



30 June - 2 July 2022
University of Milan

**9th QUADRENNIAL INTERNATIONAL SYMPOSIUM
ON CANINE AND FELINE REPRODUCTION**

in a joint meeting with the

**24th EUROPEAN VETERINARY SOCIETY FOR
SMALL ANIMAL REPRODUCTION CONGRESS**
ISCFR-EVSSAR 2020+2

Under the auspices of



UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI MEDICINA VETERINARIA
E SCIENZE ANIMALI





Dear Colleagues,

We are pleased to welcome you to the 9th Quadrennial ISCFR and the 24th EVSSAR Congress in Milano, Italy, organized as a Satellite Symposium of the ICAR 2020+2 which takes place in Bologna, Italy.

We hope you enjoy the program that is relevant to all specialists in carnivore reproduction science (from fundamental to clinical researchers). In each session, the lectures from invited speakers and selected abstract presenters will inform the audience about the state-of-the-art in carnivore reproduction as well as the new directions in that field.

This Symposium is the product of a close collaboration between the ISCFR International Organizing Committee, the ISCFR/EVSSAR Scientific Program Committee, and the Local Organizing Committee chaired by Gaia Cecilia Luvoni.

Lastly, this Symposium could not have been possible without the generous support of our sponsors. We are very grateful to all of them.

We wish you all a very pleasant and enriching stay in Milano.

*Michelle Kutzler and Pierre Comizzoli
International Organizing Committee*

Dear EVSSAR members, Dear Colleagues,

On behalf of the EVSSAR Board I am honoured to welcome you to the 9th Quadrennial International Symposium on Canine and Feline Reproduction and the 24th EVSSAR Congress, here at Milan the Capital of Lombardy, organized as a Satellite Meeting to ICAR 2022 which takes place in Bologna, Italy.

Long time has passed from our previous physical meeting at Berlin and since then, our world has changed a lot. COVID-19 had a strong impact on our lives and our scientific activities could not be the exception. The ghost of war visited once more our Continent reminding us that peace, unity, and welfare are not guaranteed in 2022.

But despite all the difficulties, we are here! And we hope that you will enjoy the carefully prepared scientific program, which aims to be interesting for both scientists/academics and practitioners! The high number of research and clinical abstracts that were submitted this year, is very encouraging, as it shows the strong interest in small animal reproduction and that research is still alive, even during these hard times! Following the tradition of previous congresses, interesting subjects will be discussed in this symposium and, both clinical and biotechnological advances will be presented.

This Symposium is the result of the excellent cooperation of the ISCFR International Organizing Committee members, Prof. Michelle Kutzler and Prof. Pierre Comizzoli, the Scientific Program Committee, and the Local Organizing Committee. The professionalism and competence of the chair of the LOC, Prof. Gaia-Cecilia Luvoni and her team, coordinated efficiently all our efforts and has made this congress possible. Thank you, Cecilia!

Organizing our Congress would not have been feasible without the support of our sponsors. We are very grateful to all of them for their great assistance! All delegates are kindly invited to visit the sponsors' exhibition!

The annual EVSSAR General Assembly will take place on Friday the 1st of July at 18.30. This year we have elections, and three new members will be elected at the Board. The final voting will take place during this meeting and all EVSSAR members are invited to participate and to vote!

Lastly, as my duty at the Board is ending this year, I would personally like to thank all the Board members that I have cooperated with all these years: Sebastian Arlt, Helen Ovregaard, Tuire Tamminen, Andrea del Carro, Chiara Milani, Cindy Maenhoudt, Paulo Borges, Ragnvi Hagman, Catherine Lefèvre, Sandra Goericke-Pesch, Sabine Schäfer Somi, and Andrea Münnich! It was a great honor and a greater pleasure to cooperate with you dear friends! Thank you for your trust, thank you for your friendship.

Let's look to the future, let's think to a new beginning! Welcome to Milan!

*George Mantziaras
EVSSAR President*





Welcome to Milan.

A heartfelt thank you to all of you who believed that one day we would make it. That one day we would go past the hard times and we would be again together for science, culture, social relations, new scientific collaborations and good time.

Thanks for being so enthusiastic that the congress was not cancelled and thanks to all your support that made the members of the LOC still able to overcome all the difficulties they faced.

On behalf of the whole LOC, I wish you a wonderful congress and a chance to keep with you the memory that we are back to the real life.

We cannot forget that while I am writing these few lines, colleagues, friends, women, men and children are living the worst time of their life with a war that darkens the skies of Ukraine. Life must always be protected and life in peace must be everyone's right. We really hope that at the time of the congress peace will have return.

*Gaia Cecilia Luvoni
Chair of the LOC*

SCIENTIFIC AND ORGANIZING COMMITTEES

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Pierre Comizzoli, *Chair*, USA

Gary England, UK

Michelle Kutzler, USA

John Verstegen, Belgium

Local Organizing Committee

Gaia Cecilia Luvoni, *Chair*

Martina Colombo

Isa Mohammed Alkali

Umberto Altamura

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Organizing Secretariat of the ISCFR-EVSSAR Congress 2020+2



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Milan

Milan is the main industrial, commercial and financial centre of Italy and a leading global city. Its business district hosts the Borsa Italiana (Italy's main stock exchange) and the headquarters of the largest national banks and companies.

The city is a major world fashion and design capital. Thanks to its important museums, theatres and landmarks (including the Milan Cathedral, the fifth largest cathedral in the world, and Santa Maria delle Grazie, decorated with Leonardo da Vinci paintings, a UNESCO World Heritage Site), Milan attracts over 7 million annual visitors. It hosts numerous cultural institutions and universities, with 190,000 enrolled students in 2019. The city is also well known for several international events and fairs, including Milan Fashion Week and the Milan Furniture Fair, the largest of its kind in the world.

Access to Milan

Milan can easily be reached by car, train and airplane.

Linate Airport is about 10 km from Milan city centre. Take bus N. 73 to the city centre and get off at Piazza Fontana, a few minutes walk from the University of Milan.

Malpensa Airport is about 50 km from Milan city centre. There are trains (Malpensa express) and buses (Malpensa shuttle) to the Central Station and to Cadorna Railway Station. Once you are at Cadorna station take Metro 1 (direction: Sesto 1 maggio FS) and get off at Piazza San Babila if you intend to go to the congress venue.

The Central Station (Stazione Centrale), Milan's main railway station, is located at the hub of the transport network. This is also where two of the main underground lines intersect (line 2/green line; line 3/yellow line).

Buses (54, 60, 73, 84, 94) trams (12, 14, 15, 16, 23, 24, 27) and the underground (Duomo station - line 1; Missori station - line 3) all stop nearby.

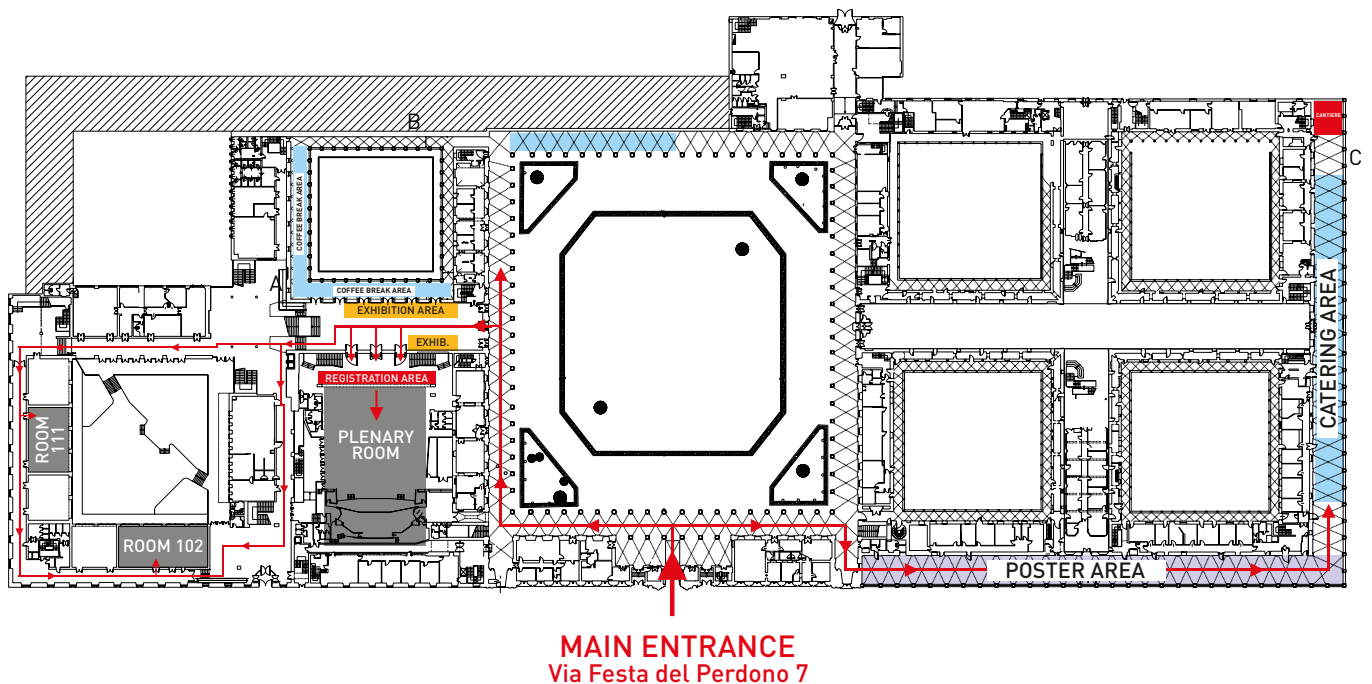


THE CONFERENCE VENUE

University of Milan

The conference takes place in the main building of the University of Milan located in Via Festa del Perdono 7. At the present time, the University offers 8 faculties and 2 schools, 141 study courses (divided between 1st and 2nd level degree programmes), 33 doctoral programs and 62 research centers. Approximately 62,000 students are enrolled at the University. The teaching staff is composed of 2,100 tenured professors and researchers and approximately 500 adjunct professors. More than 1,850 people work in the technical and administrative sector. The University of Milan was one of the institutions that helped to found LERU, the League of European Research

Universities, and is the only Italian University to be a member of the organisation. Thanks to its commitment to basic and applied research, the University is among the top institutions in the main national and international rankings.



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SCIENTIFIC PROGRAM

THURSDAY 30th JUNE

15.30-17.30	Plenary Room - Symposium 
19.00-21.00	WELCOME PARTY

FRIDAY 1st JULY

9.00-9.30	Registration and Introductory Remarks
9.30-10.30	Opening Session (Plenary Room)
2ND QUADRENNIAL CONCANNON LECTURE ON CARNIVORE REPRODUCTIVE BIOLOGY	
10.30-11.30	Understanding the effects of sustained supraphysiologic concentrations of luteinizing hormone in gonadectomized dogs-what we know and what we still need to learn <i>Michelle Kutzler</i>
11.30-12.00	ECAR Update Meeting

11.30-13.00	<i>Light lunch and Sponsor Exhibition</i>
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	ETHICS IN REPRODUCTION	EMBRYOLOGY & GAMETES	CLINICAL & FIELD CONTRACEPTION
13.00-15.00	Concurrent Session 1 (Plenary Room)	Concurrent Session 2 (Room 102)	Concurrent Session 3 (Room 111)

15.00-15.30	<i>Coffee Break</i>
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	COMPARATIVE REPRODUCTIVE PATHOLOGY	COMPARATIVE REPRODUCTIVE BIOLOGY	ScienceNet PROJECT
15.30-17.30	Concurrent Session 1 (Plenary Room)	Concurrent Session 2 (Room 102)	Concurrent Session 3 (Room 111)

17.30-18.00	<i>Coffee Break</i>
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18.00-19.30	Poster Reception
18.30-19.30	EVSSAR General Assembly



PROGRAM AT A GLANCE

SATURDAY 2 nd JULY			
Plenary Room			
PLENARY KEYNOTE			
9.30-10.15	The canine corpus luteum: its establishment and maintenance in pregnancy and non-pregnant cycles <i>Mariusz Kowalewski</i>		
10.15-10.30	Coffee Break		
	REPRODUCTIVE SURGERY	STEM CELLS/ BIOTECHNOLOGY	KISSPEPTIN & GnRH
10.30-12.30	Concurrent Session 1 (Plenary Room)	Concurrent Session 2 (Room 102)	Concurrent Session 3 (Room 111)
12.30-13.30	Light lunch and Sponsor Exhibition		
	NEONATOLOGY & PEDIATRICS	REPRODUCTIVE CRYOBIOLOGY	ANDROLOGY & TEACHING
13.30-15.30	Concurrent Session 1 (Plenary Room)	Concurrent Session 2 (Room 102)	Concurrent Session 3 (Room 111)
15.30-16.00	Coffee Break		
	EXOTIC, ZOO & WILD CARNIVORE REPRODUCTIVE BIOLOGY	ROUND TABLE: SEMEN SHIPMENT	CLINICAL & FIELD CONTRACEPTION
16.00-17.00	Concurrent Session 1 (Plenary Room)	Concurrent Session 2 (Room 102)	Concurrent Session 3 (Room 111)
Plenary Room			
18.30 - 19.30	Closing Remarks & ISCFR-EVSSAR AWARDS		
19.30 - 23.30	Farewell reception (additional registration required)		



Carlos Eduardo Ambrosio

Carlos E. Ambrósio undergraduate in veterinary medicine at UNIFEOB in Brazil, 1999. During 2001 to 2014, complete the master degree and Ph.D in Veterinary Science at São Paulo University. During 2005 to 2008, complete post-doctoral program among Center of Human Genome Center (USP, Brazil) and visiting collaboration projects with Justus Liebig and Hannover University (Germany).

In 2008 start as Associate Professor at São Paulo University and in 2019, start Full Professor Position in Animal Reproduction Biotechnology at Department of Veterinary Medicine, Pirassununga. Published over 280 articles since 2000 and the carrier is on animal stem cells productions and establishment of preclinical trials in acquired and genetics disease.

Since August/2021 is the Dean of Faculty of Animal Science and Food Engineering, University of São Paulo.



Sebastian Arlt

Dr. Sebastian Arlt graduated in 2001 and since 2002 has provided scientific assistance at the Clinic of Animal Reproduction, Free University Berlin, Germany. He is involved in teaching, research and medical service (on all species, but mainly small animals). In 2002, Sebastian completed his doctoral thesis on the quality of literature about alternative medicine in livestock.

After working on livestock animals for a few years he switched do small animals. Since 2006 he is heading the small animal section and provides services for dog and cat breeders including semen freezing and TCI. In addition, he conducts several research projects on clinical aspects of small animal reproduction. He is also interested in Evidence based Veterinary Medicine (EBVM) and teaching methods and has published several papers on these topics. He completed his habilitation thesis on EBVM aspects of practicing and teaching animal reproduction in 2013 and is a Diplomate of the European College of Animal Reproduction both in small animals and in ruminants and herd health. He is vice-president of the European Veterinary Society for Small Animal Reproduction (EVSSAR).



Kaywalee Chatdarong

Prof. Kaywalee Chatdarong received her DVM from Chulalongkorn University in 1993. She accomplished her MSc and PhD at Swedish University of Agricultural Science in 2003 with the thesis entitled 'Reproductive Physiology of the Female Cat with special reference to cervical patency, sperm distribution and hysterography'.

She has been awarded a Diplomate Founder of the Thai Board of Theriogenology in 2016. Her research interests involve semen preservation, AI, gamete rescue, folliculogenesis and female reproductive physiology in dogs, cats and wild cats. She has been a major advisor for 4 Master's, 6 PhD students and 2 postdoc fellows and is currently a full-time professor, advising 1 Master's and 4 PhD students.





Martina Colombo

Dr. Martina Colombo graduated in Veterinary Biotechnology Sciences at the University of Milan (Italy). She started her research career investigating enriched culture conditions for cryopreserved feline oocytes in collaboration with São Paulo State University (Brazil), later completing the experiments also thanks to an EVSSAR (European Veterinary Society for Small Animal Reproduction) Grant. Currently, she is enrolled in a PhD program in Veterinary and Animal Science at the University of Milan.

Her research concerns reproductive biotechnologies in animal models, especially oocyte long-term conservation. She is working on the assessment of intracellular mechanisms affected by cryopreservation and on the improvement of culture conditions for vitrified oocytes.



Thomas Conlon

Dr. Conlon, PhD, is the Chief Scientific Officer of the Michelson Found Animals Foundation. He completed his undergraduate degree in genetics at Texas A&M University and his PhD in genetics/biomedical studies at the University of Florida. His career included serving as Director of the Powell Gene Therapy Center (PGTC) Toxicology Core for 13 years where his work focused on the preclinical and safety testing of gene therapy vectors.

He was at the forefront of collaborations between the PGTC and the University of Florida College of Veterinary Medicine to identify means for treating congestive heart failure, Retinal Degeneration and Glycogen Storage Disease in humans.



Pierre Comizzoli

Pierre Comizzoli started his career 25 years ago as a research veterinarian in French Guyana and in Africa. He then completed a PhD in 2000 on in vitro fertilization in bovine and deer species. In 2002, Pierre joined the Smithsonian Conservation Biology Institute at the National Zoological Park in Washington, DC as a staff scientist to develop new cryo-banking projects on gametes and gonadal tissues from rare and endangered species.

His comparative research mainly focuses on gamete biology and embryology (using the domestic cat as a model).



Jeffrey de Gier

Dr. Jeffrey de Gier graduated from Utrecht University Veterinary Medicine in 1999 and became board-certified in the European College of Animal Reproduction in 2004. He completed a PhD in reproductive endocrinology in 2011. Dr. de Gier is a specialist in companion animal reproduction working as an assistant professor at the Department of Clinical Sciences of the Veterinary Faculty at Utrecht University since 2012. As coordinator of the clinical unit of Companion Animal Reproduction he is responsible for patient care of all admitted reproduction cases.

As a board member of the Netherlands Association for Companion Animal Medicine he was involved in developing a professional guideline for management of the health risks resulting from hereditary disease and deleterious breed characteristics in 2015. More recently, he contributed to a report in which criteria for enforcement of Dutch legislature concerning breeding with brachycephalic dogs, are described.



Elly Hiby

Dr. Elly Hiby is Scientific Coordinator to the International Companion Animal Management (ICAM) Coalition and an independent animal welfare consultant. Previously she worked for international NGOs (Dogs Trust and World Animal Protection) leading companion animal welfare programmes and advising on humane dog population management and rabies control.

She has also provided technical expertise to OIE, WHO and FAO on dog population management. She is on the board of directors for the Alliance for Contraception of Cats and Dogs (ACC&D); ACC&D works as a catalyst for successful introduction of non-surgical fertility control of dogs and cats.



Mariusz Kowalewski

Graduated (DVM, 2002), Faculty of Veterinary Medicine, University of Warmia and Mazury, Olsztyn, Poland; (2002-2006) Clinic for Obstetrics, Gynecology and Andrology of Large- and Small Animals, PhD program in reproductive biology, Faculties of Medicine and Veterinary Medicine, Justus-Liebig-University (JLU) Giessen, Germany; (2006-2007) postdoctoral training, JLU, Institute of Veterinary Anatomy, Histology and Embryology; (2007-2009) postdoctoral training, Texas Tech University Health Sciences Center (TTUHSC), School of Medicine, Department of Cell Biology and Biochemistry, Lubbock, Texas, USA; (from 2009) PI in own research group, Institute of Veterinary Anatomy (IVA), Vetsuisse Faculty, University of Zurich (VSF, UZH), Zurich, Switzerland; (2012) Venia legendi (Habilitation) for the fields of Veterinary Anatomy, Histology and Embryology from UZH; (2014) Professor of Functional Microanatomy, VSF, UZH; (2020) Professor of Veterinary Anatomy, Histology and Embryology, VSF, UZH, Head of the Institute, leader of the Group of Reproductive Endocrinology, teaches veterinary gross anatomy, histology, embryology, developmental and reproductive biology.

Research interest: Comparative reproductive biology and endocrinology of domestic animals, endocrine regulation of canine luteal and placental function, concepto-maternal communication in accompanying animals; mechanisms of STAR-dependent steroidogenesis.



Michelle Kutzler

Dr. Michelle Kutzler graduated from Washington State University with a Bachelor of Science and Doctor of Veterinary Medicine degree. After graduation, Dr. Kutzler worked in private practice for four years before going to Cornell University to pursue a theriogenology residency and PhD. Since 2002, Dr. Kutzler has been at Oregon State University in Corvallis, Oregon. Dr. Kutzler has published widely in the field of small animal theriogenology. Dr. Kutzler has been an active member of the Society for Theriogenology (since 1994) and the American College of Theriogenologists (since 1999). Dr. Kutzler is also on the Scientific Advisory Committee for the Alliance for Contraception in Cats and Dogs and an American Kennel Club Breeder of Merit with her Dachshunds.



Catherine Lefevre

Veterinary diplomate in 1988 in Liege (Belgium), working in own private practice with a high interest for breeding and reproduction.

EVSSAR member from 1999, board member 2011-2017 and secretary 2013-2017, initiating the google reprovet map.

Interest to anything reporting to small animal reproduction by attending different courses: from insemination and manipulating semen for chilling and freezing to EVSSAR courses with larger view of the matter and practice. Made first transcervical inseminations by 1995-96 with a soft endoscope. ECAR diplomate in 2007, with small animal reproduction sub-specialty. 2010 new practice "Vet484", with good exchanges with breeders, and with reproduction interest and development of semen banking.



Alberto Luciano

Professor of Veterinary Anatomy and Embryology at University of Milan, Italy, group leader of the Reproductive and Developmental Biology Laboratory (www.redbiolab.unimi.it). He earned a M.S. in Biological Sciences and a Ph.D. in Biotechnology applied to Veterinary Sciences at the Faculty of Veterinary Medicine, from the University of Milan. He undertook a postdoctoral fellowship in Reproductive Physiology at the University of Connecticut, School of Medicine, CT, USA. Author of more than 90 peer reviewed publications and book chapters, the majority of which was focused on the study of mammalian oocyte development and on cellular and molecular determinants that confer meiotic and developmental competence on oocyte.





Wojciech Nizanski

Graduated in 1992 at the Faculty of Veterinary Medicine University of Environmental and Life Sciences in Wrocław, Poland. Active practitioner on the field of animal reproduction, especially artificial insemination and fertility disorders in males and females. Researcher exploring possibilities of the use of Assisted Reproduction Technologies in programs of rescue of endangered animal species. He established in Wrocław Bank of Gametes and Somatic Cells of Companion Animals and Endangered Animal Species. He defended PhD on cryopreservation of the dog semen in 1999 and habilitation on artificial insemination in relation to semen quality in dogs in 2009. In 2014 received the title of Full Professor of veterinary sciences. Current Head of the Department of Reproduction on Wrocław Vet Faculty since 2009 and current Leader of Veterinary Discipline at University. Past Board Member (2007-2013) and Past President (2011-2013) of the European Society for Veterinary Small Animal Reproduction EVSSAR. Member of the Board and Past President of Wrocław division of Society for Biology of Reproduction in Poland. Current Head of Committee of Veterinary Sciences and Biology of Reproduction of Polish Academy of Sciences and President-Elect of Polish Small Animal Veterinary Association PSAVA. He has published more than 200 original studies, reviews and books dedicated small animal reproduction for practitioners, students and academics.



David Pépin

Dr. Pépin, PhD, is an Assistant Professor in the Department of Surgery at the Pediatric Surgical Research Laboratories of the Massachusetts General Hospital, Harvard Medical School. He is the Associate Director of the Pediatric Surgical Research Laboratories, where he heads an independent research laboratory focusing on the role of Mullerian Inhibiting Substance (MIS or AMH) in female reproduction and its application to contraception, oncofertility, and women's health.



Linda Rhodes

Dr. Rhodes, VMD, PhD, practiced both companion and farm animal medicine and held positions in R&D at Merck and Merial Ltd. She founded AlcheraBio, an animal health contract research company and subsequently was the founding CEO of Aratana Therapeutics (acquired by Elanco in 2019) where she led the FDA approval of three innovative drugs (Entyce®, Galliprant® and Nocita®) during her five-year tenure.

She is a member of the Board of Directors of Zoetis, Dalan Animal Health, and the Alliance for Contraception in Cats and Dogs. Dr. Rhodes received her VMD from U. Penn and her PhD from Cornell.





Stefano Romagnoli

Stefano Romagnoli graduated in Veterinary Medicine from the University of Pisa in 1982. He was a Fulbright Fellow at the University of Minnesota, where he completed a Master of Science Degree in Theriogenology in 1986. He then returned to Italy, as an Assistant Professor (1987) and Associate Professor (1991) at the Faculty of Veterinary Medicine of the University of Pisa, and then as a Professor at the Faculty of Veterinary Medicine of the University of Padova in January 2001. He is a Diplomate of the European College of Animal Reproduction, has co/authored 53 papers in refereed journals and more than 230 papers in total including non-refereed journals, book chapters and scientific abstracts.

His scientific activity has a special focus on reproduction in cats, as he has served as President of the Italian Feline Practitioners Association (1993-1999) and President of the European Society of Feline Medicine (2000-2006). He is currently (2019-2021) President of the Italian Society for Animal Reproduction.



William Swanson

Dr. William Swanson is the Director of Animal Research at the Cincinnati Zoo's Center for Conservation and Research of Endangered Wildlife (CREW). His educational background includes a B.S. in Zoology (University of Texas), a D.V.M. (Texas A&M University) and a Ph.D. in Animal Science (Louisiana State University). Following five years at the Smithsonian Institution's National Zoological Park, he joined the Cincinnati Zoo & Botanical Garden in 1997.

Over the past 30 years, Dr. Swanson's research has been focused on investigating the reproductive biology of domestic cats and ~30 wild felid species to improve population management and wildlife conservation.



Lindsey Vansandt

Dr. Vandsandt, DVM, PhD, is a Theriogenologist at the Center for Conservation and Research of Endangered Wildlife (CREW) at the Cincinnati Zoo & Botanical Garden. She completed her undergraduate requirements at the University of Missouri-Columbia and graduated from Missouri's School of Veterinary Medicine in 2008.

Lindsey then performed a research internship at the Saint Louis Zoo before obtaining a PhD in Animal Sciences at the University of Maryland. Lindsey joined CREW in the fall of 2014. Her research focuses on applying assisted reproductive technologies for the conservation of imperiled felids and improving the health and welfare of community cats.

SPEAKERS



Maria Cristina Veronesi

DVM (110/110 cum laude), PhD, ECAR diplomate, full professor at the Department of Veterinary Medicine, Università degli Studi di Milano. Undergraduate and post graduate teaching, scientific and clinical activities focussed on domestic animals reproduction, and especially on neonatology. Co-author of about 200 publications on peer-reviewed journals and author of the section "Neonatologia del cane e del gatto" (Dogs and cats neonatology) in the book "Neonatologia Veterinaria" (Veterinary neonatology).

Member of the ERC for the European College of Animal Reproduction, Vice President of the Italian Society of Animal Reproduction and member of the Italian Scientific Group for the Study of Veterinary Paediatrics.



Daniele Zambelli

Daniele Zambelli is full Professor at the Department of Veterinary Medical Sciences of Bologna University. He graduated in 1991 in Veterinary Medicine at the same University and achieved his PhD in 1995 at Perugia University. From 1997 to 2017 he was researcher and then Associate Professor at Bologna University. In 2002 he got the Diploma of the European College of Animal Reproduction and from 2018 he is the Head of Clinical Skill lab and Laboratory of Veterinary Simulators (VetSimLab).

Prof. Zambelli published more than 130 scientific papers (journals, proceedings, book chapters). His research is focused on the following topics: semen collection, cryopreservation and artificial insemination in the cat and wild felids, prostatic diseases in dogs, ultrasonographic monitoring of fetal growth in the dog and cat and neonatal surgery.



THURSDAY 30th JUNE

15.30
17.30

SYMPOSIUM



FROM BIRTH TO ADULthood, WEIGHT MONITORING AS A KEY HEALTH INDICATOR

Plenary Room

Pr Sylvie CHASTANT, DVM PhD DipECAR
Dr Amélie MUGNIER, DVM PhD ResECVPH

NéoCare, ENVT, University of Toulouse, France

HOW BIRTH WEIGHT IMPACTS LIFE TRAJECTORY

Small is beautiful, but what about birth weight? Why are some puppies and kittens born small? Is it a matter of their placenta? What difficulties do they encounter during their early life? Small at birth but heavy in adulthood: what's new about birth weight and maternal programming in dogs and cats?

Dr Virginie GAILLARD, PharmD PhD PMP
Research Program Manager, Royal Canin Research Center, Aimargues, France

THE 2 FIRST MONTHS OF LIFE: A CRUCIAL GROWTH PERIOD FOR PUPPIES AND KITTENS

In a period of life where neonatal mortality is high, close and regular monitoring is necessary for optimal early life management. Modeling the growth between birth and 8 weeks of age at the size or breed level offers breeders and veterinarians the opportunity to adapt to the specificities of each puppy and kitten.

Prof Alexander J GERMAN, BVSc PhD CertSAM DipECVIM-CA SFHEA FRCVS
Royal Canin Professor of Small Animal Medicine, Institute of Life Course & Medical Sciences
and School of Veterinary Science, University of Liverpool, UK

PROMOTING HEALTHY GROWTH IN PUPPIES AND KITTENS FROM 8 WEEKS ONWARDS

How owners and vets can monitor the growth of puppies and kittens under their care, from the point of acquisition to the point of skeletal maturity? Through a practical approach, including the use and interpretation of growth charts, the speaker will explain how such monitoring fits into a lifelong programme of healthy weight monitoring.

19.00
21.00

WELCOME PARTY

FRIDAY 1st JULY

<u>9.00</u> <u>9.30</u>	Registration and Introductory Remarks
Plenary Room	
<u>9.30</u> <u>10.30</u>	Opening Session <i>Chairs: Comizzoli P., Kutzler M., Luvoni G.C., Mantziaras G.</i>
2nd QUADRENNIAL CONCANNON LECTURE ON CARNIVORE REPRODUCTIVE BIOLOGY	
<u>10.30</u> <u>11.30</u>	Understanding the effects of sustained supraphysiologic concentrations of luteinizing hormone in gonadectomized dogs - what we know and what we still need to learn <i>Kutzler M.</i>
<u>11.30</u> <u>12.00</u>	ECAR Update Meeting
<u>11.30</u> <u>13.00</u>	Light lunch and Sponsor Exhibition

	ETHICS IN REPRODUCTION Chairs: Øvregaard H., Siena G.	EMBRYOLOGY & GAMETES Chairs: Luvoni G.C., Ligocka Z.	CLINICAL & FIELD CONTRACEPTION Chairs: Kutzler M., Tavares Pereira M.
	Plenary Room	Room 102	Room 111
<u>13.00</u> <u>13.40</u>	New regulation for breeding with brachycephalic dogs <i>de Gier J.</i>	Recent updates on the biology of gametes and embryos in domestic and wild carnivore species <i>Comizzoli P.</i>	Evaluation of a second-generation AAV9- MIS vectored contraceptive in cats <i>Pepin D.</i>
<u>13.40</u> <u>14.00</u>	Perioperative antimicrobial usage in female dogs surgically treated for pyometra <i>Hagman R.</i>	Inhibition of the cholesterol transporter ABCA1 by probucol decreases capacitation and tyrosine phosphorylation of canine spermatozoa, and is dose dependent <i>Schäfer-Somi S.</i>	Gene therapy-induced overexpression of MIS produces long-term contraception in female domestic cats <i>Vansandt L.</i>



SCIENTIFIC PROGRAM

	ETHICS IN REPRODUCTION Chairs: Øvregaard H., Siena G.	EMBRYOLOGY & GAMETES Chairs: Luvoni G.C., Ligocka Z.	CLINICAL & FIELD CONTRACEPTION Chairs: Kutzler M., Tavares Pereira M.
	Plenary Room	Room 102	Room 111
<u>14.00</u> 14.20	Effect of brachycephalic obstructive airway syndrome during pregnancy in bitches <i>Rosa Filho R.R</i>	Characterization of canine Oviductal Epithelial Spheroids (cOES), a possible tool to support maturation of dog oocytes and/or embryo development <i>Reynaud K.</i>	Gene transfer: Successful veterinary disease case studies, and the promise for HPG axis interventions <i>Conlon T. J.</i>
<u>14.20</u> 14.40	Genetics and cytogenetics in the clinical management of intersex patients <i>D'Anza E.</i>	Low dose local infusion of dexmedetomidine infusion and spermatic cord traction may improve sperm recovery with urethral catheterization in domestic cats <i>Barnes J.</i>	Gene transfer sterilization: how much will it cost, how long will it take? <i>Rhodes L.</i>
<u>14.40</u> 15.00	Canine vaginitis: clinical signs, potential treatments and risk factors of surgical treatment. A retrospective study of 69 cases <i>Robiteau G.</i>	Inter-rater reliability of a portable device (iSperm®) for canine semen analysis <i>Banchi P.</i>	Questions and Answers



<u>15.00</u> 15.30	Coffee Break		
	COMPARATIVE REPRODUCTIVE PATHOLOGY Chairs: Borges P., Niewiadomska Z.	COMPARATIVE REPRODUCTIVE BIOLOGY Chairs: Kowalewsky M., Kaszak I.	ScienceNet PROJECT Chairs: Nizanski W., Luvoni G.C.
	Plenary Room	Room 102	Room 111
15.30	Of dogs and men - a comparison of benign prostatic hypertrophy: questions you might need to answer when a male dog and his male owner both with BPH walk into your clinic <i>Romagnoli S.</i>	Progress towards species-tailored approaches in reproductive biotechnologies <i>Luciano A.</i>	International multicentric platform as a key element for the effective scientific research (ScienceNet): assisted reproduction techniques in small animals <i>Nizanski W.</i>
<u>15.50</u> 16.10			Effects of modification of plasma membrane composition on the capacitation status of dog sperm cells <i>Ligocka Z.</i>
<u>16.10</u> 16.30	Safety and efficacy of pentoxifylline use in the management of canine infertility <i>Agnew M.E.</i>	In-depth analysis of changes associated with canine decidualization and effects evoked by antigestagens on decidualized canine uterine stromal cells <i>Tavares Pereira M.</i>	Variations of ProAKAP4 concentration among different ejaculates for the same dogs <i>Siena G.</i>
<u>16.30</u> 16.50	Biofilm formation and antimicrobial resistance in <i>Escherichia coli</i> isolated from bitches affected by pyometra <i>Leelamany D.</i>	Ontogenesis of the dog ovary <i>Reynaud K.</i>	Ovarian tissue vitrification: fixation may affect follicle grading <i>Alkali I.M.</i>
<u>16.50</u> 17.10	Characterization of seminal plasma proteins associated with benign prostatic hyperplasia in dogs <i>Genov M.</i>	First isolation of extra-cellular vesicles from bitch's amnion-derived cells culture and their CD 59 expression: preliminary results <i>Pastore S.</i>	Neutering as a risk factor for joint disorders and cancers in female dogs in Belgium <i>van Leeuwenberg R.</i>

SCIENTIFIC PROGRAM

	COMPARATIVE REPRODUCTIVE PATHOLOGY Chairs: Borges P., Niewiadomska Z.	COMPARATIVE REPRODUCTIVE BIOLOGY Chairs: Kowalewsky M., Kaszak I.	ScienceNet PROJECT Chairs: Nizanski W., Luvoni G.C.
	Plenary Room	Room 102	Room 111
17.10 17.30	Health information in a long-lifespan group of neutered and intact dogs <i>Sirivaidyapong S.</i>	The biochemical profile of the domestic dog (canis familiars) fetal fluids during the second half of pregnancy <i>Tal S.</i>	AMH- a parameter to test for the presence of gonadal tissue... and many more? <i>Claaßen S.</i>
17.30 18.00	Coffee Break		
18.00 19.30	Poster Reception		
18.30 19.30	EVSSAR General Assembly		

SATURDAY 2nd JULY

PLENARY KEYNOTE

Chairs: Comizzoli P., Kutzler M., Luvoni G.C., Mantziaras G.

Plenary Room

9.30 10.15	The canine corpus luteum: its establishment and maintenance in pregnancy and non-pregnant cycles <i>Kowalewski M.</i>
10.15 10.30	Coffee Break



	REPRODUCTIVE SURGERY Chairs: Arlt S., van Leeuwenberg R.	STEM CELLS/ BIOTECHNOLOGY Chairs: Colombo M., Claaßen S.	KISSPEPTIN & GnRH Chairs: De Gier J., Navanukraw P.
	Plenary Room	Room 102	Room 111
<u>10.30</u> <u>11.10</u>	What a huge belly! management of peripartum abdominal hypertension <i>Lefevre C.</i>	Adipose and Amnion-derived mesenchymal stem cells: implication for reproductive biotechnology <i>Ambrósio C.E.</i>	Feline Kiss1 and Kiss1r localization in the hypothalamus, ovary and uterus <i>Chatdarong K.</i>
<u>11.10</u> <u>11.30</u>	Prospective cohort study of the peri- and post-operative outcomes for bitches neutered pre or post- pubertally <i>Moxon R.</i>	Feline and canine reproductive organoids: a novel 3-D model to study disease <i>Hollinshead F.K.</i>	Sex hormone binding globulin (SHBG) and testosterone concentrations related to age, weight and prostatic size in intact male dogs <i>Holst B.S.</i>
<u>11.30</u> <u>11.50</u>	Total Prostatectomy: evaluation of postoperative complications and outcomes <i>Ballotta G.</i>	Differential role of glyoxalase I and II in somatic and spermatogenic testicular cells during sexual maturation in the domestic cat <i>Braun B.C.</i>	Clinical effects of the GnRH stimulation test on testicles and prostate of adult male dogs <i>Schrank M.</i>
<u>11.50</u> <u>12.10</u>	Comparison of alfaxalone and propofol administered as anesthetic induction agent for ovariohysterectomy in bitches <i>Rodríguez R.</i>	Alteration of the canine spermatogonial stem cell compartment in testicular tissues affected by spontaneous immune mediated orchitis (IMO) <i>Reifarth L.</i>	Effect of GnRH vaccine in queens <i>Stornelli M.A.</i>
<u>12.10</u> <u>12.30</u>	Trans-cervical catheterisation and uterine flushing by video-vaginoscopy to treat closed-cervix pyometra and mucometra remaining closed after treatment with aglepristone <i>Levy X.</i>	Feline umbilical cord vessels as a novel source of mesenchymal stem cells: isolation and in vitro characterization <i>Baouche M.</i>	Postponement of puberty in male cats with a 4.7 mg deslorelin implant <i>Romagnoli S.</i>

SCIENTIFIC PROGRAM

<u>12.30</u> <u>13.30</u>	Light lunch and Sponsor Exhibition		
	NEONATOLOGY & PEDIATRICS Chairs: Tamminem T., Schrank M.	REPRODUCTIVE CRYOBIOLOGY Chairs: Chatdarong K., Alkali I.M.	ANDROLOGY & TEACHING Chairs: Romagnoli S., Orlandi R.
	Plenary Room	Room 102	Room 111
<u>13.30</u> <u>14.10</u>	Biochemical factors affecting newborn survival <i>Veronesi M.C.</i>	Microenvironment factors promoting the quality of vitrified cat oocytes <i>Colombo M.</i>	Diagnostic tests in andrology - what do they really tell us <i>Arlt S.</i>
<u>14.10</u> <u>14.30</u>	Management of low birth weight newborns in canine and feline species <i>Mugnier A.</i>	Ovarian cortex cryopreservation of lions for female wild cat genetic bank <i>Martins J.L.</i>	Innovative models for teaching reproduction: the experience at DIMEVET of Bologna University <i>Zambelli D.</i>
<u>14.30</u> <u>14.50</u>	Anti-Müllerian hormone serum concentrations in neonatal, infantile and prepubertal cats <i>Gobello C.</i>	Influence of fragment size in cat ovarian tissue vitrification <i>Ali Hassan H.</i>	
<u>14.50</u> <u>15.10</u>	Litter size, parturition, and puppy mortality in the German shepherd dog <i>Axnér E.</i>	Alterations in ultrastructure of feline oocytes during 24- and 48-hours ovarian storage <i>Ochota M.</i>	Analysis of prostatic parameter ratios with L6 in large breed dogs with confirmed BPH diagnosis <i>Laurusevicius T.</i>
<u>15.10</u> <u>15.30</u>	Evaluation of the input of different steps of post-mortem examination in the diagnosis of bacterial infection in newborn dogs <i>Mila H.</i>	Association between anti-Müllerian hormone and semen quality in dogs <i>Hallberg I.</i>	Canine caesarian section simulator - what do experts and students think about it? <i>Körber H.</i>
<u>15.30</u> <u>16.00</u>	Coffee Break		



SCIENTIFIC PROGRAM

	EXOTIC, ZOO & WILD CARNIVORE REPRODUCTIVE BIOLOGY Chair: Comizzoli P.	ROUND TABLE: SEMEN SHIPMENT Chairs: Mantziaras G., Luvoni G.C.	CLINICAL & FIELD CONTRACEPTION Chair: Kutzler M.
	Plenary Room	Room 102	Room 111
<u>16.00</u> <u>16.40</u>	The challenges of assisted reproduction for conservation of wild felids - a reality check <i>Swanson W.</i>	Open discussion on new European rules for canine and feline semen shipment and their impact on semen exchange in and out EU	Fertility control in population management <i>Hiby E.</i>
<u>16.40</u> <u>17.00</u>	Do male wolves really not reach puberty until their second breeding season? <i>Bauman K.</i>		Immunocontraception of male domestic cats using anti GnRH vaccine Improvac® <i>Stornelli M.A.</i>
<u>17.00</u> <u>17.30</u>			
Plenary Room			
<u>18.30</u> <u>19.30</u>	Closing Remarks & ISCFR-EVSSAR AWARDS		
<u>19.30</u> <u>23.30</u>	FAREWELL RECEPTION additional registration required		



INFORMATION

Oral Presentations

Presenting authors giving their presentation in the Plenary Room are kindly requested to deliver their slides to the slide center at least two hours before their presentation.

Presenting authors giving their presentation in room 102 and 111 are requested to upload their slides to the dedicated computer in the room in the morning before the conference starts or at lunch break.



Posters

Poster displays will be limited to one side of a tack board

The recommended poster size is 80 w x 100 h cm (portrait orientation).

The Posters shall be set up on June 30th from 3 pm to 7 pm.

The necessary equipment and plan will be available at the registration desk.

Certificates of attendance

The certificates of attendance will be sent by email after the Conference.

Useful Numbers

Taxi: Ph + 39 02 8585

Emergency Service

For Ambulance dial 118

For Police dial 112

SOCIAL PROGRAMME

Welcome Party June 30th - from 19.00 to 21.00

Included in the registration fee.

Informal Welcome Cocktail at the Congress Venue.

Farewell Reception July 2nd - from 19.30 to 23.30

Not included in the registration fee.

Informal dinner and music at the Cortile d'Onore (Congress Venue).

The access to the reception is allowed only presenting the ticket you have received at the time of your registration to the staff at the entrance of the Cortile d'Onore.

Delegates without the ticket will not be allowed to take part in the reception.



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