

Welcome

Welcome to the **Zoo and Wildlife Health Conference 2017** in Berlin, Germany. The conference was formerly known as the International Conference on Diseases of Zoo and Wild Animals and is continuing under the new name with a broader and more inclusive scope. You are contributing to the advancement of research relevant to captive and free ranging animal health by being a part of this unique international gathering.

The Zoological Garden Berlin AG consists of the Zoo Berlin, the Tierpark Berlin and the Zoo-Aquarium Berlin and represents the largest zoo operation in Europe with more than 4 million visitors per year. Nowhere can we encounter over 25,000 animals in only one city.

The historical Zoo Berlin was opened in 1844 and founded as a private share-holder company in 1845. It is not only the oldest Zoo in Germany and the ninth oldest in the world but it is also renowned for its large animal collection. Before World War II, Zoo Berlin hosted 1.196 mammals from 385 species. But only 91 individuals survived the war, among them two lions, two hyenas, one Asian elephant, one hippopotamus and one chimpanzee. Although the number of animals was increased again after the war, modern animal welfare standards suggested a reduction of species to provide better living standards and care for each individual. Thus by the end of 2015, Zoo Berlin had 898 mammals of 159 species in its care. In the UN decade of biodiversity we are now focused on raising awareness about biodiversity outside, rather than aiming for the largest number of species within our Zoological Gardens.

“In order to shape the future, you need to look back at the past” is our motto. While we are preserving and presenting the unique history of this truly remarkable institution, we are creatively and openly discovering and developing its potential. Setting new standards in animal care and research, species conservation, and visitor experience is a monumental and exciting task that our entire team will approach with great passion both now and in the coming decades.

The architecture of animal houses in the zoo is a good example of what Berlin is renowned for: history and future side by side. On the one hand, the traditional Antelope House, built with its minarets and opened in 1872, was and is the most splendid building in the Zoo Berlin. On the other hand, the recently reopened “World of Birds” lives up to the latest trends of visitor information and so-called “edutainment”. Another highlight is certainly the news that a young panda couple will be coming to Zoo Berlin. The panda contract with Beijing has been signed and so it is official that Zoo Berlin will welcome two giant pandas from the Chengdu Research Base of Giant Panda Breeding in June 2017.

While the iconic Zoo Berlin is attracting visitors due to its central location and history, the Tierpark Berlin is impressing with its extensive grounds. Located in a historical palace garden in one of Berlin's eastern suburbs, the 160 ha wide landscape is the largest Zoo in Europe. To retain its special tradition, its uniqueness, while at the same time making the largest landscape zoo in Europe fit for the future is a monumental task that we will face in the coming years – one that will move proverbial mountains. Founded in 1955, the Tierpark Berlin is not only famous for its magnificent castle – Schloss Friedrichsfelde – but also for its success in breeding pachyderms. The greater one-horned rhinoceros Thanos was born in September 2015 and his neighbour Edgar came as the latest addition to the Asian elephant herd on New Year's Day 2016.

For many years the Tierpark Berlin was also the only place in Europe where you could observe many different animal species from China and its bordering countries. The blue sheep, the Central Chinese goral and the Sichuan takin are only a few of these animals.

The Aquarium is situated at the border of the Zoo Berlin. It is the largest aquarium in Germany and it houses on three floors not only water animals, but also reptiles and amphibians and even a large number of terrestrial invertebrates. But the Aquarium Berlin is also well known for its success in the husbandry of the rare chimaeras and especially for its successful breeding of jellyfish. The reptile department has been renovated to provide more spacious and natural enclosures.

All three institutions incorporated in the Zoologischer Garten Berlin AG are famous for their great success in husbandry and breeding of rare and endangered animals – many of them are kept in self-sustaining populations. Every year the breeding surplus is supplied to zoos around the world or - as part of international programs - released again into their original natural habitat in order to secure their long-term survival. By participating in more than 200 international breeding and conservation programs, the Zoological Garden Berlin AG is a major contributor to nature conservation.

We hope your stay is productive and pleasurable. Do not hesitate to contact us at the conference office for help and/or advice.

Enjoy your stay in Berlin!

Alex D. Greenwood
Gábor Á. Czirkák
Steven Seet
Josepha Prügel
Stefanie Lenz
Heribert Hofer

Andreas Knieriem
Andreas Ochs
André Schüle
Andreas Pauly
Günther Strauss
Claudia Bienek

Hanspeter Steinmetz
Stephanie Sanderson
Kim Grützmacher
Hugo Fernández Bellon
Sabine Öfner
Baptiste Mulot



**Leibniz Institute for Zoo
and Wildlife Research**
IN THE FORSCHUNGSVERBUND BERLIN E.V.

*Leibniz Institute for Zoo
and Wildlife Research
(IZW), Berlin, Germany*

**ZOOLOGISCHE
GÄRTENBERLIN**
ZOO | AQUARIUM | TIERPARK

*Zoo Berlin
Tierpark Berlin
Aquarium Berlin*



*European Association
of Zoo and Wildlife
Veterinarians (EAZWV)
Liebfeld-Berne, Switzerland*

**Contact local organiser:
Contact IZW organiser:**

**Claudia Bienek
Steven Seet**

**Tel: +49 175 263 00 20
Tel: +49 177 857 26 73**

Cover:

Western lowland gorilla "Ivo"
© Zoo Berlin, Ruben Gralki



This booklet is printed on recycled paper😊 !

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ACKNOWLEDGEMENT - SPONSORS

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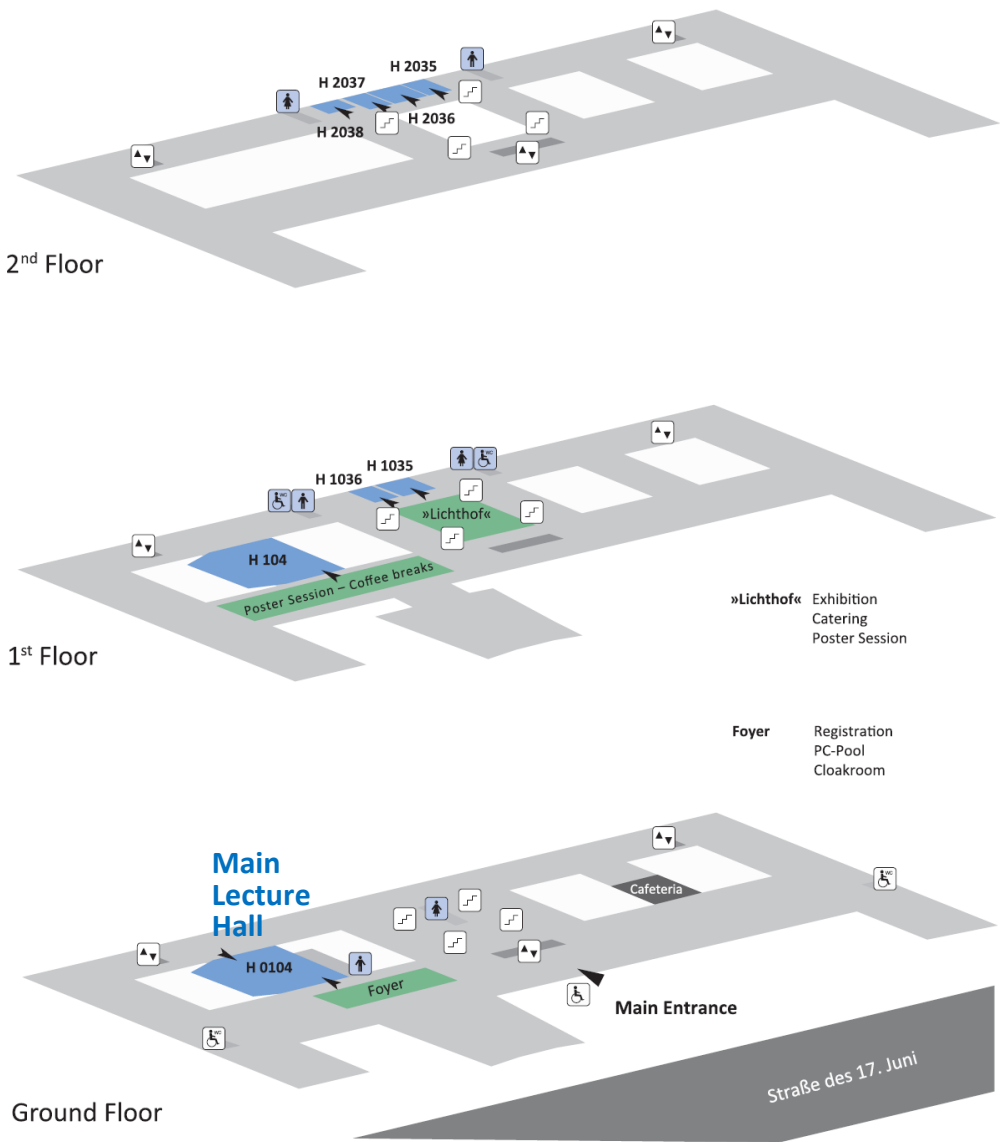
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FLOOR PLAN: CONFERENCE VENUE

(Technische Universität Berlin)



Main Building | Floor plan

Floor plan: © TUBS GmbH

SCIENTIFIC PROGRAMME – GENERAL INFORMATION

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Please note that in your own interest and for copyright reasons it is strictly forbidden to take pictures, videos and sound recordings of any conference contribution especially unpublished data during the whole conference. This includes especially talks, discussions, posters and round table discussions. You may not take pictures or copies of slide shows, posters and abstracts from the Conference Proceedings. You may not use twitter, facebook & Co to distribute unpublished data. Pictures may be taken only upon authorisation by the authors and/or copyright holders. Anyone who violates the copyrights will be expelled from the conference and they are accountable to the law if they violate copyrights or steal data.

PRESENTATIONS AT THE CONFERENCE

There will be three different forms of presentations at the conference: plenary talks, oral contributions and poster contributions.

All presentations will be held at the conference centre at the Technische Universität Berlin in **Berlin, Germany**. There will be four **plenary talks**, one at the beginning of the morning session on Thursday and Saturday and one at the beginning of the Thursday and Friday afternoon session. The last plenary talk will be held on the Saturday morning session. Contributed talks will be held in **twelve** sessions and are scheduled with 12 min followed by 3 min of discussion. The session chairs will keep a strict schedule.

PowerPoint presentations require a USB-stick containing all necessary files. **Speakers are asked to hand in their USB flash drive at the registration desk** to receive their registration documents. For technical reasons, individual laptops will only be hooked up to the projector in rare exceptions after prior agreement with the organisers.

Posters are displayed in the conference centre and can be viewed at all times. Posters are arranged alphabetically. **Contributors of posters are requested to present their posters in person during the poster sessions** (Thursday and Friday afternoon during the coffee break). Poster mounting starts on Wednesday, 24th May, at 13:00. Posters should be on site until Saturday, 27th May, at 13:00.

Workshops 1 – 9 are scheduled for Wednesday, 24th May (for times, durations, and locations please see below).

1. Basics of immobilisation - drugs, technique, practice (09:00 – 13:00, Zoo Berlin)
2. Expeditionary veterinary medicine (14:00 – approx. 17:00, Zoo Berlin)
3. Wildlife field techniques- the use of invertebrates to monitor mammal diversity and diseases (09:00 – 16:00, Technische Universität Berlin + Zoo or Tiergarten)
4. Advanced Anaesthesia (09:00 – 18:00, Technische Universität Berlin)
5. Parasites of arthropods and cold blooded vertebrates (10:00 – 16:00, Technische Universität Berlin)
6. Handling, clinical examination and treatment techniques in injured wild birds (09:00 – 16:00, Freie Universität Berlin)
7. Molecular diagnostics for elephant and equine herpes: a look behind the scenes (09:00 – 15:00, Institute of Virology (small course room), Freie Universität Berlin)
8. Zoo animal pathology (09:00 – 16:30, Leibniz Institute for Zoo and Wildlife Research (IZW))

9. The use of ultrasound and computed tomography in zoo animals (09:00 – 17:00, Leibniz Institute for Zoo and Wildlife Research (IZW))

All workshop participants will receive a name badge, which ensures free entry to the workshop areas throughout the day. This is also your name badge for the conference and ensures access to all conference areas.

All conference name badges can be used as ticket for public transport in Berlin (in all three tariff zones A, B and C) throughout the whole conference (24th to 27th), in combination with your identity card or passport.

Roundtable discussions (parallel sessions) are scheduled for **Friday, 26th May (17:30 – 18:30)** in the conference centre at the Technische Universität Berlin.

1. Tuberculosis: TB or not TB
2. The role of veterinary advisors

Two further topics will arise by popular demand and will be announced at the conference.

Rudolf Ippen Young Scientist Award, IZW/EAZWV. The “Rudolf Ippen Young Scientist Award” was awarded for the first time in Madrid in 2010, in memory of the internationally acclaimed scientist Prof Dr Rudolf Ippen, who passed away in March 2009.

The award will go to a young scientist whose research demonstrates challenging and innovative ideas and/or offers useful practical or theoretical knowledge to the work of a broad spectrum of zoo and wildlife veterinarians, biologists and other wildlife scientists.

Application for 2018: Please send your CV, list of publications (at least one as first author), and a PDF copy of the three most important publications of the last 12 months to:

2018@zoowildlifehealth.org.

Student presentation and poster awards. A jury will grant three awards to the presenting authors of the best student presentations and three awards to the presenting authors of the best posters during the closing session scheduled between **12:00** and **13:00** on **Saturday, 27th May**. **Students and poster authors are requested to be at the closing session!**

Abstracts of all scientific contributions to the conference are published in the “Proceedings of the Zoo and Wildlife Health Conference 2017”.

In this “Conference Programme” booklet, the page number at the end of the title of each contribution indicates the page number of the corresponding contribution in the published proceedings.

Networking:

1. Students general assembly: Thursday, 25th May, 18:00 – 19:00 (main lecture hall; H 0104)
2. EAZA veterinary committee: Thursday, 25th May, 18:00 – 19:30
3. EAZWV working group meetings (specific information will be announced at the conference):
Thursday, 25th May, during lunch and 19:00 – 19:30
Friday, 26th May, during lunch and 18:30 – 19:00
4. EAZWV general assembly: Saturday, 27th May, 14:00 – 15:30 (main lecture hall; H 0104 – everyone welcome)

SOCIAL EVENTS

Welcome evening (ice breaker). Wednesday, 24th May, 19:00 – 22:00. We will meet at the Aquarium Berlin (Budapester Straße 32, 10787 Berlin) and greet colleagues over a variety of snacks and beverages.



© Aquarium Berlin

Festive evening. Thursday, 25th May, 20:00 – 23:00. We are looking forward to a special evening in the restaurant “Osteria Maria”.

Address restaurant: Osteria Maria, Leydenallee 79, 12167 Berlin-Steglitz.

The festive evening includes the five-course “Maria’s menue” with

- a variety of different starters
- homemade pasta
- entree
- main course
- a variety of different desserts
- aperitif, open red and white wine, mineral water, soft drinks, beer, grappa & espresso



© Osteria Maria

Student-mentor-mixer. Friday, 26th May, 19:00 – 20:00, conference centre at the Technische Universität Berlin. The aim is to provide students with the chance to meet some of their potential future mentors and/or employers to ask questions and get in touch with them during short roundtable discussions. The topics will be about different aspects in zoo and wildlife medicine.

Students night out. Friday, 26th May, 20:30 – 23:30.

Organised by the EAZWV Student Section, this event became a very popular part of the social programme over the past years. It is the ideal spot to socialise with fellow students from all over the world and exchange experiences and ideas over a cold beer. Food and drinks will be provided, dancing mood is highly appreciated.

Exact time and place will be announced at the Students General Assembly (Thursday, 25th May, 18:00 – 19:00), so do not miss it!

Contact Johanna Kasberg: students@eazwv.org.

Conference banquet (zoo evening). Saturday, 27th May, 19:00 – 24:00, Tierpark Berlin.

The farewell evening will take place in the middle of the Tierpark Berlin, where participants will enjoy a welcome drink followed by a dinner including local dishes.

During the zoo tour prior to the banquet, conference participants will have the opportunity to observe examples of animal management both in the Zoo and the Tierpark Berlin.



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© Zoo & Tierpark Berlin



Sunday excursion, option 1: "Berlin by Boat"

28th May, 09:30 – 13:30

Departure: Cornelius Bridge, Corneliusstraße 11, 10787 Berlin

The boat trip will take you through the city center from Cornelius Bridge via Zoo, Unterschleuse, Charlottenburg, Moabit, Tiergarten, Bellevue Palace, Haus der Kulturen der Welt, German Federal Chancellery, Government Quarter, Reichstag, Friedrichstraße, Museum Island, Berlin Cathedral, Nikolai Quarter, Millendamm Schleuse, Jannowitz Bridge, Oberbaum Bridge, Oberschleuse, further on the Landwehr Canal via Kreuzberg, Potsdamer Platz, Tiergarten back to Cornelius Bridge.



© Stern und Kreis Schifffahrt GmbH

Sunday excursion, option 2: Lower Oder Valley National Park

28th May, 07:30 – 19:30

Departure: Technische Universität Berlin (main conference venue)

This excursion will take you to the Lower Oder Valley National Park, Germany's only wetland national park. More than 145 bird species are breeding in this unique landscape. Due to its river valleys and frequently flooded meadows, the national park is a species-rich habitat for waterfowl as hatchery, resting and hibernation place.

Guides from the "Wildnisschule Teerofenbrücke" will show you beautiful sites as well as the lab of the national park.

Accompanying persons are very welcome to participate in all social events provided that a place is booked for them by a conference participant.

Free entry for conference participants to the Zoo Berlin and Tierpark Berlin

All **conference participants** and accompanying persons who have registered have free entry to the Zoo Berlin, Aquarium Berlin and Tierpark Berlin from Wednesday, 24th May to Saturday, 27th May. Please be prepared to present your name badge at the entrance gates to obtain free entry.

SCIENTIFIC PROGRAMME

VENUES

Workshops: Zoo Berlin

Zoo Restaurant, "Lichtensteinsalon", entrance to the Zoo via
Hardenbergplatz 8, 10787 Berlin

Technische Universität Berlin (main building)

Straße des 17. Juni 135, 10623 Berlin

Leibniz Institute for Zoo and Wildlife Research (IZW)

Alfred-Kowalke-Straße 17, 10315 Berlin

Freie Universität Berlin

Institute for Virology, Robert-von-Ostertag-Straße 7-13, 14163 Berlin

Freie Universität Berlin

Veterinarium Progressum, Oertzenweg 19B, 14163 Berlin

Conference: Technische Universität Berlin (main building)

Straße des 17. Juni 135, 10623 Berlin

24 th May	Wednesday
	Workshops: Parallel sessions Locations: Four locations as given above and below
Starting at 08:30	Registrations for workshop participants at different locations
The following two workshops will be held at the Zoo Berlin:	
09:00 - 13:00	Basics of immobilisation - drugs, technique, practice Andreas Ochs (Zoo Berlin, Germany)
14:00 - 17:00	Expeditionary veterinary medicine Christian Walzer (University of Veterinary Medicine, Vienna)
The following three workshops will be held at the Technische Universität Berlin:	
09:00 - 16:00	Wildlife field techniques- the use of invertebrates to monitor mammal diversity and diseases Fabian Leendertz (Robert Koch Institute, Germany)
09:00 - 18:00	Advanced Anaesthesia Christine Lendl (Grünwald, Germany) Carsten Grøndahl (Copenhagen Zoo, Denmark)
10:00 - 16:00	Parasites of arthropods and cold blooded vertebrates Frank Mutschmann (Exomed/Veterinary Practice Mutschmann, Germany)
The following two workshops will be held at the Freie Universität Berlin:	
09:00 - 16:00	Handling, clinical examination and treatment techniques in injured wild birds Veterinarium Progressum Kerstin Müller (Freie Universität Berlin, Germany)
09:00 - 15:00	Molecular diagnostics for elephant and equine herpes: a look behind the scenes Institute of Virology (small course room) Nikolaus Osterrieder (Freie Universität Berlin, Germany) Walid Azab (Freie Universität Berlin, Germany) Alex D. Greenwood (Leibniz Institute for Zoo and Wildlife Research (IZW), Germany)

24th May Wednesday	
The following two workshops will be held at the Leibniz Institute for Zoo and Wildlife Research (IZW):	
09:00 - 16:30	Zoo animal pathology Karin Lemberger (Vet Diagnostics, France) Claudia Szentiks (Leibniz Institute for Zoo and Wildlife Research (IZW), Germany) Gudrun Wibbelt (IZW, Germany)
09:00 - 17:00	The use of ultrasound and computed tomography in zoo animals Thomas B. Hildebrandt (Leibniz Institute for Zoo and Wildlife Research (IZW), Germany) Frank Goeritz (IZW, Germany) Robert Hermes (IZW, Germany) Guido Fritsch (IZW, Germany) Susanne Holtze (IZW, Germany)
08:30 - 16:00	Registration Conference centre; Technische Universität Berlin; Straße des 17. Juni 135, 10623 Berlin
19:00 - 22:00	Welcome evening – Ice breaker Aquarium Berlin, Budapester Straße 32, 10787 Berlin

25 th May		Thursday
07:30 - 19:00		Registration (Conference centre)
08:00 - 08:30		Opening ceremony (Steinmetz H, Greenwood AD, Hofer H, Naumann R, Knieriem A)
Session chairs	Kik M Mühldorfer K Guevara L Greenwood A Hammer Jensen T Bos J	Pathology and Infectious diseases
08:30	van den Brand JMA	Plenary talk: The role of (wild) animals in emerging viral zoonoses (p. 2)
09:30	Shilton CM	The pathology of invasive colonic entamoebiasis, an emerging disease of cane toads in Australia (p. 3)
09:45	Dervas E	A novel nidovirus in green tree pythons (<i>Morelia viridis</i>) as the causative agent of mucoid pneumonia (p. 4)
10:00	van Bolhuis H	Management of a tularaemia outbreak in red tailed guenons (<i>Cercopithecus ascanius</i>) (p. 5)
10:15	Quintard B	<i>Yersinia spp.</i> infection in zoo animals: a retrospective study over seven years in Mulhouse Zoo (p. 6)
10:30		Coffee break
11:00	Kunze M	Putative risk and protective factors associated with <i>Toxoplasma gondii</i> infection in captive felids (p. 7)
11:15	Giorgiadis M	Haemosporidian parasites in strigiformes: results of an epidemiological survey in 15 French zoos (p. 8)
11:30	Soilemetzidou SE	Using behavioural enrichment toys to non-invasively monitor pathogen shedding in zebras (<i>Equus zebra</i> , <i>Equus quagga</i> , <i>Equus grevyi</i>) (p. 9)
11:45	Pereira N	Antimicrobial bacterial resistance in public aquaria. Should we be concerned? Preliminary report concerning six years of bacterial cultures and resistance to antimicrobials in fish, sea birds, and amphibians (p. 10)
Session chairs	Lopez J Laricchiuta P	Herpetology
12:00	Hetzel U	Vertical Transmission of arenaviruses in BIBD diseased boid snakes (p. 11)
12:15	Thompson SB	Limiting transmitter associated morbidity and mortality in snakes (p.12)
12:30		EAZWV working group/partner reports (main lecture hall – everyone welcome)
13:00		Lunch & working group meetings
Session chairs	Walzer C Abreu S Möller T Larsen RS Czirják GÁ Grützmacher K	Conservation and Wildlife I
14:00	Walzer C	Plenary talk: Take a walk on the wild side – How can zoo-based veterinarians “help” wildlife? (p. 15)
15:00	Jayson SL	Veterinary input into the Zoological Society of London (ZSL) amphibian conservation programmes (p. 18)
15:15	Kvapil P	Why do animals in the zoo die? (p. 19)
15:30	Moriceau M-A	How can an animal poison call centre be involved in vultures conservation? (p. 20)
15:45	Hvilsom C	Bank on it! The EAZA biobank (p. 23)
16:00		Coffee break & poster session

25 th May		Thursday
16:30	Masters NJ	A multi-disciplinary approach to the conservation of gyps vultures in South Asia – a role for veterinary professionals (p. 24)
16:45	Keller DL	Periodontal disease in the lesser bushbaby (<i>Galago moholi</i>) (p. 32)
17:00	Niphuis H	Screening Peruvian black spider monkeys (<i>Ateles chamek</i>) as part of a reintroduction program into the Tambopato National Reserve in Peru (p. 33)
17:15	Hokan M	Sleeping in tree holes may promote parasitism in wild lemurs (p. 34)
17:30	Czirják GÁ	You are where you eat: high <i>Brucella</i> seroprevalence in coastal but not inland arctic foxes (p. 35)
17:45	Webster RKE	<i>Paranannizziopsis australasiensis</i> in tuatara (p. 36)
18:00	Students general assembly & EAZA veterinary committee & JZWM associate editors meeting (concurrent)	
19:00	Working group meetings (specific information will be announced at the conference)	
20:00 - 23:00	Festive evening Italian Restaurant "Osteria Maria", Leydenallee 79, 12167 Berlin-Steglitz	

26 th May		Friday
08:00 - 19:00	Registration (Conference centre)	
Session chairs	Adkesson M Casares M Kasberg J	Diagnostics
08:30	Collins D	Computerised tomography guided endoscopic sinus surgery in an adult western lowland gorilla (<i>Gorilla gorilla gorilla</i>) (p. 37)
08:45	Liptovszky M	An update on cardiac disease of great apes – achievements and future directions of the ape heart project (p. 38)
09:00	Ruetten M	Gene analysis of hepcidin and blood levels in three different lemur species (p. 41)
09:15	Lueders I	A full mouth speculum for elephants facilitating bronchoscopy, gastric tubing, and dental health evaluation (p. 42)
09:30	van Zijll Langhout M	Evaluation of metabolic bone disease in wild and captive common spadefoot toads (<i>Pelobates fuscus</i>) by computed tomography, as part of a captive rearing programme (p. 43)
09:45	Holtze S	Ultrasound assessment of wild olms (<i>Proteus anguinus anguinus</i>) in Croatia (p. 44)
10:00	Adkesson MJ	Evaluation of a pressure-sensitive walkway system for gait characterisation in Humboldt penguins (<i>Spheniscus humboldti</i>) (p.45)
Session chairs	Hermes R Avni-Magen N Koroknai V	Reproduction
10:15	Martínez-Navado E	Successful semen cryopreservation in black-footed penguin (<i>Spheniscus demersus</i>) and gentoo penguin (<i>Pygoscelis papua</i>) (p. 47)
10:30	Coffee break	
11:00	Kasberg J	Yield of semen samples collected by urethral catheter compared to electroejaculation in African lion (<i>Panthera leo</i>) (p. 48)
11:15	Ververs C	Reproductive performance parameters in a population of 1,000+ game-ranched white rhinoceroses (<i>Ceratotherium simum simum</i>) (p. 49)
11:30	Hermes R	Birth management in white rhinoceros (<i>Ceratotherium simum simum</i>) (p. 50)
11:45	Fiuza R	The Sabah rhino breeding programme: Reproductive pathology of wild-caught Sumatran rhinoceroses and its implications in conservation (p. 51)
12:00	Schwarzenberger F	Contraception in giraffes using the GnRH vaccine Improvac® (p. 52)
12:15	Crespo-Picazo JL	Use of assisted reproductive techniques in fish species facing extinction: the European eel (<i>Anguilla anguilla</i>) case (p. 53)

26th May		Friday
12:30		EAZWV section reports (main lecture hall – everyone welcome)
13:00		Lunch & working group meetings
		Legislation
14:00	Nuijten D, de Man D	Plenary talk: Developments in the EU's animal health legislation and EAZA's new population management structure (p. 54)
Session chairs	Hoby S Bouts T	Welfare
15:00	Schiffmann C	When elephants fall asleep – case studies and practical solutions for geriatric animals (p. 57)
15:15	Hatt JM	The welfare assessment questionnaire at Zurich Zoo - a tool to monitor quality of life in geriatric or chronically ill animals (p. 58)
15:30	Tahas S	Where does the money go? A decennial retrospective analysis of drug expenditure at Zurich Zoo (p. 59)
15:45	Mulot B	A suspected case of psychosocial short stature in a female gorilla (<i>Gorilla gorilla gorilla</i>): when ape psychological disorders meet human's (p. 60)
16:00		Coffee break & poster session
Session chairs	Larsen RS Czirják GÁ Grützmacher K Tuttle A Martínez Nevado E Popscue I	Wildlife II and Aquatics
16:30	Grilo M	Virulence traits, antibiotic resistance and clonality of enterococci isolated from lions (<i>Panthera leo</i>) of the Niassa National Reserve, Mozambique (p. 61)
16:45	Roller M	Post-mortem examination of free-ranging European brown hares (<i>Lepus europaeus</i>) from Schleswig-Holstein, Germany (p. 62)
17:00	Reckendorf A	Post-mortem findings of 12 sperm whales (<i>Physeter macrocephalus</i>) stranded on the coast of Schleswig-Holstein, Germany, in early 2016 (p. 63)
17:15	Cole GC	Hexabothrid monogenean parasites in a group of short-tail stingrays (<i>Dasyatis brevicaudata</i>) and successful use of a blood transfusion to treat anaemia (p. 64)
17:30 - 18:30		Roundtable discussions (4 parallel sessions)
Chair:	Lécu A	Tuberculosis: TB or not TB
Chair:	Lawrenz A Sanderson S	The role of veterinary advisors
		Two further topics that arise at the meeting by popular demand
18:30		Working group meetings (specific information will be announced at the conference)
19:00 - 20:00		Student-mentor-mixer (Conference venue)
20:30 - 23:30		Students night out (Time and place will be announced at the Students General Assembly on Thursday)

27 th May		Saturday
08:00 - 12:00		Registration (Conference centre)
Session chairs	Voracek T Lobo Fernandes T Kvapil P	Surgery and anaesthesia
08:30	Bernardino RI	Plenary talk: Surgical challenges: a fifteen years' experience (p. 65)
09:30	Duby D	Surgical management and identification of 3 different new tumors in captive eastern quolls (<i>Dasyurus viverrinus</i>) (p. 66)
09:45	Le Net R	Effect of midazolam hydrochloride administration via intranasal route on survival in surf scoters (<i>Melanitta perspicillata</i>) captured for implantation of intracoelomic transmitter (p. 67)
10:00	Fernández-Bellón H	Propofol-sevoflurane anaesthesia in juvenile <i>Varanus komodoensis</i> (p. 68)
10:15	Barbon AR	Sevoflurane anaesthesia in livingstone's fruit bats (<i>Pteropus livingstonii</i>) (p. 69)
10:30		Coffee break
11:00	Sá Braz Barros D	Effective thiafentanil immobilisation and physiological responses of free ranging moose (<i>Alces alces</i>) in Northern Sweden (p. 70)
Session chairs	Vercammen F Perrin K Chenet B	Nutrition
11:15	Strike T	Long-term management of type 2 diabetes mellitus in callitrichids with oral anti-hyperglycaemic medication and dietary modification (p. 71)
11:30	Bertelsen MF	Stable isotope signatures of puffins (<i>Fratercula arctica</i>) and common murrelets (<i>Uria aalge</i>) on known diets – a verification study (p. 72)
11:45	Drake GJ	Help! My bear is going bald! Recent advances in the treatment of Andean bear (<i>Tremarctos ornatus</i>) alopecia syndrome (p. 73)
12:00	Closing ceremony, poster award, student award, Rudolf Ippen Young Scientist Award	
13:00		Lunch
14:00		EAZWV General Assembly
15:30		Visit Zoo Berlin and Tierpark Berlin
19:00 - 24:00		Zoo evening, conference banquet at the Tierpark Restaurant "Patagona", Am Tierpark 125, 10319 Berlin

28 th May		Sunday
09:30 - 13:30		Option 1 Excursion: "Berlin by Boat" Duration: 4 hours Departure: Cornelius Bridge, Corneliusstraße 11, 10787 Berlin
07:30 - 19:30		Option 2 Excursion: Lower Oder Valley National Park Duration: full day (07:30 - 19:30) Departure: Technische Universität Berlin (conference centre)

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VENUES

Conference centre (registration, conference, lunch)

Technische Universität Berlin (main building)

Straße des 17. Juni 135
10623 Berlin

Workshops (on Wednesday, 24th May 2015)

Zoo Berlin

Hardenbergplatz 8
10787 Berlin

Technische Universität Berlin

Straße des 17. Juni 135
10623 Berlin

Leibniz Institute for Zoo and Wildlife Research (IZW)

Alfred-Kowalke-Straße 17
10315 Berlin

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The conference office is directly located at the conference centre.

Opening times of the conference registration & information desk:

➤ Wednesday,	24 th May	08:30 - 16:00	Conference centre
➤ Thursday,	25 th May	07:30 - 19:00	Conference centre
➤ Friday,	26 th May	08:00 - 19:00	Conference centre
➤ Saturday,	27 th May	08:00 - 12:00	Conference centre

The staff at the registration and information desk will be happy to help you with any questions and problems regarding the conference. Tourist and sightseeing information will be provided.

Notice and communication boards for announcements, changes, waiting lists or additions to the programme will be located at the registration & information desk. Messages for other participants can be posted there as well.

Coffee/tea and other refreshments will be served during breaks; **lunch** will also be served in the conference centre.

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Fax: +49 30 31 55 1002

Email: reservation.berlin@grandcityhotels.com

Website: <https://www.wyndhamberlinexcelsior.com/en>

Hotel SANA Berlin

Nürnberger Straße 33/34, 10777 Berlin

Phone: +49 30 2005 151-851

Fax: +49 30 2005 151-9

Email: rsv1.berlin@sanahotels.com

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Mollstraße 4, 10178 Berlin

Phone: +49 30 214 80 28 28

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Hardenbergstraße 15, 10623 Berlin

Phone: +49 30 2602 1287

Fax: +49 30 860 90 99 99

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Nürnberger Straße 50-55, 10789 Berlin

Phone: +49 30 68 315 2301

Fax: +49 30 68 315 5555

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Lietzenburger Strasse 85, 10719 Berlin

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Please refer to the code 'Leibniz-IZW' when booking your hotel room.

ORGANISATION

The **Zoo and Wildlife Health Conference 2017** is organised by the Leibniz Institute for Zoo and Wildlife Research (IZW, Berlin, Germany), the European Association of Zoo and Wildlife Veterinarians (EAZWV, Liebefeld-Berne, Switzerland), in cooperation with the Zoo and Tierpark Berlin (Berlin, Germany).

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Andreas Pauly
Günther Strauß

CONTACT



Contact: Claudia Bienek
Hardenbergplatz 8
10787 Berlin
Germany

E-Mail: C.Bienek@zoo-berlin.de
Phone: (+49) 30 25 401 215



Leibniz Institute for Zoo
and Wildlife Research
IM THE FORSCHUNGSVERBUND BERLIN E.V.

Contact: Josepha Prügel, Steven Seet
Alfred-Kowalke-Straße 17
10315 Berlin
Germany

E-Mail: 2017@zoowildlifehealth.org
Phone: (+49) 30 51 68 127
Fax: (+49) 30 51 26 104



Contact: Hanspeter Steinmetz
Walter Zoo
Neuchlen 200
9200 Gossau
Switzerland

E-mail: president@eazwv.org

NOTES
