**WORLD ASSOCIATION FOR BUIATRICS**
**WELT-GESELLSCHAFT FÜR BUIATRIK**
**SOCIÉTÉ MONDIALE DE BUIATRIE**
**ASOCIACIÓN MUNDIAL DE BUIATRIA**

***www.buiatrics.com***

# Newsletter 2 – 2015

**The 29th Congress of the World Association of Buiatrics, taking place in Dublin, Ireland from the 3rd - 8th July, 2016, is now accepting abstracts. Submitting an abstract is open to all involved in the field of bovine health management and production; the congress will also address the health management of small ruminants and camelids. The abstract system will remain open until December 2015.**

The Congress will be held over five days, bringing together world experts in cattle health and production systems: latest scientific updates will include the areas of internal medicine, nutrition, animal health economics, sustainable agriculture, biosecurity, reproduction, toxicology, genetics, breeding and a wide range of emerging diseases.
The Congress is expected to attract between 2,500-3,000 delegates from academia, research, general veterinary practice and government veterinary services as well as leading animal scientists.

Registration will open in July, 2015, with abstracts being accepted from June, 2015, and you can find out all the latest information from the official WBC 2016 Website. For more information or general enquiries, please contact the Conference Secretariat at WBC2016@mci-group.com or call +353 1 280 2641 and ask for the WBC team.

# News from ANEMBE

SOCIACIÓN NACIONAL DE ESPECIALISTAS
EN MEDICINA BOVINA DE ESPAÑA

On the 6th to 8th of May 2015 the Spanish National Association of Experts in Bovine Medicine (ANEMBE) has organized the XX International Conference in Burgos, in the North of Spain. We have exceeded the 600 attendees and over 30 sponsor and collaborating private companies. The scientific program covered a total of 26 main lectures, 31 oral short-presentations and 15 posters. We could also have with us, over 20 keynote speakers, including 10 world scientific personalities, plus some renowned figures from the bovine veterinarian Spanish sector. In addition, on the day before, two scientific seminars and one symposium took place.

Taking this news we wanted to announce that next year will be very special for our association, as we celebrate our 25th anniversary (I attached the logo). We have just begun to prepare the celebrations to make this year more than special for our members and for any other bovine practitioners or expert that would like to take part of this year with us! Different courses, information days and seminars will be organized during the year, focused on the ANEMBE membership, mainly practitioner.
The celebrations will culminate in the 21st edition of our International Conference, making it even more special than usually. The city chosen for this event is an emblematic city, both in our country and in the international arena: Santiago de Compostela. All of you are cordially invited to join us in Santiago!!!

The date for this Conference will be the 13th-15th May 2016. Abstracts submission is open since now until the deadline of the 10th of January 2016 (more information at www.anembe.com or ask at our secretary anembe@anembe.com). Decisions about the abstracts will be taken up before the 29th February 2016… You can already reserve the dates in your agendas!

Finally, we would like to inform you that our Association has organized two on-line continuous training courses in bovine reproduction and in bovine nutrition. The first edition of these courses (2014-2015) is about to end, being a resounding success. The courses combine theoretical knowledge in very flexible way (on-line) including the participation of 60 Spanish and foreign teachers, world-specialists in each of the issues. The courses are for veterinarians, with or without experience in these specialties, and can be taken full or independently, into modules. Each course consists of about 100 teaching hours as a video slide show with the voice-off, and written material in pdf, where the high quality material is offered in a broad and comprehensive way. The language so far is Spanish, although a small proportion of the content is in English, with subtitles in Spanish. If you would like to have more information you can visit the "anembeformacion" platform at www.anembeformacion.com or write to our Secretary (anembe@anembe.com). Registration period for next year is now open!!!

# buiatrics2015

XI BRAZILIAN CONGRESS AND
XVII LATIN AMERICAN BUIATRICS CONGRESS

JULY 22 - 24, 2015 | SAO PAULO

## SAVE THE DATE

The Brazilian Buiatrics Association and Paulista Buiatrics Association is pleased to invite you to the XVII Latinamerican Buiatrics Congress and XI Brazilian Buiatrics Congress, in São Paulo, Brazil.

We will have events covering: Animal Welfare, Buffaloes, Clinical Practice, Imaging Diagnostics, Reproductive Diseases, Nutritional and Metabolic Diseases, Vesicular Diseases, Encephalitis and Encephalopathies, Mastitis, Neonatology, Parasitology, Small Ruminants, National Plan for the Control and Eradication of Brucellosis and Tuberculosis (PNCEBT), Podology, Public Policies, Breeding, Therapeutics and Vaccinology.

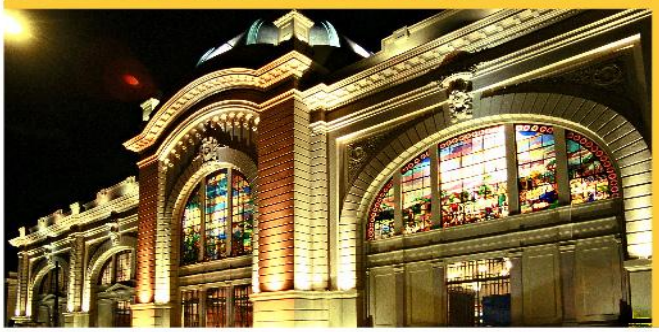
## JULY 22 - 24, 2015 | SAO PAULO | BRAZIL


VISIT OUR WEBSITE: **BUIATRIA2015.COM.BR**

# buiatrics2015

XI BRAZILIAN CONGRESS AND
XVII LATIN AMERICAN BUIATRICS CONGRESS

## WELCOME TO BRAZIL, WELCOME TO SAO PAULO

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Associação Brasileira de Buiatria
Brazilian Buiatrics Association

Associação Paulista de Buiatria
Paulista Buiatrics Association

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## Congress on Controversies in Bovine Health, Industry and Economics (CoBo) August 27-30, 2015 in Berlin, Germany

CoBo will address controversial issues in the format of debates and discussions, allowing ample time for speaker-participant interaction. Participants from different professional groups (veterinarians, farmers, scientists, dairy food producers, technology providers, etc.) will deliberate burning issues and offer multidisciplinary approaches to reaching consensus. The congress will also include presentations focusing on applied research which can readily be used in the field soon after the discussion. The faculty consists of esteemed international experts in the field.

**The program will include important topics such as**:

- Sustainability of Cattle Production
- Heat Detection or Hormone Protocols
- Milk Quality from an Industry's Perspective
- Mastitis Treatment
- In-Line Detection of Disease
- Welfare and Productivity
- More…

**We would appreciate if your society would**:
1) Post the CoBo logo to your website (we would be happy to post your logo to the CoBo website in exchange).
2) Add the CoBo Congress to your events calendar.
3) Announce the CoBo Congress to your members (we would be happy to send you an e-mail shot for this).

We are pleased to offer special discount packages to attend the CoBo Congress: **Bring three, pay for two and save €430!**

http://www.congressmed.com/bovine/


# XLVII Congress of the Italian Association for Buiatrics
# Piacenza, Italy,
# September 11 to 12, 2015

Information on scientific program and deadlines soon in the webpage of the SIVAR (www.buiatria.it)

# XXV Jubilee International Congress of the Hungarian Association for Buiatrics
# Budapest, Hungary
# September 13 to 16, 2015

## Invitation

The Hungarian Association for Buiatrics, in co-operation with the Austrian Association for Buiatrics are very pleased to invite you to participate the XXV Jubilee International Congress of the Hungarian Association for Buiatrics, which will be held in Danubius Health Spa Resort Helia, Budapest from September 13 to September 16, 2015. Lectures and posters will be presented on September 14 and 15 while on September 16 a workshop will be organised.

The programme of the Congress will aim at updating the scientific knowledge and professional skills of veterinary surgeons and stock breeders in bovine, ovine and caprine practice to enable them to achieve an ever increasing qualification and help the veterinary surgeons and stock breeders to get more familiar with each other.
In addition to the scientific programme social programmes will be organised for the participants and accompanying persons. The exhibition area will serve to present products manufactured by various companies.
The organisers will spare no efforts in offering you successful and agreeable days in Budapest, Hungary.
**To get more information please visit: www.mbuiatrikus.org**

## 2015 AABP Annual Conference in New Orleans
## New Orleans, Louisiana, USA
## September 17 to 19, 2015

The 48th Annual Conference of the American Association of Bovine Practitioners will be held September 17-19 in New Orleans, Louisiana. The conference will feature the latest continuing education for beef and dairy veterinarians. Also included will be joint sessions with the American Association of Small Ruminant Practitioners. Additional events will include practice tips, poster sessions, preconference seminars, research summaries, sessions for students, entertainment and a large trade show. Registration will open May 1, 2015.

Visit **www.aabp.org** for more information.


EBF 2015
European Buiatrics Forum
Rome
14-16 October

## European Buiatrics Forum 2015

## Rome (Italy)

## October 14 - 16, 2015

Rich in colour, tradition and culture, Rome is also a forward- looking european capital chosen to host the upcoming European Buiatrics Forum (EBF2015).
We have the pleasure of inviting you to participate in this unique event in Europe which brings together practitioners, academics and scientists to exchange ideas and experiences in the field of cattle medicine. The conferences and trade exhibition will take place in the Grand Hotel Parco dei Principi, in the center of Rome.
Participants will have an opportunity to update their knowledge, meet representatives of the pharmaceutical industry and catch up on new products and developments.
Don't miss out on this fourth edition which combines science, culture and tourism at the heart of the Eternal City!

Topics:
- Mastitis and udder health
- Reproductive disorders
- Surgery, anaesthesia and pain management
- Infectious diseases,vaccines and emerging diseases
- Antibiotics and antimicrobial resistance: problems and solutions
- Metabolic disorders and nutrition
- Parasitology

Abstract submission is open until 1st July 2015
Early birds for registration fees till 15th July 2015

More information: http://www.buiatricsforum.com/ebfinfo.html

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# Scientific abstracts

Prof Anim Scientist 2015. 31.101-108

### Control of liver abscesses in feedlot cattle: a review

C. Reinhardt, M. Hubbert

Published literature was reviewed to provide an overview of the historical prevalence and methods of controlling liver abscesses (LA) in feedlot cattle. Liver abscesses are typically categorized as mild, moderate, or severe, with severe LA most often being associated with reductions in performance. The prevalence of LA in beef-breed steers increased by 25% between 2008 and 2013; however, the

prevalence in Holstein steers tripled over the same period. Regionally, the greatest prevalence has been observed in Kansas, eastern Colorado, and western Nebraska, and the lowest prevalence has been observed in the Midwest and the desert southwest. Fusobacterium necrophorum and Trueperella pyogenes are most commonly associated with LA, although F. necrophorum is likely the primary causative pathogen. Liver abscesses are often, but not always, associated with perforations in the rumen wall. Tylosin phosphate is commonly fed to control LA. Feeding elevated levels of roughage during growing and finishing periods results in a dramatic reduction in LA; overprocessing of dietary roughage reduces its effectiveness. Grain processing has marked effects on ruminal starch availability but has minimal effect on LA; inclusion of fibrous by-product feeds also does not mitigate prevalence of LA. Vaccination against F. necrophorum has shown little benefit in field application. Providing a source of true scratch-factor to the rumen, either by increasing the percentage of coarse roughage included in the TMR or by periodically providing coarse hay apart from the TMR, appears to be the most effective method of reducing LA.

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J Dairy Sci 2015. 98.3071-3078.

**Bovine subclinical intramammary infection caused by coagulase-negative staphylococci increases somatic cell count but has no effect on milk yield or composition**

T. Tomazi*, J. Gonçalves, J. Barreiro, M. Arcari, M. Dos Santos

The aim of this study was to evaluate the effect of subclinical intramammary infection (IMI) caused by coagulase-negative staphylococci (CNS) as a group and by specific CNS species on milk yield and composition and somatic cell count (SCC) of dairy cows. Selection of cows with IMI caused by CNS was performed by microbiological cultures of composite samples collected from 1,242 dairy cows distributed in 21 dairy herds. After selection of cows, milk yield was measured and milk samples were collected at the mammary quarter level (i.e., 1,140 mammary samples collected from 285 cows) for analysis of milk composition and SCC. In total, 108 isolates of CNS were identified at the species level by PCR-RFLP analysis. Forty-one pairs of contralateral mammary quarters, with and without IMI, were used to evaluate the effect of CNS on milk yield and composition. Mammary quarters infected with CNS had higher geometric mean SCC (306,106 cells/mL) than noninfected contralateral mammary quarters (62,807 cells/mL). Intramammary infection caused by CNS had no effect on milk yield or on contents of fat, crude protein, casein, lactose, total solids, and solids-not-fat. *Staphylococcus chromogenes* was the most prevalent CNS species in this study and the only species that allowed within-cow evaluation. The IMI caused by *S. chromogenes* increased SCC but had no effect on milk yield and composition at the quarter level. In conclusion, subclinical mastitis caused by CNS increased the SCC but had no effect on milk yield and composition of dairy cows.

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J Dairy Sci 2015.98.3120-3132.

**Effect of intrauterine infusion of an organic-certified product on uterine health, survival, and fertility of dairy cows with toxic puerperal metritis**

P. Pinedo*, J. Velez, H. Bothe, D. Merchan, J. Piñeiro, C. Risco

The objective was to evaluate the effect of intrauterine infusion of an organic certified product (Optimum UterFlush, Van Beek Natural Science, Orange City, IA) on uterine health, survival, and fertility of cows affected with toxic puerperal metritis (TPM) in an organic dairy farm. Cows with TPM were defined as having an abnormally enlarged uterus and a fetid watery red-brown vaginal discharge, associated with systemic illness and fever (rectal temperature ≥39.5°C), within 12 d postpartum. Cows diagnosed with TPM (n = 220; study d 0) were blocked by parity (1 and ≥2) and randomly assigned into 1 of 2 intrauterine treatments applied every other day for a total of 3 applications: (1) control (CON) = 200 mL of povidone iodine diluted in 2 L of distilled water (n = 113); (2) Optimum UterFlush (UF) = 3.75 mL diluted in 117 mL of distilled water (n = 107). All enrolled cows received hypertonic saline solution (500 mL 7.2% i.v.), dextrose (500 mL 50% i.v.), and oral aspirin (5 boluses/d). Outcome variables for treatment efficacy included fever and presence of fetid vaginal discharge at study d 6 and 14, survival at study d 6 and 14 and at 30 and 100 DIM, and reproductive performance. Control variables were parity, BCS at enrollment, calving season, and milk yield. Occurrence of fever at d 6 and 14 was not different between the 2 treatment groups. Presence of fetid vaginal discharge at d 6 and 14 was lower in cows treated with UF compared with cows in the CON group (10.7 vs. 28% and 1.1 vs. 9.1%). The odds (95% confidence interval) for survival and remaining in the farm at study d 6 and 14 and at 30 and 100 DIM for cows in the UF treatment were 4.67 (1.38–15.8), 2.77 (1.25–6.10), 3.13 (1.22–8.02), and 2.82 (1.38–5.71) times the odds of cows in the CON group, respectively. The odds of AI until 150 DIM and the interval from calving to first AI were not different between the 2 treatments. However, pregnancy was affected by treatment; the odds (95% confidence interval) of pregnancy at the first AI, 150 DIM, and 300 DIM for cows treated with UF were 2.15 (1.05–4.40), 1.81 (1.04–3.15), and 1.92 (1.09–3.38) times the odds of cows in the CON group, respectively. Days to pregnancy were similar in both treatment groups, but the number of artificial inseminations per pregnancy were different (2.69 vs. 2.02 for cows in the CON and UF treatments). Results indicate that cows with TPM administered intrauterine infusion of Optimum UterFlush had higher odds of recovering and improved reproductive performance compared with cows treated with povidone iodine.

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Theriogenology May 2015.83.1344-1351.

**Comparison of two treatment strategies for cows with metritis in high-risk lactating dairy cows**

R. Armengol, L. Fraile

Acute puerperal metritis (APM) and clinical metritis (CM) are uterine diseases frequently diagnosed in dairy cows. These diseases are responsible for important economic loss because of their effect not only on reproductive performance but also on milk production. The objective of this study was to assess the impact of two different treatments for metritis on dairy cows by measuring their reproductive performance in the next gestation. The end points to measure the reproductive performance included the conception rate at the first artificial insemination, the number of days at conception, and the proportion of nonpregnant cows at over 150 days after beginning milk production. The study was carried out in a high production dairy cow farm located in Lleida (northeast Spain). Recordings of 1044 parturitions of 747 Holstein cows were controlled in this farm from 2009 to 2014. Cows were diagnosed as suffering from metritis (APM or CM) if the following parameters were observed: an abnormally enlarged uterus; a fetid, watery, reddish brown uterine discharge with (APM) or without

(CM) fever (>39.5 °C); and presence (APM) or absence (CM) of signs of systemic illness (decreased milk production, dullness, or other signs of toxemia) within 21 days postpartum. Afterwards, cows suffering from metritis (APM or CM) were randomly assigned and balanced to two groups: (1) animals receiving parenteral amoxicillin intramuscularly plus intrauterine infusion with oxytetracycline (P + I group) and (2) animals receiving only parenteral amoxicillin intramuscularly (P group). Furthermore, reproductive performance of cows without metritis was used as reference (control group). Metritis was diagnosed in 27.5% of the total parturitions included in the study (288 of 1044). In particular, metritis was diagnosed in 30.5% (118 of 387) and 25.9% (170 of 657) of parturitions from heifers and multiparous cows, respectively. Reproductive performance was not significantly affected by the parity, the season at the first artificial insemination, the season at conception, the bull, or the inseminator. The P + I treatment was able to significantly reduce the number of days at the first insemination and at conception when compared with the P treatment in heifers.

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J Dairy Sci 2015.98.3766-3777.

**Low body condition predisposes cattle to lameness: An 8-year study of one dairy herd**

L. Randall, M. Green, M. Chagunda, C. Mason, S. Archer, L. Green, J. Huxley

Lameness in dairy cows is a multifactorial and progressive disease with complex interactions between risk factors contributing to its occurrence. Detailed records were obtained from one United Kingdom dairy herd over an 8-yr period. Weekly locomotion scores were used to classify cows as not lame (score 1 to 2), mildly lame (score 3) and severely lame (score 4 to 5). These outcomes were used to investigate the hypothesis that low body condition score (BCS) is associated with an increased risk of lameness in dairy cows. Mixed effect multinomial logistic regression models were used to investigate the association between prior BCS and repeat lameness events during the longitudinal period of the study. Discrete time survival models were used to explore the relationship between prior BCS and first lifetime lameness events. In total, 79,565 cow weeks at risk were obtained for 724 cows. The number of lameness events was 17,114, of which 8,799 were categorized as mildly lame and 8,315 as severely lame. The median BCS was 2.25 (range, 0.75 to 4.25) and the mean body weight (BW) and age at first calving were 619.5 kg (range, 355.6 to 956.4 kg) and 25.8 mo (range, 20.5 to 37.8 mo), respectively. Subsets of the data were used in the discrete time survival models: 333 mild and 211 severe first lifetime lameness events in heifers (first lactation cows), and 81 mild and 49 severe first lifetime lameness events in cows second lactation or greater. Low BCS 3 wk before a repeated lameness event was associated with a significantly increased risk of lameness. Cows with BCS <2 were at greatest risk of mild or severe lameness, and an increased BCS above 2 was associated with a reduced risk of mild or severe lameness. Low BCS 16 or 8 wk before a first mild or severe lifetime lameness event, respectively, also had a positive association with risk of lameness in cows second lactation or greater. This provides evidence to support targeting management toward maintaining BCS to minimize the risk of lameness. Low BW (independent of BCS) and increased age at first calving above 24 mo were also associated with increased long-term risk of repeated lameness events. Overall, the model explained 62 and 60% of the variability for mild and severe lameness, respectively, highlighting the importance of these variables as risk factors and hence where management could be targeted to significantly affect reducing the risk of lameness.

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Theriogenology. 2015.84.76-81.

## Accuracy of diagnosing double corpora lutea and twin pregnancy by measuring serum progesterone and bovine pregnancy-associated glycoprotein 1 in the first trimester of gestation in dairy cows

Z. Szelényi Z, A. Répási, NM de Sousa, JF Beckers, O Szenci.

Progesterone (P4) and bovine pregnancy-associated glycoprotein 1 (bPAG-1) concentrations during gestation are dependent on the number of CL and fetuses, respectively. The objective of this present study was to measure and evaluate the usefulness of measuring the P4 and bPAG-1 concentrations in cases of single versus twin pregnancies and one versus two CL at the first 4 months of gestation. We hypothesized that both the number of the CL and the number of fetus might have an effect on P4 and pregnancy protein concentrations, and we can set up clinically useful threshold levels to predict twin gestations. Eighty-four Holstein-Friesian dairy cows were enrolled in this prospective observational clinical trial. Blood was collected at time point 1: between Days 29 and 42, time point 2: between Days 57 and 70, time point 3: between Days 85 and 98, and time point 4: between Days 113 and 126 of gestation, and bPAG-1 and P4 concentrations were measured. Binary logistic regression analyzing serum P4 concentrations differed at time point 2 compared with baseline level, but the area under the curve (AUC) had low sensitivity. The bPAG-1 concentrations were statistically different at each time point of gestation. The AUC cutoff values of serum bPAG-1 concentrations were sufficiently sensitive to differentiate between twin gestations from singleton ones. At time points 3 (cutoff value of 3.4 ng/mL) and 4 (cutoff value of 56.5 ng/mL), statistically significant differences with low sensitivity, high specificity, and a high AUC were found. On the basis of these results, the diagnosis of twin pregnancy using pregnancy protein measurements is clinically insufficient before Day 85 of gestation; however, the ability to confirm the early twin pregnancy diagnosis with bPAG-1 measurements appears to be promising. To achieve high sensitivity, further studies are required.