

**Diplom Biogeographer****Dr. Nico Linus Justus Martin Günther**

*16.11.1984 in Trier

School education (1991-2004):

- 1995-04** Auguste-Viktoria-Gymnasium, Trier.
1991-95 Johann-Herrmann primary school, Trier-Euren.

Undergraduate studies (2005-2012):

- 2012** **Graduation at University of Trier:** Diplom Biogeographer.
- 2011** **Six-week field trip** to Costa Rica (La Selva field station, Organisation for Tropical Studies – OTS) to collect observational data and genetic samples of proboscis bats (*Rhynchonycteris naso*) for my diploma thesis.
- 2010** **Two-week laboratory internship** at the Museum für Naturkunde Berlin (MfN). Methods: Paternity analyses with microsatellite markers of the Neotropical greater sac-winged bat *Saccopteryx bilineata* (Emballonuridae).
Six-week internship as field assistant in Costa Rica (La Selva, OTS). Methods: Mist netting, banding, genetic sampling and behavioural observations.
- 2009** **Four-month research internship:** Studying xylem sapflow of Douglas fir (*Pseudotsuga menziesii*).
Four-month research internship: Studying the habitat usage and singing activity of the melodious warbler (*Hippolais polyglotta*) at the northeastern border of its summer distribution (Trier, Rheinland-Pfalz, Germany).
Three-month research internship: Studying the habitat usage of Bechstein's bats (*Myotis bechsteinii*) with vhf-telemetry in the nature reserve 'Wawerner Bruch' (Rheinland-Pfalz, Germany).
Two-week internship at the ecotoxicology laboratories of the University Trier. Applications of various genetic, immunological and cytological methods.
- 2008** **Three-month internship at the 'Endangered Primate Rescue Centre'** of the der Frankfurt Zoological Society at Cuc Phuong National Park, Vietnam. Establishing of a new data base for primates with information on ecology, populations, distribution, habitat types, systematic and conservation status.
- 2005** Start of undergraduate studies in applied **Biogeography, Geobotany, Ecotoxicology and Soil Science** at the University of Trier.

Scientific career:

- 2018** **Research associate at the Museum für Naturkunde** to establish a post-doc project and write a DFG grand application (six-month Postdoc position funded by the Museum für Naturkunde - Innovation Fund).
- 2017** **PhD defence** in September.

- 2017** **Six-month research assistance** in the BATS-Projekt (Betriebsadaptive Tracking-Sensorsysteme) of the DFG Forschergruppe FOR 1508.
Dissertation submission in May.
- 2016** **Six-month research assistance** in the BATS-Projekt (Betriebsadaptive Tracking-Sensorsysteme) of the DFG Forschergruppe FOR 1508.
- 2014** **Two-month field trip** to Costa Rica (La Selva, OTS) to collect observational data and genetic samples of proboscis bats (*R. naso*) for my PhD project (September-November).
Two-month field trip to Costa Rica (La Selva, OTS) for my PhD project (March-May).
- 2013** **Nine-month field trip** to Costa Rica (La Selva, OTS) for my PhD project (March-December).
Acquisition of the Elsa-Neumann-Stipend to conduct my PhD project.
- 2012** **One-month field trip** to Costa Rica (La Selva, OTS) for my PhD project.
Start of PhD at Humboldt-University Berlin and Museum für Naturkunde Berlin (MfN).

Publications:

- 2018** Wieser H, **Günther L**, Mayer F & Ripperger S (2018). Temperature profiles of different bat boxes in an urban habitat (Königsheideforst, Berlin). *Nyctalus*. *In press* (acceptance letter attached).
Wilkinson GS, Carter GG, Bohn KM, Caspers B, Chaverri G, Farine D, **Günther L**, Kerth G, Knörnschild M, Mayer F, Nagy M, Ortega J, Patriquin K (2018). Kinship, association and social complexity in bats. *Behavioral Ecology and Sociobiology*. *In press* (BEAS-D-18-00110R2; acceptance letter attached).
Wilde LR, **Günther L**, Mayer F, Knörnschild M & Nagy M (2018). Thermoregulatory requirements shape mating opportunities of male proboscis bats. *Frontiers in Ecology and Evolution* 6.
Ripperger S, **Günther L**, Wieser H, Duda N, Hierold M, Casses B, Kapitza R, Kölpin A & Mayer F (2018). Proximity sensors reveal social information transfer in maternity colonies of common noctule bats. *bioRxiv*, 421974.
- 2017** **Günther L**, Knörnschild M, Nagy M⁺ & Mayer F⁺ (2017) The evolution of a rare mammalian trait – benefits and costs of male philopatry in proboscis bats. *Scientific Reports* 7, 15632. (*joint senior authors)
- 2016** **Günther L**, Lopez MD, Knörnschild M, Reid K, Nagy M⁺ & Mayer F⁺ (2016) From resource to female defence: the impact of roosting ecology on a bat's mating strategy. *Royal Society Open Science*, 3, 160503. (*joint senior authors)
- 2014** Nagy M, Knörnschild M, **Günther L**, & Mayer F (2014) Dispersal and social organization in the Neotropical Grey sac-winged bat *Balantiopteryx plicata*. *Behavioral ecology and sociobiology*, 68(6), 891-901.
- 2013** Nagy M*, **Günther L***, Knörnschild M & Mayer F (2014) Female-biased dispersal in a bat with a female-defence mating strategy. *Molecular Ecology*, 22(6), 1733-1745. (*joint first authors)
- 2010** Hillen J, Angetter L-S, **Günther L** & Molitor F (2010) Habitatnutzung einer Kolonie der Bechsteinfledermaus (*Myotis bechsteinii*) im NSG 'Wawerner Bruch'. *Dendrocopos* 37, 19-42.

Oral presentations:

- 2017** Günther L, Knörnschild M, Nagy M, Mayer F (2017) The evolution of male philopatry in Proboscis bats – benefits and costs of a rare mammalian trait. **Treffen deutscher Fledermausforscher**, Vallendar, Germany.
- 2016** Günther L, Knörnschild M, Nagy M, Mayer F (2016) From resource to female defence – the impact of roosting ecology on a bat's mating strategy. **Graduate Meeting: Animal Behaviour of the German Zoological Society (DZG)/ Ethologische Gesellschaft**, Gülpe, Germany.
- Günther L, Knörnschild M, Nagy M, Mayer F (2016) Some like it bright – the impact of exceptional roosting ecology on the social system of *Rhynchonycteris naso*. **17. International Bat Research Conference (IBRC)**, Durban, South-Africa.
- 2015** Günther L, Nagy M, Knörnschild M, Mayer F (2015) Mating strategies and colony structure of a bat with an exceptional dispersal pattern among mammals. **Treffen deutscher Fledermausforscher**, Olpe, Germany.
- 2014** Günther L (2014) Mating strategies in a bat with an exceptional dispersal pattern. **Jyväskylä Winter Symposium** „Evolution of Mating Systems“, Konnevesi Research Station, Finland.
- Günther L, Nagy M, Knörnschild M, Mayer F (2014) Male mating strategies and reproductive success in a bat with an exceptional mammalian dispersal pattern. **Evolutionsbiologisches Seminar of the MfN**, Berlin, Germany.
- 2013** Günther L, Nagy M, Knörnschild M, Mayer F (2013) Male philopatry and female natal dispersal in the Neotropical Proboscis bat *Rhynchonycteris naso* (Emballonuridae). **Treffen deutscher Fledermausforscher**, Rottenburg-Ergenzingen, Germany.
- Günther L, Nagy M, Knörnschild M, Mayer F (2013) Female-biased dispersal in a bat with a female-defence mating strategy. **La Selva Talk Series, Organisation for Tropical Studies**, Costa Rica.
- Günther L, Nagy M, Knörnschild M, Mayer F (2013) Female-biased dispersal in a bat with a female-defence mating strategy. **16. International Bat Research Conference (IBRC)**, San José, Costa Rica.
- Günther L, Nagy M, Knörnschild M, Mayer F (2013) Dispersal behaviour and mating strategies in the Neotropical Proboscis bat (*Rhynchonycteris naso*). Barro Colorado Island Bambi Seminar Series, **Smithsonian Tropical Research Institute**, Panama.
- 2012** Günther L, Nagy M, Knörnschild M, Mayer F (2012) Sex-biased dispersal and paternity patterns in the Neotropical Proboscis bat *Rhynchonycteris naso* (Emballonuridae). **Jahrestagung der Gesellschaft für Tropenökologie (GTÖ)**, Erlangen, Germany.
- Günther L, Nagy M, Knörnschild M, Mayer F (2012) Should I stay or should I go? Natal dispersal patterns and paternity in the Neotropical Proboscis bat *Rhynchonycteris naso* (Emballonuridae). **17. Graduiertentreffen der Fachgruppe Evolutionsbiologie der Deutschen Zoologischen Gesellschaft (DZG)**, Siegen, Germany.

Poster presentations:

- 2017** Günther L, Knörnschild M, Nagy M, Mayer F (2017) Benefits and costs of a special mammalian trait: male philopatry in proboscis bats (*Rhynchonycteris naso*). **5th International Berlin Bat Meeting (IBBM)**, Berlin, Germany.

2016 Günther L, Knörnschild M, Nagy M, Mayer F (2016) Temporal dynamics of interaction networks in bats and the influence of kinship. **GOEvol meeting "Networks in Biology"**, Göttingen, Germany.

2015 Günther L, Nagy M, Knörnschild M, Mayer F (2015) Male mating strategies and reproductive success in a bat with an exceptional mammalian dispersal pattern. **4th International Berlin Bat Meeting (IBBM)**, Berlin.

Fundraising:

2018 **MfN Innovation fund** for grant writing. To establish a post-doc project (six-month Postdoc position).

2016 **DAAD congress stipend** for the attendance at the 17. International Bat Research Conference (IBRC), Durban, South-Africa.

2014 **MfN Innovation fund** for travelling. To collect genetic and observational data for my PhD project in the field (September-November).

DAAD travel stipend to collect genetic and observational data for my PhD project in the field (March-May).

2013 **Elsa-Neumann fellowship** – a three-year PhD fellowship of the Berlin state.

2011 **PROMOS fellowship** of the University of Trier in cooperation with the DAAD to collect data for my diploma thesis in the field.

Workshop attendance:

2017 „**Software Carpentry**“ (automating tasks with Unix shell, building programs with Python and version control with Git) by Toby Hodges (German Network for Bioinformatics Infrastructure, IRI Life Sciences).

2015 „**Scientific Writing**“ by Dr. Brian Cusack (Science Craft).

„**Presentation Skills** by Dr. Rick Scavetta (Science Craft).

„**Data Visualisation using R**“ by Dr. Rick Scavetta (Science Craft).

2014 „**Proposal Writing**“ by Dr. Brian Cusack and Dr. Barbette Regierer (Science Craft).

Other activities:

2018 DTFF-Conference 2018 **organisation team member**.

Since '17 **Reviewing** for the journal 'Mammalia'.

2014-16 Committee work as **PhD-representative** at the Museum für Naturkunde.

2009-10 **Consultancy work** at the Landschaftsökologisches Büro Gessner in various bat consulting projects (e.g. wind energy) and a long-term survey on impact of a large street construction (B51 at Meckel) on the bat abundance and community. Deepening my experience in acoustic and telemetric methods.

2007 **Assistance in a project** of the Faunistisch-Ökologische Arbeitsgemeinschaft (FÖA) on fragmentation of bat habitats due to infrastructure and possible coping strategies.

Since '05 **Bat conservation work:** Hibernation counts in mines and natural caves. Mist netting and banding, baring mine and cave entries, remediating and cleaning bunkers and attics as hibernation sites and nursery colonies, educational work.