



*Meeting Report*

## **5th Transgenic Technology Meeting (<http://www.imbim.uu.se/transtech>)**

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The 5th meeting on Transgenic Technologies took place in Uppsala (Sweden) on March 14–16, 2004, organized by Karin Nilsson (Transgenic Facility at Uppsala University), Johannes Wilbertz (Karolinska Center for Transgene Technologies, Karolinska Institutet, Stockholm) and Nelson Khoo (Transgenic Facility at Umeå University). This is the fifth meeting opportunity for scientists, technicians, students and commercial exhibitors to meet and discuss different aspects of genetic modification of animals. These meetings originated in 1998, thanks to the pioneering initiative of Johannes Wilbertz who brought together a range of important topics which are not usually addressed in other mouse meetings. That Scandinavian initiative was very well received by the mouse-community, readily becoming first a European and then finally evolving into one of the key International meetings where all professionals interested in the production of transgenic animals can meet and openly discuss new methods, their specific problems, offer solutions and propose imaginative strategies for the future. The uniqueness focus of a balanced combination of excellent scientific presentations and most valuable technical discussions, are interesting both to scientists responsible for the analysis of newly created animal models and qualified technicians directly engaged in the generation of transgenic animals.

The meeting in Uppsala started with two presentations on transgenic animals and the environment. Graham Tobin (Harlan, UK) discussed the effect of phyto-oestrogens, commonly found in animal diets, and their undesirable influence on animal reproductive aspects. Kembra Howde-

shell (University of Michigan, USA) called the attention of the audience to Bisphenol A release from commonly used polycarbonate animal cages and its unwanted effects in animal production.

Next, the third genOway prize for Transgenic technologies for outstanding contributions in the field of transgenic research (sponsored by this French biotech company), was awarded to Qi Zhou (Inst. Zoology, Chinese Acad. Sciences, Beijing, China) for his work leading to the first rat generated by nuclear transfer.

A session devoted to animal facility planning followed, where three different examples (Astra-Zeneca, Södertälje, Sweden; NCI, Amsterdam, The Netherlands; Göteborg University, Sweden) were presented, illustrating the problems encountered and the solutions implemented. The impact of new technologies in the generation of transgenic mice was also the subject of a session, where new electroporation methods (Amaya biosystems, Köln, Germany), chemical mutagenesis of mouse genome (Ingenium Pharmaceuticals, Martinsried, Germany), methods to speed up conditional gene targeting (Artemis Pharmaceuticals, Köln, Germany) and advances in viral and RNAi technologies (BD Biosciences Clontech) were discussed. There was also a presentation about the European Mouse Mutant Archive (EMMA) project, from the Swedish partner of this European initiative.

On the second day, discussions focused around the *in vitro* differentiation of ES cells as a tool for addressing the role of genes involved in embryo-lethal phenotypes. Jürgen Rhowedel (University of Lübeck) presented the topic in depth and Meng Li (University of Edinburgh) took over and elaborated a presentation on

*in vitro* ES cell-derived dopaminergic neurons. The session closed with two presentations on hematopoietic and vascular differentiation from ES cells, by Leif Carlsson (University of Umeå) and Lena Claesson-Welsh (University of Uppsala), respectively.

The meeting finished with a session on transgenic models for biomedical research, where Helena Edlund (University of Umeå) described mouse models to study pancreas development and beta cell function and Freddy Radtke (Ludwig Inst. for Cancer Research, Epalinges, Switzerland) described some of the

known pleiotropic functions of *Notch1* using animal models.

The next Trans-Tech meeting is scheduled for September 2005 and will take place in Spain (<http://www.cnb.uam.es/~tt2005/>). I will have the responsibility and the pleasure to organize the meeting, with the help of colleagues in our country. Therefore, for the first time, a transgenic technology meeting will go South where it is expected that warmer weather will maintain and hopefully encourage the friendly, helpful and useful atmosphere that has been present to date in this unique type of forum.