



Year 1 : Annual Reporting & Industry Days

This third Newsletter focuses on the Network's first major event for Industry and Academia: the EADGENE Industry Days held in Hinxton, UK.



Network News

Volume 2, Issue 1

There is also a report on the STS mobility funding within EADGENE, an article about the recent DIAS Microarray course, an introduction to the Med-Vet-Net NoE and an update on the Annual Reporting. Enjoy your reading!!

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EADGENE Industry-Academia Days

EADGENE recently held an industry-academia event in cooperation with EFFAB and Genesis Faraday, aimed at giving the representatives of animal breeding and animal health industries a good opportunity to learn about the EADGENE project and its possibilities. The **Genetics and Genomics for Animal Health** meeting, from 19 to 21 October 2005 at the Wellcome Trust Genome Campus in Hinxton (UK), took place in conjunction with the annual events of Genesis Faraday and EFFAB, and included joint industry-academia talks, funding presentations, a discussion about the future of animal breeding, a poster gallery, and a funding market.

The event started on Wednesday 19 October with a full-day **EADGENE course, "Genomics Applied to Livestock Breeding,"** which introduced participants to the basics of genomics and concluded with discussion of the application of genomics to animal breeding.

The **Industry-Academia Interaction Conference** started after lunch on Thursday 20th October. The audience was given an overview of the possible **uses of genomics** in the animal health industry, and of the latest diagnostic methodologies, practices and prices.

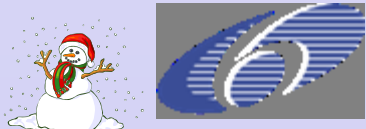
The **second part** of the Thursday afternoon consisted of joint industry and academic presentations of **four animal diseases: PWMS** in pigs; **mastitis** in cattle; **E-coli** in poultry; and **IPN** in salmon. The industry speakers highlighted the problems that need to be solved, the costs of the disease in monetary and animal terms and their hopes for a genomics solution. The academic speakers outlined the current stage of the research for each disease. It became clear that there was still a long way to go from the research to its application in industry. The Thursday meeting **closed** with a presentation about the **lessons** that animal health research can take from human research in terms of knowledge, technology, and the benefits of industry-academia cooperation.



Hans-Martin Seyfert (RIBFA)
Mastitis in cattle – academic perspective



..... (next page)





...Industry Days continuation...

A wine reception in the poster gallery was followed by the conference dinner, providing ample opportunities to intensify contacts.

“Breeding and Research Funding now and in the next 15-20 Years”

was the focus of the meeting on Friday 21 October. Research funding was explained by representatives of various funding organisations. The meeting closed with a discussion of the Farm Animal Breeding and Reproduction Technology Platform (**FABRE-TP**, www.fabretp.org).

What is



MED•VET•NET

?

Med-Vet-Net is a European **Network of Excellence** that aims to **improve the prevention and control of zoonoses** by integrating veterinary, medical and food science research. Comprising **16 European partners** and over 300 scientists, Med-Vet-Net will enable these scientists to share and enhance their knowledge and skills, and develop collaborative research projects. Med-Vet-Net officially **commenced on 1 September 2004**, and is funded for **5 years**. In 2004, the EU identified 23 zoonotic agents, which must be monitored by member states in both human and animal populations. Traditionally, research on zoonotic agents in Europe has been highly fragmented, and so, in order to address this, the EU 6th Framework Program has provided financial support for five years to develop a Network of Excellence for Integrated Research on the Prevention and Control of Zoonoses.

Why zoonoses research?

Diseases transmissible between animals and humans (zoonoses) are the cause of many of our serious public health problems. In fact, nearly two thirds of all known human pathogens are zoonotic. **Zoonoses have always represented a risk to humans**, but recent events, **such as avian influenza**, have demonstrated that these risks are increasing and have the potential for serious global consequences.

These changing risks are due to increasing global travel, changes in livestock production and trade, growing contact between man and exotic animals, as well as shifts in human eating and food preparation habits. At the same time, human populations are becoming more susceptible while the organisms themselves are mutating and becoming more virulent, and developing new transmission routes. Food supply is an increasingly global industry and because many

zoonotic agents are food-borne or have reservoirs in livestock, the microbiological safety of food is now recognised as a major public health concern for the European Union (EU).

Structure of Med-Vet-Net

Med-Vet-Net is structured into three integration activities and four joint scientific activities (thematic areas).

Integration activities:

‘Virtual Institute’ - aiming to develop an effective management structure with administrative procedures, processes, reporting and review to enable the smooth running of the Network.

‘Strategic Scientific Integration’ – providing the platform for the development, coordination and integration of scientific skills and expertise throughout the Network, as well as network expansion.

‘Spreading Excellence’ – the dissemination of knowledge both within the Network as well as externally.

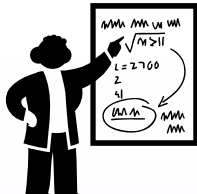
Scientific Activities:

There are four thematic areas: Epidemiology; Host-microbe Interaction; Detection and Control; and Risk Research. Research Workpackages in these areas have been commissioned on the basis of a Strategic Scientific Plan developed by scientists representing all partners.

Med-Vet-Net provides the appropriate environment for its scientists to share and enhance their knowledge and skills, develop collaborative projects and present joint research within and outside the network.

www.medvetnet.org





cDNA microarray course at DIAS

Integrating analytical tools (WP1.4) workshops

WP1.4 representatives from various partner institutes met at Roslin Institute on 21 October 2005 to discuss plans for two workshops. The idea underlying the **Cross-Fostering Workshop** is to facilitate the exchange of ideas and expertise between animal health specialists and animal geneticists. It is hoped this workshop will take place in The Netherlands in **April or May 2006**. The **Data Analysis Workshop** is planned for **November 2006** in Denmark. Data will be distributed among the participants six months prior to this workshop, and they will then analyse the data and present their results at the workshop.

An organising group has been set up for each of these two workshops, and we would welcome input from any partners who would like to be involved in the organisation.

Please contact caroline.channing@bbsrc.ac.uk for further information

A **DNA microarray course** was held in Foulum, Denmark, from 10 to 14 October, 2005. The course was designed to give both **hands-on experience** on different techniques in the laboratory and to give experience on some of **the statistical procedures** used for analyzing the data from the experiments.

The course was attended by 10 people from Spain, Italy, Norway, and Denmark of which **7 were members of the EADGENE NoE**.

The course consisted of a mix of lectures/data analysis group work and laboratory experiments. The laboratory work included cDNA synthesis and labeling, microarray hybridization and scanning, and a demonstration experiment of microarray printing. The lectures covered topics on the theoretical background of working with microarrays including the design of experiments and microarrays, the preparation and handling of samples, the techniques used to obtain microarray data as well as an introduction and group work on the statistical analysis of the obtained data.

For further information on EADGENE training courses please visit www.eadgene.org

Management Communications

Annual reporting !!

After several weeks of intense activity **the Management Team** completed the **First Year Scientific Annual Report** for the European Commission **on 15 October 2005**. The document has now been submitted for assessment and we expect the **EC's response in middle of December** (perhaps during the EADGENE Annual Review). This document is composed of several reports, in particular: the **Periodic Activity Report** and the **Draft Planning of the Joint Programme of Activities** from September 2005 to February 2007. All the documents have been sent to WP leaders and, after validation by the EC, you will find all the documents on the private website.

The **Periodic Management report** (financial report) was delayed until **18 November** due to the time it took to receive all the form C's and Audit Certificates.

We intend to simplify and improve the reporting process for next year. We would like to **thank you all for your understanding and your energy!**

Coming events

Review 2005

The EADGENE Annual Review will take place on **14 December 2005** in front of the Commission **in Brussels**.

**Newsletter N°3
December 2005**





EADGENE mobility opportunities (Short-term Stays: WP3.1)

New Staff Welcome !!

Angela van der Sanden joined EADGENE on 1 November 2005, to work on the Spreading of Excellence (WP10.1, WP12.3) at EFFAB (The Netherlands).



Angela van der Sanden

Jean-Louis Delforge (FMV-Ulg) was appointed as the University of Liege EADGENE coordinator in August 2005.

In the first year of the project, **6 scientists** have been helped to **develop their expertise** and widen their experience through **EADGENE funded short-term stays (STS)** at various partner member laboratories. Strengthening the trans-national interactions between its thirteen member institutions is a central intention of the EADGENE Network. For further information on this funding please visit the EADGENE website at www.eadgene.org

Short-term stay spotlight: Birgitte Ask

My name is Birgitte Ask, and I am a Danish PhD student who has been working in Veterinary Faculty of Utrecht University in the Netherlands for the last 2½ years. The topic of my PhD is 'Genetic, physiological and immunological aspects of colibacillosis in broilers.'

A collaboration partner should have expert knowledge and added 'value' relative to the PhD working-group, and we found this in Prof. S.Bishop at the Roslin Institute. We wanted to model immune system development in broilers depending on initial capabilities and infection(s), and the relationship with population health. During my stay, I gained knowledge on building models: how to design a framework based on biology, and translating this into functions and equations. I also benefited from the expertise of the entire group through giving presentations, and established contact with an immunologist who could provide data for validation of the model. Meeting new people and simply being in new surroundings increased my motivation and joy in my work, and this, in combination with the collaboration with Stephen Bishop, ensured that my stay abroad was successful.



Birgitte Ask

Contact us

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Contributions & suggestions are welcome!

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Congratulations...

To **Christophe Klopp** (INRA) who has agreed to take charge of WP1.3: Bioinformatic tools.

To FABRE-TP (Farm Animal Breeding and Reproduction Technology Platform) for their draft vision paper "Sustainable Farm Animal Breeding" which gives a vision of farm animal breeding in the next 15-20 years. The final vision paper will be launched on 2nd March 2006 at the Salon de l'Agriculture in Paris.

Merry Christmas

On behalf of the Management and Communication Team of EADGENE, we would like to take this opportunity to wish you and your families a **very Merry Christmas** and **best wishes for the New Year 2006**.

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