris N, Bright M (2010) Diversity of Meiofauna from the 9°50'N East Pacific Rise across a gradient of hydrothermal fluid emissions. *PLoS ONE* 5(8): e12321 doi:10.1371/journal.pone.0012321

- (8) Gollner S, Ivanenko VN, Martínez Arbizu, Bright M (2010) Advances in taxonomy, ecology, and biogeography of Dirivultidae (Copepoda) associated with chemosynthetic environments in the deep sea. PLoS ONE 5(8): e9801 DOI:10.1371/journal.pone.0009801
- (7) Vanreusel A, De Groote A, Gollner S, Bright M (2010) Ecology and biogeography of free-living nematodes associated with chemosynthetic environments in the deep sea: A Review. PLoS ONE 5(8): e12449 DOI:10.1371/journal.pone.0012449
- (6) Bright M, Plum C, Riavitz LA, Nikolov N, Martinez Arbizu P, Cordes EE, Gollner S (2010) Epizoic metazoan meiobenthos associated with tubeworm and mussel aggregations from cold seeps of the northern Gulf of Mexico. Deep-Sea Research II DOI:10.1016/j.dsr2.2010.05.003
- (5) Gollner S, Ivanenko VN, Martínez Arbizu P (2008) A new species of deep-sea Tegastidae (Crustacea: Copepoda: Harpacticoida) from 9°50'N on the East Pacific Rise, with remarks on its ecology. Zootaxa 1866:323-336
- (4) Gollner S, Zekely J, Govenar B, Nemeschkal HL, Le Bris N, Fisher CR, Bright M (2007) Tubeworm-associated permanent meiobenthic communities from two chemically different hydrothermal vent sites on the East Pacific Rise. Marine Ecology Progress Series 337:39-49
- (3) Gollner S, Zekely J, Van Dover CL, Govenar B, Le Bris N, Nemeschkal HL, Bright M (2006) Benthic copepod communities associated with tubeworm and mussel aggregations on the East Pacific Rise. Cahiers de Biologie Marine 47:397-402
- (2) Zekely J, Gollner S, Van Dover CL, Govenar B, Le Bris N, Bright M (2006) The nematode community and trophic structure of three macrofaunal aggregations at 9° & 11°N East Pacific Rise. Cahiers de Biologie Marine 47:477-482
- (1) Govenar B, Le Bris N, Gollner S, Glanville J, Apherigis A, Hourdez S, Fisher CR (2005): Epifaunal community structure associated with *Riftia pachyptila* aggregations in chemically different hydrothermal vent habitats. Marine Ecology Progress Series 305:67-77

### Book chapter

- (1) van de Schootbrugge B, Gollner S (2013) Altered primary production during mass-extinction events In: *Paleontological Society Papers, Volume 19*, Bush AM, Pruss SB, Payne JL(eds )

### Reports (for MIDAS)

- (7) Cuvelier D, Colaco A, Dzon B, Gollner S, Jones D, Kaiser S, Martínez Arbizu P, Menzel L, Mestre N, Morato T, Pham C, Pradillon F, Purser A, Raschka U, Sarrazin J, Simon-Lledo E, Stewart I, Stuckas H, Sweetman A (2016) Synoptic report on colonisation of artificial substrates by deep-sea fauna and potential restoration actions in the deep-sea including literature and new data. Deliverable 6.7 MIDAS 67 pp
- (6) Gollner S, Kaiser S, Menzel L, Martinez Arbizu P and contributing authors (2016) Resilience of benthic deep-sea fauna to mining activities. Deliverable 6.6 MIDAS 65 pp



- (5) Stuckas H, Bonifácio P, Chavan G, Colaço A, Gollner S, Glover A, Janssen A, Kaiser S, Kihara TC, Khodami S, Martinez Arbizu P, Menot L, Menzel L, Paterson G, Silva M, Ribeiro PA, Taboada S (2016) Report on scales of population connectivity based on genetic analyses. Deliverable 4.4 MIDAS 51 pp
- (4) Menzel L, Kaiser S, Gollner S, Martinez Arbizu P and contributing authors (2016) Report on timescales of recovery of abyssal communities after disturbance (DISCOL area). Deliverable 6.1 MIDAS 52 pp
- (3) Janssen F, Boetius A and contributing authors (amongst them Gollner S) (2015) Compilation of existing deep-sea ecosystem technologies in European research and industry sectors: Assessment of applicability and identification of gaps. Deliverable 10.1 MIDAS 177 pp
- (2) Paterson GLJ, Menot L, Colaço A, Glover AG, Gollner S, Kaiser S, Gebruk AV, Janssen A, Silva MCA, Janssen F, Sahling H, Felden J, Martinez Arbizu P (2014) Biogeography and connectivity in deep-sea habitats with mineral resource potential–gap analysis. Deliverable 4.2 MIDAS 45pp
- (1) Gollner S, Kaiser S, Martinez Arbizu P (2014) MIDAS WP6 Workshop-report: Response of deep-sea benthic fauna to natural and anthropogenic disturbance. March 11th-13th 2014 / Senckenberg am Meer, DZMB / Wilhelmshaven / Germany