

All-day seminar: **Future of dairy cattle housing**

Chairmen: Joao Costa, University of Kentucky, USA, and Marija Klopčič, University of Ljubljana, Slovenia

in cooperation with ADSA or ASAS, EAAP Cattle commission, EAAP Precision Livestock Farming commission, and EU-project FreeWalk

Opening of seminar “Future of dairy cattle housing” by Ana Sofia Santos, president Portuguese Organizing Committee

Contributions (only affiliation of main author is listed):

Session 33a – morning 31/2 hour

Marcia Endres (invited), University of Minnesota, USA: **Future of housing from an American perspective – 30 min**

Paul Galama, Wijbrand Ouweltjes, Marcia Endres, Yehuda Sprecher, Lorenzo Leso, Isabel Blanco Penedo, Kerstin Bruegemann, Elfriede Ofner-Schrock, Maria Klopčic – Wageningen UR, the Netherlands: **Future of cattle housing - 15 min**

Wijbrand Ouweltjes, Isabel Blanco-Penedo and Paul Galama, Wageningen UR, the Netherlands: **Lying behaviour in freewalk vs cubicle barns – 15 min**

Ilan Halachmi – ARO Volcani Center, Israel: **Animal-centric approach to mitigate heat stress - housing and management practices in Israel – 15 min**

Lorenzo Leso, Paul Galama, Isabel Blanco Penedo, Kerstin Bruegemann, Andreas Zentner, Maria Klopčic, Matteo Barbari, University of Firenze, Italy: **Bedding management in compost-bedded pack and cubicle barns for dairy cows in Europe – 15 min**

P.F.P. Ferraz, G.A.S. Ferraz, L. Leso, G. Rossi, M. Klopčic and M. Barbari, University of Firenze, Italy: **Potential alternative bedding materials for dairy cattle – 15 min**

Jochem Tolkamp, Jeroen Verstegen and Henk Hanskamp, Firm Hanskamp - Innovation for Dairy Farming, Doetinchem, the Netherlands: **Application of Cow-Toilet in progress – 30 min**

Ulf Emanuelson, Kerstin Bruegemann, Marija Klopčic, Lorenzo Leso, Wijbrand Ouweltjes, Andreas Zentner, Isabel Blanco Penedo, Swedish Agricultural University, Sweden: **Health aspects of dairy herds in freewalk and cubicle housing systems – 30 min**

Thompson, J.S., Robinson, R., Hudson, C., Bollard, N., Woad, K., Huxley, J., Kaler, J., Green, M.J., School of Veterinary Medicine and Science, University of Nottingham, UK: **A randomised control trial of housed dairy cows to explore the effect of overall space allowance on reproductive performance and yield – 15 min**

Nina Melzer, J. Langbein and B. Foris, Leibniz Institute for Farm Animal Biology, Dummerstorf, Germany – **Automated detection of social behavior at the feed bunk in dairy cows – the influence of regrouping** – 15 min

Isabel Blanco-Penedo, Joop van der Werf, Kerstin Bruegemann, Elfriede Offner-Schrock, Lorenzo Leso, Marija Klopčič, Ulf Emanuelson, Swedish Agricultural University, Sweden: **Dairy cattle welfare in two housing systems in Europe** – 15 min

Session 33b – afternoon – 21/2 hour

António Moitinho Rodrigues, Polytechnic Institute of Castelo Branco, Portugal: **Cattle husbandry and management in Portugal** – 15 min

Joao Costa (invited), M.C. Kantor, M.M. Woodrum Setser, H.W. Neave, University of Kentucky, USA: **The future of dairy calf housing: group housing systems and the use of precision technologies** – 30 min

N. Dirksen, B. Puppe, L.Schrader, D. Elliffe, L. Matthews and J. Langbein, Leibniz Institute for Farm Animal Biology, Dummerstorf, Germany – **How to reduce GHG emission – Latrine training of dairy calves** – 15 min

J.J. Hayer, D. Nysar, C. Leubner, C. Heinemann and J. Steinhoff-Wagner, University of Bonn, Institute of Animal Science, Bonn, Germany - **The effect of age and housing on assessment of animal welfare for unweaned dairy calves** – 15 min

Marija Klopčič, Abele Kuipers, Megan Waldrop and Jutta Roosen, University of Ljubljana, Slovenia: **Multi-functional use of barn and farmers and consumers attitude towards using composting bedding materials** – 15 min

Patricia Wagner, Kerstin Bruegemann, T. Yin, Christine Weimann and Sven Koenig, University of Giessen, Germany: **Phenotypic and genomic analysis of microscopic differential cell counts in compost bedded pack barns** – 15 min

Abele Kuipers and Paul Galama, Wageningen UR, the Netherlands: **Antibiotic use in freewalk, cubicle and organic farming systems** – 15 min

Knut Hofstad, V. Kvakkestad, G. Lien, M. Klopčič, Norwegian Institute of Bioeconomy Research, Norway: **Comparing housing systems for dairy production using Multi-Criteria-Analysis** – 30 min

Session 33c – Thursday morning -21/2 hour

Albert de Vries and I.M.M. Toledo, University of Florida, USA: **Dairy cattle management and housing for warm environments** – 15 min

Bertrand Fagoo and J. Capdeville, Institute d'Elevage, France: **Assessment of thermal comfort of dairy cows housed indoor during high heat periods** – 15 min

Elfriede Ofner-Schroeck, HBLFA Raumberg-Gumpenstein, Austria: **The influence of housing conditions and management on animal welfare in freewalk systems and cubicle housing systems in Europe** – 15 min

Yehuda Sprecher and Paul Galama, Sprecher architects, Israel: **Innovations in bedded pack barns** – 30 min

Flavio Alves Damascino, University de Lavras, Brazil: **Developments in cattle housing in Brazil** - 15 min

Juan Leandro Monge and F. Bargo, Argentina: **Developments in cattle housing in Argentina** – 15 min

D.E. Hidalgo, University de Chile, Santiago, Chile: **Housing systems for cattle in Chile** – 15 min

L. Braga, University Estadual Paulista, Brazil - **Relationships of stress during corral weaning with future productive performance in beef cattle** – 15 min

M. Klopčič, University of Ljubljana: **FreeWalk Highlights** – 15 min