

Curriculum vitae



Mag. Dr. Ulrike Griebel

Current affiliations:

Faculty affiliate, The University of Memphis, Institute for Intelligent Systems, FedEx Institute of Technology Memphis, 365 Innovation Drive Memphis, TN 38152, USA

Adjunct faculty, School of Communication Sciences and Disorders, The University of Memphis

Member of the Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, Austria

Research interests:

I am interested in evolution, cognition and communication in general, currently working on communication in primates. I am specially interested in theoretical aspects of communication and the comparison of animal communication systems with human communication and the evolution of language.

Publications:

Griebel, U. (1990) Farbensehen beim Kalifornischen Seelöwen. M.Sc. Thesis: University of Vienna.

Griebel, U. & Schmid, A. (1992) Color vision in the California sea lion (*Zalophus californianus*). *Vision Research* 32: 477-482.

Griebel, U. & Schmid, A. (1996) Color Vision in the Manatee (*Trichechus manatus*). *Vision Research* 36 (17), 2747-2757.

- Griebel, U. (1996) Color Vision in Marine Mammals. Ph.D. Thesis: University of Vienna.
- Griebel, U. & Schmid, A. (1997) Brightness Discrimination Ability in the West Indian Manatee (*Trichechus manatus*). *Journal of Experimental Biology* 200, 1587-1592.
- Griebel, U. & Schmid, A. (2002) Spectral sensitivity in the bottlenose dolphin (*Tursiops truncatus*). *Marine and Freshwater Behaviour and Physiology* 35 (3), 129-137.
- Griebel, U. (2002) Color Vision in Marine Mammals. In: "The Vienna School of Marine Biology: A Tribute to Jörg Ott" (Eds. Bright, M., Dworschak, P.C. & Stachowitsch, M.), *Facultas Universitätsverlag, Wien*: 73-87.
- Byrne, R.A., Kuba, M, & Griebel, U. (2002) Lateral asymmetry of eye use in *Octopus vulgaris*. *Animal Behavior* 64, 461-468.
- Griebel, U. & Peichl, L. (2003) Color vision in aquatic mammals – facts and open questions. *Aquatic Mammals* 29 (1), 18-30.
- Byrne, R.A., Griebel, U., Wood, J.B. & Mather, J.A. (2003). Squid say it with skin: a graphical model for skin displays in Caribbean Reef Squid (*Sepioteuthis sepioidea*). In: Warnke, K., Keupp, H., Boletzky, Sv. (eds) *Coleoid cephalopods through time. Berliner Paläobiol. Abh.* 3: 29-35.
- Meisel, D.V., Byrne, R.A., Kuba, M.J. & Griebel, U. (2003). Circadian Rhythms in *Octopus vulgaris*. In: Warnke, K., Keupp, H., Boletzky, Sv. (eds) *Coleoid cephalopods through time. Berliner Paläobiol. Abh.* 3: 171-177.
- Kuba, M., Meisel, D. V., Byrne, R. A., Griebel, U. & Mather, J. A. (2003). Looking at play in *Octopus vulgaris*. In: Warnke, K., Keupp, H., Boletzky, Sv. (eds) *Coleoid cephalopods through time. Berliner Paläobiol. Abh.* 3: 163-169.
- Pretterer, G., Bubna-Littitz, H., Windischbauer, G., Gabler, C., & Griebel, U. (2004). Brightness discrimination in the dog. *Journal of Vision* 4, 241-249.
- Geisbauer, G., Griebel, U., Schmid, A. & Timney, B. (2004) Brightness discrimination and neutral point testing in the horse. *Canadian Journal of Zoology* 82, 660-670.
- Oller, D.K. & Griebel, U. (2004) *Evolution of Communication Systems – a Comparative Approach*. Edited volume, MIT Press.
- Oller, D.K. & Griebel, U. (2004) Theoretical and methodological tools for comparison and evolutionary modeling of communication systems. In: Oller, D.K. & Griebel, U.(eds.) *Evolution of Communication Systems – a Comparative Approach*. MIT Press.

- Oller, D.K. & Griebel, U. (2004). Directions for research in comparative communication systems. In Oller, D.K. & Griebel, U. (Eds.). *Evolution of Communication Systems: A Comparative Approach*. MIT Press. pp. 325-331.
- Oller, D. K. and Griebel, U. (2005). Contextual freedom in human infant vocalization and the evolution of language. In R. Burgess and K. MacDonald (Eds.). *Evolutionary Perspectives on Human Development*. Sage Publications, Thousand Oaks, CA, pp 135-165.
- Griebel, U., König, G. & Schmid, A. (2006) Spectral sensitivity in two species of pinnipeds (*Phoca vitulina* and *Otaria Flavescens*). *Marine Mammal Science*, 22 (1), 156-166.
- Byrne R. A., Kuba M. J., Meisel D. V. & Griebel U., Mather J. A. (2006). Does *Octopus vulgaris* have preferred arms? *Journal of Comparative Psychology* 120 (3), 198-204.
- Byrne R. A., Kuba M. J., Meisel D. V. & Griebel U., Mather J. A. (2006). Octopus arm choice is strongly influenced by eye use. *Behavioural Brain Research* 172, 195-201.
- Oller, D.K. and Griebel, U. (2006). How the language capacity was naturally selected: Altriciality and long immaturity. Commentary on Locke, J. and Bogin, B: *Language and life history: A new perspective on the evolution and development of linguistic communication*. *Behavioral and Brain Sciences*. 293-294.
- Oller, D. K. and Griebel, U. (2008). The origins of syllabification in human infancy and in human evolution.. In B. Davis and K Zajdo. *Syllable Development: The Frame/Content Theory and Beyond*. Lawrence Erlbaum and Associates. Mahwah, NJ, pp 29-62.
- Oller, D.K. and Griebel, U. (2008). *Evolution of Communicative Flexibility: Complexity, Creativity, and Adaptability in Human and Animal Communication*. MIT Press.
- Griebel, U. and Oller, D.K. (2008). Evolutionary forces favoring communicative flexibility. In: *Evolution of Communicative Flexibility: Complexity, Creativity, and Adaptability in Human and Animal Communication*, Eds. D.K. Oller and U. Griebel, MIT Press.
- Oller, D.K. and Griebel, U. (2008) Contextual flexibility in infant vocal development and the earliest steps in the evolution of language. In: *Evolution of Communicative Flexibility: Complexity, Creativity and Adaptability in Human and Animal Communication*, Eds. D.K. Oller and U. Griebel, MIT Press.

- Mather, J.A., Griebel, U. & Byrne, R.A. (2010) Squid dances: an ethogram with postures and actions of *Sepioteuthis sepioidea* with a muscular hydrostat system. *Marine and Freshwater Behavior and Physiology* 43 (1), 45-61.
- Byrne, R.A., J.B. Wood., R.C. Anderson, U. Griebel, & J.A. Mather (2010). Non-invasive methods of identifying and tracing wild squid. In Fuchs, D. (ed.), *Proceedings of the 3rd International Symposium "Coleoid Cephalopods Trough Time"*. Ferrantia 59, 22-31.
- Griebel, U. & Oller, D.K. (2012) "Vocabulary Learning in a Yorkshire Terrier: Slow mapping of spoken words". *Plos One* 7(2): e30182. doi: 10.1371/journal.pone.0030182
- Griebel, U. & Oller, D.K. (2014) *Origins of Language in a Comparative Perspective*. In: LaFreniere, P & Weisfeld, G.(eds), *Evolutionary Science of Human Behavior – An Interdisciplinary Approach*. Linus Learning, NY.
- Oller, D.K. & Griebel, U. (2014). On Quantitative Comparative Research in Communication and Language Evolution. *Biological Theory* DOI 10.1007/s13752-014-0186-7
- Griebel, U., Pepperberg, I. M., & Oller, D. K. (2016). Developmental plasticity and language: A comparative perspective. In *New Frontiers in Language Evolution and Development* Edited by: Wayne D. Gray. *Topics in Cognitive Science (topiCS)*, 8(2), 435-445.
- Oller, D. K., Griebel, U., & Warlaumont, A. S. (2016). Vocal development as a guide to modeling the evolution of language. In *New Frontiers in Language Evolution and Development* Edited by: Wayne D. Gray. *Topics in Cognitive Science (topiCS)*, 8(2) 382-392.
- Oller, D.K., Dale, R., Griebel, U. (2016). *New Frontiers in Language Evolution and Development*, Edited by: Wayne D. Gray. *Topics in Cognitive Science (topiCS)*, Volume 8.
- Oller, D. K., Griebel, U., Iyer, S. N , Jhang, Y., Warlaumont, A. S., Dale, R., & Call, J. (2019). Language origins viewed in spontaneous and interactive vocal rates of human and bonobo infants. *Frontiers in Psychology* 10: 729. PMID: PMC6455048
- Oller, D. K., Griebel, U., Bowman, D. D., Bene, E. R., Long, H. L., Yoo, H., & Ramsay, G. (2020). Infant boys found to be more vocal than infant girls. *Current Biology*, 30:10, 426-427.
- Oller, D. K. and Griebel, U. (2021). Functionally flexible signaling and the origin of language. *Frontiers in Psychology*.
- Griebel, U., & Oller, D. K. (2021). Animal signals and symbolism. In *The evolution of complex communication systems*. Oxford Handbook of Human Symbolic Evolution,

edited by Natalie Gontier, Andy Lock, and Chris Sinha. Oxford Univ. Press, Oxford, UK.

Oller, D. K., Ramsay, G., Bene, E. R. Long, H. L., and Griebel, U. (2021). Protophones, the precursors to speech, dominate the infant vocal landscape. *Phil. Trans. Royal Soc. B.* 376: 20200255.

Scientific Grants:

1995-1996: Project "Color vision in marine mammals" (funded by the Fonds zur Förderung der wissenschaftlichen Forschung (Austrian Science Foundation), A.S. P-10351BIO).

1997: Project "Spectral Sensitivity and Color Vision in Pinnipeds" (funded by the Fonds zur Förderung der wissenschaftlichen Forschung, A.S. P-10351BIO).

1998-2001: Project "Cognition in Octopus" (funded by the Konrad Lorenz Institute for Evolution and Cognition Research).

Courses at the University of Memphis:

- Spring 2004: Special Topic Course: Biology of Marine Mammals (3 credits, 4000/6000 graduate level), Dept. of Biology
- Fall 2005: Special Topic Course: Biology of Marine Mammals (3 credits, 4000/6000 graduate level), Dept. of Biology
- Spring 2009: Evolution (3 credits, 4100/6100 undergraduate/graduate level), Dept. of Biology
- Spring 2012: Evolution (3 credits, graduate level, School of Communication Sciences and Disorders)
- Fall 2012: Cognitive Science Seminar: Evolution of Communication (7514/8514 PSYCH/COMP/PHIL)
- Spring 2015: Cognitive Science Seminar: Evolution and Development of Brain, Culture, and Language (7514/8514 PSYCH/COMP/PHIL), taught together with Kim Oller and Stan Franklin
- Spring 2018: Cognitive Science Seminar: The Evolution and Development of Neurodiversity (7514/8514 PSYCH/COMP/PHIL), taught together with Kim Oller
- Spring 2021: Cognitive Science Seminar: Emotion and Cognitions (7514/8514 PSYCH/COMP/PHIL), taught together with Kim Oller

Personal data:

Date of birth: Nov. 6th, 1962
Place of birth: Salzburg, Austria
Citizenship: Austria and USA
Languages: German, English, some Spanish

Academic career:

1985-1996: Studies in biology at the University of Vienna,
Specialization in marine biology, ethology, sensory physiology, and
cognition
Master's thesis: 'Color vision in the California sea lion'
Dissertation: 'Color vision in marine mammals'
(Funded by the BMWF)

1997: Postdoctoral stipendium at the University of Vienna:
'Spectral sensitivity and color vision in pinnipeds'
(Funded by the BMWF)

1998-2001: Postdoctoral stipendium at the Konrad Lorenz Institute for Evolution
and Cognition Research: 'Cognition in octopus'
Beginning of a 7-year-project on communication in social squid in
Bonaire, Netherlands Antilles

2003 - Adjunct faculty member in the department of Biology, The University of
Memphis

2011 - Faculty affiliate, The University of Memphis, Institute for Intelligent
Systems, FedEx Institute of Technology Memphis, 365 Innovation
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