



**7th International Conference on
Behaviour, Physiology and Genetics
of Wildlife**

Scientific Programme

Berlin, 21st - 24th September 2009

Welcome

On behalf of the Leibniz Institute for Zoo and Wildlife Research (IZW) and the European Association of Zoos and Aquaria (EAZA), we heartily welcome you at the **7th International Conference on Behaviour, Physiology and Genetics of Wildlife**.

We are confident that your participation in this conference will contribute to a stimulating exchange of ideas among international specialists from many disciplines working with free-ranging and captive animals.

Germany's capital, Berlin, offers a vibrant cultural life, including famous sites of contemporary architecture, museums, art galleries, two zoos and much more. We hope you will enjoy both the conference and the hosting city.

We hope to make this conference carbon neutral and ecologically friendly. Therefore the conference t-shirts and bags have been produced under the label **ORGANIC** and **FAIR TRADE**. The scientific programme booklet has been printed on recycling paper and all paper products have been printed on: **FOREST STEWARDSHIP COUNCIL** labelled paper. We will make sure that the **CARBON NEUTRAL FEE** will go 100 % to a certified reforestation and habitat protection project.










Our aim is to make your stay productive and pleasurable. Please do not hesitate to contact us whenever you need any help and or advice.

Simone Sommer, Steven Seet, Petra Kretzschmar and Heribert Hofer



BfR - Federal Institute for Risk Assessment, Berlin-Marienfelde, GERMANY

Contents

Scientific programme - general information	4
Overview of daily schedules	6
Scientific programme	
Monday, 21 September	8
Tuesday, 22 September	10
Wednesday, 23 September	13
Thursday, 24 September	16
Posters	
 Behavioural ecology	17
 Stress & disturbance	18
 Reproduction biology	19
 Conservation genetics	20
 Conservation biology	21
 Communications in mammals and birds	22
 Stable isotopes, nutrition and energetics	22
 Behavioural rhythms	22
 Research by, in, with and for zoos, aquaria and other <i>ex situ</i> -institutions	23
Conference venue	24
Social events	26
Public transport (BVG) information	28
Acknowledgements / Sponsors	31
Map of conference venue	
Ground floor / Conference office and Foyer	32
First floor / Lecture rooms and Gallery	33
Organisation and contact	34

Scientific programme - general information

Oral presentations: There will be five **plenary talks** in the main lecture hall (**MLH**) on the first floor; one at the beginning of each morning and one at the beginning of the Tuesday and Wednesday afternoon sessions. **Contributed talks** will be held in eight main sessions (**MLH**) and in six workshops (**MLH** & seminar room **SR**). Contributed talks in the main sessions comprise 10 minutes of presentation and 3 minutes of discussion. At the end of the discussion 2 minutes will be reserved to allow a smooth change between successive speakers. Due to the tight schedule, the chair persons will ensure that presentations are strictly limited to the time they have been allocated.

Oral presentations require a CD-ROM or USB-stick containing all necessary information in a single **PowerPoint presentation file**. For technical reasons, individual laptops cannot be connected to the beamer. Please submit your presentation **on your arrival** at the conference office.

Posters will be displayed in the gallery throughout the entire conference period grouped in nine major topics: behaviour ecology; stress & disturbance; reproduction biology; conservation genetics; conservation biology; communication in mammals and birds; stable isotopes, nutrition and energetics; behaviour rhythms; and research by, in, with and for zoos, aquaria and other *ex situ*-institutions. Within these topics the posters are arranged alphabetically (according to first author). Each poster has been allocated a number that indicates the board on which it can be found. The number of each poster presentation is listed in this programme booklet. At registration, you will be supplied with this number along with pins to mount your poster. Poster should be mounted upon arrival.

Poster presentation: We will have a poster presentation for each of the main topics. Contributors of posters are requested to present their posters in person during these sessions.

Dates and times:

22.09.2009	10:30 am & 12:30 pm	Conservation genetics/ stress & disturbance
22.09.2009	03:30 pm & 05:30 pm	Behavioural rhythms/communications in mammals and birds/ research by, in, with and for zoos, aquaria and other <i>ex situ</i> -institutions
22.09.2009	07 :00 pm	All topics

23.09.2009	10:30 am	Behavioural ecology
23.09.2009	12:30 am	Behavioural ecology/reproduction biology
23.09.2009	03:00 pm & 05:00 pm	Conservation biology/stable isotopes, nutrition and energetics
24.09.2009	10:30 am	Reproduction biology

Contributors of posters are also requested to present their posters in person during the “**Poster & pasta party**” which is scheduled from 07:00 pm onwards on Tuesday, September 22nd. Posters have to be removed by 04:00 pm on Thursday, September 24th.

Workshops: You are welcome to join any of the **workshops** that will be held during the conference.

Workshop I “*Research by, in, with and for zoos, aquaria and other ex-situ institutions*” is scheduled for **Monday afternoon, September 21st (03:00 pm – 06:30 pm)**; seminar room.

Workshop II “*Communication in mammals and birds*” is scheduled for **Monday afternoon, September 21st (03:00 pm – 06:30 pm)**; main lecture hall.

Workshop III “*Evolutionary genomics*” is scheduled for **Tuesday afternoon, September 22nd (04:00 pm – 07:00 pm)**; main lecture hall.

Workshop IV “*Behavioural rhythms*” is scheduled for **Tuesday afternoon, September 22nd (04:00 pm – 07:00 pm)**; seminar room.

Workshop V “*Stable isotopes, nutrition and energetics*” is scheduled for **Thursday afternoon, September 23rd (03:30 pm – 06:45 pm)**; seminar room.




Workshop VI “*Welfare and conservation*” is scheduled for **Thursday afternoon, September 23rd (03:30 pm – 06:45 pm)**; main lecture hall.




Abstracts of all scientific contributions to the 7th International Conference on Behaviour, Physiology and Genetics of Wildlife are published in the “Conference proceedings” by the Leibniz Institute for Zoo and Wildlife Research (IZW) in Berlin. The page numbers of these abstracts are listed next to the contribution titles in the programme below.

Presenting authors of abstracts with multiple authors are usually the first name listed. If the first author is not present, the representing author is indicated in the programme.

Overview of daily schedules

Time	Monday, 21.09.09		Tuesday, 22.09.09		
			08:00 am - 07:00 pm	Registration (FOYER)	
			08:45 am	Opening session (MLH)	
			09:00 am	Plenary talk Conservation genetics (MLH)	
			10:00 am	Session I Conservation genetics (MLH)	
			10:30 am	Coffee break & poster session (FOYER & GALLERY)	
			11:00 am - 12:30 pm	Session II Conservation genetics (MLH)	
			12:30 pm	Lunch (CANTEEN) & poster session (GALLERY)	
			01:30 pm	Plenary talk Stress & disturbance (MLH)	
			02:30 pm	Session III Stress & disturbance (MLH)	
12:00 am - 06:30 pm	Registration (FOYER) & mounting of posters (GALLERY)		03:30 pm	Coffee break & poster session (FOYER & GALLERY)	
03:00 pm	Workshop I Research by, in and with zoos and aquaria	Workshop II Communication in mammals and birds	04:00 pm	Workshop III Evolutionary genomics	Workshop IV Behavioural rhythms
04:35 pm	Coffee break (GALLERY)		05:30 pm	Coffee break & poster session (FOYER & GALLERY)	
05:00 pm	(SR)	(MLH)	05:50 pm	(MLH)	(SR)
06:30 pm	Welcome evening		07:00 pm	Poster & pasta party	

 Behavioural ecology  Stress & disturbance  Reproduction biology

 Conservation genetics  Conservation biology  Communication in mammals and birds

- Abbreviations: MLH: main lecture hall; SR: seminar room
- For locations see map of venue on pages 32 - 33

Time	Wednesday, 23.09.09		Thursday, 24.09.09
08:00 am - 07:00 pm	Registration (FOYER)		08:00 am - 12:00 am Registration (FOYER)
09:00 am	Plenary talk Behavioural ecology (MLH)		09:00 am Plenary talk Reproductive biology (MLH)
10:00 am	Session IV Behavioural ecology (MLH)		10:00 am Session VII Reproductive biology (MLH)
10:30 am	Coffee break & poster session (FOYER & GALLERY)		10:30 am Coffee break & poster session (FOYER & GALLERY)
11:00 am	Session V Behavioural ecology (MLH)		11:00 am Session VIII Reproductive Biology (MLH)
12:30 pm	Lunch (CANTEEN) & poster session (GALLERY)		12:15 pm Poster award & closing session (MLH)
01:30 pm	Plenary talk Conservation biology (MLH)		12:30 pm Lunch (CANTEEN)
02:30 pm	Session VI Conservation biology (MLH)		01:30 pm - 04:00 pm Removal of posters
03:00 pm	Coffee break & poster session (FOYER & GALLERY)		02:30 pm - 04:30 pm Guided visit to Zoo Berlin (meet 01:30 pm at BfR ENTRANCE)
03:30 pm	Workshop V Stable isotopes, nutrition and energetics	Workshop VI Welfare & conservation	
05:00 pm	Coffee break & poster session (FOYER & GALLERY)		
05:30 pm	(SR)	(MLH)	
07:00 pm	Banquet (meet at BfR entrance)		

Stable isotopes, nutrition and energetics Behavioural rhythms

Research by, in, with and for zoos, aquaria and other *ex situ*-institutions

Scientific programme

Monday, 21.09.09			
12:00 am - 06:30 pm		Registration (registration desk) Submission of PowerPoint presentation (conference office) Mounting of posters (gallery)	
Workshop I Research by, in, with and for Zoos, Aquaria and other <i>ex situ</i>-Institutions WS leader: LEUS K			Abstract page
03:00 pm	LEUS KRISTIN	Research by, in, with and for zoos, aquaria and other <i>ex situ</i> -institutions: examples and discussion	8
03:05 pm	PEREBOOM ZJEF JJM	From menagerie to laboratory? The history of research in zoos	148
03:20 pm	FIDGETT ANDREA L	Developing the research potential of zoos and aquaria; introducing the research strategy of the European Association of Zoos and Aquaria	71
03:35 pm	DICKIE LESLEY ET AL.	The 2009 EAZA research survey: results and the future for research in EAZA zoos	57
03:50 pm	STEVENS JEROEN MG	From 'living cameras' to 'evil scientists': balancing the needs and perceptions of different parties involved in zoo research	184
04:05 pm	GANSLOBER UDO ET AL.	From EEP to high-end research and back: the example of the southern white rhino (<i>Ceratotherium simum simum</i>)	78
04:20 pm	SCHWARZENBERGER FRANZ, WALZER CHRIS	What does it need to make good conservation research and to create conservation impact	177
04:35 pm		Coffee break	
05:00 pm	SCHMUCKER SONJA S ET AL.	Assessing the fine structure of oral activities in captive giraffes (<i>Giraffa camelopardalis</i>)	171
05:15 pm	NIENHAUS YVONNE, KOLTER LYDIA	Activity budgets of meerkats (<i>Suricata suricatta</i>) – comparison <i>in-situ</i> and <i>ex-situ</i>	140
05:30 pm	MÜLLER DENNIS WH ET AL.	Breeding history and recommendations for giraffids (family <i>Giraffidae</i>) with special emphasis on seasonal patterns	131
05:45 pm	Discussion		
From 06:30 pm onwards		Welcome evening	

Monday, 21.09.09			
Workshop II Communication in mammals and birds WS leader: BONADONNA F, DEHNHARD M			Abstract page
03:00 pm	PART I	Olfaction	
*	BONADONNA FRANCESCO	Petrels' olfactory world: from homing to mate choice	12
	NIEMANN NADJA, KOLTER LYDIA	Response to olfactory lures in Asian golden cat, leopard cat and fishing cat	139
		Discussion: Why so few pheromone themes?	
*	PART II	Acoustic	
	MILLER JACQUELINE R	Patterns and paradigms in vocal signaling - spectral diversity in North and Central American mice	127
	BITTNER EVAN ET AL.	Vocal recognition and discrimination in Asian elephants (<i>Elephas maximus</i>)	32
	LELIVELD LISETTE MC ET AL.	Acoustic correlates of individuality in the vocal repertoire of a nocturnal lemur (<i>Microcebus murinus</i>)	121
04:35 pm	Coffee break		
05:00 pm	EFREMOVA KSENIYA ET AL.	The vocal development of the goitred gazelle <i>Gazella subgutturosa</i> , a species with permanently descendent larynx	66
	JANIK VINCENT M	Chorussing in melon-headed whales (<i>Peponocephala electra</i>)	101
	Poster presentations	We kindly request the authors of posters to give a 5 min talk	
		Discussion	
From 06:30 pm onwards	Welcome evening		

* Flexible time frame; workshop leader will decide about schedule on site

Tuesday, 22.09.09			
08:00 am - 7:00 pm		Registration (registration desk) Submission of PowerPoint presentation (conference office) Mounting of posters (gallery)	
08:45 am		Opening session	
Plenary talk Chair: SOMMER S			Abstract page
09:00 am	TABERLET PIERRE	Conservation genetics in the age of evolutionary and ecological genomics	6
Session I: Conservation genetics Chair: CASTRO-PRIETO A			
10:00 am	CORRALES DUQUE CAROLINA, HÖGLUND JACOB	Landscape genetic structure of the black grouse (<i>Tetrao tetrix</i>) in Sweden	49
10:15 pm	CZARNOMSKA SYLWIA ET AL.	Genetic population structure of the wolf (<i>Canis lupus</i>) in Poland	51
10:30 am		Coffee break & poster session: Conservation genetics/stress & disturbance	
Session II: Conservation genetics Chair: SMITH S			
11:00 am	ANDERSON-LEDERER ROSALYNN M ET AL.	The genetic rescue of black rhinoceros (<i>Diceros bicornis</i>): redressing translocation bias for longer-term meta-population management	19
11:15 am	SILBERMAYR KATJA ET AL.	High mitochondrial differentiation levels between domestic and Mongolian wild Bactrian camels (<i>Camelus ferus</i>), a basis for rapid detection of maternal hybridization	181
11:30 am	SCHUBERT GRIT ET AL.	Complex patterns of Y-chromosome variation in male-philopatric primates	175
11:45 am	KELLER CHRISTINA ET AL.	Phylogeny of baboons in southern Africa	108
12:00 am	DE THOISY BENOIT ET AL.	Population history, phylogeography, and conservation genetics of the South American lowland tapir (<i>Tapirus terrestris</i>)	54
12:15 pm	PATOUE MARIE-LILITH ET AL.	Evolutionary history of the palm civets (<i>Paradoxurus hermaphroditus</i>) - a new model for Asian biogeography	146
12:30 pm		Lunch & poster session: Conservation genetics/stress & disturbance	

Tuesday, 22.09.09			
Plenary talk			Abstract page
Chair: HOFER H			
01:30 pm	APOLLONIO MARCO	Twenty five to one: why and how humans are a nuisance for wild ungulates in Europe	5
Session III: Stress & disturbance			
Chair: HOFER H			
02:30 pm	ALMASI BETTINA ET AL.	The ability to rise a stress-response is linked to melanin-based colouration in barn owls	18
02:45 pm	FINKLER HILIT, TERKEL JOSEPH	Endocrinological and behavioural differences between neutered and intact female cats living in urban social groups	74
03:00 pm	JENNI-EIERMANN SUSANNE ET AL.	Inferring habitat quality and human disturbance from faeces of birds	102
03:15 pm	LEE CRUZ LARISA, HAMER KEITH C	Variability in provisioning strategies in the Galapagos blue-footed booby	120
03:30 pm	Coffee break & poster session: Behavioural rhythms/ communications in mammals and birds/research by, in, with and for zoos, aquaria and other <i>ex situ</i> -institutions		
Workshop III			
Evolutionary genetics			
WS leader: TABERLET P & SOMMER S			
			Abstract page
04:00 pm	TABERLET PIERRE	Evolutionary approaches in conservation: from genetics to genomics	9
04:30 pm	CASTRO-PRIETO AINES ET AL.	Immunegene diversity of the free-ranging Namibian cheetah population	41
04:50 pm	NISKANEN ALINA ET AL. presenting author: ASPI JOUNI	Diversity and selection of MHC class II genes in Finnish wolves	141
05:10 pm	SMITH STEVE ET AL.	Regional differences in the relationship between MHC variability and fitness in Populations of European brown hares (<i>Lepus europaeus</i>)	182
05:30 pm	Coffee break & poster session: Behavioural rhythms/ communications in mammals and birds/research by, in, with and for zoos, aquaria and other <i>ex situ</i> -institutions		
05:50 pm	AXTNER JAN, SOMMER SIMONE	MHC gene expression in relation to parasite burden in a non-model organism, the yellow-necked mouse (<i>Apodemus flavicollis</i>)	21
06:10 pm	WEYRICH ALEXANDRA ET AL.	Seasonal changes in roe deer (<i>Capreolus capreolus</i>) testicular gene expression pattern measured by expression microarray analysis	199
06:30 pm	ABDELKRIM JAWAD ET AL.	Microsatellite mining using next generation sequencing	15
06:50 pm	Discussion		
07:00 pm	Poster & pasta party		

Tuesday, 22.09.09			
Workshop IV Behavioral rhythms WS leader: DAAN S & BERGER A			Abstract page
04:00 pm	DAAN SERGE	Circadian activity rhythms in rodents: orthodox and unorthodox	13
04:30 pm	BAGANZ DANIELA ET AL. presenting author: STAAKS GEORG	From fishy signals to fish behaviour pattern – the next step	22
04:45 pm	PUTILOV ARCADY A	Spectral and periodogram analyses of the interrelationships between circadian and ultradian components of activity: Examples from the studies of distinct vertebrate species	160
05:00 pm	HECKMANN ILJA, BENESCH ANNETTE	Introducing activity pattern: a versatile analysis programme for activity data	93
05:15 pm	BERGER ANNE, DETTKI HOLGER	Presentation of versatile chronobiological analysis tools written in R-language	29
05:30 pm	Coffee break & poster session: Behavioural rhythms/ communications in mammals and birds/research by, in, with and for zoos, aquaria and other <i>ex situ</i> -institutions		
05:50 pm	PERTL MARTINA ET AL.	Chronobiological investigations on captive new born giant Panda cubs (<i>Ailuropoda melanoleuca</i>)	150
06:05 pm	KANDLER CLAUDIA ET AL.	The nocturnal activity pattern of African elephants in captivity - an indicator of well-being	107
06:20 pm	KOJOLA ILPO, HEIKKINEN SAMULI	Activity rhythm of dispersing wolves	114
06:35 pm	BENESCH ANNETTE ET AL.	Activity patterns of free-ranging red deer and roe deer in National Park Bavarian Forest	28
06:50 pm	Discussion		
07:00 pm	Poster & pasta party		

Wednesday, 23.09.09			
08:00 am - 07:00 pm		Registration	
		Plenary talk Chair: ORTMANN S	Abstract Page
09:00 am	MONAGHAN PAT	Early environment, phenotypic plasticity and life history trade-offs	6
		Session IV: Behavioural ecology Chair: ORTMANN S	
10:00 am	BAUCH CHRISTINA ET AL.	Slow lifestyle is reflected by telomere length in common terns	25
10:15 am	HÖNER OLIVER P ET AL.	A silver spoon for spotted hyena sons	96
10:30 am		Coffee break & poster session: Behavioural ecology	
		Session V: Behavioural ecology Chair: MONAGHAN P	
11:00 am	BRAASCH ALEXANDER ET AL.	Last laid, first served: consequences of reversed hatching asynchrony in common tern chicks	37
11:15 am	ALBRECHT SYLVIA ET AL.	Maternal energy intake and its influence on pre- and postnatal investment in roe deer (<i>Capreolus capreolus</i>) - an experimental approach	16
11:30 am	STEYAERT SAM MJG ET AL.	Movement patterns of male and female brown bears during the mating season in relation to sexually selected infanticide theory	185
11:45 am	ANTONEVICH ANASTASIA, NAIDENKO SERGEY	Inter-individual hormonal differences related to early sibling aggression in Eurasian lynx	20
12:00 am	WIDDIG ANJA, KULIK LARS	Is there a benefit for male rhesus macaques to form coalitions?	200
12:15 pm	PETERS ELISABETH ET AL.	Reintroduction of the European mink (<i>Mustela lutreola</i> , Linné 1761) at a nature reserve in Saarland, Germany – part I: preliminary data on the use of space and activity as revealed by radio-tracking and live-trapping	152
12:30 pm		Lunch & poster session: Behavioural ecology/reproduction biology	

Wednesday, 23.09.09			
Plenary talk			Abstract page
Chair: WACHTER B			
01:30 pm	DINERSTEIN ERIC	The future of conservation	5
Session VI: Conservation biology			
Chair: WACHTER B			
02:30 pm	MCCARTHY THOMAS M	Assessing snow leopard population status using non-invasive genetics, trap-cameras and occupancy modeling	125
02:45 pm	MELZHEIMER JÖRG	Knowledge on spatial movements of Namibian cheetahs (<i>Acinonyx jubatus</i>) might decrease the human-cheetah conflict	126
03:00 pm	Coffee break & poster session: Conservation biology/stable isotopes, nutrition and energetics		
Workshop V			Abstract page
Stable isotopes, nutrition and energetics			
WS leader: MARTINEZ DEL RIO C, ORTMANN S & VOIGT CC			
03:30 pm	MARTINEZ DEL RIO CARLOS	Isotopic natural history: a novel tool for wildlife biologists	14
04:00 pm	DESCHNER TOBIAS ET AL.	Alpha ¹⁵ N and C/N ratios in urine allow the monitoring of changes in body weight related to dietary restriction in captive bonobos (<i>Pan paniscus</i>)	56
04:15 pm	BERKELEY ELIZABETH V, LINKLATER WAYNE L	Blood glucose profiles in response to different diets in white rhinoceros (<i>Ceratotherium simum</i>)	31
04:30 pm	KELM DETLEV H	High physical activity prevents pathologic blood glucose levels in nectar-feeding bats (<i>Glossophaginae</i>)	109
04:45 pm	VALENCAK TERESA G, RUF THOMAS	Peak sustained energy turnover during reproduction in hares: where is the limit?	192
05:00 pm	Coffee break & poster session: Conservation biology/stable isotopes, nutrition and energetics		
05:30 pm	LASON KARIN E ET AL.	Seasonality and reproduction energetics of female European roe deer (<i>Capreolus capreolus</i>) and European mouflon (<i>Ovis gmelini musimon</i>)	119
05:45 pm	GRIMPO KIRSTEN ET AL.	That's hot: golden spiny mice display torpor even at high ambient temperatures	89
06:00 pm	WEISSENBÖCK NICOLE M, ARNOLD WALTER	Daily rhythms of body temperature in Asian elephants (<i>Elephas maximus</i>): heterothermy as an adaptation of hot climates	198
06:45 pm	Discussion		
07:00 pm	Banquet (meet at BfR entrance for bus shuttle)		

Wednesday, 23.09.09			
Workshop VI Welfare and conservation WS leader: DINERSTEIN E & EAST ML			Abstract page
03:30 pm	DINERSTEIN E	Welfare and conservation	
03:45 pm	DE BARBA MARTA ET AL.	Demographic and genetic population viability analysis of a small translocated brown bear population and implications for conservation and management	52
04:00 pm	EBERT CORNELIA ET AL.	Comparing hair and faeces field sampling approaches for the purpose of non-invasive genetic population estimation of wild boar (<i>Sus scrofa</i>)	63
04:15 pm	GOLLER KATJA V ET AL.	Is canine distemper virus a threat to African wild dogs (<i>Lycaon pictus</i>)?	85
04:30 pm	PUDYATMOKO SATYAWAN	Predation can increase the extinction risk of banteng (<i>Bos javanicus</i>) in Java, Indonesia	159
04:45 pm	SUTOR ASTRID	The raccoon dog (<i>Nyctereutes procyonoides ussuriensis</i>) - an alien canid in Germany – threat for native biodiversity?	187
05:00 pm	Coffee break & poster session: Reproduction biology		
05:30 pm	DE THOISY BENOIT, POIRRIER EDDY	Densities and behavioural patterns of the two largest neotropical forest predators, the jaguar (<i>Panthera onca</i>) and the puma (<i>Puma concolor</i>) in French Guiana, using camera trapping	53
05:45 pm	WILTING ANDREAS ET AL.	Being on the prowl for carnivores. Camera-trapping of threatened cats and civets in commercially used tropical rainforests in Sabah, Malaysia	201
06:00 pm	GÖTTERT THOMAS ET AL.	Behavioural acclimatisation of relocated black rhinos in Namibia	86
06:45 pm	Discussion		
07:00 pm	Banquet (meet at BfR entrance)		

Thursday, 24.09.09			
08:00 am - 12:00 am		Registration	
Plenary talk Chair: JEWGENOW K			Abstract page
09:00 am	WILDT DAVID E	Sex, wildlife and intensive management	7
Session VII: Reproduction biology Chair: SI W			
10:00 am	VAN KESTEREN FREYA ET AL.	Reproductive physiology of Ethiopian wolves (<i>Canis simensis</i>)	194
10:15 am	FINKENWIRTH CHRISTA ET AL.	Pregnancy diagnosis in the Iberian lynx (<i>Lynx pardi</i>) based a specific urinary pregnancy signal	72
10:30 am		Coffee break and poster session	
Session VIII: Reproduction biology Chair: WILDT DE			
11:00 am	NICHOLS KRISSY	A non-invasive assessment of the oestrus cycle of European captive-held Visayan warty pig (<i>Sus cebifrons negrinus</i>)	138
11:15 am	MORDEN C-JAE C ET AL.	Faecal hormones as a non-invasive population monitoring and management method for woodland caribou	130
11:30 am	WACHTER BETTINA ET AL.	Cub survival and reproductive health of female cheetahs depends on environmental conditions and reproductive history, not lack of genetic diversity	196
11:45 am	FESTL WOLFGANG, BODENSTEIN CLAUDIA	Data on reproduction in captive European mink (<i>Mustela lutreola</i>) kept for ex-situ conservation: periodic cycles in breeding success – a natural phenomenon, or an artefact of management?	70
12:00 am	SARAGUSTY JOSEPH ET AL.	Skewed birth sex ratio and premature mortality in elephants	169
12:15 pm		Poster award & closing ceremony	
12:30 pm		Lunch	
01:30 pm		Removal of posters	
02:30 pm		Zoo visit (meet 01:30 pm at BfR entrance)	

Posters

Board no	Behavioural ecology		Abstract page
001	BECKER MIRJAM ET AL.	Mother-offspring and sibling-conflict in European roe deer (<i>Capreolus capreolus</i>) at early lactation period	27
002	BRABENDER KRISTIN ET AL.	Natal dispersal in a growing population of Przewalski's horses (<i>Equus ferus przewalskii</i>) – just a matter of inbreeding avoidance?	38
003	CHAGAEVA ALLA A, NAIDENKO SERGEI V	Maternal behaviour of Eurasian lynx (<i>Lynx lynx</i>)	42
004	CHASOVSKIKH ZOYA ET AL.	Factors and correlates of the development of begging behaviour in larvae: an experimental approach	45
005	CINKOVA IVANA ET AL.	Social behaviour of southern white rhinoceros (<i>Ceratotherium simum simum</i>) in game reserves in South Africa	47
006	DRUZYAKA ALEXEY ET AL.	Territory and reproduction in larvae: an experimental approach	58
007	EAST MARION L ET AL.	Maternal effects on offspring social status in spotted hyenas	60
008	FISTAROL LARA, SPIEZIO CATERINA	Colour preference and lateralization in captive pig-tailed macaques	75
009	GREINER SABINE ET AL.	Challenge of skin immune system causes a decrease of plasma testosterone in a tropical bat	88
010	HERDE ANTJE, ECCARD JANA A	Personalities in voles (<i>Microtus arvalis</i>)?	94
011	ITONAGA NAOMI ET AL.	Age- and density-dependent breeding dispersal patterns in white storks (<i>Ciconia ciconia</i>)	99
012	KUBIČKA LUKÁŠ ET AL.	Macroevolutionary pattern of sexual size dimorphism conforming to Rensch's rule in geckos extends intraspecific temperature-induced variation	118
013	MIN NANG WAH WAH	Study on the distribution and feeding ecology of the leaf monkey (<i>Trachypithecus phayrei</i>) in the Popa Mountain Park in Myanmar	129
014	NEUGEBAUER M, PESCHKE JOHANNES	Ethological studies on red kangaroos (<i>Macropus rufus</i>)	137
015	OGILVY VICTORIA ET AL.	Does it matter if you're dull? What role does carotenoid based colour play in nocturnal tree frogs?	144
016	OGILVY VICTORIA ET AL.	Crickets vary in gut loading capacity: implications for delivery of carotenoids to amphibians	145
017	PÉRON FRANCK ET AL.	Cooperative problem solving in grey parrots (<i>Psittacus erithacus</i>)	149

018	QUARESMINI CATERINA ET AL.	Social interactions in pig-tailed macaques (<i>Macaca nemestrina</i>): is there lateralization during approaching behaviour?	161
019	RAHDE TOBIAS	Evidences for self-recognition in keas (<i>Nestor notabilis</i>)	162
020	ROGOVIN KONSTANTIN A ET AL.	On the use of non-invasive methods in the study of population physiology of the great gerbil (<i>Rhombomys opmus</i>)	167
021	SCHMITZ PHILIP, KOLTER LYDIA	Tactics of harem-stallions of Przewalski's horses in growing population (<i>Equus ferus przewalskii</i>)	170
022	SCHOLZ FRIEDERIKE, KRONE OLIVER	Habitat use of white-tailed sea eagles (<i>Haliaeetus albicilla</i>) in northern Germany	173
023	TRIGO SANDRA, MOTA PAULO	Is carotenoid-based colouration related to immune response and physical condition in the male serin (<i>Serinus serinus</i>)?	188
024	UHER JANA	The individual in animal behavioural sciences – implications from a new research discipline for behavioural ecology, evolutionary biology, animal welfare and conservation	190
025	VOIGT CHRISTIAN C ET AL.	The effects of flight energetics and echolocation on group-foraging and sociality of bats	195

Board no	Stress & disturbance		Abstract page
026	BLAS JULIO ET AL.	Stress response is linked to survival and reproduction in wild birds	35
027	ĎUREJE LUDOVIT ET AL.	House mouse aggression - genes or postnatal maternal environment?	59
028	HIRATA SUZANA B ET AL.	Faecal sample identification and physiological validation of a double antibody radioimmunoassay for glucocorticoid metabolites in feces of bush dogs (<i>Speothos venaticus</i>)	95
029	HULSMAN ALMA ET AL.	Non-invasive monitoring of glucocorticoid metabolites in brown hyaena (<i>Hyaena brunnea</i>) faeces	97
030	LEWANZIK DANIEL ET AL.	Do environmental factors affect the adrenocortical stress response in bats	122
031	PAVLOVA EKATERINA V, NAIDENKO SV	Behavioural and hormonal analysis of males' relationships in far-east wildcat: winners have to pay	147
032	RIECHERT JULIANE ET AL.	Is hatching sex ratio in common terns influenced by maternal baseline corticosterone levels?	165
033	ROCHA CINTIA G ET AL.	Non-invasive study of stress response to physical restraining in captive males of black tufted marmosets (<i>Callithrix penicillata</i>) by measuring faecal and urinary metabolites of cortisol and testosterone	166
034	SPREITZER KATHARINA ET AL.	Non-invasive monitoring of stress hormones from droppings: a comparative analytical study in galliformes	183

Board no	Reproduction biology		Abstract Page
035	AL-EISSA MOHAMMED S ET AL.	Semen characteristics and cryopreservation of the Arabian sand gazelle males (<i>Gazella subgutturosa marica</i>) using triladyl and tris diluents	17
036	BLAS JULIO ET AL.	Testosterone levels reveal male incubating behaviour in raptors	33
037	BLAS JULIO ET AL.	Testosterone advertises in colour	34
038	CHEN YONGCHANG ET AL.	Folic acid deficiency inhibits neuronal development in rhesus monkey (<i>Macaca mulatta</i>) embryonic stem cells model	46
039	EAST MARION L ET AL.	What metabolites of testosterone and cortisol should hormone assays target in the faeces of carnivore? Results from radio-labelled testosterone and cortisol application to spotted hyenas	61
040	EDER SUSANNE ET AL.	Computer assisted motility analysis (SpermVision) of epididymal spermatozoa from domestic cats	64
041	FREY ROLAND, GOYMANN WOLFGANG	Evolutionary morphology of the African black coucal's (<i>Centropus grillii</i>) peculiar male reproductive tract	77
042	GHANEM SIMON J ET AL.	Bats drink mineral enriched water at salt licks in Amazonian rain forests	83
043	GOLINSKI ALISON ET AL.	Hormones and the evolution of mating strategies in eublepharid lizards	84
044	HANSCHKE ANNE ET AL.	Non-invasive reproductive monitoring in female sand cats (<i>Felis margarita</i>) by analysing faecal estrogen and gestagen metabolites	91
045	JIRKÚ HANA ET AL.	Female reproductive cycle in the Madagascar ground gecko (<i>Paroedura picta</i>): how many clutches can develop simultaneously?	103
046	KAFFENBERGER ALEXANDRA ET AL.	Characterisation of oviductin expression within oviductal epithelial cells of domestic cats (<i>Felis catus</i>)	104
047	KRATOCHVIL LUKAS, POKORNA MARTINA	Phylogeny and evolution of sex-determining mechanisms in amniotic vertebrates: from dependency on thermal environment to genetic control?	116
048	MULLER GRAZIELA ET AL.	Lipid composition of epididymal spermatozoa from domestic cats	133
049	SCHRÖDER KATHARINA ET AL.	Minimal invasive sampling of cell material from embryonal resorption sites by ultrasound-guided amniocentesis in European brown hares (<i>Lepus europaeus</i>)	174
050	SI WEI ET AL.	Improved survival by cryopreserving rhesus macaque (<i>Macaca mulatta</i>) spermatozoa with directional freezing technique	180
051	WAURICH ROMY ET AL.	Relative abundance of mRNA transcripts in in vitro produced early embryos of the domestic cat (<i>Felis catus</i>) - first results	197

Board no	Conservation genetics	Abstract page
052	BRÜNICHE-OLSEN ANNA ET AL. Genetic diversity and herd structure in the indigenous Danish Jutland breed (<i>Bos taurus</i>)	39
053	CHARRUAU PAULINE ET AL. A single amino acid deletion in the mitochondrial gene ND5 separates the two East African cheetah subspecies (<i>Acynonyx jubatus soemmeringii</i> and <i>Acinonyx jubatus raineyi</i>)	43
054	CIZKOVA DAGMAR ET AL. The role of MHC in mate choice in wild house mouse	48
055	ELLIOTT VITTORIA Individual identification of tigers from scat samples	67
056	ESPARZA-SALAS RODRIGO ET AL. Molecular analyses of prey of grey seals (<i>Halichoerus grypus</i>) and Baltic ringed seal (<i>Pusa hispida botnica</i>) in the Baltic Sea	68
057	GAROFALO LUISA ET AL. Genetic analysis of a sample of the loggerhead turtle (<i>Caretta caretta</i>) from Maltese coastal waters	80
058	GAROFALO LUISA ET AL. Accessing the history of the sea turtle (<i>Caretta caretta</i>) in the Mediterranean by means of the genetic analysis of Italian museum specimens	82
059	GROBLER PAUL J ET AL. Application and limitations of assignment methods in conservation genetics: determining the geographic origin of translocated cheetah (<i>Acinonyx jubatus</i>)	90
060	INOUE-MURAYAMA MIHO ET AL. Genetic diversity of endangered Japanese golden eagle (<i>Aquila chrysaetos japonica</i>)	98
061	KAHILA BAR-GAL GILA ET AL. The effect of Israel human demography on the genetic variation found among mammalian populations and its implication for conservation	106
062	KOŁODZIEJ KAROLINA ET AL. Seasonal influences on non-invasive genotyping of wild boar (<i>Sus scrofa</i>)	115
063	NOWAK CARSTEN ET AL. Non-invasive genetic monitoring of wildcat (<i>Felis silvestris</i>) in Germany	142
064	NOWAK CARSTEN ET AL. A simple non-invasive genetic system for the identification of central European mammals from hair and scat samples	143
065	PLOSHNITSA ANNA ET AL. Effects of historical founder effects and a recent bottleneck on MHC variability in Commander arctic foxes	154
066	PROMEROVA MARTA ET AL. Structure of the major histocompatibility complex genes in a galliform bird, the grey partridge (<i>Perdix perdix</i>)	158
067	RUOKONEN MINNA ET AL. Population genetic structure and the effect of environmental factors on genetic differentiation in the grey wolf (<i>Canis lupus</i>)	168

Board no	Conservation biology		Abstract Page
068	BOCHAROVA NATALIA A ET AL.	Preliminary immunologic study in endangered Arctic fox subspecies (<i>Alopex lagopus semenovi</i> , Ognev. 1931)	36
069	BYKOVA ELENA V ET AL.	Development of keeping and breeding of tortoise (<i>Agrionemys horsfieldii</i> , Gray, 1844) in captivity on the basis of data obtained in the wild	40
070	HANSEN MALENE F, MEILVANG ANNE S	Assessment of the reintroduction suitability of rescued gorillas (<i>Gorilla gorilla ssp.</i>) in Cameroon	92
071	KLAUMANN INA ET AL.	Reintroduction of the European mink <i>Mustela lutreola</i> (Linné 1761) at a nature reserve in Saarland, Germany – part III: habitat selection of reintroduced <i>Mustela lutreola</i> as revealed by radio-tracking, live-trapping and habitat mapping	110
072	KNOPP TATJANA, ECCARD JANA A	Getting along in wildness: differences in survival behaviour between captive bred and wild captured voles	113
073	NADJAFZADEH MIRJAM, KRONE OLIVER	Feeding ecology of white-tailed sea eagles (<i>Haliaeetus albicilla</i>) in Northern Germany	134
074	NAIDENKO SERGEY V ET AL.	Pilot results of tiger conservation project in Ussuriskii reserve	135
075	PETERS ELISABETH ET AL.	Reintroduction of the European mink (<i>Mustela lutreola</i> , Linné 1761) at a nature reserve in Saarland, Germany – part I: preliminary data on the use of space and activity as revealed by radio-tracking and live-trapping	152
076	RAY RENA-REBECCA	Leopard monitoring project: ecology, status and impact of hunting on density of the leopard population in Luambe National Park, Zambia and surrounding game management areas	163
077	RECEAN ALEXANDRA ET AL.	Analysis of the effects of a campaign to promote the conservation of carnivores on changing attitudes towards wolf (<i>Canis lupus</i>) to students	164
078	SCHWARZ SABINE	Wild canines as vectors for an important zoonosis – a long term study on the fox tapeworm (<i>Echinococcus multilocularis</i>) in Brandenburg, Germany	176
079	SEEBASS CHRISTIAN, FESTL WOLFGANG	EuroNerz e.V. – actions for conservation of the European mink (<i>Mustela lutreola</i>)	179
080	STOMMEL CLAUDIA, RAY RENA-REBECCA	Habitat use, activity pattern and diet of leopards (<i>Panthera pardus</i>) in Luambe National Park (Zambia) and a bordering game-management area (GMA)	186
081	VAN GEMMERT ANDRE, BAHR JANINE	Mother pup bond of harbour and grey seals (<i>Halichoerus grypus</i>) and the difference of European seal rehabilitation	193
082	WILTING ANDREAS, CORD ANNA	Looking for a home for flat-headed cats; modelling the species distribution of an endangered South-east Asian small cat species	202

Board no	Communication in mammals and birds		Abstract page
083	BART VLAMINGS ET AL.	Cross-species pheromone application: A useful tool to minimize aggression of African wild dogs?	23
084	FREY ROLAND, GEBLER ALBAN	Evolutionary transformations of the mammalian vocal apparatus	76
085	KLUGE DENISE ET AL.	Olfactory communication in southern white rhinoceros (<i>Ceratotherium simum simum</i>) - observations and trials on free ranging rhinos at the game breeding centre in Lichtenburg, South Africa	112
086	MILLER JACQUELINE R, ENGSTROM MARK D	The singer and the song: some social functions of vocal behaviour among pygmy mice (genus: <i>Baiomys</i>) and singing mice (genus: <i>Scotinomys</i>).	128
087	UEDA SAYOKO, KOHSHIMA SHIRO	Facial colour pattern of wolf and other canid species: possible use of gaze signals in visual communication	189

Board no	Stable isotopes, nutrition and energetics		Abstract page
088	KRÜGER FRAUKE, SOMMER ROBERT S	Feeding ecology and hunting behaviour of the pond bat (<i>Myotis dasycneme</i>)	117
089	PROFOUSOVÁ ILONA ET AL.	Enzymatic activities of <i>Troglodytella abressarti</i> , an intestinal symbiotic ciliate of chimpanzee (<i>Pan troglodytes</i>)	157

Board no	Behavioural rhythms		Abstract page
090	BERGER ANNE ET AL.	Annual and diurnal patterns of continuously measured activity in moose (<i>Alces alces</i>)	30
091	DENGG KERSTIN B ET AL.	Chronoethology as a method to detect problems in well-being and health of Indian rhinoceros (<i>Rhinoceros unicornis</i>)	55
092	PODGÓRSKI TOMASZ ET AL.	Activity patterns of wild boar in two contrasting areas of Poland	156

Board no		Research by, in, with and for zoos, aquaria and other <i>ex situ</i>-institutions	Abstract Page
093	BAZVAN SALOUME ET AL.	Mating behaviour of wild sheep (<i>Ovis orientalis laristanica</i>) in captivity- a case study	26
094	CSATÁDI KATALIN ET AL.	It's not easy being blue: an experimental enrichment programme for blue poison-dart frogs	50
095	EDWARDS KATIE L ET AL.	Population viability analysis of the eastern black rhinoceros (<i>Diceros bicornis michaeli</i>)	65
096	GRAUF CORONULA, WALLSCHLÄGER DIETER	Incubation behaviour of a kiwi (<i>Apteryx mantelli</i>) at Berlin Zoo	87
097	PERTL MARTINA ET AL.	The influence of exhibit design on the curiosity behaviour of captive Indian rhinos (<i>Rhinoceros unicornis</i>)	151
098	SCHNEIDER MARION, KOLTER LYDIA	Visualisation of body surfaces specialized for heat loss by infrared thermography	172

Conference venue

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Registration desk / conference office. The staff at the conference office will be happy to help you with any questions and problems regarding the conference programme. Both the registration desk and conference office are located near the entrance to the **Foyer** (see map on page 32), the opening times are:

Monday, September 21 st :	12:00 am - 06:30 pm
Tuesday, September 22 nd :	08:00 am - 07:00 pm
Wednesday, September 23 rd :	08:00 am - 07:00 pm
Thursday, September 24 th :	08:00 am - 12:00 am

A **notice and communications board** for announcements, changes, or additions to the programme, will be located close to the entrance to the **Foyer**. Messages for other participants can be posted there as well.

Coffee, tea, water, cookies and fruits are served during all coffee breaks in the Foyer and Gallery.



(BrandMarke, www.pixelio.de)



(Jules, www.pixelio.de)

Lunch is available at the **canteen** of the conference venue, with prices ranging from 2 to 6 € per dish.



Canteen at BfR - Federal Institute for Risk Assessment, Berlin-Marienfelde

Computer facilities: If you need access to e-mail or other computer services, please contact the staff at the registration desk / conference office for help.

Social events

Welcome evening: Monday, September 21st at 06:30 pm; appetising fingerfood and beverages in the **canteen** of the conference venue.

Poster & pasta party: Tuesday, September 22nd from 07:00 pm onwards; this event will provide participants with the opportunity to discuss with authors their results presented on posters. Hot pasta and refreshing drinks will be offered during this event on the conference site.

The Banquet: Wednesday September 23rd from 8:00 pm onwards. The conference Banquet will take place in the heart of the West Berlin city center, in the **20th floor** of the **Europa Center**. From this location you will have a breathtaking view overlooking the city center of Berlin while enjoying a delicious buffet with beverages served *ad libitum*. We hope that you will spend a memorable evening with us. **Tickets for the banquet are available at the registration desk.** Do not forget your binoculars!



Puro Sky Lounge Berlin GmbH

Meeting point: Registered banquet participants will meet on Wednesday, September 23rd, at **07:00 pm** in front of the **conference venue entrance** for an organised bus ride to the banquet site.

Poster award: Please take the opportunity to vote for the best poster. Voting forms are provided with your conference material at registration and should be completed and handed in at the conference office **at the latest by Wednesday, September 23rd at 06:00 pm.** Poster prizes will be awarded to the presenting authors of the best three posters before the lunch break on Thursday, September 24th, at 12:15 pm in the main lecture hall (MLH).

Zoo Berlin visit: All **conference participants** have free entry to the **Zoo Berlin** and the **Aquarium Berlin** during the conference period **21.09. - 24.09.09**, so please be prepared to present your conference name buttons at the entrance gates to obtain **free entry**.



(E. Rose, www.pixelio.de)

We offer a guided visit to the oldest zoo in Germany, which harbours the world's largest number of species. The visit will take place on **Thursday, September 24th**, from **2:30 pm to 04:30 pm**.

Since the number of participants for this event is limited to 60, we have to select the participants according to the chronology of registrations. The names of the participants will be announced on our notice board.

Meeting point: Participants registered for the guided tour as well as participants intending to visit the zoo on this day without joining the guided tour should meet on **Thursday, September 24th**, after lunch at **1:30 pm in front of the conference venue entrance** for an organised bus ride to the Zoo Berlin. At the zoo we will meet in front of the administrative building of the zoo, Hardenbergstraße 8 at 2:30 pm.

You can bring your luggage to the zoo if you wish to continue your travel afterwards. We have arranged a room where participants can leave their luggage. After the guided tour from 02:30 to 04:30 pm, all participants will need to make their own travel arrangements. Help with directions will be provided if required.

If you wish to arrange your own visit to the **Zoo Berlin** ("Zoologischer Garten") or the **Aquarium Berlin**, you will find helpful information about the public transport on page 28.

Zoologischer Garten Berlin AG

Hardenbergplatz 8
10787 Berlin, GERMANY
www.zoo-berlin.de/en

Accompanying persons are very welcome to participate in all social activities and evening programmes as long as they are registered.

Public transport (BVG) information

Public transport in Berlin is operated by the company **BVG**. **Due to technical reasons the S-Bahn service in Berlin is in September 2009 only limited available or partly shut down!** In the following section, we provide general information about tariff areas, tickets and fares as well as the most important routes for conference participants. More detailed information and a very helpful **journey planer** and **BVG network maps** for download can be found at <http://www.bvg.de/index.php/en/Bvg/Start>.

Berlin has three **tariff zones**: A, B and C.

Zone A: Berlin's inner city up to and including the S-Bahn ring

Zone B: outside the S-Bahn ring up to the city boundary

Zone C: Greater Berlin, including Schönefeld airport and the City of Potsdam

Tickets are available for the combined zones AB, BC and ABC. The zone **AB** is sufficient to travel within Berlin and thus for all routes mentioned below. Tickets allow you to use all **buses, trams, S-Bahn** and **underground (U-Bahn) trains**, including **regional rail transport**.

Tickets are available from **ticket counters** and **ticket machines** on S-Bahn, underground and trams (unless otherwise stated, see 7-Day-Card) and can be bought from bus drivers. **Validity requires the cancellation** via stamping **immediately on starting your travel** for tickets purchased from machines (but not those bought from bus drivers). Stamping machines are provided at all stations, tickets purchased within trams are already cancelled at the point of sale.

Fares overview for **AB tickets**:

- **Single ticket** (Einzelfahrausweis): valid for two hours, one direction, **2.10 €**
- **Day pass** (Tageskarte): valid for one day, all directions, until 03:00 am on the following day, **6.10 €**
- **Small group ticket** (Kleingruppenkarte): up to 5 people can travel together according to the conditions of a day pass, **15.90 €**
- **7-Day-Card** (7-Tage-Karte): valid on seven consecutive days, (not available on busses and trams, please purchase on underground or ticket counters), **26.20 €**

To plan your journeys, please use the **journey planer** on the **BVG website**. Here, you can indicate your departure and destination stop (also specific

addresses, i.e. street name and number) as well as the date and time of desired arrival or departure and receive a detailed travel plan.

On the following pages, you will find a description of how to get to the conference venue (BfR) after your arrival at Berlin by plane or train. Furthermore, information of how to get to a traffic junction, i.e. connections to your accommodation, after the conference banquet and of how to get to the Zoo Berlin or Tierpark Berlin starting at the conference venue (BfR) by public transport are given. Please make sure that you have a valid “BVG” ticket when you start a journey, since **ticket controllers are frequent and strict**.

Important travel routes:

(1) Airport Berlin-Tegel to the BfR (conference venue)

- From **Airport Tegel** take the **bus X9** at the main entry of the airport in direction to “Zoologischer Garten”
- Exit at the station “**Zoologischer Garten**”. You will find the entry to the underground in front of the train station entry. Take the **underground line 9** in direction to “Rathaus Steglitz”.
- Exit at the station “**Rathaus Steglitz**”. Follow signs to the **bus X83** and take this bus in the direction of “Lichtenrade”.
- Exit at the station “**Nahmitzer Damm / Marienfelder Allee**”. Cross the Nahmitzer Damm” and follow the **path** directly leading to the conference venue at the BfR (see map on page 24).

The whole journey will take approx. 70 minutes.

(2) Airport Berlin-Schönefeld to the BfR (conference venue)

- Take the **bus 171** in direction of “U Hermannplatz”. It departs at the forecourt in front of the **Airport Schönefeld** building
- Exit at the station “**Neuköllner Straße / Zwickauer Damm**”. Take the **bus M11** in direction of “Unter den Eichen/Drakestr.”.
- Exit at the station “**Nahmitzer Damm / Marienfelder Allee**”. Cross the Nahmitzer Damm” and follow the **path** directly leading to the institute (see map on page 24).

The whole journey will take approx. 60 minutes.

(3) Main Station Berlin (“Hauptbahnhof”) to the BfR (conference venue)

- Here, you can **take any S-Bahn line** (via station “Friedrichstraße”) to the next station “Friedrichstraße”.
- At the station “**Friedrichstraße**”, take the **S-Bahn line 2** in direction “Lichterfelde”.
- Depart at the station “**Buckower Chaussee**” and exit the station in direction of “Buckower Chaussee”. The bus stop is located left from the rails over the road. Take either **bus X11** in direction of “U Dahlem-Dorf” or the **bus M11** in direction “Unter den Eichen / Drakestraße”.
- Exit at the station “**Nahmitzer Damm / Marienfelder Allee**”. Cross the Nahmitzer Damm” and follow the **path** directly leading to the institute (see map on page 24).

The whole journey will take approx. 50 minutes.

(4) **Banquet location** (Puro in the Europa Center) **to the “S + U Zoologischer Garten”**

- (5) It is only a 5 minute walk from the Europa Center **to the “S + U Zoologischer Garten”**, you need to go in direction of the Kaiser Wilhelm Memorial Church, pass it on the right and cross the street to your right. Straight ahead you will see the **S + U Zoologischer Garten**. From here there are various S-Bahn, underground railways and busses which will take you to your hotel.

(6) **BfR** (conference venue) **to the Zoo Berlin**

- Walk to the station “**Nahmitzer Damm / Marienfelder Allee**” (see map on page 24) and take the **bus X83** in direction of “U Dahlem-Dorf”.
- Exit at the station “**Rathaus Steglitz**”. Follow the signs to the underground and take **underground line 9** in direction of “U Osloer Straße”.
- Depart at the station “**S + U Zoologischer Garten**” and leave the train station at the main entry / exit. Cross the street and go to the administrative building of the **Zoo Berlin**, Hardenbergstraße 8 opposite the train station.

The whole journey will take approx. 60 minutes.

Acknowledgements / Sponsors

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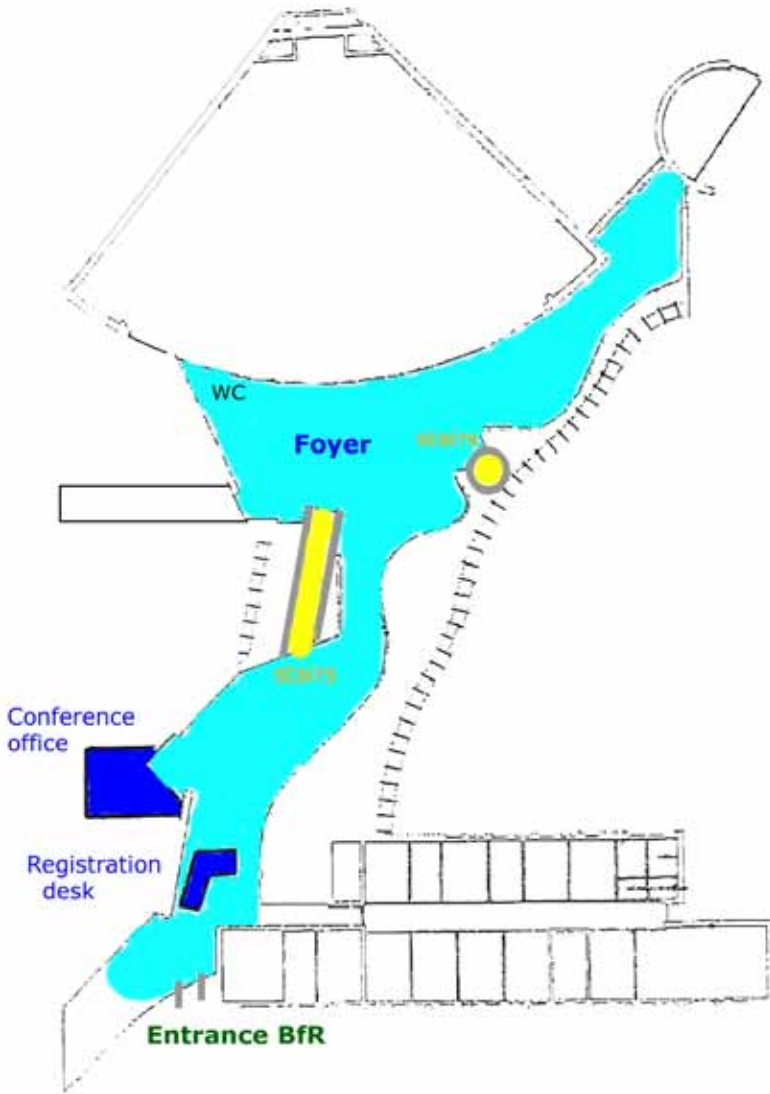
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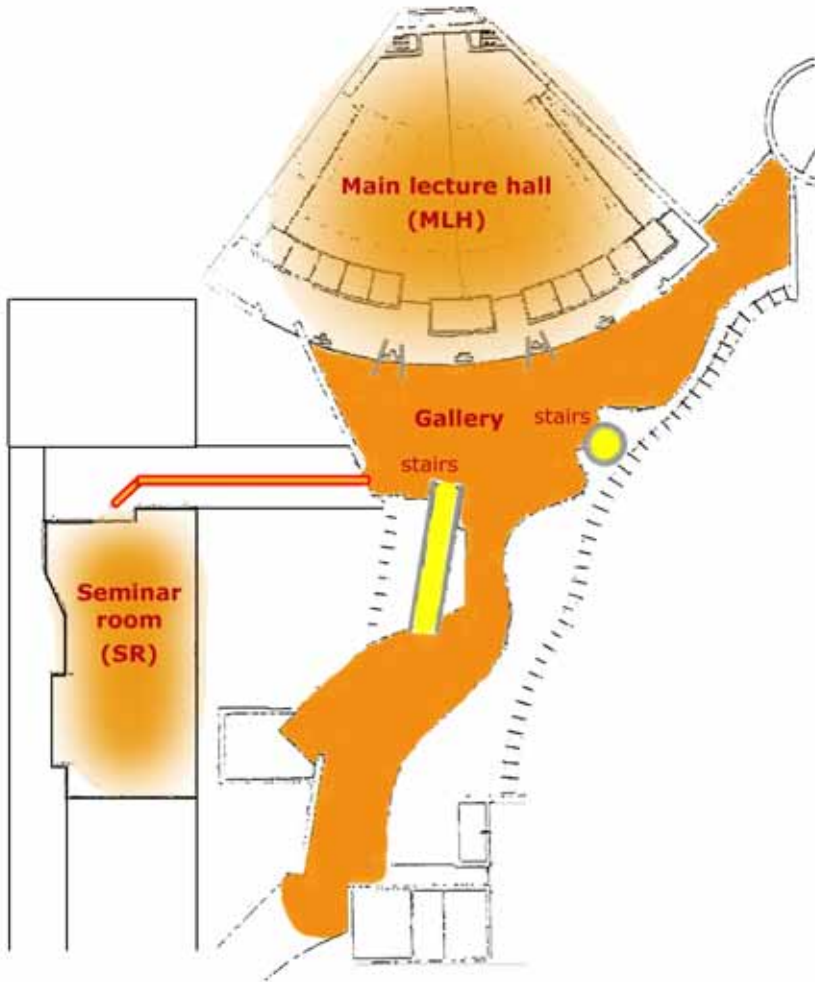
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BfR - Federal Institute for Risk Assessment - First floor



Organisation and contact

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