

SEEWIESEN

Max Planck Institute
for Ornithology



LECTURE SERIES

FALL/WINTER 2017/18



MAX-PLANCK-GESELLSCHAFT

THURSDAY | NOVEMBER 9, 2017 | 13 P.M. | HOUSE 4 LECTURE ROOM

NORBERT SACHSER

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Behavioural Profiles are shaped by social experiences: When, how and why

Individual differences in cognition, emotion, and behaviour develop during ontogeny. Using a comparative approach, this contribution focuses on the modulation of behavioural profiles by the social environment in mammals. I review evidence that such shaping of behavioural profiles occurs from the prenatal phase through adolescence and beyond. Causation is discussed, in particular, how behavioural profiles are shaped by social stimuli through behavioural and neuroendocrine processes. Finally, function is addressed and it is argued that the shaping of behavioural profiles by social experience represents an effective mechanism for repeated and rapid adaptation during the life time.

WHO IS NORBERT SACHSER

1984 PhD University of Bielefeld, 1984, DE

1985 Postdoctoral Fellow, Department of Animal Physiology, University of Bayreuth, DE

1987 Assistant Professor, Department of Animal Physiology, University of Bayreuth, DE

1994 Professor of Behavioural Biology, University of Münster, DE

SELECTED PUBLICATIONS

Bodden C; van den Hove D; Lesch KP; Sachser N (2017): Impact of varying social experiences during life history on behaviour, gene expression, and vasopressin receptor gene methylation in mice.

Scientific Reports 7: 8719

Freund J; Brandmaier AM; Lewejohann L; Kirste I; Kritzler M; Krüger A; Sachser N; Lindenberger U; Kempermann G (2013): Emergence of individuality in genetically identical mice. **Science** 340: 756-759

Sachser N; Kaiser S; Hennessy M (2013): Behavioural profiles are shaped by social experience: When, how and why. **Philosophical Transactions of the Royal Society B** 368 (1618).

Zimmermann TD; Kaiser S; Hennessy MB; Sachser N (2017): Adaptive shaping of the behavioural and neuroendocrine phenotype during adolescence. **Proceedings of the Royal Society B**: DOI: 10.1098/rspb.2016.2784

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