

## 1<sup>st</sup> Münster Evolution Meeting (MEM)

4<sup>th</sup> – 6<sup>th</sup> October 2018, University of Münster

### THURSDAY 4<sup>TH</sup> OCTOBER 2018

12.00 – 13.00 Registration & Coffee

13.00 – 13.15 Opening remarks by MEM Chair Jürgen Gadau

*Chair: Jürgen Gadau*

13.15 – 13.45

**Diethard Tautz**

*Max Planck Institute for Evolutionary Biology, Plön*

Mutual genomic introgression and immune gene evolution in house mice

13.45 – 14.00

**Stephan Drukewitz**

*University of Leipzig*

A dipteran's sucker punch - Evolution of venom in robber flies

14.00 – 14.15

**Anne Kupczok**

*Kiel University*

Rates of mutation and recombination in *Siphoviridae* phage genome evolution over three decades

14.15 – 14.30

**Shuqing Xu**

*University of Münster*

Low genetic variation is associated with low mutation rate in the giant duckweed

14.30 – 15.00

Coffee break

*Chair: Shuqing Xu*

15.00 – 15.30

**Erich Bornberg-Bauer**

*University of Münster*

Emergence of de novo protein coding genes from 'dark genomic matter' - fact or fiction?

15.30 – 15.45

**Katrin Hammerschmidt**

*Kiel University*

Polarization of ancestor relations reveals the order of traits in the evolution of cyanobacterial multicellularity

15.45 – 16.00

**Francesco Catania**

*University of Münster*

The environment: a catalyst for genome re-patterning?

16.00 – 16.15

**Michael Hiller**

*Max Planck Institute of Molecular Cell Biology and Genetics, Dresden*

Less is more: The role of gene losses for adaptive evolution in mammals

16.15 – 16.30

**Neel Prabh**

*Max-Planck-Institute for Developmental Biology, Tübingen*

Deep taxon sampling reveals the evolutionary dynamics of novel gene families in the *Pristionchus* genome

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16.30 – 16.45	<b>Chen Xie</b> <i>Max Planck Institute for Evolutionary Biology, Plön</i> Recently evolved de novo genes function in distinct biological pathways in mice
16.45 – 17.15	Coffee break
17.15 – 17.30	Welcome address by Vice-Rector Monika Stoll  <i>Chair: Jürgen Gadau</i>
17.30 – 18.45	<b>Peter Hammerstein</b> <i>Humboldt-Universität zu Berlin</i> The organism as evolved information processor: How genetic, epigenetic and sensory inputs are integrated and why endosymbionts have their own word to say
18.45 – 21.00	1 <sup>st</sup> Poster session (even numbers) & Reception with finger food buffet

*Day 1 is hosted by the Evolution Think Tank of the  
 Münster Graduate School of Evolution, funded by*



**FRIDAY 5<sup>TH</sup> OCTOBER 2018**

*Chair: Susann Wicke*

09.00 – 09.30	<b>Julia Fischer</b> <i>German Primate Center &amp; Georg-August-University, Göttingen</i> Guinea baboons: a test case for studying the link between social systems, communication and cognition
09.30 – 09.45	<b>Sandra Steiger</b> <i>University of Bayreuth</i> The evolution of family life: why should we care about caring insects
09.45 – 10.00	<b>Claudia Fricke</b> <i>University of Münster</i> Sexual maturation in <i>Drosophila melanogaster</i> males – what is going on in young males?
10.00 – 10.15	<b>Klaudia Witte</b> <i>University of Siegen</i> Mate choice in the public: does distance matter?
10.15 – 10.45	Coffee break  <i>Chair: Joachim Kurtz</i>
10.45 – 11.15	<b>Ralf Sommer</b> <i>Max-Planck-Institute for Developmental Biology, Tübingen</i> The mechanisms of developmental plasticity: from switch genes and epigenetics to canalization
11.15 – 11.30	<b>Joshua Payne</b> <i>ETH Zürich</i> A comparative analysis of empirical genotype-phenotype maps

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11.30 – 11.45	<b>Gregor Bucher</b> <i>Georg August University Göttingen</i> The cellular and genetic mechanisms of central complex diversification
11.45 – 12.00	<b>Nico Posnien</b> <i>Georg August University Göttingen</i> Context dependent regulatory divergence in closely related <i>Drosophila</i> species
12.00 – 12.15	<b>Gregor Rolshausen</b> <i>Senckenberg Biodiversity and Climate Research Centre, Frankfurt am Main</i> Evolutionary rates for evolutionary space. Perspectives on trait evolution
12.15 – 13.30	Lunch break (self-catering)  <i>Chair: Francesco Catania</i>
13.30 – 14.00	<b>Hinrich Schulenburg</b> <i>Kiel University</i> Evolutionary ecology meets the antibiotic crisis: Can we control pathogen adaptation?
14.00 – 14.15	<b>Christian Kost</b> <i>University of Osnabrück</i> Synergistic coevolution speeds up molecular evolution
14.15 – 14.30	<b>Leonardo Oña</b> <i>University of Osnabrück</i> The role of ecological factors on the evolution of microbial individuality
14.30 – 14.45	<b>Joachim Kurtz</b> <i>University of Münster</i> Host-parasite coevolution and the evolution of immunological specificity
Cancelled	<b><del>Carolin Wendling</del></b> <del><i>GEOMAR Helmholtz Centre for Ocean Research Kiel</i></del> <del>Different ways to resistance—coevolution of bacteria and temperate phages along the parasitism mutualism continuum</del>
14.45 – 15.30	Coffee break  <i>Chair: Erich Bornberg-Bauer</i>
15.30 – 16.00	<b>Judith Korb</b> <i>University of Freiburg</i> Why can termite queens live so long?
16.00 – 16.15	<b>Susanne Foitzik</b> <i>Johannes Gutenberg University of Mainz</i> Immune challenge alters expression of more genes in fertile ant workers and causes a drastic reduction in gut microbiome diversity
16.15 – 16.30	<b>Lukas Schrader</b> <i>University of Münster</i> Genome evolution and speciation of inquiline social parasites in leaf-cutting ants
16.30 – 16.45	<b>Jos Kramer</b> <i>University of Zürich</i> The other facets of family life and their role in the evolution of animal sociality

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16.45 – 17.15	<b>Wolfgang Stephan</b> <i>Natural History Museum, Berlin</i> Population genetics of rapid evolutionary adaptation
17.15 – 17.30	<b>Stefan Laurent</b> <i>Max Planck Institute for Plant Breeding, Köln</i> An experimental test of the genomic consequences of local adaptation in deer mice
17.30 – 18.00	Evolution in Germany
18.00 – 20.00	2 <sup>nd</sup> Postersession (odd numbers) with beer and snacks

**SATURDAY 6<sup>TH</sup> OCTOBER 2018**

*Chair: Claudia Fricke*

09.00 – 09.30	<b>Susanne Renner</b> <i>University of Munich (LMU)</i> Will aDNA from herbarium collections and a pharaonic tomb reveal who domesticated the watermelon?
09.30 – 09.45	<b>Susann Wicke</b> <i>University of Münster</i> Nutritional specialization and host-related diversification in parasitic plants
09.45 – 10.00	<b>Stefan Abrahamczyk</b> <i>University of Bonn</i> Floral key innovations triggered the evolution of the Malagasy Impatiens (Balsaminaceae) clade
Cancelled	<b>Harald Letsch</b> <i>University of Vienna</i> Evolution of the minute seed weevils (Ceutorhynchinae, Curculionidae, Coleoptera) – the impact of Earth's climate changes and host plant associations
10.15 – 10.45	Coffee break  <i>Chair: Ulrich Krohs</i>
10.45 – 11.15	<b>Axel Meyer</b> <i>University of Konstanz</i> <i>Agouti-related peptide 2</i> drives convergent evolution of stripe patterns across cichlid fish radiations
11.15 – 11.30	<b>Thomas Schmitt</b> <i>Julius-Maximilians-Universität Würzburg</i> Studying the evolution of cuticular hydrocarbons in insects: a model for a complex trait
11.30 – 11.45	<b>Oliver Niehuis</b> <i>University of Freiburg</i> Evolutionary history of the Hymenoptera

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11.45 – 12.00	<b>Liliya Doronina</b> <i>University of Münster</i> Retrotransposon-based phylogeny in the era of genomics
12.00 – 12.15	<b>Johannes Steidle</b> <i>University of Hohenheim</i> Speciation in the Hohenheim park? Ecological separation in a population of the jewel wasp <i>Nasonia vitripennis</i> (Hymenoptera: Pteromalidae)
12.15 – 13.30	Lunch break (self-catering)  <i>Chair: Jürgen Gadau</i>
13.30 – 14.00	<b>Katja Nowick</b> <i>Freie Universität Berlin</i> Evolution of transcription factor networks in primate brains
14.00 – 14.15	<b>Ulrich Krohs</b> <i>University of Münster</i> Explaining evolution: Models go first
14.15 – 14.30	<b>Panagiotis Provataris</b> <i>Zoological Research Museum Alexander Koenig, Bonn</i> Comparative analyses suggest reduced DNA methylation levels in Holometabola
14.30 – 14.45	<b>Robert Peuß</b> <i>Stowers Institute for Medical Research, Kansas City</i> Approaching “Old Friends” with a new model: How pathogen diversity shaped the adaptation of <i>Astyanax mexicanus</i> to the cave
14.45 – 15.00	<b>Camilo Barbosa</b> <i>Kiel University</i> Antibiotic combination efficacy (ACE) networks in <i>Pseudomonas aeruginosa</i>
15.00 – 15.30	Coffee break
15.30 – 15.45	<b>Maryam Keshavarz</b> <i>Max Planck Institute for Evolutionary Biology, Plön</i> Existence of a major control locus for basic behavioral traits
15.45 – 16.00	<b>Jürgen Gadau</b> <i>University of Münster</i> The evolution of social niches in ants
16.00 – 16.15	Farewell and closing of the conference