

COST Action FA1002

Farm Animal Proteomics Spring Meeting 2011

Programme

Thursday 31st March 2011

St. Andrews Building, University of Glasgow

08.30-09.00 Opening Remarks David Eckersall (Action Chair)

9.00 WG1 Farm Animal Health proteomics (Chairs: F. Ceciliani & R. Turk)

09.00-09.30	Invited	Ingrid Miller	The proteomes of pig serum and other body fluids
09.30-10.00	Plenary	Fabrizio Ceciliani	Post translational-modification and inflammation: the α_1 -acid glycoprotein story
10.00-10.30	Plenary	Romana Turk	Oxidative stress and reproductive disorders in dairy cows - a proteomic challenge
10.30-11.00		Coffee Break	
11.00-11.15		Pekka Varmanen	Multiproteome profiling to uncover host-specificity determining factors in infectious and commensal <i>Staphylococcus epidermidis</i> strains
11.15-11.30		Anna Bassols	A proteomic approach to search for welfare biomarkers in cattle under different production systems.
11.30-11.45		Mari Smits	Serum protein profiles as biomarker for infectious disease status in pigs
11.45-12.00		Helga Sauerwein	Relevance of the acute phase protein haptoglobin as an adipokine in dairy cows
12.00-12.15		Cornelia Metges	Maternal diet during pregnancy affects the ontogenetic development of the hepatic proteome related to glucose metabolism in porcine offspring
12.15-12.30		Jens Raila	Assessment of transthyretin microheterogeneity in horses by MALDI-TOF-MS
12.30-14.00		LUNCH	

14.00 WG3 Platform Presentations, Bioinformatics (Chairs: G. Mazzuchelli & F. Lisacek)

14.00-14.30	Plenary	Gabriel Mazzuchelli	Mass spectrometry applied to biomolecules analysis.
14.30-15.00	Plenary	Jenny Renaut	Luxembourg: banks and proteomics, release the secret!
15.00-15.30	Plenary	Frederique Lisacek	Proteome Informatics: does what we have meet what you need?
15.30-16.00		Coffee Break	
16.00-16.15		Susana Cristobal	Environmental proteomics, tools and applications in marine species
16.15-16.30		Mary Doherty	Proteomic Strategies for Temporal Profiling in Animal Species
16.30-16.45		Helen Grundy	Method to screen for the addition of cow and pig blood-based binding agents to foods using LC-MS/MS
16.45-17.00		Matthew Collins	Dinosaurs for lunch: proteomics from food fraud and archaeology studies to determine the species origin of collagen and gelatine in food and feeds.
17.00-17.15	WG1	Monica L. Mazuz	Genetic diversity of the Bv80 gene in virulent and attenuated <i>Babesia bovis</i>

17.30-18.30 Commercial Presentations (Chairs: A. Bassols & T. Georgieva)

17.30-18.00		Robert Tonge (Waters Ltd)	LC-MSE: A method for data independent LC-MS analysis
18.00-18.30		Juliet Evans (Nonlinear Dynamics)	How do I set up a robust, reproducible, proteomics experiment?
20.00-23.00		Glasgow Social Dinner (<i>The Bothy</i>)	

Friday 1st April 2011

St. Andrews Building, University of Glasgow

08.00-09.00 FA1002 - MC Meeting

09.00 WG2 Proteomics of Food of Animal Origin (Chairs: K. Hollung & C. Molette)

09.00-09.30 Plenary Kristin Hollung Understanding tenderness in beef at the molecular level using proteomics

09.30-10.00 Plenary Caroline Molette Current advances in proteomic analysis of (fatty) liver

10.00-10.15 Barbara Tessema Effect of slaughter age on the proteome profile in norwegian landrace *adductor* muscle

10.15-10.30 Paola Roncada Differential proteomics and phosphoproteomic analysis of milk derived from cloned cattle

10.30-11.00 Coffee Break

11.00-11.15 Carmen Oliván Autophagic processes are involved in meat tenderization

11.15-11.30 Levente Czeglédi Selenium as feed supplement changes proteome of chicken liver

11.30-11.45 Laëtitia Théron The mechanisms of fat loss during cooking of 'foie gras': proteomic analysis of duck fatty liver

11.45-12.00 Eva Veiseth-Kent Proteome analysis of primary muscle cell cultures from salmon supplemented with varying concentrations of arginine and glutamine

12.00-12.30 Plenary Flemming Jessen Proteomics and fish quality

12.30-14.00 LUNCH

14.00 WGs 1 & 2 Farm Animal Production & Health Proteomics (Chairs: E. Bendixen & A. Almeida)

14.00-14.30 Plenary Emøke Bendixen Proteomics for targeting production traits in Farm Animals

14.30-15.00 Plenary André de Almeida Proteomics of weight loss in farm animals: a possible tool in animal selection?

15.00-15.30 Invited Jeffrey Plowman Unravelling the proteome of wool

15.30-16.00 Coffee Break

16.00-16.15 WG2 Alexandre Campos Proteomics to investigate the metabolism of bivalves and the biochemical response to toxic cyanobacteria

16.15-16.30 WG2 Cristian Piras Proteomic evaluation of *E.coli* strains with evidence of multi drug resistance

16.30-16.45 WG1 Rastislav Mucha Proteomic analysis to reveal molecular basis of adhesion of *Francisella* to endothelial cells

16.45-17.00 WG1 Rodrigo P Martins Proteome analysis of porcine mesenteric lymph-nodes after *Salmonella typhimurium* infection

17.00-17.15 WG1 Björn Kuhla A longitudinal proteomic approach to investigate skeletal muscle metabolism in the adaptation to early lactation of dairy cows

17.15-17.30 WG1 Steven Verhaegen Proteome changes in the human H295r adrenal carcinoma line following exposure to the mycotoxin, zearalenone

17.30-18.00 Plenary Andrea Mozzarelli Proteomic analysis of pork meat in the production of cooked ham

18.00 Closing Remarks David Eckersall

Poster List

Working Group 1

Proteomics in Farm Animal Health

- Janice Barr Exploring the diagnostic potential of differential protein profiling in TSE disease.
- Teodora M. Georgieva Blood haptoglobin response in obese rabbits with experimentally induced *Staphylococcus aureus* infection
- Christina Lecchi Phosphorylation of alpha₁-acid glycoprotein modulates bovine granulocyte phagocytosis and killing activity.
- Marian Madar A differential C4bp binding ability of *Borrelia* and *Francisella* strains
- Angela Moreno Quantitative proteomics by 2-DE, ¹⁸O/¹⁶O labeling and linear ion trap mass spectrometry analysis of lymph nodes from piglets inoculated by porcine circovirus type 2 (PCV2)
- Angela Moreno Lipopolysaccharide stimulation of swine neutrophils: a proteomic approach by time-course comparison
- Vladimir Mrljak TNF – α, IL – 6, and IL – 10 in dogs with *Babesia canis* infection
- Jarlath Nally Characterization of Urinary IgG from reservoir hosts of *Leptospirosis*
- Jarlath Nally Deciphering the pathogenic mechanisms of the Leptospiral Pulmonary Haemorrhage Syndrome - a comparative research approach
- Cristian Piras Specific protein targets for detection of *Mycobacterium avium* sub. *Paratuberculosis*
- Erminio Trevisi IL-1b and IL-6 levels in dry period and acute phase response in early lactating dairy cows
- Tatyana Vlaykova Changes of PON1 activity, total thiols and ferrous reducing ability of plasma during acute inflammation of rabbits with *Staphylococcus aureus*.

Working Group 2

Proteomics in Food of Animal Origin

- Carmen Oliván Post-mortem proteomic changes in bovine meat from different biotypes showing distinct tenderization rate
- Adrian Bugeja Douglas Analysing the Milk Components of the Maltese Goat

Working Group 3

Technology Platforms in Farm Animal Proteomics

- Arno Gutleb A plea to include proteomic studies in toxicological studies using farm animals
- Simon Faulkner An efficient and reproducible method for the depletion of albumin and immunoglobulin G from bovine plasma
- Sara Tedesco Proteomic and lipidomic analysis of primary cultures of mouse hepatocytes exposed to nanoparticles

Posters will be on continuous display in Room 227 during the meeting and can be viewed during coffee breaks