

Curriculum vitae

Personal information

Name	Carsten Schradin
Address	Zoological Institute, Department of Animal Behavior, University of Zurich, Winterthurerstrasse 190, 8057 Zurich, Switzerland.
Phone	+41 – (0)44- 635 5486
e-mail	carsten.schradin@zool.uzh.ch
Date of birth	19.07.1972
Place of birth	Gaildorf (Germany)
Marital status	Married
Children	Two
Nationality	German
Current position	Research Associate, Zoological Institute, Department of Animal Behavior, University of Zurich, Switzerland. Honorary Researcher at the School of Animal, Plant and Environmental Sciences, University of the Witwatersrand, Johannesburg, South Africa.

Major achievements

- 2009: Invited symposium speaker at the annual meeting of the German Zoological Society.
- 2006: Establishment of the Enzyme Immunoassay (hormone) laboratory at the Department of Animal Behavior, University of Zurich.
- 2005: Fritz-Frank-Förderpreis, award for young scientists from the German Society of Mammology
- 2001: Establishment of the Succulent Karoo Research Station in South Africa.
- 2001 – now: Combination of field and laboratory work establishing the striped mouse as an example to study paternal care, communal breeding and group living.

Research interest

Understanding evolved physiological mechanisms which allow animals to behave adaptively in their changing natural environment. I seek to understand the proximate and ultimate causes of social behavior, including physiological, endocrine, ecological, demographic and evolutionary reasons. Thus, I want to break down the barrier between proximate and ultimate research, using molecular tools in organismic research.

Education

10. November 2008 Habilitation at the Faculty of Sciences, University of Zurich. Venia Legendi in Zoology.
Habilitation thesis: "Ultimate and Proximate Aspects of Social Flexibility in the African Striped Mouse (*Rhabdomys pumilio*) as an Example."
- Since October 2005 Research Associate, Zoological Institute, Department of Animal Behavior, University of Zurich, Switzerland.
- June 2001 – September 2005 Postdoctoral scientist at the School of Animal, Plant and Environmental Sciences, University of the Witwatersrand, Johannesburg, South Africa.
- 1 June 2004 – September 2005 Fellow of the Claude Harris Leon Foundation (Cape Town, South Africa).
- June 2003 – May 2004 Grant of the German Science Foundation (DFG) for postdoctoral work in South Africa.
- June 2001 – May 2003 Grant of the Swiss National Science Foundation for postdoctoral work in South Africa.
- 19th April 2001 PhD in Anthropology (Dr. sc. nat).
Dissertation thesis: "Paternal Care in New World Monkeys with Special Reference to the Goeldi's Monkey (*Callimico goeldii*)".
Under supervision of Dr. G. Anzenberger and Prof. Dr. R.D. Martin.
Examined by Prof. Dr. B. König (Zürich) and Dr. A.F. Dixson (San Diego).
- 1997-2001 PhD thesis at the Anthropological Institute, University of Zurich, Switzerland.
- 1994-1997 Ludwig-Maximilians-University Munich (Germany); diploma in biology; main subject Zoology, minor subjects Anthropology, Ecology and Psychology.
Diploma thesis at the Max-Planck-Institute for Behavioural Physiology, Seewiesen (Germany).
Diploma thesis: "Sex-biases emigration in the shell-dwelling cichlid fish *Neolamprologus multifasciatus*: ultimate and proximate causes".
Grade of the diploma: 1.0 (passed with distinction). Supervisor: Prof. Dr. Jürg Lamprecht
- 1992-1994 University Stuttgart Hohenheim (Germany); Vordiplom (corresponding to bachelor degree) in biology.
- 1992 High school certificate Abitur (corresponding to matric), grade 1.6 (grades in Germany range from 1 (best) to 4 (worst)).

Professional experience

- June 2009 Visiting researcher at the Brain and Body Centre at the University of Illinois, Chicago. Learning IHC in the laboratory of Prof. Sue Carter.
- 2006 Attended course "Training for persons responsible for directing animal experiments", corresponding to FELASA-Category C (2

- days).
- Since September 2001 Field studies in the Succulent Karoo of South Africa (Goegap Nature Reserve). Establishment of the Succulent Karoo Research Station.
- October 2003** **Invited to the 92. Dahlem Conference in Berlin: “Attachment and Bonding: A New Synthesis“.**
- June 2003 Visiting researcher at the University of Zurich and the Technical University of Zurich (Eidgenössischen Technischen Hochschule Zürich, ETH). Hormone measurements of striped mouse samples.
- May – July 2002 Visiting researcher at the University of Zurich and the Technical University of Zurich (Eidgenössischen Technischen Hochschule Zürich, ETH). Hormone measurements of monkey and striped mouse samples.
- 1998-2001 Organization of a graduate student meeting at the Anthropological Institute of the University of Zurich, enabling discussion between students.
- 1999-2001 ISIS (International Species Information System) representative for the colony of Goeldi’s monkeys (*Callimico goeldii*) of the Anthropological Institute, University Zurich.
- August 2000 Field study on the pygmy marmoset (*Cebuella pygmaea*). Observations and capture of wild marmosets, and collecting of hair samples.
- February 2000 University of California, Davis, USA. Research on hormonal correlates of paternal care in the titi monkey (*Callicebus moloch*), laboratory analysis.

Services for the public

- 2008 Expert for Science Fair (“Jugend Forscht”) Switzerland.

Teaching

- 2009 BIO 349: Theories and methods in behavioral endocrinology. Students learn how to conduct hormone assays and how to interpret the results.
BIO 122: Verhalten und Hormonphysiologie. 4 hours of lectures about hormones and behavior in addition to two afternoons of practical training for students.
BIO 324: Verhaltensbiologie. 7 weeks, practical training of 2 undergraduate students.
- 2008 BIO 620 Literature seminar on animal behavior (1 semester).
BIO 331: Frontiers in Animal Behaviour. Lectures (6 hours)
BIO 122: Verhalten und Hormonphysiologie. 4 hours of lectures about hormones and behavior in addition to two afternoons of practical training for students.
BIO 324: Verhaltensbiologie. 7 weeks, practical training of 2 undergraduate students.
BIO 358 Forschungspraktikum Verhaltensbiologie. 6 weeks of

- supervising two undergraduate students.
2007 BIO 620 Literature seminar on animal behavior (1 semester).
BIO 331: Frontiers in Animal Behaviour. Lectures (6 hours)
BIO 122: Verhalten und Hormonphysiologie. 4 hours of lectures about hormones and behavior and four afternoons of practical training for students.
BIO 358 Forschungspraktikum Verhaltensbiologie. 8 weeks of supervision of one undergraduate student.
2006 BIO 620 Literatur seminar on animal behavior (1 semester).
BIO 122: Verhalten und Hormonphysiologie. 2 hours of lectures about hormones and behavior and four afternoons of practical training for students.
BIO 324: Verhaltensbiologie. 7 weeks, practical training of 4 undergraduate students.
April 2005 BIO 620 Literature seminar on animal behavior (1 semester).
Supervision of 10 undergraduate students from the University of the Witwatersrand during a one week field trip to Goegap Nature Reserve.
2001 Lectures and practical in “Behavioural and Evolutionary Ecology“ (1 semester, 6 hours/ week; together with M. Whiting; University of the Witwatersrand).
2001 Lectures and practicals in “Verhalten der Primaten“. (Behaviour of primates; University Zürich).
2000/01 Lectures in “Gesellschaftsformen der Primaten II“. (Social organisation of primates; together with G. Anzenberger; University Zürich).
2000 “Naturschutzbiologie der Primaten“. (Conservation biology of primates; together with G. Anzenberger; University Zürich).
1999 Lectures and practicals in “Verhalten der Primaten“. (Behaviour of primates; together with G. Anzenberger; University Zürich).
1998/99 Lectures in “Gesellschaftsformen der Primaten II“. (Social organisation of primates; University Zürich).

Supervision of undergraduate and graduate students

4 PhD students

3 MSc students

6 diploma students

37 undergraduate students

- 2010 Supervision of one PhD student, University of Zurich (J. Raynaud):
“Hormones, Metabolism and Behavior: Interactions and causal relationships”.
- 2009 Supervision of one PhD student, University of Zurich (E. Yuen):
“Personality traits in striped mice: differences in fitness and between social tactics”.
- 2009/2010 Supervision of one MSc student, University of Basel (M. Wastavino,

- together with D. Ebert).
- October 2009 I advertised for one PhD student for the project “Hormones, metabolism and behaviour: Interactions and causal relationships” (grant from the FAN).
- Since April 2008 Supervision of one PhD student, University of Zurich (I. Schoepf): “Social flexibility in a mammal: environmental and endocrine causes and consequences”.
- 2008/2009 Supervision of two diploma students, University of Mainz, together with Dr. Johannesen (N. Solmsen and S. Weick).
- 2008 Supervision of one MSc student, University of Zurich (D. Lehmann).
- 2007/2008 Supervision of one MSc student, University of Zurich (G. Schmohl).
- September 2005 Member of the PhD evaluation committee of Tasmin Rymer (University of the Witwatersrand): “Paternal care in the striped mouse *Rhabdomys pumilio*: ontogeny and function.”
- 2005-2009 Supervising the PhD project of Melanie Schubert, University of Bayreuth, Germany (together with Prof. D. von Holst): “Monogamy in the round-eared elephant shrew.”
- June 2004 to April 2005 Supervising projects of three diploma students from Germany, together with Prof. Dr. Sachser (University of Münster, Germany; 2 students: C. Keller and C. Schneider) and Prof. Dr. D. von Holst (University of Bayreuth: M. Schubert).
- Since September 2001 Supervision of 31 undergraduate students (1 from Denmark; 19 from Germany; 1 from France; 1 from Hong Kong; 3 from South Africa; 3 from Switzerland; 1 from the U.K.; 2 from the USA), who worked as field assistants at my research station in the Goegap Nature Reserve.
- 2001 Supervision of one diploma student, together with Prof. Dr. R.D. Martin, University of Zurich (J. Zingg).
- 2000 Supervision of one diploma student, together with Dr. G. Anzenberger, University of Zurich (S. Pika).

Instructional skills development (Hochschuldidaktik courses at the University of Zurich)

- 2009 - Rhetoric seminar (“Tritt frisch auf ... Werkzeuge der Rhetorik für den Unterricht“)
- 2007 - Project management of master theses (2.5 days).
- Leading a discussion / meeting (1 day).
- 2001 - Rhetoric and communication: How to make proper conversations (2 days).
- Problem-based learning (2 days).
- 2000 - New forms of teaching in an interactive way (2 days).
- 1999 - Lectures have to be in a way that the students understand you (2 days).
- Basic course for lecturers (2 days).
- Learning and teaching with the World Wide Web (2 days).

Funds raised for scientific equipment

Year	Organisation	Amount	Amount in Euro
2009	FAN (foundation for junior scientists of the University of Zurich, Switzerland)	100 000 CHF	66 666
	Research group, University of the Witwatersrand	30 000 ZAR	2 730
2008	Zürcher Universitätsverein	3 000 CHF	1 875
	Helene Bieber-Fond Zürich	3 000 CHF	1 875
	Swiss National Science Foundation	279 000 CHF	174 375
	Donations from the email newsletter <i>FSM-TIMES</i> .	3 419 EURO	3 419
	Research group, University of the Witwatersrand	50 000 ZAR	5 000
2007	Holcim Foundation, Switzerland	19 000 CHF	11 520
	Vontobel Foundation, Switzerland	27 600 CHF	17 800
	Julius Klaus-Stiftung	9 000 CHF	5 450
	Donations from the email newsletter <i>FSM-TIMES</i> .	1 000 EURO	1 000
	Research group, University of the Witwatersrand	20 000	2 500
2006	Holcim Foundation, Switzerland	19 000CHF	12 670
	Vontobel Foundation, Switzerland	19 300 CHF	12 870
	National Geographic Foundation	17 500 US\$	13 600
	Donations from the email newsletter <i>FSM-TIMES</i> .	1 000 Euro	1 000
	Research group, University of the Witwatersrand	20 000 ZAR	2 500
2005	Ethologische Gesellschaft	165 Euro	165
	Research group, University of the Witwatersrand	25 000 ZAR	3 100
	Donations from the email newsletter <i>FSM-TIMES</i> .	1 000 Euro	1 000
2004	Ethologische Gesellschaft (Germany)	1 300 Euro	1 300
	Research group, University of the Witwatersrand	25 000 ZAR	3 100
	Swiss Society for Natural Sciences	1 500 CHF	1 000
2002	Foundation for junior scientists of the University of Zurich, Switzerland	30 0000 CHF	20 000
	Equipment grant University of the Witwatersrand	35 000 ZAR	4 300
	Swiss National Science Foundation	3 000 CHF	2 000
	Swiss Society for Natural Sciences	1 262 CHF	840
2001	Swiss National Science Foundation	3 000 CHF	2 000

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Swiss Society for Natural Sciences	1 782 CHF	1 200
A.H. Schultz Foundation, Zurich	5 000 CHF	3 300

Total: Euro 380 155

National collaboration

- Dr. G. Anzenberger, Anthropological Institute, University of Zurich, Switzerland. Experience and paternal care in Goeldi's monkeys (*Callimico goeldii*).
- Dr. A. Lindholm, Zoological Institute, University of Zurich, Switzerland. Socio-genetics of *Rhabdomys pumilio*.
- Prof. M. Sanchez, Palaeontological Institute and Museum, University of Zurich, Switzerland. Project: Neonatal ossification in *Rhabdomys pumilio*.

International collaborations

- Dr. J. Johannesen, University of Mainz. Population genetics in *Rhabdomys pumilio*. Supervision of two diploma students.
- S. Matthee, Department of Entomology, University of Stellenbosch, South Africa. Ectoparasites in *Rhabdomys pumilio*: Influence of social tactic and home range size.
- Prof. C. Carter, University of Chicago, U.S.A. Neuropeptide measurements in brains of *Rhabdomys pumilio*.
- Prof. N. Pillay, University of the Witwatersrand, South Africa. Socio-ecology of *Rhabdomys pumilio*.
- Prof. D. Ribble, Zoological Institute, University of Trinity, USA. Project: Evolution of monogamy in elephant shrews. Paternity analysis in elephant shrews.
- Dr. M. Scantlebury, University of Belfast. RMR measurements in *Rhabdomys pumilio*.
- Prof. M. Heinrichs, Department of Psychology, Laboratory for Biological and Personality Psychology, University of Freiburg. Personality research in striped mice.

Member of following societies

- Deutsche Gesellschaft für Säugetierkunde
- Ethologische Gesellschaft
- Society for Behavioral Neuroendocrinology

Referee for following funding bodies

- National Research Foundation South Africa
- National Environment Research Council U.K. (NERC)

Referee for following journals

- African Zoology
- Animal Behaviour
- Austral Ecology
- Behaviour
- Behavioral Ecology
- Behavioral Ecology and Sociobiology
- Ecography
- Ethology

- European Journal of Wildlife Research
- Functional Ecology
- Hormones and Behavior
- Journal of Anatomy
- Journal of Ethology
- Journal of Mammalogy
- Mammalian Biology
- Mastozoologia Neotropical
- Physiology and Behavior
- Proceedings of the Royal Society of London, Series B
- Reproduction, Fertility and Development

Invitations for interviews for tenure or tenure-track positions

- 2009: Heisenberg (W3) professorship for animal behaviour at the University of Bielefeld (Germany).

Awards

- 2005: Fritz-Frank-Förderpreis for young scientists from the German Society of Mammalogy.

Publications and presentations**Summary of publication record (last update 23rd October 2009).****41 publications, first author on 32, last author on 5 of them.****h-index: 13**

Journal	Number of publications	Impact factor	Total impact	Times cited
News in Physiological Sciences (now: Physiology)	1	7	7	19
American Naturalist	1	5	5	2
Biology of Reproduction	1	4	4	
Hormones and Behavior	3	4	12	14
Journal of Animal Ecology	1	4	4	0
Proceedings of the Royal Society of London B	1	4	4	3
Animal Behaviour	2	3	6	16
Behavioral Ecology	3	3	9	25
Evolutionary Anthropology	1	3	3	1
Functional Ecology	2	3	6	13
Journal of Human Evolution	1	3	3	7
Behavioral Ecology and Sociobiology	3	2	6	40
Ethology	4	2	8	26
Journal of Comparative Psychology	3	2	6	71
Journal of Mammalogy	3	2	6	39
Journal of Zoology	1	2	2	0
Organisms Diversity and Evolution	1	2	2	0
Physiology and Behavior	1	2	2	5
American Journal of Primatology	2	1	2	17
Belgian Journal of Zoology	1	1	1	9
Biodiversity and Conservation	1	1	1	
Canadian Journal of Zoology	1	1	1	1
Journal of Ethology	2	1	2	15
Mammalian Biology	1	1	1	18
Summary	41		103	341

Publications (reviewed journals)

Accept. Scantlebury, M., Bennett, N., Pillay, N. & Schradin, C. accept. Basking reduces endothermic energy demands in desert-living striped mice. *Journal of Zoology*.

Schradin, C., König, B. & Pillay, N. accept. Reproductive competition favours solitary living while ecological constraints impose group-living in

- African striped mice. *Journal of Animal Ecology*.
- Schradin, C., Schmohl, G., Rödel, H.G., Schoepf, I., Treffler, S.M., Brenner, J., Bleeker, M., Schubert, M., König, B. & Pillay, N. accept. Female home range size is regulated by resource distribution and intraspecific competition: a multi-faceted, long term field study on African striped mice. *Animal Behaviour*.
- Schubert, M., Schradin, C., Pillay, N. & Ribble, D. accept. Male mate guarding in a socially monogamous mammal: On costs and trade-offs. *Behavioral Ecology and Sociobiology*.
- Wilson, L.A.B., Schradin, C., Mitgutsch, C., Galliari, F.C., Trillmich, F., Andrea Mess, A., Sánchez-Villagra, M.R. Accept. Skeletogenesis in the African striped mouse (*Rhabdomys pumilio*) and a study of sequence heterochrony in rodent evolution. *Organisms Diversity and Evolution*.
- 2009 Schradin, C., Kinahan, A.A. & Pillay, N. 2009. Cooperative breeding in groups of synchronously mating females demands large testes to avoid sperm depletion. *Biology of Reproduction*. **81**: 111-117.
- Schradin, C., Scantlebury, M., Pillay, N. & König, B. 2009. Testosterone levels in dominant sociable males are lower than in solitary roamers: Physiological differences between three male reproductive tactics in a sociably flexible mammal. *American Naturalist* **173**, 376-388.
- Schradin, C., Schneider, C., Yuen, C.H. 2009. Age at puberty in male African striped mice: the impact of food, population density and the presence of the father. *Functional Ecology* **23**: 1004-1013.
- Schubert, M., Pillay N. & Schradin C. 2009. Parental and allo-parental care in a polygynous mammal. *Journal of Mammalogy* **90**: 724-731.
- Schubert, M., Pillay, N., Ribble, D. & Schradin, C. 2009. The round-eared sengi and the evolution of social monogamy: Environmental parameters constrain males to live with a single female. *Ethology* **115**: 972-985.
- 2008 Keller, C. & Schradin C. 2008. Plant and small mammal richness correlate positively in a biodiversity hotspot *Biodiversity and Conservation* **17**, 911-923.
- Rymer, T., Schradin, C. & Pillay, N. 2008. Social transmission of information about novel food in two populations of the African striped mouse *Rhabdomys pumilio*. *Animal Behaviour* **76**, 1297-1304.
- Schradin, C. 2008. Differences in prolactin levels between three alternative male reproductive tactics in striped mice (*Rhabdomys pumilio*). *Proceedings of the Royal Society of London B* **275**, 1047-1052.
- Schradin, C. 2008. Seasonal changes in testosterone and corticosterone levels in four social categories of a desert dwelling sociable rodent. *Hormones and Behavior* **53**, 573-579.
- 2007 Hoffmann, M., Schradin, C. & Geisman, T. 2007. Radiographic evaluation of neonatal skeletal development in *Callimico goeldii* reveals closer similarity to *Callithrix jacchus* than to *Saguinus oedipus*. *American Journal of Primatology* **69**, 1-14.
- Schradin, C. 2007. No information transfer of food sites in a group living solitary forager. *Journal of Ethology* **25**, 83-86.

- Schradin, C. 2007. Schradin, C. 2007. Comments to K.E. Wynne-Edwards & M.E. Timonin. Paternal care in rodents: Weakening support for hormonal regulation of the transition to behavioral fatherhood in rodent animal models of biparental care. *Hormones and Behavior*. **52**, 557-559.
- Schradin, C., Krackow, S., Schubert, M., Keller, C., Schradin, B. & Pillay, N. 2007. Regulation of activity pattern in desert-living striped mice: The importance of basking. *Ethology* **113**, 606-614.
- 2006 Schradin, C. 2006. Whole day follows of the striped mouse. *Journal of Ethology* **24**, 37-43.
- Schradin, C. & Pillay, N. 2006. Female striped mice (*Rhabdomys pumilio*) change their home ranges in response to seasonal variation in food availability. *Behavioral Ecology* **17**, 452-458.
- Schradin, C., Schubert, M. & Pillay, N. 2006. Winter huddling groups in the striped mouse. *Canadian Journal of Zoology* **84**, 693-698
- Scantlebury, M., Pillay, N., Speakman, J.R., Bennett, N.C., & Schradin, C. 2006. Huddling in groups leads to daily energy savings in free-living African four-striped grass mice *Rhabdomys pumilio*. *Functional Ecology* **20**, 166-173.
- 2005 Schradin, C. 2005. Nest side competition in diurnal rodents from the succulent karoo of South Africa: The striped mouse (*Rhabdomys pumilio*) against the bush karoo rat (*Otomys unisulcatus*). *Journal of Mammalogy* **86**, 757-765.
- Schradin, C. 2005. When to live alone and when to live in groups: ecological determinants of sociality in the African striped mouse (*Rhabdomys pumilio*, Sparrman, 1784). *Belgian Journal of Zoology* **135**, 77-82.
- Schradin, C. & Pillay, N. 2005. The influence of the father on offspring development in the striped mouse. *Behavioral Ecology* **16**, 450-455.
- Schradin, C. & Pillay, N. 2005. Demography of the striped mouse (*Rhabdomys pumilio*) in the succulent karoo: a unique population in an extreme environment. *Mammalian Biology*. **70**, 84-92.
- Schradin, C. & Pillay, N. 2005. Intraspecific variation in the spatial and social organization of the African striped mouse. *Journal of Mammalogy* **86**, 99-107.
- 2004 Schradin, C. 2004. Territorial defence in a group living solitary forager: who, where against whom? *Behavioural Ecology and Sociobiology* **55**, 439-446.
- Schradin, C. & Anzenberger, G. 2004. Development of prolactin levels in marmoset males: from helper to first-time father. *Hormones and Behavior* **46**, 670-677.
- Schradin, C. & Pillay, N. 2004. Prolactin levels in paternal striped mouse (*Rhabdomys pumilio*) fathers. *Physiology & Behavior* **81**, 43-50.
- Schradin, C. & Pillay, N. 2004. The striped mouse from the succulent karoo of South Africa: A territorial group living solitary forager with communal breeding and helpers at the nest. *Journal of Comparative Psychology*, **118**, 37-47.

- 2003 Schradin, C. & Anzenberger, G. 2003. Mothers, not fathers, determine the delayed onset of male carrying in Goeldi's monkey (*Callimico goeldii*). *Journal of Human Evolution* **45**, 389-399.
- Schradin, C. & Pillay, N. 2003. Paternal care in the social and diurnal striped mouse (*Rhabdomys pumilio*): laboratory and field evidence. *Journal of Comparative Psychology* **117**, 317-324.
- Schradin, C., Reeder, D., Mendoza, S. & Anzenberger, G. 2003. Prolactin and paternal care: comparison of three species of monogamous New World monkeys (*Callicebus cupreus*, *Callithrix jacchus*, and *Callimico goeldii*). *Journal of Comparative Psychology* **117**, 166-175.
- 2002 Schradin, C. & Anzenberger, G. 2002. Why do New World monkey fathers have enhanced prolactin levels? *Evolutionary Anthropology (Supplement)*. **1**, 122-125.
- Schradin, C. & Lamprecht, J. 2002. Female emigration in the group living cichlid fish *Neolamprologus multifasciatus*. *Ethology* **108**, 237-248.
- 2001 Schradin, C. & Anzenberger, G. 2001. Costs of infant carrying in common marmosets, *Callithrix jacchus*: an experimental analysis. *Animal Behaviour* **62**, 289-295.
- Schradin, C. & Anzenberger, G. 2001. Infant carrying in family groups of Goeldi's monkeys (*Callimico goeldii*). *American Journal of Primatology* **53**, 57-67.
- 2000 Schradin, C. 2000. Confusion effect in a reptilian and a primate predator. *Ethology* **106**, 691-700.
- Schradin, C. & Lamprecht, J. 2000. Female-biased immigration and male peace keeping in groups of the shell-dwelling cichlid fish *Neolamprologus multifasciatus*. *Behavioural Ecology and Sociobiology* **48**, 236-242. [Research report by *Nature* about Schradin & Lamprecht, 2000: <http://www.nature.com/nsu/000000803/000803-1.html>]
- 1999 Schradin, C. & Anzenberger, G. 1999. Prolactin, the hormone of paternity. *News in Physiological Sciences* **14**, 223-231.

Manuscripts under review

Schradin, C. & Lindholm, A.K. under review. Relative fitness of alternative male reproductive tactics in a mammal varies between years.

Non-reviewed papers and book chapters (abstracts are excluded)

- 2005 Leckman, J. F., Carter, C. S., Hennessey, M. B., Hrdy, S. B., E.B. Kervene, Klann-Delius, C., Schradin, C., Todt, D. & Holst, D. v. 2005. Biobehavioral processes in attachment and bonding. In: *Attachment and Bonding: A New Synthesis. Dahlem Workshop Report 92* (Ed. by C.S. Carter and L. Ahnert). pp. 301-348. Cambridge, MA: The MIT Press.
- 2002 Schradin, C. 2002. Die vier Fragen Tinbergens und väterliches Verhalten. In: *Gruppenmechanismen* (Ed. U. Ganslößer). pp. 29-48. Filander Verlag, Fürth.
- 2001 Schradin, C. 2001. Prolaktin, das Elternhormon. Praxis der Naturwissenschaften: Biologie in der Schule. **5**, 24-30.

- 1998 Schradin, C. 1998. Intraspezifische Konkurrenz. Translation from English into German. In: *Ökologie*, Begon, M.E., Harper, J.L. & Townsend, C.R. (Eds.): Spektrum Verlag, Heidelberg, pp. 139-204.
- 1992 Schradin, C. 1992. Vorschlag zur Katalogisierung einer Sammlung. *Entomologische Zeitschrift*, **102**, 318-319.

Popular science (majority in German)

- 2004 - present SGM-Spiegel (in German) and FSM-Times (in English), free popular science email newsletter providing information about the projects at the *Succulent Karoo Research Station*: www.stripedmouse.com. In so far 18 issues have been published.
- 2008 Schradin, C. 2008. Der Vater im Manne? (The male parent) *Jaeger* **3/2008**, 6-9.
- Schradin, C. 2008. Le comportement paternel chez les animaux sauvages indigenes. *Chasse et Nature* 23. (Translated article).
- 2007 Schradin, C. 2007. Die Biologie des Vaters: Was uns die Verhaltensforschung über Väter berichten kann. (The biology of the father: insights from behavioral biology). Filander Verlag, Fürth, Germany. Popular science book.
- Schradin, C. 2007. Väterliches Verhalten bei einheimischen Wildtieren. (Paternal care in European animals) *Wildbiologie* **8/16**, 16 pages.
- 2006 Schradin, C. 2006. Die Elefantenspitzmaus – die kleine Verwandte der grauen Riesen. (Elephant shrews – the small relatives of the grey giants). *Rodentia* **30**.
- Sommer, V. & Schradin, C. 2006. Ach, Männer. Popular science article about fathers. *Weltwoche* 31/06.
- 2005 Schradin, C. 2005. Im Jahr der Maus. Teil 2: Das Leben von Striemengrasmaus-Weibchen Nr. 23. (In the year of the mouse. Part II: The life of striped mouse female No. 23). *Rodentia* **25**, pp. 28-30.
- Schradin; C. 2005. Im Jahr der Maus. Teil 1: „Kindheit und Jugend“ von Striemengrasmaus-Weibchen Nr. 23. (In the year of the mouse. Part I: Childhood of striped mouse female No. 23). *Rodentia* **24**, 41-43.
- Schradin, C. 2005. Namaqualand: Ein Biodiversitäts- und Kleinsäugerhotspot. (Namaqualand: A biodiversity and small mammal hotspot). *Rodentia* **23**, 26-30.

Popular reports about my research projects

- 2009 Blöchliger, B. Striemengrasmäuse: Testosteron und Risikofreudigkeit. Report on the website of the University of Zurich by unipublic.
- Telegraph (Newspaper in the U.K.). 23 Feb. 2009. Nice guys get the girls. Report about our publication in the *American Naturalist*.
- 2008 Radio broadcast about animal fathers (27 min), interview with Carsten Schradin about paternal care. 30. April 2008. *IQ - Wissenschaft und Forschung from Bayern* 2.
- Boehme, N. 2008. Fürsorgliche Väter (Good fathers). Ein Herz für Tiere (A Hearth for Animals, Europe's largest animal magazine), March 2008.
- 2007 Kraft, U. 23. August 2007. Ein bisschen schwanger (A little bit pregnant).

Handelsblatt.

- Boehme, N. 2007. Väter in Nadelstreifen. Interview with me about my field work and paternal care. Ein Herz für Tiere (A Hearth for Animals, Europe's largest animal magazine), July 2007.
- Blöchliger, B. Die Biologie des Vaters (The Biology of the Father). Report on the website of the University of Zurich by unipublic.
- Blöchliger, B. Von polygamy bis solitary: Die Striemengrasmaus (To be Polygynous or to be Solitary: the Striped Mouse). Report on the website of the University of Zurich by unipublic.
- Reye, B. Gute Väter statt arrogante Machos. (Good fathers, not machos!) Report in the Switzerland largest newspaper *Tages Anzeiger*.
- Tschudin, M. Das turbulente Liebesleben der Striemengrasmäuse (The turbulent love life of striped mice). TV documentary of 12min.
Appeared:
1. January, *MTW*, SF1 (Swiss TV 1).
24. and 25. January, *Nano*, 3 SAT (German TV).
January on five public regional German TV stations (RBB, SWR, WDR, MDR und BRalpha).
11., 12. and 13. February in the science magazine *Tomorrow Today* of Deutsche Welle TV (worldwide broadcast) in English.
11., 12. and 13. February in the science magazine *Projekt Zukunft* of Deutsche Welle TV in German.
- Tschudin, P. Vaterschaftskonzepte im Tierreich (Fathers in the Animal Kingdom). Interview about the book „Biology des Vaters“ on the Swiss radio station DRS2 in the broadcast drsaktuell. 4 minutes.
- 2005 Wiedon, A. Fürsorglich und Flexible; Die Striemengrasmaus. (Caring and flexible: the striped mouse). *Biologie in unserer Zeit* **35**, 226-227.
- Vaterliebe nach Bedarf. (Paternal love on demand) *Horizonte* (magazine of the Swiss National Science Foundation), March, p. 8. Report about Schradin & Pillay 2005, *Behavioral Ecology***35**, 266-267.
- 2001 Papa wartet. (Daddy is waiting). National Geographic Germany, October, p. 14. Report about my research on Goeldi's monkeys (*Callimico goeldii*).
- 2000 **Research report by Nature about Schradin & Lamprecht, 2000:**
<http://www.nature.com/nsu/000000803/000803-1.html>

Presentations (presentations where I was co-author are excluded)**Summary**

	Invited talk	Talk international conference	Poster international conference	Talk national conference	Poster national conference	Talk Department
2009	7		1	1		
2008	3	1	1		1	2
2007	2			1		
2006	3					1
2005		1				
2004		1				1
2003	1	1		2		
2002	1	1				
2001	3	1		2		1
2000	2	1	1	1		
1999		2		2		
1998				1	1	
SUM	22	9	3	10	2	5

- 2009 Schradin, C. 26. October 2009. Social Flexibility: An integrative approach to understand ultimate reasons and proximate mechanisms of social behavior. Invited talk, Institute of Evolutionary Biology, University of Basel, Switzerland.
- Schradin, C. 30. September 2009. How small mammals cope with the extreme conditions in the Succulent Karoo desert. University of Zurich, Veterinarian Department.
- Schradin, C. 28. September 2009. I was invited to give a plenary lecture as a young scientist at the annual meeting of the German Zoological Society (DZG): Social Flexibility: An integrative approach to understand ultimate reasons and proximate mechanisms of social behavior. Regensburg, Germany.
- Schradin, C. 15. July 2009. Social Flexibility: An integrative approach to understand ultimate reasons and proximate mechanisms of social behavior. Invited talk, Institute of Zoo and Wildlife Research, Berlin, Germany.
- Schradin, C. 14. July 2009. Social Flexibility: An integrative approach to understand ultimate reasons and proximate mechanisms of social behavior. Invited talk, University of Potsdam, Germany.
- Schradin, C. 26. June 2009. Evolved endocrine mechanisms of social flexibility. Poster, annual meeting of the Society for Behavioral Neuroendocrinology, East Lansing, Michigan, U.S.A.
- Schradin, C. 19. June 2009. Social Flexibility: An integrative approach to understand ultimate reasons and proximate mechanisms of social

- behavior. Invited talk, University of Miami, U.S.A.
- Schradin, C. 3. June 2009. Social Flexibility: An integrative approach to understand ultimate reasons and proximate mechanisms of social behavior. Invited talk, University of Illinois at Chicago. U.S.A.
- Schradin, C. 12. February 2009. Evolved endocrine mechanisms of social flexibility: How individuals adapt to a changing environment Talk, 4. *Thementagung der Ethologischen Gesellschaft, Göttingen, Germany.*
- 2008 Schradin, C. 18. July 2008. Endocrine control of alternative male reproductive tactics in a small mammal. Talk, *European Conference on Behavioral Biology, Dijon, France.*
- Schradin, C. 9. July 2008. Endocrine control of alternative male reproductive tactics in a small mammal. Poster presentation, *Annual Meeting of the Society of Behavioral Neuroendocrinology, Groningen, Netherlands.*
- Schradin, C. 26. June 2008. Personalities in the Animal Kingdom. Trial lecture for the habilitation, *University of Zurich, Zurich, Switzerland.*
- Schradin, C. 4. June 2008. Alternative male reproductive tactics in the African striped mouse. Invited talk, *Veterinary University of Vienna, Vienna, Austria.*
- Schradin, C. 22. May 2008. Socio-genetics of African striped mice. *Board of trustees of the Julius-Klaus Stiftung, University of Zurich, Zurich, Switzerland.*
- Schradin, C. 24. April 2008. Alternative male reproductive tactics in the African striped mouse. Invite talk, *Queens University Belfast, Belfast, U.K.*
- Schradin, C. 11. April 2008. Endocrine ecology of social flexibility. Talk, *Zoologisches Symposium, University of Zurich, Zurich, Switzerland.*
- Schradin, C. 21. February 2008. Endocrine correlates of alternative male reproductive tactics in the striped mouse. Poster, *Meeting Ethologische Gesellschaft, Regensburg, Germany.*
- 2007 Schradin, C. 25. October 2007. The Biology of the Father: Insights from Animal Behavior. Invited talk, *Research Colloquium, Department of Clinical Psychology and Psychobiology, University of Zurich, Zurich, Switzerland.*
- Schradin, C. 25. September 2007. A model to study animal's responses to global warming. Talk, *Kimberly Biodiversity Symposium, Kimberley, South Africa.*
- Schradin, C. 25. September 2007. Social flexibility in the striped mouse. Public lecture, *meeting of the South African Association of Naturalists, Kimberley, South Africa.*
- Schradin, C. 24. May 2007. Paternal care in mouse and monkey fathers. Invited talk, *German Primate Centre, Göttingen, Germany.*
- 2006 Schradin, C. 20. June 2006. Social flexibility in the striped mouse: When to live in groups and when to live alone. Invited talk, *Institute for Zoo and Wildlife Research, Berlin, Germany.*
- Schradin, C. 21. June 2006. Social flexibility in the striped mouse: When to live in groups and when to live alone. Invited talk, *Biological Institute, Humboldt University of Berlin, Germany.*

- Schradin, C. 19. May 2006. Social flexibility in the striped mouse: When to live in groups and when to live alone. Talk, *Zoological Institute, University of Zurich, Switzerland*.
- Schradin, C. 19. April 2006. Social flexibility in the African striped mouse: When to be paternal and when to search for mates. Invited talk, *Department of Behavioral Ecology, University of Bern, Switzerland*.
- 2005 Schradin, C. & Pillay, N. Paternal care in the African striped mouse: a flexible and adaptive strategy. Talk, *XXVIII International Ethological Conference, Budapest, Hungary*.
- 2004 Schradin, C. & Pillay, N. Ecological changes over years lead to social changes: from groups to solitary to groups. Talk, *Second European Conference on Behavioural Ecology, Groningen, Netherlands*.
- Schradin, C. When to live in groups and when to live alone: answers from the striped mouse. Talk, *School of Animal, Plant and Environmental Sciences, University of the Witwatersrand, Johannesburg, South Africa*.
- 2003 Schradin, C. & Pillay, N. Social flexibility in the South African striped mouse (*Rhabdomys pumilio*): when to live alone and when to live in groups? Talk, *9th African Small Mammal Symposium, Morogoro, Tanzania*.
- Schradin, C. Namaqualand – in the land of mice. Video presentation, *9th African Small Mammal Symposium, Morogoro, Tanzania*.
- Schradin, C. & Pillay, N. Social flexibility in the South African striped mouse (*Rhabdomys pumilio*): when to live alone and when to live in groups? Talk, *Conference of the Zoological Society South Africa, Cape Town, South Africa*.
- Schradin, C. & Pillay, N. Social flexibility in the South African striped mouse (*Rhabdomys pumilio*): when to live alone and when to live in groups? Talk, *Meeting of the German Zoological Society, Berlin, Germany*.
- Schradin, C. Namaqualand – in the land of mice. Video presentation, *Meeting of the German Zoological Society, Berlin, Germany*.
- Schradin, C. Extreme soziale Flexibilität bei der südafrikanischen Striemengrasmaus (*Rhabdomys pumilio*): mal allein, mal vereint! Talk, *Institute of Behavioural Biology, University Zurich, Switzerland*.
- 2002 Schradin, C. Namaqualand – in the land of mice. Video presentation, *First European Conference on Behavioural Ecology, Münster, Germany*.
- Schradin, C. Namaqualand – in the land of mice. Video presentation, *Anthropological Institute, University Zurich, Switzerland*.
- Schradin, C. The socio-ecology of the striped mouse from the succulent karoo of South Africa. Talk, *Institute of Behavioural Biology, University Zurich, Switzerland*.
- Schradin, C. & Pillay, N. The four-striped mouse as a model for studying paternal care in mammals. Poster, *First European Conference on Behavioural Ecology, Münster, Germany*.
- 2001 Schradin, C. Väterliches Verhalten beim Springtamarin (*Callimico goeldii*) im Vergleich zum Weissbüscheläffchen (*Callithrix jacchus*). Talk, *Anthropologisches Institut, Universität Zürich, Switzerland*.
- Schradin, C. Väterliches Verhalten beim Springtamarin (*Callimico goeldii*) im

- Vergleich zum Weissbüscheläffchen (*Callithrix jacchus*). Invited talk, *Verhaltensbiologisches Institut, Universität Münster, Germany*.
- Schradin, C. Paternal care in Goeldi's monkeys (*Callimico goeldii*). Invited talk, *School of Animal, Plant and Environmental Sciences, University of the Witwatersrand, South Africa*.
- Schradin, C. Paternal infant carrying in Goeldi's monkeys (*Callimico goeldii*): Why starts it so late? Talk, *Graduiertentreffen der Studiengruppe Evolutionsbiologie der DZG, Bielefeld, Germany*.
- Schradin, C. Hormone und Jungenaufzucht. Talk, *VHS-Zürich, Switzerland*.
- Schradin, C. Was Hormone sind und wie sie wirken. Talk, *VHS-Zürich, Switzerland*.
- Schradin, C. Wie Fisch sich einen Harem hält: Männliche Friedensstifter beim Schneckenbuntbarsch (*Neolamprologus multifasciatus*). Invited talk, *Institut für Verhaltensbiologie, Universität Zürich, Switzerland*.
- Schradin, C. & Anzenberger, G. Prolactin and paternal care in New World monkeys. Talk, *ASAB Easter Meeting, Chester College, UK*.
- Schradin, C., Reeder, D. M., Mendoza, S. P., Anzenberger. Prolactin and paternal care in New World monkeys. Talk, *XXVII International Ethological Conference, Tübingen, Germany*.
- 2000 Schradin, C. & Anzenberger, G. Paternal infant carrying in Goeldi's monkeys (*Callimico goeldii*): Why starts it so late? Talk, *17. Ethologentreffen, Utrecht, Netherlands*.
- Schradin, C. & Anzenberger, G. Costs of infant care in common marmosets (*Callithrix jacchus*): Reduction of the leaping distance due to infant carrying. Poster, *International Behavioral Ecology Congress, Zürich, Switzerland*.
- Schradin, C. & Anzenberger, G. Measurement of Prolactin in Urine. Talk, *European Marmoset Research Group, Paris, France*.
- Schradin, C. & Anzenberger, G. Paternal care in Goeldi's monkeys, *Callimico goeldii*. Invited talk, *University of California, Davis, Psychology Department, USA*.
- Schradin, C. & Anzenberger, G. Paternal care in Goeldi's monkeys, *Callimico goeldii*. Invited talk, *University of California, Davis, Primate Seminar, USA*.
- 1999 Schradin, C. Regulation väterlichen Verhaltens. Talk, *Workshop Gruppenmechanismen, Max-Planck-Institute for Behavioral Physiology Seewiesen, Germany*.
- Schradin, C. & Anzenberger, G. Paternal care in Goeldi's monkeys: its endocrinology and motivational development. Talk, *XXVI International Ethological Conference, Bangalore, India*.
- Schradin, C. & Anzenberger, G. Prolactin and paternal care in clawed New World monkeys. Talk, *Centenary Congress of the Anthropological Institute and Museum in Zürich 1899-1999, Switzerland*.
- Schradin, C. & Anzenberger, G. Measuring prolactin in the urine of common marmosets. Talk, *European Marmoset Research Group, Swiss Seminar 1999, Zürich, Switzerland*.

- 1998 Schradin, C. Prolaktin, das Elternhormon. Talk, *Workshop Gruppenmechanismen, Max-Planck-Institute for Behavioral Physiology Seewiesen, Germany.*
- Schradin, C. & Lamprecht, J. Sex-biased immigration in the shell-dwelling cichlid fish *Neolamprologus multifasciatus*. Poster, *16. Ethologentreffen, Halle, Germany.*

References

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