

# HSA International Symposium 2015:

## Recent Advances II

Zagreb, Croatia 16-17<sup>th</sup> July 2015

## Information about the Symposium venue:

The Symposium is being held in the Hotel Dubrovnik on Ban Jelačić Square in the centre of Zagreb. Talks will take place in the Ban Jelačić conference room.

Delegates are kindly requested to take their seats in plenty of time before the start of each session. These will start promptly at the time indicated and each speaker has been allocated five minutes for questions from delegates. The first session, on the 16<sup>th</sup> July, will begin at 08.55am.

Delegates with any questions or queries should address these to the staff at the Symposium registration desk in the conference foyer. Storage for luggage and cloakroom facilities are available on request.

### Catering

Tea, coffee and other refreshments will be served in the conference foyer and in the Ban Zrinski room, where the posters are displayed. Lunch will be served in the Centrum room.

### Safety

In the event of a fire or other emergency, please leave via the nearest emergency exit. Delegates should then go to the collection point, which you will be directed to when exiting the building. A check that everyone attending the Symposium is present will then be made.

#### Access to the wireless network

Search available networks and select either:

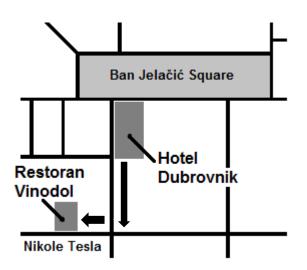
Wifi Hd Guest Password: dubrovnik1929

or Wifi HD Kongres Password: HDUzg1929

## **Drinks reception:**

A drinks reception is being held from 7.30pm on the evening of the 16<sup>th</sup> July in central Zagreb at Restoran Vinodol. The restaurant is a short walk from the Hotel Dubrovnik at 10 Nikole Tesla. Drinks and canapés will be available at the event. Afterwards delegates are free to explore Zagreb.

There will be people around to act as guides to the venue if need be.



### Information on Presentations:

### **Speakers**

We request that all speakers ensure that they have loaded a copy of their presentation, which should be carried on a memory stick and formatted for use on Microsoft PowerPoint for PC, well in advance of the session in which they are to talk. As a guide, we would expect anyone talking in a session scheduled before lunch to have loaded their talk and checked it either the day before or as early as possible on the day of their talk.

Speakers should come to the front of the Ban Jelačić conference room where they can load copies of their talk and check that they are complete. Speakers should also inform staff at the Symposium registration desk once they have loaded their talk.

Access to the Ban Jelačić conference room is from 8.00am on the 16<sup>th</sup> July.

#### **Posters**

Posters will be displayed in the Ban Zrinski room, accessed from the conference foyer. We request that all posters should be in place before the start of the first session at 08.55am on the 16<sup>th</sup> July. They should be taken down no later than the end of the afternoon refreshment break on the 17<sup>th</sup> July.

#### **Poster sessions**

There will be two poster sessions, when authors will be available to answer questions about their posters. These will take place during the lunch breaks, and will start at 13.10 on both days of the Symposium. Delegates contributing posters are asked to be available by their poster during their allocated session, which can be found in the poster sessions programme.

### **Badges**

Delegates with a special role to play in the Symposium have been allocated a coloured badge, as follows:

**Blue:** Organisers and Assistants

Yellow: Speakers and Session Chairs

**Pink:** Poster presenters

## **Acknowledgements:**

We wish to thank Jarvis Products for their generous support towards the costs of holding this Symposium.

# Timetable: Day one: 16<sup>th</sup> July 2015

## 08:00-08:55 Registration and poster set-up

08:55	Dr Robert Hubrecht	Welcome and Introduction
	Humane Slaughter Association, UK	

09:05-10:45 Session 1 Chair: Peter Jinman, FAWC, UK		
09:05	HRH Princess Alia Al Hussein	Islam and animal welfare – a pathway to more humane slaughter
	Princess Alia Foundation, Jordan	practices
09:45	Malcolm Mitchell	The effects of journey time upon the welfare of pigs in transit: A
	SRUC, UK	study under commercial transport conditions
10:05	Karen von Holleben	Evaluation of cattle head fixation for captive bolt stunning under
	bsi Schwarzenbek, Germany	practical conditions – How tight and how fast?
10:25	Suzanne Millman	Assessment of aversion to CO2 by weaned pigs and neonatal goats
	Iowa State University, USA	

## 10:45-11:10 Break

11:10-12	11:10-12:40 Session 2 Chair: Dr Antonio Verlarde, IRTA, Spain		
11:10	Dr Denis Simonin Animal Welfare Unit, European Commission	The European Commission's work to improve food animal welfare at slaughter	
11:40	Steve Wotton University of Bristol, UK	EC Regulation 1099/2009: Stunning current on cardiac arrest in Halal sheep	
12:00	Pia Brandt Danish Meat Research Institute, Denmark	Documentation of welfare of finishing pigs on the day of slaughter	
12:20	Rebeca Garcia DEFRA, United Kingdom	Evidence-based policy on welfare at slaughter –Latest regulatory changes, gaps and advances	

### 12:40-14:00 Lunch, including poster session from 13:10

14:00-15:30 Session 3 Chair: Prof Yvonne Vizzier Thaxton, University of Arkansas, USA		
14:00	Dr Mara Miele	Making slaughter of livestock acceptable to the consumer: How
	Cardiff University, UK	science, technology and religion affect the public debate about
		slaughtering practices
14:30	Georgina Limon	Pathophysiology of captive-bolt stunning in alpacas (Vicugna
	Royal Veterinary College, UK	pacos)
14:50	Charlotte Berg	Animal welfare at slaughter – A social learning process
	Swedish University of Agricultural	
	Sciences, Sweden	
15:10	Simon Parotat	Pig slaughter: Detecting signs of life prior to scalding by means of
	bsi Schwarzenbek, Germany	optical flow

### 15:30-16:10 Break

16:10-17:30 Session 4 Chair: Dr Mario Ostović, University of Zagreb, Croatia		
16:10	Antoni Dalmau	Use of carbon dioxide to stun rabbits
	IRTA, Spain	
16:30	Vasco Antunes	Outcome of audits of EU Member States on animal welfare
	European Commission Food and	controls at slaughter
	Veterinary Office, Ireland	
16:50	Phil Hadley	A comparison of handling methods relevant to the religious
	EBLEX AHDB, UK	slaughter of sheep
17:10	Miroslav Radeski	Absence of stress in sheep while witnessing the slaughtering
	Ss. Cyril and Methodius University of	process
	Skopje, Macedonia	

### 19:00-21:00 Drinks Reception at Restoran Vinodol

# Timetable: Day two: 17<sup>th</sup> July 2015

09:00-10:20 Session 5 Chair: Prof Charlotte Berg, Swedish University of Agricultural Sciences, Sweden		
09:00	Antonio Velarde	Electrical stunning effectiveness with current levels lower than 1A
	IRTA, Spain	in lambs and kid goats
09:20	Claudia Meier	Evaluation of the Meyn multistage CO2 stunning system for
	bsi Schwarzenbek, Germany	chicken with regard to animal welfare under practical conditions
09:40	Hans van de Vis	An approach to implement stunning and killing of fish
	IMARES, The Netherlands	
10:00	Käthe Kittelsen	Wing fractures in broilers, observed at two Norwegian abattoirs
	Norwegian Meat and Poultry Research	
	Centre, Norway	

### 10:20-11:00 Break

11:00-12	11:00-12:30 Session 6 Chair: Dr Martin von Wenzlawowicz, bsi Schwarzenbek, Germany		
11:00	Tozie Zokufa	Humane slaughter: Is Africa there yet? Challenges and	
	Program Manager for Africa, Humane	opportunities	
	Society International and Chairman,		
	PAAWA, South Africa		
11:30	Mhairi Sutherland	Evaluation of a non-penetrating captive bolt to euthanase	
	Ruakara Research Centre, New	neonatal goat kids	
	Zealand		
11:50	Anthony Akunzule	Review of the transportation system affecting animal welfare	
	Veterinary Services Directorate, Ghana	during transport of live animal to slaughterhouses in Ghana	
12:10	Sophie Atkinson	A study of aversion and stun quality in pigs stunned in a gas	
	Swedish University of Agricultural	mixture of 80% N2 and 20% CO2 compared to 90% CO2 during	
	Sciences, Sweden	commercial slaughter	

## 12:30-12:40 Presentation of the HSA Award 2015

### 12:30-14:00 Lunch, including poster session from 13:10

14:00-15:30 Session 7 Chair: Dr Hans van de Vis, IMARES, The Netherlands		
14:00	Prof Yvonne Vizzier Thaxton	From idea to reality: The development of the Low Atmosphere
	University of Arkansas, USA	Stunning System
14:30	Eloy Gonzales-Gustavson	An evaluation of the humanness of stunning and slaughter
	IVITA, Peru	methods used in Guinea pigs (Cavia porcelus) for the Andean
		region
14:50	Alison Small	DTS: Diathermic syncope for cattle stunning
	CSIRO, Australia	
15:10	Georgina Limon	Effect of neck cut position on time to collapse in Halal slaughtered
	Royal Veterinary College, UK	cattle

### 15:30-16:10 Break

16:10-17:10 Session 8 Chair: Prof Malcolm Mitchell, SRUC, UK		
16:10	Jessica Martin SRUC, UK	Evaluation of electroencephalogram responses of chickens killed using three mechanical devices
16:30	Martin von Wenzlawowicz bsi Schwarzenbek, Germany	Risk factors for the use of a rifle for stunning/killing of cattle
16:50	Merel Verhoeven Wageningen University, The Netherlands	Validation of indicators used to assess unconsciousness in cattle at slaughter

17:10 End

Poster Session: Day one: 16<sup>th</sup> July 2015

13:10-13:50 Poster Session

**Marc Cooper** (RSPCA, UK) Automated assessment of key welfare parameters at the time of killing to better understand on-farm conditions for broilers

**Maurizio Ferri** (Italian Veterinary Service, Italy) *Monitoring of animal welfare at slaughter – study results of indicators' use at a bovine slaughterhouse* 

Katrine Fogsgaard (University of Aarhus, Denmark) Are sows sent for slaughter fit for transport?

**Marlene Kirchner** (University of Copenhagen, Denmark) *How to assess fitness for transport of Danish broiler chickens* 

**John Lever** (University of Huddersfield, UK) *Farm animal welfare and corporate social responsibility: Making slaughter visible?* 

**Nikki Mackie** (University of Bristol, UK) *Behavioural responses of broiler chickens during Low Atmospheric Pressure Stunning* 

**Suzanne Millman** (Iowa State University, USA) *An animal welfare assessment of swine marketed through buying stations in the United States* 

**Suzanne Millman** (Iowa State University, USA) *Assessment of aversion to different concentrations of CO2* gas by weaned pigs using an approach-avoidance paradigm

Suzanne Millman (Iowa State University, USA) Tolerance of carbon dioxide gas by neonatal goats

**Carla Molento** (Federal University of Parana, Brazil) *Perceptions of fish welfare issues by Latin American citizens* 

**Simone Pauling** (Marel Stork Poultry Processing, The Netherlands) 20 years of experience in carbon dioxide stunning of poultry: Proven scientific knowledge and additional insights

**Avraham Pinkas** (Hai-Meshek – Isreali Society for the Prevention of Cruelty to Farm Animals, Israel) *Killing* spent laying hens on farm, in 1 second

**Kristin Pufpaff** (Islamic Food and Nutrition Council of America, USA) *Target areas for animal welfare improvement within a religious context* 

**Jessica Walsh** (University of Guelph, Canada) *Evaluation of producer attitudes regarding on-farm euthanasia methods for commercial meat rabbits* 

**Hannah Westen** (World Horse Welfare, UK) *Transport of equine animals for slaughter: New guidelines on watering and fitness for transport* 

Poster Session: Day two: 17<sup>th</sup> July 2015

13:10-13:50 Poster Session

**Hamid Ahmad** (Formerly Pakistan Society of Food Scientists and Technologists, Pakistan) *Religious Halal slaughter of animals for food, Animal welfare, Meat science – Knowledge gaps* 

**Johannes Bergsma** (Meyn Food Processing Technology, The Netherlands) *Improving animal welfare:* Automated monitoring of foot pad lesions

**John Cranley** (AWSELVA, UK) *Risks of sensibility type behaviour during slaughter with and without stunning in Britain* 

**Kirstin Dahl-Pedersen** (Aarhus University, Denmark) *Study design and selection of relevant measures for assessment of fitness for transport of dairy cows* 

**Leonie Jacobs** (ILVO, Belgium) *Effect of transport duration and broiler breeding age on day-old chick welfare and performance* 

Helle Daugaard Larsen (DMRI, Denmark) Video surveillance of CO2-stunning of finishing pigs in groups

Renata Leuschner (EFSA, Italy) The EFSA approach to assessing proposals for new stunning methods

**Gustavo María** (University of Zaragoza, Spain) *Effect of long term transportation on sheep productive traits, behaviour and welfare* 

Gustavo María (University of Zaragoza, Spain) Social perception of animal welfare in Argentina

**Luc Mirabito** (Institut de l'Elevage, France) *Promoting and implementing high standards of animal welfare:* An example in French cattle slaughterhouses

**Johanna Probst** (Research Institute of Organic Agriculture, Switzerland) *Relationship between stress-related physiological exsanguination blood variables, vocalisation, and stressors at a conventional abattoir* 

**Jon Ratcliffe** (Moulton College, UK) Causes of livestock vehicle accidents in the UK and the consequences for the animals involved

**Fiona Roberts** (Integra Food Secure, UK) Observations on the understanding and implementation of EC Regulation 1099/2009: Analysis from farm, factory and hatchery audit of the global poultry supply chain for a major UK retailer

**Janet Talling** (Animal and Plant Health Agency, UK) *Extended journey lengths (11 days) in high specification lorries does not further compromise pig welfare* 

**Wouter Veerkamp** (Meyn Food Processing Technology, The Netherlands) *Improving animal welfare: CAS stunning before tilting*