

Online or in person

Behaviour & Evolution Seminars

Winter Semester 2024/2025

On Wednesdays, *online* or in the room *W0-135*

12:15h

Zoom information for WiSe2425:

<https://uni-bielefeld.zoom-x.de/j/68076185866?pwd=RnZOYTE1Uit-vaGhseIB3bERRVEZMz09>

Meeting ID: 680 7618 5866

Passcode: 127983

Date	Speaker	Online/In-person	Title + Abstract
9.10	Name: Edward Ivimey-Cook Institution: University of Glasgow (Host: Alfredo Sánchez-Tójar)	<i>Online</i>	Title: Maternal effects on offspring life histories across taxa Abstract: In this talk, Ed will discuss his research on how parental diet and age impact a wide range of offspring traits across different organisms. He will also explore these findings within the context of broader comparative reviews.
16.10	Name: Tina Heger Institution: ZiF, Bielefeld (Host: Klaus Reinhold)	<i>In person</i>	Title: Addressing the challenges of generalization and causality in ecology: An interdisciplinary approach Abstract: The presentation will introduce the rationale behind the current ZiF Resident group "Mapping evidence to theory in ecology", with the aim to stimulate a discussion around possibilities for tighter connections of the group with current research at Uni Bielefeld.
23.10	Name: Jaroslava Varella Valentova Institution: University of Sao Paulo (Host: Segovia)	<i>Online</i> (EXCEPTIONALLY STARTS AT 12:00AM)	Title: Evolutionary Perspectives on Human Partner Preferences
30.10	Name: Carl Soulsbury Institution: University of Lincoln, UK (Host: Joe)	<i>In person</i>	Title: The evolution of sperm form and function Abstract: Sperm are the most morphologically diverse of all cells, yet the drivers of such diversity remain poorly understood. Using the combined approaches of fluid mechanics, biophysics and evolution we demonstrate how they shape sperm form, specifically highlighting the critical role of the fertilizing environment in shaping key sperm traits.
6.11	Name: Institution: (Host: Damas Moreira)		Title: Abstract:
13.11	Maria Moiron (Host: Moiron)	<i>In person</i>	Title: Evaluating the prevalence and importance of indirect genetic effects using a meta-analytical approach Abstract: The presentation will introduce the concept of indirect genetic effects and provide the results of a meta-analysis evaluating the overall

			<p>magnitude and generality, and several patterns of variation, in indirect genetic effects across the published literature.</p>
20.11	<p>Sean Ehلمان IGB Berlin (Host: Wittmann)</p>		<p>Title: The role of development in shaping behavioral variation - insight from theory and the Amazon molly</p> <p>Abstract:</p> <p>The developmental sources of behavioral individuality are relatively poorly understood. Recent advances in high-resolution behavioral tracking and computational theory, however, offer new opportunities to address this gap. I present work in our lab along these lines, tracking the behavioral development of clonal Amazon mollies (<i>Poecilia formosa</i>) through substantial periods of development, applying novel machine learning tools to quantify behavioral repertoires, and developing and testing theoretical models of development.</p>
27.11	<p>Name: Laura Schulte, Bielefeld University Institution: (Host: Caspers)</p>	In person	<p>Title: Same same but different? Morphological, physiological and behavioral differences in fire salamander larvae from two habitat types.</p> <p>Abstract:</p>
4.12	<p>Name: Steve Petersen Institution: The University of Utah (Host: Spangenberg)</p>		<p>Title: The behavior of habitat selection by free-roaming horses (<i>Equus ferus caballus</i>) in Western North America</p> <p>Abstract: Dr. Steve Petersen will present his research on feral horses in the Great Basin of Nevada, USA. Overall, his research links ungulate behavior and vegetation. Steven's methods include GIS, unmanned aerial systems (drones), and stable isotope analysis.</p>
11.12	<p>Name: Oliver Krüger Institution: Bielefeld University (Host: Krüger/Chakarov)</p>		<p>Title: One current to rule an entire continental coast</p> <p>Abstract: The talk will be an exploration of the Humboldt current at the west coast of South America.</p>
18.12	<p>Name: Laurent Lehmann Institution: University of Lausanne (Host: Olena Orlova)</p>	In-person	<p>Title: The evolution of environmentally mediated social interactions and posthumous spite under isolation by distance</p> <p>Abstract: Organisms continually modify their environment by extracting resources, releasing toxins, or engineering habitats. These environmental modifications can have significant fitness consequences on other organisms, including those living far away in space and the distant future. To better understand the evolutionary relevance of such environmentally mediated social interactions, we quantify natural selection on a trait that influences biotic or abiotic environmental variables in a population composed of finite patches experiencing isolation by distance, as is typical of taxa facing limited dispersal. We show how selection on a trait due to its environmental effects can be understood in terms of the way that a focal individual influences the fitness of all future individuals at all spatial positions via a modification to the environment these individuals encounter, whose importance depends on the relatedness between these and the focal. Simply put, natural selection tends to favour traits whose environmental effects help (resp. harm) individuals that are more (resp. less) related than average, including those distantly in space and time. In addition to allowing for a full quantification of directional selection, this inclusive fitness</p>

perspective helps garner intuition for the evolution of environmentally mediated social interactions in general and of spite in particular.

08.01 Name:
Institution:

(Host: Maraci)

Title:
Abstract:

15.01 Name: Linda Weiss
Institution: Ruhr-Universität Bochum

(Host: Meuthen)

In-person

Title: Molecular Mechanisms of phenotypic plasticity: Environment perception, signal transmission and the development of adaptive phenotypes in the freshwater crustacean *Daphnia*

Abstract: Phenotypic plasticity describes the ability of an organism to respond to changing environmental conditions by the adaptation of its phenotype. Thereby, organisms can conquer environments with fluctuating conditions as their genotype is geared with adaptive strategies increasing the individual's fitness. The freshwater crustacean *Daphnia* reacts highly plastic to a wide variety of environmental cues, by developing adaptive context-dependent phenotypes.

I will present the progress that has been made in deciphering mechanistic underpinnings underlying adaptive strategies in *Daphnia*. I focus on inducible defence expression as well as environmentally induced diapause. These strategies allow *Daphnia* to overcome harsh environmental conditions. In this context, causes of climate change negatively affect these adaptive strategies, making *Daphnia* susceptible to anthropogenic environmental challenges.

22.01 Name: Elena Groneberg
Institution: University of Münster

(Host: Kraus)

In-person

Title: Lefties: in great demand but limited supply? – Investigating paw preference in rats

Abstract:

29.01 Name:

(Host:Barauh/Nabutanyi)

Title:
Abstract:

All interested are welcome!

Questions or comments?

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