

SCIENTIFIC PROGRAMME

INTERNATIONAL CONFERENCE ON DISEASES OF ZOO AND WILD ANIMALS 2015

MAY 13 - 16
BARCELONA, CATALONIA (SPAIN)



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



Welcome

We welcome you to the **International Conference on Diseases of Zoo and Wild Animals 2015** in Barcelona, Spain. By being part of this unique international annual gathering, you are contributing to advancing key research on diseases of free-ranging and zoo animals.

Barcelona Zoo opened in 1892 in the historic Ciutadella Park beside the old town. Since those early years, the Zoo has evolved to adapt to the present social realities that demand a strong commitment to research, conservation and education, and is an active member of the zoo community. It occupies 13'5 ha and can boast remarkable vegetation and a varied representation of local and allochton animal species of the different world's biomes, including an outstanding collection of primates and reptiles. The Barcelona Zoo has the charm of an old zoo rooted in the past but successfully aiming at modernity and quality.

As a member of the European Association of Zoos and Aquaria (EAZA), the World Association of Zoos and Aquariums (WAZA), AIZA, UICN, EAAM, WWF and GRASP, the Barcelona Zoo is home to over 2,000 animals from 329 species, 28 % of which in EEP or ESB programmes. It was the home of Snowflake, the famous albino gorilla who died in 2003.

The Barcelona Zoo participates in numerous awareness and conservation projects and more than 1 million people visit it every year. Through its Foundation, it promotes its own programme of conservation & research grants. Through its team of curators and veterinarians, it has set up an Animal Welfare Education Centre (ZAWEC) jointly with the Autonomous University of Barcelona.

In 2012, it started a strategic plan for the renewal of all its exhibits, to be concluded in 2020. Right now a new Savannah area and Orangutan's house are under development.

We wish to make your stay pleasurable and productive. Please do not hesitate to contact us at the conference office whenever you need help and/or advice.

We hope you will enjoy the conference and have a memorable stay in Barcelona!

Anke Schumann
Steven Seet
Claudia A. Szentiks
Heribert Hofer
Dagmar Boras
Alex D. Greenwood

Hugo Fernández Bellon
Vanessa Almagro
Maria Josep Virgos
Mariángeles Huzman
Josep Maria Alonso
Miquel Trepas
Carme Lanuza

Alexis Lécu
Stephanie Sanderson

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

*Barcelona Zoo
Barcelona, Spain*

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

Contact local organisers:
Contact IZW organiser:

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Cover:

Komodo dragon (*Varanus komodoensis*);
J. Fàbregas / © Barcelona Zoo

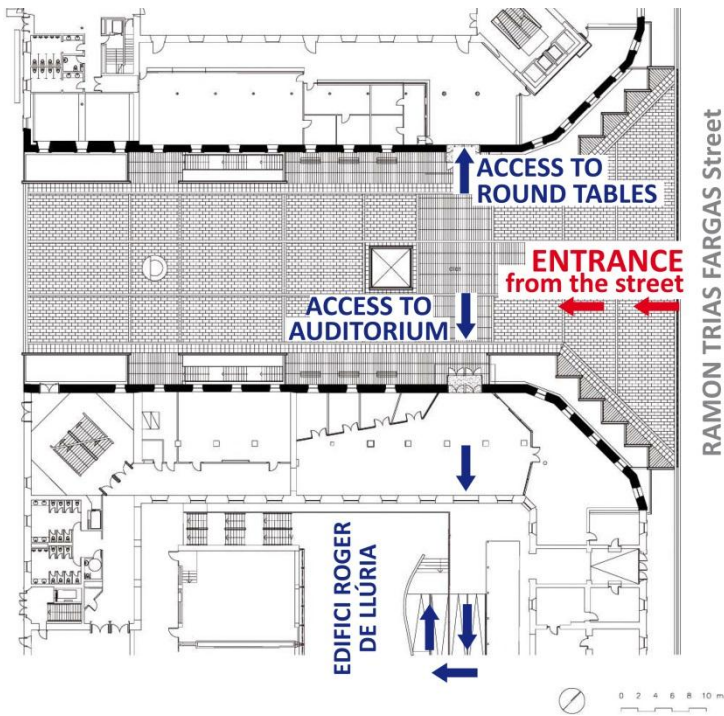


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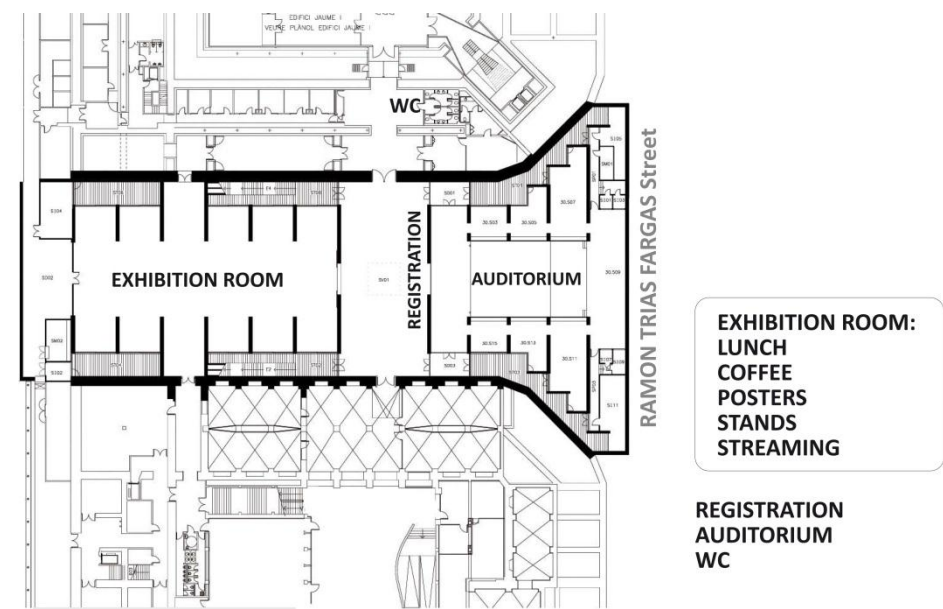
FLOOR PLAN: CONFERENCE VENUE

(Pompeu Fabra University, UPF, Campus De La Ciutadella)

GROUND FLOOR



UNDERGROUND FLOOR



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SCIENTIFIC PROGRAMME – GENERAL INFORMATION

COPYRIGHT REGULATIONS

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 Pompeu Fabra University (Universitat Pompeu Fabra, UPF) in **Barcelona, Spain**. There will be four **plenary talks**, one at the beginning of each morning session and one at the beginning of the Thursday afternoon session. The last plenary talk will be held on the Saturday morning session. Contributed talks will be held in **nine** 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. 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, 13th May, at 15:00. Posters should be on site until Saturday, 16th May, at 13:00.

Workshops 1 – 9 are scheduled for Wednesday, 13th May (for times, durations, and locations please see below).

1. Fish medicine for beginners (14:30 – 18:00, L'Aquàrium de Barcelona)
2. Advanced fish medicine (09:00 – 13:00, L'Aquàrium de Barcelona)
3. Diagnostic imaging (09:00 – 18:00, Hospital Veterinari Montjuïc)
4. Advanced anaesthesia (09:00 – 18:00, Barcelona Zoo)
5. Komodo dragon medicine (14:00 – 18:00, Barcelona Zoo)
6. An introduction to FAUNA Zoo Diet Management System (09:00 – 13:00, Barcelona Zoo)
7. ACZM/ECZM - Ultra-short workshop (09:00 – 18:00, Barcelona Zoo)
8. Animal welfare assessment (14:00 – 18:00, Barcelona Zoo)
9. Clinical procedures in small mammals (14:00 – 18:00, Barcelona Zoo)

In the morning of Wednesday, 13th May, there will be volunteers at each workshop. All workshop participants will receive a name badge, which ensures free entry to the workshop areas throughout the day.

Roundtable discussions (parallel sessions) are scheduled for **Friday, 15th May (17:30 – 18:30/18:50*)** in the conference centre at the Pompeu Fabra University.

1. Transport & neuroleptics
2. Tuberculosis*
3. Veterinary complications
4. Management euthanasia – necessity and ethics, practical applications, and management of public perception

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 2016. 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:

2016@zoovet-conference.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 **12:30** and **13:00** on **Saturday, 16th 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 International Conference on Diseases of Zoo and Wild Animals 2015”.

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. **European College of Zoological Medicine (ECZM): Wednesday, 13th May, during the welcome evening** (contact: Hanspeter Steinmetz, hp.steinmetz@knieskinderzoo.ch; Mads Bertelsen, mfb@zoo.dk; Maya Kummrow, kummrow@zoo-wuppertal.de; Miguel Casares, miguel.casares@bioparcvalencia.es; Endre Sós, drsos@zoobudapest.com)
2. **EAZA Veterinary Committee: Thursday, 14th May, during lunch break** (contact: Arne Lawrenz, lawrenz@zoo-wuppertal.de)
3. **Students General Assembly: Thursday, 14th May, 19:15 – 20:15 (main lecture hall)** (contact: Julia Reiners, ezwvstudents@googlemail.com)
4. **EAZWV Infectious Diseases Working Group: Friday, 15th May, during lunch break** (contact: Alexis Lécu, alecu@vetosphere.com)

SOCIAL EVENTS

Welcome evening (ice breaker). Wednesday, 13th May, 19:00 – 21:30. We will meet at the El Born Centre Cultural (Plaça Comercial, 12; 08003 Barcelona) and greet colleagues over a variety of snacks and beverages.



© El Born Centre Cultural

Festive evening. Thursday, 14th May, 20:30 – 23:30. We are looking forward to a special evening in the 'Restaurant 1881 per Sagardi'.

Address restaurant: Museu d'Història de Catalunya, Plaça de Pau Vila 3, 08039 Barcelona
From 22:00 h onwards all conference participants who will not take part in the dinner are welcome to join us for a drink (10 €) and music by a DJ!



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Student-mentor-mixer. Friday, 15th May, 19:00 – 20:30, conference centre at Pompeu Fabra University. 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 (e.g. zoo practitioner, research, field projects) and the students will rotate in small groups.

Students night out. Friday, 15th May, 21:00 – 23:00.

Organised by the EAZWV Student Working Group (SWORG), 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, 14th May, 19:15 – 20:15), so do not miss it!

Contact Julia Reiners: eazwvstudents@googlemail.com

Conference banquet (zoo evening). Saturday, 16th May, 20:00 – 24:00, Barcelona Zoo.

The farewell evening will take place in the central part of the Zoo, 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 visit areas under development, salient zoo facilities including the Veterinary Clinic, and also observe some examples of animal management.



© Zoo Barcelona

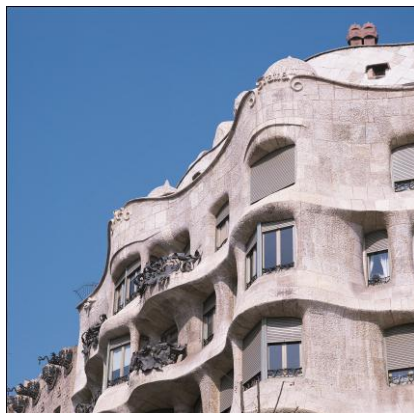
**Sunday excursion, option 1: "Modernist" Barcelona by bike
17th May, approx. 10:00 - 13:00 (duration: from 2 to 3 hours)**

Departure: Esparteria 3, 08003 Barcelona (El Born), Tel: +34 932682104

Barcelona is the capital of Art Nouveau in Europe. On bicycles we will discover the most important monuments and buildings designed by Antoni Gaudí and make a halt for a well-deserved tapa and cold beer. Highlights are Sagrada Família, La Pedrera, Casa Batlló, Casa Amatller, Palau de la Música.



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Sunday excursion, option 2: One morning bus sightseeing + visit to the Sagrada Família
17th May, approx. 09:00 - 13:00 (duration: approx. 4 hours)

Departure: Pompeu Fabra University (Universitat Pompeu Fabra, UPF)
Campus de la Ciutadella, Ramon Trias Fargas 25-27, 08005 Barcelona

This bus tour will take us to the most emblematic Art Nouveau buildings in Barcelona. A professional guide will give us an insight into the work of Antoni Gaudí and show us his best known work, the immense but still unfinished *Basílica de la Sagrada Família*, under construction since 1882. We will step off the bus to visit this unique temple, a symbol of Barcelona all over the world. Highlights are *Sagrada Família*, *La Pedrera*, *Casa Batlló*, *Casa Amatller*.



©Basílica de la Sagrada Família

Sunday excursion, option 3: Empordà wetlands and Empúries ruins
17th May, approx. 09:00 - 18:00 (duration: approx. 9 hours)

Departure: Pompeu Fabra University (Universitat Pompeu Fabra, UPF)
Campus de la Ciutadella, Ramon Trias Fargas 25-27, 08005 Barcelona

We will travel by bus to the Empordà/Costa Brava area, to the North of Barcelona, where we will visit the Natural Park of the Empordà Wetlands, a protected area of great ecological value, and the impressive Empúries Greek and Roman Ruins, situated in an absolutely stunning location just behind the beautiful beach of Sant Martí d'Empúries, in the picturesque Gulf of Roses. We will have lunch in the Hostal Empúries, just beside the remains and facing the Portixol beach, where we will be offered a taste of sophisticated eco-Mediterranean gastronomy.

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 Barcelona Zoo

All **conference participants** and accompanying persons who have registered have free entry to the Barcelona Zoo from Thursday, 14th May to Sunday, 17th May. Please be prepared to present your name badge at the entrance gates to obtain free entry.

SCIENTIFIC PROGRAMME

Venues

Workshops: L'Aquarium de Barcelona
Moll d'Espanya del Port Vell s/n, 08039 Barcelona

Hospital Veterinari Montjuïc
Carrer Mèxic 30, 08004 Barcelona

Barcelona Zoo
Parc de la Ciutadella s/n, 08003 Barcelona

Conference: Pompeu Fabra University (Universitat Pompeu Fabra, UPF)
Campus de la Ciutadella, Ramon Trias Fargas 25-27, 08005 Barcelona

13th May	Wednesday
	Workshops: Parallel sessions Locations: Three 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 L'Aquarium de Barcelona:	
09:00 - 13:00	Advanced fish medicine Alexis Lécu (Paris Zoo, France) Daniel Garcia (Oceanografic, Spain)
14:30 - 18:00	Fish medicine for beginners Francesc Padròs (Fish Diseases Diagnostic Service, Veterinary School, Universitat Autònoma de Barcelona, Spain)
The following workshop will be held at the Hospital Veterinari Montjuïc:	
09:00 - 18:00	Diagnostic imaging Stephanie Ohlert (University of Zurich, Switzerland) Rosa Novellas (Hospital Clinic Veterinari UAB, Universitat Autònoma de Barcelona, Spain)
The following six workshops will be held at the Barcelona Zoo:	
09:00 - 13:00	An introduction to FAUNA Zoo Diet Management System Andrea Fidgett (Chester Zoo, UK) Loren Peterson (Format International, UK)
09:00 - 18:00	ACZM / ECZM - Ultra-short workshop Hanspeter W. Steinmetz (Knies Kinderzoo, Switzerland)
09:00 - 18:00	Advanced anaesthesia Christine Lendl (Grünwald, Germany) Carsten Grøndahl (Copenhagen Zoo, Denmark) Chris Walzer (University of Veterinary Medicine, Vienna, Austria) Ferran Manen (Hospital Sant Joan de Déu, Spain)
14:00 - 18:00	Animal welfare assessment Francesc Xavier Manteca Vilanova (School of Veterinary Science, Universitat Autònoma de Barcelona, Spain) Patrick Pageat (Institut de Recherche en Sémiologie et Ethologie Appliquée, France)
14:00 - 18:00	Clinical procedures in small mammals Jaume Martorell (Hospital Clinic Veterinari UAB, Universitat Autònoma de Barcelona, Spain)
14:00 - 18:00	Komodo dragon medicine Willem Schaftenaar (Rotterdam Zoo, The Netherlands) Vanessa Almagro (Barcelona Zoo, Spain)
15:00 - 19:00	Registration (Conference centre)
19:00 - 21:30 19:00 - 20:00	Welcome evening – Ice breaker (El Born Centre Cultural) European College of Zoological Medicine (ECZM) (El Born Centre Cultural)

14 th May		Thursday
07:30 - 19:00		Registration (Conference centre)
08:30 - 09:00		Opening ceremony (Sanderson S, Greenwood AD, Trepatt M)
Session chairs	Luz S Fernández Bellon	Assessing zoo animal welfare I
09:00 - 09:45	Manteca X	Plenary talk: Assessing zoo animal welfare using animal-based indicators (p. 1)
09:45 - 10:00	Biolatti C	Behavioural analysis of captive tigers (<i>Panthera tigris</i>) under different zoo managements (p. 2)
10:00 - 10:15	Bakker J	Hair cortisol concentrations in non-human primates as reliable indicator of chronic stress (p. 5)
10:15 - 10:30	Bechstein N	Assessment of faecal glucocorticoid metabolites in healthy and alopecic Andean bears (<i>Tremarctos ornatus</i>) in Germany (p. 6)
10:30 - 10:45	Carbajal A	Validation of an enzyme immunoassay for the measurement of shed skin corticosterone in Komodo dragons (<i>Varanus komodoensis</i>) (p. 7)
10:45 - 11:15		Coffee break
Session chairs	Lemberger K Garamvölgyi L	Assessing zoo animal welfare II
11:15 - 11:30	Lopez J	Practical zoonosis management for zoos (p. 8)
11:30 - 11:45	Hermes R	Bronchoalveolar lavage for Tb diagnosis in rhinoceros – impact of Tb diagnosis on animal welfare (p. 9)
11:45 - 12:00	Kik M	<i>Mycobacterium tuberculosis</i> infection in two African elephants (<i>Loxodonta africana</i>) (p. 10)
12:00 - 12:15	Painer J	Veterinary services and research supervision for non-governmental wildlife welfare organisations (p. 11)
12:15 - 12:30	Kirchner MK	Construction of an integrated welfare assessment system (MacWel) for macaques (<i>Macaca</i> spp.) in human husbandry (p. 12)
12:30 - 12:45	Holtze S	Naked mole-rat husbandry, diagnostics and what we can learn from the wild (p.18)
12:45 - 14:30		Business lunch: EAZWV GA Activity Reports A1 & EAZA Veterinary Committee
Session chairs	Nielsen A Grøndahl C	Pharmacology I
14:30 - 15:15	Gamble KC	Plenary talk: Pharmacokinetic alchemy: interpretation, logistics and ethics in exotic animal medicine (p. 19)
15:15 - 15:30	Perrin KL	Alfaxalone anaesthesia in the Bengalese finch (<i>Lonchura domestica</i>) (p. 41)
15:30 - 15:45	Meyer L	The use of partial-opioid antagonism combined with oxygen insufflation to support the physiology of chemically immobilised white rhinoceros (<i>Ceratotherium simum</i>) (p. 32)
15:45 - 16:00	Gerlach CA	Long-term anaesthesia following two different induction protocols in South African impala (<i>Aepyceros melampus</i>) (p. 33)
16:00 - 16:15	Flanders J	Pharmacokinetics of single dose intravenous and oral flunixin meglumine in the black rhinoceros (<i>Diceros bicornis</i>) (p. 34)
16:15 - 17:15		Coffee break & poster session
Session chairs	Backues K Goeritz F	Pharmacology II / Free topics
17:15 - 17:30	Caulkett N	Capture of free-ranging white-tailed deer (<i>Odocoileus virginianus</i>) with a combination of medetomidine, azapalone and alfaxalone (p. 35)
17:30 - 17:45	Wenger S	Comparison of two similar anaesthetic protocols for prolonged recumbency using isoflurane and intermittent bolus injection of etorphine in an adult male African elephant (<i>Loxodonta africana</i>) (p. 36)
17:45 - 18:00	Fahlman Å	Challenges with capture and zolazepam-tiletamine immobilisation of free-ranging and captive grey wolves (<i>Canis lupus</i>) (p. 40)
18:00 - 18:15	Möller T	<i>Mycobacterium marinum</i> infections in dolphins – 20 years of co-existence in the dolphinarium of Kolmarden, Sweden (p. 186)
18:15 - 18:30	Lublin A	Evaluation of a novel sustained-release formulation of doxycycline in parrots (<i>Psittacula krameri</i>) and in domesticated chickens (<i>Gallus gallus domesticus</i>) (p. 42)
18:30 - 18:45	Wiegmann L	Occurrence of <i>Babesia</i> species in captive reindeer (<i>Rangifer tarandus</i>) in Germany (p. 43)
18:45 - 19:00	Murphy H/Strong V	The Great Ape Heart Project: A model for collaborative disease investigation (p. 44)
19:15 - 20:15		Students General Assembly
20:30 - 23:30		Festive evening

15 th May		Friday
08:30 - 19:00		Registration (Conference centre)
Session chairs	Sanderson S Korugan C	Surgery I
09:00 - 09:45	Pizzi R	Plenary talk: Surgery: old and new techniques applied to wild animals (p. 45)
09:45 - 10:00	Cole G	Surgical management of a persistent right aortic arch in a giraffe (<i>Giraffa camelopardalis</i>) (p. 46)
10:00 - 10:15	Sós E	Attempted surgical management of an intramedullary spinal tumour in a babirusa (<i>Babirusa babyrussa</i>) (p. 47)
10:15 - 10:30	Griffith EM	A fasciocutaneous flap for coverage of exposed bone in the hind limb of a Rothschild giraffe (<i>Giraffa camelopardalis rothschildi</i>) (p. 48)
10:30 - 10:45	Ouard S	Endoscopic salpingectomy in non-human primates (p. 49)
10:45 - 11:30		Coffee break
Session chairs	Avni-Magen N Magnone W	Surgery II / Free topics
11:30 - 11:45	Kohl M	Dentigerous cyst in the nares of a juvenile white crowned mangabey (<i>Cercocebus atys lunulatus</i>) treated successfully by minimal invasive surgery (p. 50)
11:45 - 12:00	Wissink-Argilaga N	Successful treatment of a sarcoid in a Somali wild ass (<i>Equus africanus somaliensis</i>) using Aldara® 5 % cream (imiquimod) (p. 51)
12:00 - 12:15	Bacon HJ	Diagnostic imaging of nasal neoplasia in Asiatic black bears (<i>Ursus thibetanus</i>) (p. 52)
12:15 - 12:30	Wenker C	Equine sarcoid in Somali wild ass (<i>Equus africanus somalicus</i>): preliminary report of a survey in the European Endangered Species Programme (EEP) (p. 58)
12:30 - 12:45	Lüders I / Weber H	None-surgical artificial insemination in felids: Asiatic golden cat (<i>Catopuma temmincki</i>) and Persian leopard (<i>Panthera pardus saxicolor</i>) (p. 59)
12:45 - 14:30		Business lunch: EAZWV GA Activity Reports A2 & Infectious Disease Working Group
Session chairs	van Zijl Langhout M Jurek V	Free topics
14:30 - 14:45	Rüegg S	Detection of <i>Chlamydia pneumoniae</i> in a Swiss snake collection and treatment with marbofloxacin (p. 63)
14:45 - 15:00	Carvalho MPN	Flow cytometry analysis of peripheral blood leukocyte populations of three Brazilian snake species: <i>Boa constrictor</i> , <i>Crotalus durissus</i> and <i>Bothrops jararaca</i> (p. 64)
15:00 - 15:15	Abdelgawad A	Seroprevalence of equine herpesviruses type 1 and 9 (EHV-1 and EHV-9) antibodies among captive and wildlife animals using specific peptide-based ELISA (p. 65)
15:15 - 15:30	Scaglione FE	Health status of grey squirrel populations (<i>Sciurus carolinensis</i>) in Piedmont: anatomico-pathological and microbiological investigations (p. 66)
15:30 - 15:45	Moghani F	Brucellosis and stormy abortion in Persian goitered gazelle (<i>Gazella subgutturosa subgutturosa</i>) (p. 68)
15:45 - 16:00	Ryder OA	The plight of the Northern white rhinoceros (<i>Ceratotherium simum cottoni</i>): is there still hope to prevent extinction? (p. 75)
16:00 - 16:15	Perera BVP	Mortality of wild Sri Lankan elephants (<i>Elephas maximus maximus</i>) as a result of <i>Parabronema smithi</i> infestation (p. 76)
16:15 - 16:30	Seilern-Moy K	Distribution and load of elephant endotheliotropic herpesvirus DNA in tissues from associated fatalities in Asian elephants (<i>Elephas maximus</i>) (p. 77)
16:30 - 17:30		Coffee break & poster session
17:30 - 18:30/18:50*		Roundtable discussions (4 parallel sessions)
Chair:	Grøndahl C	Transport & neuroleptics
Chair:	Lécu A	Tuberculosis*
Chair:	Schaftenaar W	Veterinary complications
Chair:	Kummrow M Lawrenz A Bertelsen MF	Management euthanasia - necessity and ethics, practical applications, and management of public perception
19:00 - 20:30		Student-mentor-mixer (Conference centre)
21:00 - 23:00		Students night out (Time and place will be announced at the Students General Assembly on Thursday)

16 th May		Saturday
08:30 - 12:30		Registration (Conference centre)
Session chairs	Lobo Fernandes T Benaglia F	Aquarium medicine and Surgery I
09:00 - 09:45	Thornton SM	Plenary talk: Public aquarium medicine and surgery – advances in the past 20 years and challenges ahead (p. 78)
09:45 - 10:00	Saviano P	Additional ultrasonographic findings in the fourth trimester of pregnancy in bottlenose dolphin (<i>Tursiops truncatus</i>) under human care (p. 79)
10:00 - 10:15	Jensen TH	<i>Mycobacterium pinnipedii /africanum</i> in South American sea lions (<i>Otaria flavescens</i>) in Aalborg Zoo (p. 80)
10:15 - 10:30	Strike T	Dealing with an outbreak of <i>Mycobacteria peregrinum</i> in Australian lungfish (<i>Neoceratodus fosteri</i>) using long- term triple antibiotic therapy (p. 81)
10:30 - 10:45	Stidworthy MF	A retrospective review of pathological findings in elasmobranchs submitted to International Zoo Veterinary Group Pathology by sea life centres (p. 82)
10:45 - 11:15		Coffee break
Session chairs	Liesegang A Möller T	Aquarium medicine and Surgery II /Free topics
11:15 - 11:30	García-Párraga D	Decompression sickness in sea turtles: key diagnostic and therapeutic aspects and new prognostic considerations (p. 83)
11:30 - 11:45	Thomsen AF	Avian bornavirus – an overlooked infection in European waterfowl (p. 84)
11:45 - 12:00	Chai N	Main and advanced surgery in amphibians (p. 85)
12:00 - 12:15	Juan-Sallés C	Retrospective study of cryptosporidiosis in zoo and aviary birds: 269 cases (p. 86)
12:15 - 12:30	Backues K	Documentation of gastric pneumatosis lesions in black and white ruffed lemurs (<i>Varecia variegata variegata</i>) with the use of radiology and computed tomography and the effect of diet on clinical signs (p. 87)
12:30 - 13:00		Closing ceremony, poster award, student award, Rudolf Ippen Young Scientist Award
13:00 - 14:00		General Assembly EAZWV (Conference centre)
14:00 - 15:00		Lunch
15:30		Visit Barcelona Zoo (within walking distance)
20:00 - 24:00		Zoo evening, conference banquet at Barcelona Zoo

17 th May		Sunday
10:00 – 13:00		Option 1 Excursion: "Modernist" Barcelona by bike Duration: 2 - 3 hours Departure: Esparteria 3 (El Born), Tel: +34 932682104
09:00 - 13:00		Option 2 Excursion: Morning bus sightseeing + visit to the Sagrada Família Duration: approx. 4 hours Departure: Pompeu Fabra University (Universitat Pompeu Fabra, UPF), Campus de la Ciutadella, Ramon Trias Fargas 25-27
09:00 - 18:00		Option 3 Excursion: Empordà wetlands and Empúries ruins Duration: approx. 9 hours Departure: Pompeu Fabra University (Universitat Pompeu Fabra, UPF), Campus de la Ciutadella, Ramon Trias Fargas 25-27

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VENUES

Conference centre (registration, conference, lunch, ice breaker)

Pompeu Fabra University (Universitat Pompeu Fabra, UPF)

Campus de la Ciutadella

Ramon Trias Fargas, 25-27

08005 Barcelona

Getting there:

- From Hotel Icaria Barcelona: approx. 10 minutes' walk
- From H10 Marina Barcelona: approx. 5 minutes' walk
- From Barcelona Zoo: approx. 5 minutes' walk

Workshops (on Wednesday, 13th May 2015)

Barcelona Zoo

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Conference registration & information desk

The conference office is directly located at the Conference Centre.

Opening times of the conference registration & information desk:

- | | | |
|-----------------------------------|---------------|-------------------|
| ➤ Wednesday, 13 th May | 15:00 - 19:00 | Conference centre |
| ➤ Thursday, 14 th May | 07:30 - 19:00 | Conference centre |
| ➤ Friday, 15 th May | 08:30 - 19:00 | Conference centre |
| ➤ Saturday, 16 th May | 08:30 - 12:30 | 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.

RECOMMENDED ACCOMMODATIONS

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ORGANISATION AND CONTACT

The **International Conference on Diseases of Zoo and Wild Animals 2015** 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 Barcelona Zoo.

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| 3 ZEBRA | 16 WHITE RHINOCEROS |
| 4 OSTRICH | 17 AFRICAN ELEPHANT |
| 5 WILDEBEEST | 18 HIPPOPOTAMUS |
| 6 RED KANGAROO | 19 HARBOR SEAL |
| 7 PIED CROW | 20 GIRAFFE |
| 8 SADDLE-BILLED STORK | 21 GALAPAGOS GIANT TORTOISE |
| 9 BARBARY SHEEP | 22 BROWN BEAR |
| 10 HERMANN'S TORTOISE | 23 HUMBOLDT PENGUIN |
| 11 MOUFLO | 24 MEERKAT |
| 12 AIDABRA GIANT TORTOISE | 25 WAPITI |
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