



# Agenda

## AnimalChange Second Annual Meeting

27 – 28 June 2013 Dublin

Venue: University College Dublin

The Health Sciences Centre

UCD, Belfield

Dublin 4

Ireland



## Thursday, June 27<sup>th</sup>

08:30 – 09:00

 **Arrival & Registration**

### Plenary Session (09:00 – 10:00)

**C005 Room**

09:00 – 09:30

**Project Presentation Coordinator**

**Participants:** all

*Jean-François Soussana (INRA)*

09:30 – 10:00

**Discussion on Data to Model Integration**

*Chair: Jean-François Soussana (INRA)*

10:00 – 10:30

 **Coffee Break**

### 5 Parallel Sessions (10:30 – 12:00)

10:30 – 12:00

**Parallel session 1: CPI, WP2 (C005 Room)**

**Audience:** WP2 participants

*Chair: Petr Havlik (IIASA)*

10:30 – 10:35

\* Introduction Petr Havlik

10:35 – 10:45

\* Task 2.1: Storylines for livestock sector scenarios in EU, studied SICA regions and globally

*Leader: Peter Kuikman (DLO)*

10:45 – 10:55

\* Task 2.2: Downscaled regional climate data (D2.3, M30)

*Leader: Nicolas Viovy (CEA)*

10:55 – 11:05

\* Task 2.3: Database of livestock production systems and their characteristics (D2.4, M36)

*Leader: An Notenbaert (ILRI)*

11:05 – 11:15

\* Task 2.4: Consistent multi-scale modelling cluster (D2.5, M42)

*Leader: Adrian Leip (JRC)*

11:15 – 11:25

\* Task 2.5: Detailed modeled livestock scenarios (D2.6, M42)

*Leader: Petr Havlik (IIASA)*

11:25 – 11:55

\* Discussion on Data to Model integration  
*Leader: Petr Havlik (IIASA)*

11:55 – 12:00

\* Wrap-up  
*Leader: Petr Havlik (IIASA)*

10:30 – 12:00

**Parallel session 2: CP3, Farm data and modeling structure (C006 Room)**

**Audience:** WP9, WP10 & WP11 participants

**Chair:** Nick Hutchings (AU-DJF)

10:30 – 10:45

\* Status of the FarmAC model  
*Nick Hutchings (AU-DJF)*

10:45 – 11:05

\* Status of model and showcase farm data input  
*Marcia Stienezen (DLO)*

11:05 – 11:25

\* Overview of productivity and emissions from model farms  
*Jørgen E. Olesen (AU-DJF)*

11:25 – 11:45

\* Plans for completing model and showcase farm inventory  
*Marcia Stienezen (AU-DJF)*

11:45 – 12:00

\* Plans for use of showcase farm, including showcasing measures  
*Marcia Stienezen (DLO)*

10:30 – 12:00

**Parallel session 3: CP4, Progress to date (WP12, WP13 & WP14) (B109/10 Room)**

**Audience:** WP12, WP13 & WP14 participants

**Chair:** Pierre Gerber (FAO)

10:30 – 10:50

\* WP12- Mitigation & Adaptation at regional scale  
*An Notenbaert (ILRI)*

10:50 – 11:10

\* WP13- Economic and social analysis of M&A. Report on MACCs (MS52 and preparation of D13.1)  
*Dominic Moran (SRUC)*

11:10 – 11:30

\* WP13- Economic and social analysis of M&A. Report on institutional and behavioral barriers (MS53 and preparation of D13.2)  
*Ana Iglesias (UPM)*

11:30 – 11:50

\* WP14- Policy options  
*Pierre Gerber (FAO)*

11:50 – 12:00

\* Wrap-up

10:30 – 12:00

**Parallel session 4: CP5, WP15 (A007 Room)**

**Audience:** WP15 participants

**Chair:** Raphaël Martin (INRA)

10:30 – 10:35

**\* Introduction**

*Raphaël Martin (INRA)*

10:35 – 11:20

**\* Task 15.1: Data management, system of the project: database architecture and consistency checks o Presentation of the first version of the database**

- o Discussion about the IP policy
- o Review of the data flow spreadsheet
- o Discussion

*Raphaël Martin (INRA)*

11:20 – 11:40

**\*Task 15.2: Tools for models evaluation and parameterization**

*Haythem Ben Touhami (INRA)*

- o Global presentation
- o Presentation of the Bayesian calibration tool
- o Discussion

11:40 – 12:00

**\*Task 15.3: Vulnerability analyses methods**

*Raphaël Martin (INRA)*

- o Global presentation
- o Presentation of Vuln-Indices tool
- o Discussion

10:30 – 12:00

**Parallel session 5: Workshop MS15: Animal diseases & parasites (A008 Room)**

**Chair:** Gianni Bellocchi (INRA)

**OBJECTIVE**

Insight on the impacts of climate changes on animal diseases and parasites.

10:30 – 10:45

**\*WP4 overview; milestones and deliverables**

*Gianni Bellocchi (INRA)*

10:45 – 11:15

**\* Climate change impacts on spread of infectious vector-borne diseases**

*Hefin Williams (AU-IBERS)*

11:15 – 11:45

**\* Climate change impacts on gastro-intestinal parasites**

*Harry Archimède (INRA)*

11:45 – 12:00

**\* Close-up**

12:00 – 13:00

LUNCH

## 4 Parallel Sessions (13:00 – 14:30)

13:00 – 14:30

### Parallel session 1: CP1, WP4 & 5 (C005 Room)

**Audience:** WP4 & WP5 participants

**Chair:** Gianni Bellocchi (INRA) & Nicolas Viovy (CEA)

\* **Overview of WP4 and WP5**

Gianni Bellocchi (INRA)

\* **Large-scale projections of climate change impacts**

Nicolas Viovy (CEA) & WP5 partners

\* **Rain manimuation and other experiment with grasslands**

Catherine Picon-Cochard (INRA) & T4.1 partners

\* **Discussion on Data-Model exchanges**

All partners

13:00 – 13:15

13:15 – 13:45

13:45 – 14:15

14:15 – 14:30

13:00 – 14:30

### Parallel session 2: CP3, Farm scale mitigation (C006 Room)

**Audience:** WP9, WP10 & WP11 participants

**Chair:** Jørgen E. Olesen (AU-DJF)

\* **Overview of mitigation measures**

Vera Eory (SRUC)

\* **Priority of mitigation options for farms in Europe, Africa and Brazil**

Group work

\* **Summing on decisions on which options are dealt with on which farms and by whom**

Vera Eory (SRUC)

\* **Decisions on use complex models for mitigation options**

Nick Hutchings (AU-DJF)

\* **General discussion**

13:00 – 13:15

13:15 – 13:45

13:45 – 14:00

14:00 – 14:15

14:15 – 14:30

13:00 – 14:30

### Parallel session 3: CP4, working sessions 1&2 (B109/10 Room)

**Audience:** WP12, WP13 & WP14 participants + representatives from CP1 (Petr Havlik & Franz Weiss) for session 2

**Chair:** An Notenbaert (ILRI)

\* **Policy support and linkage with initiatives in the area of livestock and climate change (WP14, MS58)**

Pierre Gerber (FAO)

13:00 – 13:45

13:45 – 14:30

\* Global vulnerability framework and indicators for effectiveness and risk (WP12, MS49)  
*An Notenbaert (ILRI)*

13:00 – 14:30

**Parallel session 4: CP2, WP6 (A007 Room)**

**Audience:** WP6 & WP8 participants

**Chair:** *Jamie Newbold (AU-IBERS)*

13:00 – 13:10

\* Carbon balance in managed Irish pasture systems  
*Orlaith Ni Choncubhair (Teagasc)*

13:10 – 13:20

\* Research protocol on nutrient conservation efficiency for a diversity of manure management  
*Mélanie Blanchard (CIRAD)*

13:20 – 13:30

\* Meta-analysis of mitigation options for enteric methane emissions from ruminants  
*Eli Saetnan (AU-IBERS)*

13:30 – 13:40

\* Effect of dietary nitrate and linseed oil on methane emissions from lactating dairy cows  
*Jolien Veneman (AU-IBERS)*

13:40 – 13:50

\* Role of animal genetics in GHG gas emissions from ruminants  
*Eileen Wall (SRUC)*

13:50 – 14:00

\* The effect of tannin on *in vitro* digestibility, gas and methane production of selected tropical browse species  
*Abubeker Hassen (UP)*

14:00 – 14:10

\* Effect of condensed tannins on methane emission and ruminal microbial populations  
*Michel Doreau (INRA)*

14:10 – 14:20

\* Breakthrough technologies to decrease emissions from ruminant livestock  
*Kenton Hart (AU-IBERS)*

14:20 – 14:30

\* Discussion on links with modeling packages  
*Jamie Newbold (AU-IBERS)*

## 5 Parallel Sessions (14:30 – 16:00)

14:30 – 16:00

### Parallel session 1: CPI, WP3 (C005 Room)

Audience: WP3 participants

*Chair: Peter Kuikman (DLO)*

14:30 – 14:50

Developing MITERRA Global: analysis of uncertainties on emissions from livestock production chain at regional scales for Europe and challenges for the work in Africa and Latin America (T3.1 and T3.2)

*Jan Peter Lesschen (DLO)*

14:50 – 15:10

Carbon sequestration in pasture land and animal feed production – update on data assembly for regions in Europe, Africa and Latin America (T3.3)

*Katja Klumpp (INRA)*

15:10 – 15:30

How to collect data on manure management and on feed and fodder intake and related CH<sub>4</sub> and N<sub>2</sub>O emissions at regional levels for Africa and Latin America: protocols and links with component 2 and 3 (T3.4 and T3.5)

*Peter Kuikman, Oene Oenema, Michel Doreau & André Bannink (DLO & INRA)*

15:30 – 16:00

Discussion of protocols and regional activities

14:30 – 16:00

### Parallel session 2: CP3, Farm scale adaptation (C006 Room)

Audience: WP9, WP10 & WP11 participants

*Chair: Philippe Lecomte (CIRAD)*

14:30 – 14:45

\* Simulation of climate change and extreme events on livestock farms

*Raphaël Martin (INRA)*

14:45 – 15:00

\* Principles of adaptation to climate change in livestock farming

*Jørgen E. Olesen (AU-DJF)*

15:00 – 15:15

\* Overview of adaptation options on livestock farms

*Anita Wreford (SRUC)*

15:15 – 15:30

\* Identifying and prioritising adaptation options for specific livestock farms

*Anita Wreford (SRUC)*

15:30 – 16:00

\* Plans for meetings on modeling of mitigation and adaptation

*Jørgen E. Olesen (AU-DJF)*

14:30 – 16:00

**Parallel session 3: CP4, working sessions 3&4 (B109/10 Room)**

**Audience:** CP4 participants + representatives from CP1 (Petr Havlik & Franz Weiss) for session 3

**Chair:**

14:30 – 15:15

\* Analysis of first policy scenarios using models from CP1: GLOBIOM & CAPRI (WP14, MS57)

*Dominic Moran (SRUC), Petr Havlik (IIASA) & Franz Weiss (JRC) + An Notenbaert (ILRI)*

15:15 – 16:00

\* Model simulation and estimate of regional M&A potentials: GLOBIOM & CAPRI (WP13, MS54&55)

*Dominic Moran (SRUC), Petr Havlik (IIASA) & Franz Weiss (JRC)*

14:30 – 16:00

**Parallel session 4: CP2, WP7 (A007 Room)**

**Audience:** WP7 & WP8 participants

**Chair:** *Andreas Lüscher (WBF-Agroscope)*

14:30 – 14:40

\* General overview WP7

*Andreas Lüscher (WBF-Agroscope)*

14:40 – 15:10

\* Task 7.1

**Chair:** *Andreas Lüscher (WBF-Agroscope)*

- Progress in COST data analyses

*A. Lüscher, M. Suter, J. Finn, J. Connolly (WBF-Agroscope, Teagasc, AU-IBERS)*

- The potential of forage legumes intercropping to adapt climate change impacts on livestock production in Africa

*A. Hassen, D. Gemiyo, B. Shenkute Gameda (UP)*

- Dry matter yield, botanical composition and feed quality of different mixtures in three soil types

*A. Barradas, D. Crespo, B. Godinho, J. Freire (FertiPrado)*

- Progress on multispecies mixtures and drought experiments

*J. Finn, E. Haughey, A. Lüscher (Teagasc, WBF-Agroscope)*

- Grass-legume mixtures mitigate drought effects and achieve yield persistence: preliminary results

*A. Lüscher, R. Collins, J. Connolly, M. Suter (WBF-Agroscope, AU-IBERS)*

- Other / new activities of task 7.1



15:10 – 15:30

**\*Task 7.2**

*Chair: François Gastal (INRA)*

- Progress on the common (INRA-FertiPrado) experiment to evaluate the potential of new cultivars and species mixtures to adapt to Climate Change

*F. Gastal, A. Barradas, G. Louarn, B. Julier, B. Godinho, D. Crespo (INRA, FertiPrado)*

- Evaluation (in benches) of different agronomic characteristics in forage species

*C. A. Barradas, D. Crespo, B. Godinho, A. R. Silva (FertiPrado)*

- Forage quality measurement in climate change experiment: case of Ecotron experiment and perspectives in rainout shelter experiments

*C. Picon-Cochard, V. Niederkorn (INRA)*

- Other / new activities of task 7.2

15:30 – 15:45

**\*Task 7.3**

*Chair: Jean-Yves Dourmad*

- Progress in reducing nematode problems at pasture -

*H. Archimede, M. Mahieu, C. Magdelene, N. Mandonnet, M. Boval (INRA)*

- Modeling the impact of heat stress on performance of sows and growing pigs

*J.Y. Dourmad, D. Renaudeau, J.L. Gourdine, P. Robin, M. Hassouna (INRA)*

- Other / new activities of task 7.3

15:45 – 16:00

**\* Discussion of collaboration and common protocols (WP7 & WP8)**

14:30 – 16:00

**Parallel session 5: Workshop MS16: Model Improvement (A008 Room)**

*Chair: Gianni Bellocchi (INRA) & Nicolas Viovy (CEA)*

**AIM & OBJECTIVES**

Insight on crop/grassland simulation model improvements

14:30 – 14:45

**\* Introduction to WP4-WP5 modelling activities**

*Gianni Bellocchi (INRA)*

14:45 – 15:00

**\* Recent improvements of PaSim: pixel-based version, Bayesian calibration, C4-species capabilities**

*Gianni Bellocchi (INRA)*

15:00 – 15:15

\* ORCHIDEE-PaSim integration for grassland simulation  
*Jinfeng Chang (CEA)*

15:15 – 15:30

\* Grassland modelling in Brazil: INRA-EMBRAPA collaboration  
*Luís Gustavo Barioni (EMBRAPA)*

15:30 – 15:45

\* Grassland modelling in South Africa: evaluation of SWBSci, STICS and PaSim  
*Eyob Tesfamariam (UP)*

15:45 – 16:00

\* Close-up

## Plenary Session, CPs overviews (16:30 – 19:00)

**C005 Room**

16:30 – 17:00

**CP1 overview**  
*Peter Kuikman (DLO)*

17:00 – 17:30

**CP2 overview**  
*Frank O'Mara (Teagasc)*

17:30 – 18:00

**CP3 overview**  
*Jørgen E. Olesen (AU-DJF)*

18:00 – 18:30

**CP4 overview**  
*Pierre Gerber (FAO)*

18:30 – 19:00

**CP5 overview**  
*Raphaël Martin (INRA)*

19:00 – 21:00

**DINNER**

**Please join the coaches not later than 19:00**

Friday, June 28<sup>th</sup>

## 2 Parallel Mitigation & Adaptation Options Sessions (08:45 – 10:15)

08:45 – 10:15

**Parallel Session 1: Mitigation & Adaptation Options within CP2 (C005 Room)**

*Chair: Frank O'Mara (Teagasc)*

Audience: CP2 participants

08:45 – 10:15

**Parallel Session 2: Mitigation & Adaptation Options within CP3 & CP4 (C006 Room)**

*Chair: Jørgen Eivind Olesen (AU-DJF) & Pierre Gerber (FAO)*

Audience: CP3 & CP4 participants

08:45 – 09:30

**\*CP3: Mitigation & Adaptation Options within CP3**

- Overview of model farms and showcase farms for modeling mitigation and adaptation

*Marcia Stienezen (DLO)*

- Overview of use of mitigation measures for different farm types  
*Vera Eory (SRUC)*

- Overview of potential adaptation options for different farm types and regions

*Anita Wreford (SRUC)*

- Linking adaptation and mitigation options at farm level

*Jørgen Eivind Olesen (AU-DJF)*

09:30 – 10:15

**\* CP4: Mitigation & Adaptation upscaling: Refinement of “best-bet options” and estimation of effectiveness/risk from simple modeling and farm scale modeling, harmonization with CP3 (WP12, MS50&MS51)**

*Agnes Van den Pol (DLO), An Notenbaert (ILRI)*

*TBC: Nick Hutchings (AU-DJF), Philippe Lecomte (CIRAD)*

10:15 – 10:35



**Coffee Break**

## Plenary Session (10:35 – 12:00) (C005 Room)

10:35 – 11:15

Field experiments & models interactions – Integrating Adaptation and Mitigation

*Chair: Frank O'Mara (Teagasc)*

11:15 – 12:00

WP16/CP6 Review

*Chair: Cledwyn Thomas (EAAP)*

12:00 – 13:00

LUNCH

## Plenary Session (13:00 – 16:45) (C005 Room)

13:00 – 14:00

General discussion and Publication Plans

*Chair: Jean-François Soussana (INRA)*

14:00 – 15:00

General Assembly: Reporting Preparation + Financial Issues + Management Issues

*Irina Carpusca (IT)*

15:00 – 15:30



Coffee Break

15:30 – 16:45

SAB Report

Stakeholder Platform Report

Conclusions Coordinator

## END OF THE SECOND ANNUAL MEETING

16:45 – 18:00

Executive Committee Meeting (C005 Room)

Participants: ExC members