

CV H.-P. Lipp

Name: LIPP, Hans-Peter
Birthdate: May 20 1947
Nationality: Swiss
Title: Ph.D.
Actual Position: Professor Emeritus for Human Anatomy, Institute of Anatomy, University of Zürich, Switzerland; Fractionate Professorship at Kwazulu-Natal University, School of Laboratory Medicine & Health Sciences, Durban, South Africa
Languages: German, English, French

Academic Career

July 2013 ongoing Fractionate Professorship at Kwazulu-Natal University, School of Laboratory Medicine & Health Sciences, Durban
September 2007- July 2012 Full professor of Human Anatomy
July 2001-July 2012 Head of a neurobehavioral core facility within a National Competence Grant to the University of Zurich ("Neural Plasticity and Repair")
May 1995 Professor of Anatomy (Medical Faculty University of Zürich)
Jan 1994 Head of laboratory "Neuroanatomy and behavior"
April 1990 Private Docent for Anatomy, Histology and Embryology
July 1984 Research group leader and lecturer for human anatomy and histology at the Institute of Anatomy of the University of Zürich.
Apr 82 - June 84 Visiting scientist at the Department of Psychology of the Massachusetts Institute of Technology (with W. J. H. Nauta). Career award grant from the Swiss National Foundation for Scientific Research. Research on connectivity and genetic variations of limbic structures.
Jan 81 - March 82 Maître Assistant (Senior Researcher) at the Institute of Anatomy, University of Lausanne (with H. Van der Loos). Research in neuroanatomy, animal psychology, neural and behavioral genetics at the same Institute
Apr 77 - Dec 80 Postdoctoral fellow (premier assistant) at the above institution
Jan 77 - March 77 Research stage at the Institute of Physiology, University of Zürich.
July 75 - Dec 76 Postdoctoral research fellow at the Swiss Federal Institute of Technology, Institute for Behavioral Sciences (with K. Bättig). Research in hypothalamic self-stimulation, behavior genetics and human psychophysiology.
June 75 Ph. D. in Anthropology and Primatology
Jan 71 - May 75 Assistant /Doctorand at the Institute of Physiology of the University of Zürich, Neuroethological dissertation on hypothalamic brain stimulation in marmoset monkeys (with R.W. Hunsperger).
1966 - 1971 Studies in Biology at the University of Zürich (Anthropology, Zoology, Human Anatomy and Physiology, Ethology)

Scientific fields

Neuroanatomy, Behavioral Genetics, Behavior, Neuroecology, Transgenic mice, Spatial cognition, Animal tracking, Homing pigeons, Hippocampus

Academic address:

Institute of Anatomy, University of Zürich, Winterthurerstrasse 190, CH-8057 Switzerland
Tel: +41 635 5330; Fax: +41 635 5702; e-mail: hplipp@anatom.uzh.ch

Fields of research

Main fields and techniques

- hippocampal morphology, adult neurogenesis and behavior in rodents and humans
- behavioral test techniques (computer control of standard tests, development of new tests, development of software packages); development of automated behavioral test systems
- multivariate behavioral analysis, morphometry
- ecological brain research, genetics, evolutionary theory
- studies on the behavioral and cell functions of the prion protein and scrapie inoculation in various wild mice (with U. Agrimi, Istituto Superiore di Sanita, Rome, Italy)
- behavioral testing of mice with targeted deletions or transgenes (up to 2005 90 different mutations with 7000 mice)
- neurobiology of large-scale spatial cognition: GPS tracking of marine birds, combined GPS and EEG tracking of homing pigeons, neuroanatomy of bat hippocampus

Grants

- 1982-1984: Career award grant from the Swiss National Foundation for Scientific Research (SNF) at the MIT in Boston (Prof. W.J.H. Nauta)
- 1985-1988: SNF-Project 3. 041 "Genetics and development of limbic circuitry and behavior"
- 1989-1993: Continuation of above project (SNF 3. 286/31-9470)
- 1989-1992: SNF 31-277737. 89 "Lifetime changes in the human brain"
- 1992-1993: SNF Support Eastern European Countries
- 1993-1996: Swiss Army "Genetics and behavior of military homing pigeons"
- 1993-1996: SNF 31-37497 "Genetical variability of brain and behavior in near-natural settings"
- 1995-1997: Human Science Frontier Program ("Hippocampal LTP, memory and learning")
- 1996-1999: SNF 31-46691 "Brain, behavior and ecology: experimental natural selection of brain traits"
- 1997-1998: SCOPES Institutional Partnership grant "Restoring behavioral brain research at Moscow State University"
- 1997-2000: SNF 438P "Normal functions of the prion protein and new ecologically oriented models of scrapie"

- 1999-2001: EU Biotech: "RCSP: The RAS and CREB signalling pathways in the adult brain - generation of animal models to study learning, memory and plasticity"
- 1999-2002: SNF 31.57139.99 "Micro- and macro-evolution of the hippocampal mossy fibersystem
- 2000-2003 SNF 3152-058822 " Behavioral and neurophysiological analysis of pigeon homing using the global positioning system (GPS) and micro-telemetry"
- 2001-2003: SCOPES Institutional Partnership grant "Integrating Behavioral Brain Research at Moscow State University into European Networks"
- 2001-2009: National Competence Center Grant "Neural Plasticity and Repair": project "Advanced behavioral assessment and brain imaging in rodents" (project leader with several other groups)
- 2001-2005: National Competence Center Grant "Neural Plasticity and Repair": subproject on "Behavioral correlates of adult neurogenesis of rodents in natural and semi-naturalistic environments"
- 2003-2005 EU 5th framework QLRI-CT-2002-81333 "Improved bioassays for TSE agents based on the bank vole, a wild rodent species highly susceptible to scrapie EUROVOLTE" (with U. Agrimi)
- 2002-2004: SNF 31.57139.99 "Micro- and macro-evolution of the hippocampal mossy fiber system" (cont.)
- 2004-2005: SNF 3152A0-101706/1 "The neurobiology of pigeon homing – recording flight paths and electrical brain activity
- 2005-2007: SNF 3100A0-108446 "Approaching the neurobiology of large-scale spatial cognition"
- 2005-2007 SCOPES Institutional Partnership grant " Anchoring European Integration of Behavioral Brain Research at Moscow State University"
- 2005-2009: National Competence Center Grant "Neural Plasticity and Repair": subproject on "A mouse model for analysis and treatment of radiation-induced encephalopathy
- 2006-2008 SME Grant in European FP6 Integrated Project "Entrainment of the circadian clock – EUCLOCK
- 2006-2007 SME Grant in European FP6 Specific Targeted Research Project (STREP/SME "European project on the characterisation of transgenic rat models for neurodegenerative and psychiatric diseases: Automated home cage analyses, live imaging and treatment – RATSTREAM")
- 2006-2008 SME Grant in European FP6 Specific Targeted Research Project (STREP/SME "Novelty Tuning: behavioural, electrophysiological and molecular mechanisms of novelty detection – NOVELTUNE"
- 2006-2008: SME Grant in European FP6 Specific Targeted Research Project (STREP/SME "High-throughput, fully automated and cost-effective behavioural phenotyping of normal, clinical and genetic mouse models – INTELLIMAZE". **Coordinator.**
- 2008-2011 SNF 31-122589 „Approaching the neurobiology of large-scale spatial cognition: focus on the olfactory system"
- 2009-2012 Swiss-SouthAfrican Research Programme. Project JRP09 "Neural stem cell activity in the human hippocampus: lifetime changes and comparability to established and novel animal models".
- 2009-2013 FP7 Grant. "European Consortium on Synaptic Protein Networks In Neurological and Psychiatric Diseases" (EUROSPIN).
- 2009-2011 SCOPES Joint Research Project in Ukraine "Behavioral and neural effects of gravitational anomalies on homing pigeon navigation".
- 2010-2012 Industry support "Electroencephalography and navigational behavior in laboratory animals and pigeons"
- 2011 Sino-Swiss Science and Technology Cooperation "Magnetoreception, gravitoreception and orientation in homing pigeons" Exchange visitor from China
- 2010-2011 ESA Human Space Flight μ -NAV-1. "Short-time influences of μ -and hyper gravity on spatial navigation and EEG in adult C57Bl6/N mice" (with Giovanni Colacicco)
- 2011-2013 The Polish-Swiss Research Programme "Validation of tissue- and age-specific therapeutic intervention on synaptopathies relevant to autism spectrum disorders". With E. Knapska from the NENCKI Institute Warsaw.
- several smaller grants (European Training Program in Brain and Behavior, Julius-Klaus-Stiftung für Genetik, In-house grants University of Zürich).

Awards

1981 Hans-Nachtsheim-Award from the German Society of Human Genetics for contributions to the heritability of learning. (With H. Schwegler and W. Buselmaier).

1995 Best paper of the year, by the Swiss Society of Intensive Medicine (with O. Baenziger, J. Jäggi, A.C. Müller, C.G. Morales, A.E. Lipp, G. Duc and H.U. Bucher).

2009 Distinguished scientist award by the International Behavioural and Neural Genetics Society

Editorial Boards

Neurogenetics; Behavioural Brain Research; Genes, Brain and Behavior

Grant Reviews

Austrian Academy of Science, FUNGO (Netherland Science Foundation), National Science Foundation USA, Swiss National Science Foundation, Wellcome Trust UK, Deutsche Forschungsgemeinschaft

Publication Reviews

Behavioural Brain Research, Behavioral and Brain Sciences (Associate Commentator), Behavior Genetics, Brain Research Bulletin, Developmental Psychobiology, Experimental Brain Research, Experientia, Journal of Neuroscience Methods, Hippocampus, Nature, Journal of Neuroscience, Neurogenetics, Science, European Journal of Neuroscience, Learning & Memory, Journal of Experimental Biology, PNAS.

Membership in Professional Societies

- European Federation of Neuroscience Societies (FENS)
- European Brain and Behavior Society (EBBS)
- International Behavioural and Neural Genetics Society (IBANGS)
- International Brain Research Organization (IBRO)
- Swiss Society of Anatomy, Histology & Embryology
- Swiss Society for Physiology
- Society for Neuroscience
- Swiss Society for Neuroscience

Special activities

- Co-founder and founding president International Behavioural and Neural Genetics Society (IBANGS) 1996-1999
- Co-founder of Journal "Genes, Brain and Behavior" (2001)
- Founder of the Swiss Homing Pigeon Foundation
- Founder of spin-off company "NewBehavior" (2002), CSO (Chief Scientific Officer) of same company.

Teaching

1971-1975	Undergraduate practical courses in medical physiology, University of Zürich
1973-1976	Anatomy, physiology and histology for paramedical professions in Zürich
1977-1982	Gross anatomy and dissection, Medical School University of Lausanne
1984-2012	Lectures and practical courses in gross anatomy, neuroanatomy, histology and embryology (about 200 hours per year) for students of medicine and biology, Medical School University of Zürich.
1994-2012:	Regular lecturer at the the French-American summer schools and symposia on Heredity, Nervous System and Behavior
1996-2012:	Various graduate and postgraduate courses in neuroanatomy and behavioral neuroscience at the Center of Neuroscience of the University of Zürich
2005-2012:	Teaching & practical courses in neuroanatomy for Human Biology Curriculum at the University of Zürich

Organisation of Schools

September 1994:	NATO Advanced Study Institute "Behavioural Brain Research in Naturalistic and Semi-Naturalistic Settings", Maratea, Italy
August 1998:	Institutional Partnership Summerschool Swiss National Science Foundation "Ecological Brain Research in Russia", Moscow/Bubonizi, Russia
July 2001:	1. EMBO School "Behaviour of transgenic mice", Zürich
July 2002:	Institutional Partnership Summerschool Swiss National Science Foundation "Ecological Brain Research in Russia - II", Moscow/Bubonizi, Russia
July 2003:	2. EMBO School "Behaviour of transgenic mice", Zürich
July 2006:	Institutional Partnership Summerschool Swiss National Science Foundation "Ecological Brain Research in Russia - III", Moscow/Bubonizi, Russia
July 2011:	3. EMBO School "Behaviour of transgenic mice", Zürich

Army activities

1970-1994 Officer in the Swiss Army Homing Pigeon service. Lieutenant to Major. Head from 1993-1994. Main function: instruction and field studies with pigeons

Evaluations

Sonderforschungsbereich Cognition & Movement, University of Tübingen
FP 6 expert panel in Bruxelles (Neuroscience)
University of Groningen, Center for Neuroscience
University of Helsinki, Life Sciences

Advisory boards &

Steering committees: Institute of Neurobiology, Magdeburg (2000-2006)
Advisory Board "Center of Molecular Physiology of the Brain" University of Göttingen (2007 ff)
Advisory Board "Stanford Behavioral and Functional Neuroscience Laboratory", Stanford University School of Medicine (2008 ff).
COMP COG (European Science Foundation Network for Comparative Cognition in Human and Non-human Species), steering committee 2008-2012.

Supervised Theses

MD and MDV Theses (Medical Faculty Univ. of Zürich)

- Schönholzer, W. (1988) Selektive Zucht auf geborene "Sieger" und "Verlierer" im Röhren-Dominanztest bei der Labormaus. *Institut für Zuchthygiene, Veterinärmedizinische Fakultät; Anatomisches Institut, Medizinische Fakultät*. Universität Zürich, Zürich, p. 58.
- Wolfer, D.P. (1988) Die postnatale Differenzierung rekurrenter Moosfaser-Kollateralen und des Verhaltens beim Meerschweinchen. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 43.
- Schöpke, R. (1992) Swimming Navigation and Structural Variations of the Infrapyramidal Mossy Fibers in the Hippocampus of the Mouse. *Anatomisches Institut*. Universität Zürich, Zürich, p. 14.
- Bernasconi-Guastalla, S. (1993) Hippocampal Mossy Fibers and Swimming Navigation in Mice: Correlations with Size and Left-Right Asymmetries. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 25.
- Büchel, C.J. (1993) Grössenvariationen des Corpus callosum bei Inzuchtmäusen und Hybriden und ihr Verhalten im Schwimmaignationstest. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 39.
- Jöri, P. (1993) Quantitative Untersuchungen rekurrenter Moosfaserkollateralen im Hippocampus von Menschen unterschiedlichen Alters. *Department of Zoology*. M.Sc., Zürich, p. 44.
- Gruber, A.D. (1994) Weak or missing paw lateralization in a mouse strain (I/LnJ) with congenital absence of the corpus callosum. *Anatomisches Institut, Neuroanatomie und Verhalten*. Anatomisches Institut, Neuroanatomie und Verhalten, Zürich, p. 16.
- Hausheer, Z. (1995) Selective Breeding for Extremes in Open-field Activity of Mice Entails a Differentiation of Hippocampal Mossy Fibers. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 9.
- Huber, R.F. (1996) Versuche zur natürlichen Selektion am Moosfasersystem der Hausmaus: Veränderungen nach einem Jahr in einem Freigehege. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 32.
- Kohler, E. (1996) Rekurrente Moosfaserkollateralen im Hippocampus: eine quantitative Untersuchung der nichtpathologischen Variabilität beim Menschen. *Institute of Zoology*. University of Zürich, Zürich, pp. 1-52.
- Leitinger, B. (1996) Swimming Navigation, Open-Field Activity, and Extrapolation Behavior of Two Inbred Mouse Strains with Robertsonian Translocation of Chromosomes 8 and 17. *Anatomisches Institut*. Universität Zürich, Zürich, p. 12.
- Demarmels, T.B. (1997) Evaluation eines kommerziellen Transpondersystemes "TIPES" für Schlagmanagement und wissenschaftlichen Einsatz bei Brieftauben. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 52.
- Nadig-Glaser, U. (1997) Der Einfluss von prä- und postnataler Alkoholverabreichung in moderater Dosierung auf die Entwicklung des hippocampalen Moosfaser-Systems bei psychogenetisch selektionierten Rattenstämmen. *Anatomisches Institut*. Universität Zürich, Zürich, p. 75.
- Moos, M. (1998) Morphometrische Untersuchung der hippocampalen Moosfasern bei erwachsenen Mäusen nach präntaler Oxazepam-Behandlung. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 45.
- Kenig, S. (2000) Angstkonditionierung und Vermeidungslernen bei Mäusen mit gezielter transgener Ausschaltung des Proteins Ras/GRF. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 27.
- Vich-Plesko, M. (2000) Qualitative and Quantitative Morphological Evidence for Ongoing Myelination in the Hippocampus of the Adult Mouse. *Anatomisches Institut*. Universität Zürich, Zürich, p. 21.
- Ulrich, C. (2001) Left-hemispheric superiority for visuo-spatial information in homing pigeons. *Institute of Anatomy*. University of Zürich, Zürich, p. 20.
- Valenti, P. (2001) Same target, different effects: late-onset ataxia and spatial learning in Prion protein deficient mouse lines. *Anatomisches Institut*. Universität Zürich, Zürich, p. 32.
- Rissi, S. (2002) Moosfasersystem und Verhalten bei der Hausmaus nach Embryonentransfer. *Institute of Anatomy*. University of Zürich, Zürich, p. 33.
- Tschopp, M. (2002) Quantitative Untersuchung der Moosfaserprojektionen im Hippocampus von 4 freilebenden Wühlmausarten. *Anatomisches Institut*. Universität Zürich, Zürich, p. 31.
- Renaudineau, S. (2003) Latéralisation hémisphérique et perception des anomalies géomagnétiques chez le pigeon voyageur: *Columba Livia*. *DEA Neurosciences, Comportements, Cognition*. Université Paul Sabatier Toulouse III, Toulouse, p. 46.
- Savini, M. (2003) Percezione delle Anomalie Magnetiche e Lateralizzazione Emisferica durante l'Orientamento nel Piccione Viaggiatore. *Dept. Biologia Animale*. Università "La Sapienza", Roma, p. 90.
- Al-Wazzan, F. (2004) Der Einfluss prozeduraler Variablen auf das „Auditory Fear Conditioning“ bei normalen und mutanten Mäusen. *Institute of Anatomy*. University of Zürich, Zürich, p. 36.
- Huber, L.C. (2004) Analysis of exploratory and fear-related behavior in knockout mice: comparison of open field and elevated Null-maze. *Anatomisches Institut, Neuroanatomie und Verhalten*. Universität Zürich, Zürich, p. 39.
- Lukic, N. (2004) Hausmaus und Spitzmaus: Moosfaservariationen und Oekologie. *Institute of Anatomy*. University of Zürich, Zürich, p. 41.
- Ceschi, A. (2005) Effects of experimental natural selection on exploratory activity and anxiety in mice: assessment by means of three behavioral paradigms. *Institute of Anatomy*. University of Zürich, Zürich, p. 47.
- Colacicco, G. (2005) Attentional set-shifting in mice: modification of a rat paradigm and evidence for strain-dependent variation. *Institute of Anatomy*. University of Zürich, Zürich, p. 18.
- Morf, S. (2005) Variabilität und Reproduzierbarkeit von Befunden aus Verhaltenstests bei Mäusen Einfluss der Haltungsbedingungen. *Institute of Anatomy*. University of Zürich, Zürich, p. 65.
- Patcas, R. (2005) Morphometrische Untersuchung der genetischen Stabilität hippocampaler Moosfaserprojektionen bei Mäusen. *Institute of Anatomy*. University of Zürich, Zürich, p. 45.
- Hobi, D. (2006) Verhaltensänderungen und hippocampale Moosfasern bei Mäusen mit ausgeschaltetem Neuroserpin-Gen. *Institute of Anatomy*. University of Zürich, Zürich, p. 42.
- Keller, A. (2006) Initial orientation of pigeons released with GPS data loggers: comparison with vanishing bearings. *Institute of Anatomy*. University of Zurich, Zurich, p. 46.

- Bickel, S. (2007) The NMDA receptor antagonist Ketamine induces schizophrenia-like early auditory sensory encoding deficits in healthy humans. *Institute of Anatomy, Medical Faculty*. University of Zurich, Zurich, p. 23.
- Mühlemann, S. (2007) Do short-term memory deficits in mice deficient for the mental retardation gene Gdi1 depend on impaired recycling of neurotransmitters? *Institute of Anatomy*. University of Zürich, Zürich, p. 45.
- Khalaji, S. (2008) Effect of 4-Methylbenzylidene Camphor (4-MBC) and 3-Benzylidene Camphor (3-BC) on Adult Neurogenesis of the Rat. *Institute of Anatomy*. University of Zürich, Zürich, p. 33.
- Zinn, P. (2008) Factor analysis of behavioral performance of B6/129 F2 hybrid mice in open field, radial maze, water maze and automated test system Intellicage. *Institute of Anatomy*. University of Zürich, Zürich, p. 42.
- Drenth, T. (2012) Quantifizierung der Zellpopulationen im Hippocampus von *Elephantulus myurus*. *Institute of Anatomy*. University of Zürich, Zürich, p. 31.
- Menges, D. (2013) Hippocampal cell death in the Eastern Rock Elephant Shrew (*Elephantulus myurus*) in context with adult hippocampal neurogenesis. *Institute of Anatomy*. University of Zürich, Zürich, p. 41.

Master of Science Theses

- Schiesser, B. (1996) Lucifer-Yellow Füllung von Pyramidenzellen im Mäusehippocampus zur Darstellung Genetischer Variabilität in Dendritenbäumen. *Dept. of Zoology*. Ms.Sc., Zürich, p. 44.
- Amrein, I. (1998) Variabilität im Menschlichen Gehirn. *Institute of Anatomy*. University of Zurich, Zurich, p. 86. Klaus, F. (2008) Der Effekt von belohntem Laufen auf die Laufleistung und die Neurogenese von C57BL/6 Mäusen. *Institute of Anatomy*. University of Zürich, Zürich, pp. 1-59.
- Schumacher, E. (1999) Stress and spatial learning. *Institute of Anatomy*. University of Zurich, Zurich, p. 47.
- Ben Abdallah, N. (2003) Behavioral phenotyping in mice lacking neuroserpin: confounds caused by anxiety-like behavior. *DEA Neurosciences, Comportements, Cognition*. Université Paul Sabatier Toulouse III, Toulouse.
- Marionneau, R. (2007) Evaluation d'une méthode d'étude de la navigation chez le pigeon voyageur par GPS et électro-encéphalogramme embarqué : Analyse de lâchers depuis la mer. *Institute of Anatomy and M2R Neurosciences, Comportement, Cognition*. University of Zurich and Université Paul Sabatier Toulouse, Zurich, p. 38.
- Sieber, A. (2007) Spontaneous activity of mice can be measured more reliably by newly developed devices in a social home context. *Institute of Anatomy*. University of Zurich and Swiss Federal Institute of Technology, Zurich, p. 58.
- Hauser, T. (2008) Die Beziehung zwischen Zellproliferation, Neurogenese und physischer Aktivität in der Langschwanz-Waldmaus (*Apodemus sylvaticus*). *Institute of Anatomy*. University of Zürich, Zürich, pp. 1-54.
- Strauch, S. (2008) Immunhistochemische und histologische Untersuchungen zur Erforschung der neurobiologischen Grundlagen des Heimkehrverhaltens von Brieftauben. *Institute of Anatomy*. University of Zürich, Zürich, p. 45.
- Nötzli, S. (2009) The p66Shc knockout mouse: effects of the p66Shc gene knockout on short- & long-term survival, learning abilities and adult hippocampal neurogenesis. *Institute of Anatomy*. University of Zurich, Zurich, p. 52.
- Becker, A. (2011) Adulte Neurogenese im Hippocampus von Graumullen (*Cryptomys hottentotus pretoriae*). *Institute of Anatomy*. University of Zürich, Zürich, p. 33.
- Cavegn, N. (2011) Adult hippocampal neurogenesis in three South African rodent species. *Institute of Anatomy*. University of Zürich, Zürich, p. 54.
- Tschudi, A. (2012) GPS tracking of homing pigeons carrying magnets or nasal plugs. *Institute of Anatomy*. University of Zürich, Zürich, p. 45.

PhD Theses

- Tremml, P. (1999) Developmental functions of proteins associated with Alzheimer's disease: Reflex ontogeny and adult learning behavior of mice. *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 111.
- Magara, F. (1999) A Mouse Model of Agenesis of the Corpus Callosum: Genetics, Physiology and Behavior. *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 102.
- Amrein, I. (2004) Functional and neuroanatomical correlates of adult neurogenesis in the dentate gyrus of domesticated and wild rodents. *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 66.
- Bickel, S. (2007) Neurophysiological characterization of a putative genetic mouse model of schizophrenia with reduced NMDA receptor functioning. *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 104.
- Ben Abdallah, N. (2009) Modulation of adult hippocampal neurogenesis in mice by aging, radiation, and knockout of the cell cycle regulatory gene cyclin D2. *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 161.
- Dell'Arciccia, G. (2009) Behavioural factors influencing orientation and navigation in homing pigeons (*Columba livia*). *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 103.
- Gatome, C.W. (2010) Morphological correlates of spatial navigation, orientation and memory in fruit bats. *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 146.
- Klaus, F. (2011) Modulation of adult hippocampal neurogenesis in laboratory- and wild mice. *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 73.
- Kharazmi, J. (2013) Identification of regulatory regions in the Drosophila dmyc Gene: bioinformatics analyses combined with reporter activity studies. *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 140.
- Blaser, N. (2013) Cognitive mechanisms and geophysical factors influencing navigation in homing pigeons (*Columba livia*). *Mathematisch-Naturwissenschaftliche Fakultät*. Universität Zürich, Zürich, p. 102.