



DairyCare WG1 & EVIG Joint Meeting

Periparturient Immune Function and the Acute Phase Response in Dairy Animals

Health and welfare issues: the role of veterinary immunology

8th & 9th September 2016

Department of Public Health and Infectious Diseases

University of Rome "La Sapienza" – Piazzale Aldo Moro, 5 - Roma

DairyCare is an EU-COST Action focused on dairy animal health and welfare. The action's aim is to improve husbandry by combining biological, technological, engineering and social science expertise to optimize interactions between farmers and dairy animals.

The European Veterinary Immunology Group (EVIG) was founded under the auspices of the European Federation of Immunologic Societies (EFIS) in 2001 and intend to be a platform for communication and for direct scientific exchange in the field of veterinary immunology.

DairyCare and EVIG recognize that immunosuppression of high-yielding dairy cattle and their poor control of inflammatory and innate immune responses to the metabolic stress of pregnancy and lactation deserve high attention of the scientific community. Immunological findings could adequately complement clinical, metabolic and microbiological studies, and help to develop proper control procedures of animal health and welfare in dairy farms. Data so far accumulated in the field veterinary immunology can be exploited in the development of biomarkers aiming at increasing health and welfare in dairy animals. This joint meeting aims to set a channel for exchange of ideas and experience among scientists operating in the area of dairy animals' health and welfare.

The main purpose of the workshop is to stimulate discussion and interaction. We wish to involve as many different groups/laboratories as possible, from as many countries as possible and everybody is expected to contribute to the general discussion. Therefore, we planned to have enough time for a fruitful discussion at the end of each session, with few programmed interventions from both the academia and industry. In the discussion sessions, we foresee an intervention by the Coordinator of the Collaborative Working Group on European Animal Health & Welfare Research (CWG) of the Standing Committee on Agricultural Research (SCAR) (<http://www.scar-cwg-ahw.org/>), and from Elanco Animal Health.



Programme

Session 1: Thu 8th September 2016

Immunosuppression and dysregulation of the inflammatory response in dairy ruminants.

Chairs: Chris Knight (Copenhagen, DK), Massimo Amadori (Brescia, I)

14:30-14:40 Opening, Chris Knight (COST Action DairyCare)

14:40-15:10 Non-infectious stressors and innate immune response (Dirk Werling, UK)

15:10-15:50 Bovine metabolic stress and the generation of inflammatory lipid mediators
(Lorraine Sordillo, USA)

15:50-16:30 Nutritional and metabolic factors affecting the immune system
(Sven Danicke, D)

16:30-16:50 Coffee Break

16:50-17:30 Improving immune functions by innovative dairy cow management
(Pierre Lacasse, CAN)

17:30-18:10 Developments in immunoassay and omic analysis for biomarkers of innate immunity in dairy cows (David Eckersall, UK)

18:10-18:45 Discussion

20:30-23:00 Social dinner

Session 2: Fri 9th September 2016

Disease-predicting and prognostic potential of innate immune responses.

Chairs: Dirk Werling (London, UK), Gianfranco Gabai (Padova, I)

09:10-09:50 Assessment of the immune response in the periparturient cow
(Erminio Trevisi, I)

09:50-10:30 Infection and innate immunity in the female genital tract
(Martin Sheldon, UK)

10:30-11:10 Milk fever: new insights into involvement of innate immunity and potential biomarkers (Burim Ametaj, CAN)

11:10-11:30 Coffee Break

11:30-12:10 Immune response in the cow mammary gland (Hans-Joachim Schuberth, D)

12:10-12:40 What we have lost? Mastitis resistance in local breeds (Massimo Amadori, I)

12:40-13:45 Discussion





Meeting venue.

Department of Public Health and Infectious Diseases
University of Rome "La Sapienza" – Piazzale Aldo Moro, 5 - Roma
Rooms A & B – Ground floor

The meeting venue is in central Rome, at about 15 min walk from Stazione Termini and 10 min walk from the Castro Pretorio metro station (Metro Line B).

Alternatively, it is possible to travel by bus (ATAC), using bus lines 310 and 492.

Public transportations.

The Rome Metro Underground Train (<http://www.rome.info/metro/>) system has three lines named A, B and C. Lines A and B intersect at Rome Termini Station, the main public transport hub in Rome; Line C is a new line not completely activated. Information about tram and buses can be found at

<http://www.atac.roma.it/?lingua=ENG>

Using this web site, you may also plan your trip by public transportation in central Rome.

General information

The registration to the Workshop can be done through the dedicated webpage in the *DairyCare website*: (<http://www.dairycareaction.org/>).

The number of participants will be limited to the absolute maximum number of 80 delegates. COST is able to reimburse few of the delegates and we wish to involve as many different groups/laboratories as possible, from as many countries as possible. Please, follow the instructions on the website if you wish to apply for reimbursement. Then, remember that this is the Jubilee of Mercy year, and Rome will be very busy. Therefore, it is very important that delegates must register for this Workshop as soon as possible.

On *Thursday evening*, discussion and networking will continue during the *Conference Dinner* whilst slowing down and relaxing for a while. The Conference Dinner will take place at

Ristorante Polese, Piazza Cesarini Sforza, 00186 Roma (www.trattoriapolese.com).

The cost of the dinner will be €45, which includes wine. Dinner must be purchased in advance. Please reserve your ticket(s) using the DairyCare web site. You will then receive confirmation and payment details from the local organizers.

Travel information.

Rome is easily attainable by train from most Italian cities. For more information, you can have a look at the following web sites:

<http://www.trenitalia.com/tcom-en> (Trenitalia)





<https://www.italiarail.com> (Italiarail)

<http://www.italotreno.it> (Italo treno)

Most trains arrive at Roma Termini Station, which is the main railway station of Rome. Termini Station is the hub of the Rome Metro, where Underground Metro Lines A & B cross each other, and it is the largest hotel district in Rome. Few main trains stop at Tiburtina Station, which is connected to Termini Station by the line B of the Metro.

Rome is easily accessible by flight from most European and extra-European countries. Rome has two airports: the International Leonardo da Vinci Airport (Fiumicino) is used by the major airline companies, while Ciampino Airport is used by low-cost company Ryanair.

The most straightforward way to get into Rome from Fiumicino airport is by the Leonardo Express, a direct train service to Rome Termini Station. The service runs every 30 minutes from 6.30am to 11.30pm:

<http://www.adr.it/web/aeroporti-di-roma-en-/pax-fco-fiumicino>

Rome Ciampino airport has no direct rail link to the city centre, and the only direct link between Ciampino airport and the city are the Rome Ciampino Airport bus services. Terravision's Rome Coach Service is a direct bus service, which connects Ciampino Airport with Rome Termini Station. The journey takes around 40 minutes, depending on traffic, and it is advisable to book online in order to avoid queues for buying tickets. More information can be obtained at:

<http://www.adr.it/web/aeroporti-di-roma-en-/pax-cia-ciampino>

Invited Speakers

Dirk Werling (The Royal Veterinary College, London UK)

Lorraine Sordillo (Michigan State University, USA)

Sven Danicke (Friedrich-Loeffler-Institut, Braunschweig, D)

Burim Ametaj (University of Alberta, Can)

David Eckersall (University of Glasgow, UK)

Erminio Trevisi (Università Cattolica del Sacro Cuore, Piacenza, I)

Martin Sheldon (Swansea University, UK)

Pierre Lacasse (Sherbrooke Research and Development Centre, Agriculture and Agri-Food Canada)

Hans-Joachim Schuberth (University of Veterinary Medicine, Hannover, D)

Massimo Amadori (Ist. Zooprofilattico Sperimentale della Lombardia e dell'Emilia-Romagna, Brescia, I)

Marina Bagni (Collaborative Working Group on European Animal Health & Welfare Research - CWG)



Organizing Committee

Christopher H. Knight (University of Copenhagen DK - chair DairyCare)

Dirk Werling (Royal Veterinary College, London UK - chair EVIG)

Gianfranco Gabai (University of Padova I – leader, WG1 DairyCare)

Massimo Amadori (IZSLER Brescia I - EVIG)

Gianluca Russo (University of Rome “La Sapienza”, I)

Marcela Speranda (University of Osijek, HR – vice-leader, WG1 DairyCare)

Erminio Trevisi (Università Cattolica del Sacro Cuore, Piacenza)

Paolo Pasquali (ISS Rome, Italy)

The Workshop is supported by:

Department of Comparative Biomedicine and
Food Science, University of Padova



Department of Public Health and Infectious
Diseases, University of Roma “La Sapienza”



Elanco Italia SpA



Istituto Zooprofilattico Sperimentale della
Lombardia e dell’Emilia Romagna, Brescia



Università Cattolica del Sacro Cuore,
Piacenza, Italy



Istituto Zooprofilattico Sperimentale delle
Venezie, Padova

