

Publication record (peer-reviewed, chronological order)

In review

- Alpizar P, Risely A, Tschapka M, **Sommer S**. Agricultural fast food: Bats feeding in banana monocultures are heavier but have dysbiotic gut microbiomes.
- Carranco AS, Romo D, de Lourdes Torres M, Wilhelm K, **Sommer S***, Gillingham MAF*. Egg microbiome is the starting point of hatchling gut microbiome in an oviparous vertebrate. * contributed equally to the study.
- Carranco AS, Gillingham MAF, Wilhelm K, Romo D, de Lourdes Torres M, Romo D*, **Sommer S***. Emerging fungal pathogen *Fusarium* is not restricted to marine turtles - first report from a freshwater turtle in the remote Amazon. * contributed equally to the study.
- Donadio J, Risely A, Müller-Klein N, Wilhelm K, Clutton-Brock T, Manser MB, **Sommer S**. Characterizing tuberculosis progression in wild meerkats (*Suricata suricatta*) from faecal samples and symptom data.
- Montero BK, Wasimuddin, Schwensow N, Gillingham MAF, Ratovonamana YR, Rakotondranary SJ, Corman V, Drosten C, Ganzhorn JU, **Sommer S**. MHC class I and II influence viral and helminth infection via the microbiome.
- Risely A, Wilhelm K, Clutton-Brock T, Manser MB, **Sommer S**. Diurnal oscillations in gut microbiome load and composition eclipse seasonal and lifetime dynamics in wild meerkats, *Suricata suricatta*.
- Schwensow N, Heni A, Schmid J, Montero BK, Brändel S, Halczok TK, Mayer G, Fackelmann G, Wilhelm K, **Sommer S**. Not all effects are direct: How habitat traits affect multiple components of biodiversity.

2021

113. Fackelmann F, Gillingham MAF, Schmid J, Heni AC, Wilhelm K, **Sommer S** (2021) Human encroachment into wildlife gut microbiomes. *Communications Biology*. doi.org/10.1038/s42003-021-02315-7
112. Gillingham MAF, Borghesi F, Montero BK, Migani F, Béchet A, Rendón-Martos M, Amat JA, Dinelli E, **Sommer S** (2021) Bioaccumulation of trace elements affects chick body condition and gut microbiome in greater flamingos. *Science of the Total Environment*, 761, 143250.
- 111 Gillingham MAF, Montero BK, Wilhelm K, Grudzus K, **Sommer S**, Santos PSC (2021) A novel workflow to improve genotyping of multigene families in wildlife species: an experimental set-up with a known model system. *Molecular Ecology Resources*, 21, 982-998.

110. Jiménez RR, Alvarado G, Mena F, Ruepert C, Ballesteros E, **Sommer S** (2021) The fungicide chlorothalonil changes the amphibian skin microbiome: a potential factor disrupting a host disease-protective trait. *Applied Microbiology*, 1, 26–37.
doi.org/10.3390/applmicrobiol1010004
109. Risely A, Gillingham MAF, Béchet A, Brändel S, Heni A, Heurich M, Menke S, Manser M, Schmid J, Tschapka M, Wasimuddin, **Sommer S** (2021) Phylogeny- and abundance-based metrics allows for consistent comparison of core gut microbiome diversity indices across host species. *Frontiers in Microbiology*, 12, 659918. doi: 10.3389/fmicb.2021.659918

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108. Fleischer R, Risely A, Hoeck PEA, Keller LF, **Sommer S** (2020) Mechanisms governing avian phyllosymbiosis: genetic dissimilarity based on neutral and MHC regions exhibits little relationship with gut microbiome distributions of Galápagos mockingbirds. *Ecology and Evolution*, 10, 13345–13354.
107. Heni AC, Schmid J, Rasche A, Corman VM, Drosten C, **Sommer S** (2020) Pathogen-associated selection on innate immunity genes (TLR4, TLR7) in a neotropical rodent in landscapes differing in anthropogenic disturbance. *Heredity*, 125, 184-199. DOI.org/10.1038/s41437-020-0331-y.
106. Jiménez RR, Alvarado G, Sandoval J, **Sommer S** (2020) Habitat disturbance influences the skin microbiome of a rediscovered neotropical-montane frog. *BMC Microbiology*, 20, 292.
105. Paraskevopoulou S, Pirzer F, Schmid J, Corman VM, Schroeder S, Rasche A, Muth D, Goldmann N, Gottula LT, Drexler JF, Heni AC, Eibner GJ, Page R, Jones TC, Müller MA, **Sommer S**, Glebe D, Drosten C (2020) Mammalian hepatitis delta virus without hepadnavirus coinfection in the neotropical rodent *Proechimys semispinosus*. *PNAS*, 117 (30), 17977-17983.
DOI: org/10.1073/pnas.2006750117
104. **Sommer S**, Carleton MD. Natural history of *Hypogeomys antimena*, the Malagasy Giant Jumping Rat. In Goodman, S. M. (ed.) (in press). *The new natural history of Madagascar*. Princeton, Princeton University Press.
103. Viquez-R L, Fleischer R, Wilhelm K, Tschapka M, **Sommer S** (2020) Jumping the green wall: the use of PNA-DNA clamps to enhance microbiome sampling depth in wildlife microbiome research. *Ecology and Evolution*, 10, 11779-11786. DOI: 10.1002/ece3.6814.
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98. Menke S, Heurich M, Henrich M, Wilhelm K, **Sommer S** (2019) Impact of winter enclosures on the gut bacterial microbiota of red deer in the Bavarian Forest National Park. *Wildlife Biology*, 2019(1). DOI: 10.2981/wlb.00503.
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95. Schwensow N, Castro-Prieto A, Wachter B, **Sommer S** (2019) Immunological MHC supertypes and allelic expression: how low is the functional MHC variability in wild endangered Namibian cheetahs? *Conservation Genetics*, 20(1), 65-80.
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(*Acinonyx jubatus*): genetic history and implications for conservation. In: Cheetahs: Biology and Conservation of Cheetahs (edited by L Marker, L Boast, A Schmidt-Küntzel). Biodiversity of the World: Conservation from Genes to Landscapes (series editor: PJ Nyhus). Academic Press, USA.

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88. Borghesi B, Dinelli E, Migani F, Béchet A, Rendón-Martos M, Amat JA, **Sommer S**, Gillingham MAF (2017) Assessing environmental pollution in birds: a new methodological approach for interpreting bioaccumulation of trace elements in feather shafts using geochemical sediment data. *Methods in Ecology and Evolution*, 8, 96-108.
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