



TITLE : ENGINEERING OF LABORATORY ANIMALS AND XENOTRANSPLANTATION

Background:

As a result of improved medical and technological interventions in the field of transplantation, an increasing number of people are now listed for transplants. It is estimated that approximately 45,000 people are currently on waiting lists for any kind of organ transplant in the different EU member states. Efforts to increase organ donation, to improve the usefulness of sub-optimal organs and to utilise organs from living-related donors represent important corrective steps. However, current figures indicate that these approaches are unlikely ever to fully meet demand.

In an effort to meet the demand for organs for transplantation, many different avenues are being explored. These include the development of artificial organs, tissue engineering and in particular xenotransplantation. To this end the European Commission has funded XENOME, a research Consortium whose ultimate goal is to bring xenotransplantation closer to its initial clinical phase.

The project takes a multidisciplinary approach to address potential barriers to the clinical application of xenotransplantation, including immunological, physiological, ethical, legal and safety issues. The Consortium members have a strong background knowledge of genomics, proteomics and associated molecular biological techniques and have the necessary breadth of expertise to meet the current pre-clinical challenges of bringing xenotransplantation to its initial clinical phase.

A further aim of the XENOME project is the integration of ethical, social, legal and wider cultural aspects addressing in particular ethical problems raised by xenotransplantation from animal welfare to that of the potential risks to public health. It is very important that public opinion is taken into account and that the public is kept accurately informed of the relevant issues. This will ensure that any new ethical and legal framework set up for the purposes of clinical xenotransplantation is met with general public approval.

As xenotransplantation is not a familiar concept neither amongst scientists nor amongst lay people but also to the vast majority of the scientific and medical communities, dissemination and demonstration is central to the mission of XENOME. In this context efforts have been put in place to provide reliable data, information, and at creating dialogue and discussion between experts and scientists working in unrelated fields as well as the lay community. Indeed, there is the need to build a constructive and ongoing dialogue between scientists, citizens and institutions in order to contribute to the establishment of the knowledge-based society evoked in the Lisbon strategy.

In this context, XENOME organises this EU-funded scientific meeting aimed at sharing the technical know-how of the Consortium related to ***Engineering of Laboratory Animals and Xenotransplantation*** of primarily European young scientists.

The objectives of these open days are:

- share with young scientists the state of the art technologies currently available to XENOME and regarding the engineering of laboratory animals
- train young scientists on specific methodologies and different scientific subjects developed within XENOME
- ensure effective dissemination of the project's results to stakeholders (including researchers and medical practitioners)

Participants Audience

Primarily young scientists

Time/duration:

19th -20th November 2007

Venue:

Piacenza and Cremona, (Italy)

Number of participants:

Up to 100 attendees (20 fully funded by XENOME)

Draft workshop schedule and contents:

**Day 1: Università Cattolica – sede di Piacenza – Sala Congressi G. Piana via Emilia
Parmense 84 – Piacenza (IT)**

Chaired by Dr Gianna Milano (Science journalist)

Time	Topics	Speakers
13.45	Welcome and introduction to the workshop	Prof Gianfranco Piva Dean of the Faculty of Agriculture Università Cattolica Director of the PhD School Agrisystem - Piacenza (IT)
13.55	Welcome by the Dean of the Law Faculty	Prof Romeo Astorri Dean of the Law Faculty Università Cattolica Piacenza (IT)
14.05	Welcome by the Coordinator of the course in Veterinary Biotechnology	Prof Silvano Carli Coordinator of the Faculty of Veterinary Biotechnology Università di Milano (IT)
14.15	XENOME: a new start for xenotransplantation research in the European Union	Dr Emanuele Cozzi XENOME Project Coordinator Transplantation Immunology Padua Medical Centre (IT)
14.25	“Giving society a key to the lab”: new ways of engaging publics with science in the EU	Prof Mariachiara Tallacchini Law Faculty Università Cattolica Piacenza (IT)
14.35	Zoonosis in Xenotransplantation	Dr Yasu Takeuchi Division of Infection and Immunity University College London (UK)
15:00	Elimination of the viral risk in Xenotransplantation by engineering the porcine genome	Dr Linda Scobie Division of Biological and Biomedical Sciences Glasgow Caledonian University (UK)
15:30	Engineered animals in biomedical research	Prof. Marialuisa Lavitrano Dept. Surgical Sciences and Intensive Care University of Milano-Bicocca (IT)
16:00	Pig somatic cell nuclear transfer and its application to biomedical research	Prof Cesare Galli Consorzio per l'Incremento Zootecnico Cremona (IT)
16:30	Ethical aspects of Xenotransplantation	Dr María Jorqui Cátedra Interuniversitaria de Derecho y Genoma Humano Universidad de Deusto Bilbao (ES)
17:00	Communicating science to the public	Dr Gianna Milano Science journalist, “Panorama” (IT)
17:25	Final remarks and conclusion	Prof Mariachiara Tallacchini Law Faculty Università Cattolica Piacenza (IT)

Day 2: Consorzio per l'Incremento Zootecnico Cremona

Time (9.00- 13.00)	Topics	Speakers
60 min	Preparation and culture of transgenic cells	Dr Dario Brunetti Dr Andrea Perota Consorzio per l'Incremento Zootecnico Cremona (Italy)
60 min	Preparation of matured oocytes	Dr Giovanna Lazzari Consorzio per l'Incremento Zootecnico Cremona (Italy)
60 min	Production of nuclear transfer embryos	Dr Irina Lagutina Consorzio per l'Incremento Zootecnico Cremona (Italy)
60 min	Embryo transfer and recipient management	Dr Roberto Duchi Consorzio per l'Incremento Zootecnico Cremona (Italy)

Reimbursement of participation costs

The XENOME project will pay for up to 20 selected participants (non-XENOME partners):

1. Travel costs (including local bus transport)
2. Bed and breakfast for the maximum of 2 nights in a hotel in Piacenza.
3. Training course facilities and refreshments
4. Training material

Items that will not be reimbursed from this workshop budget:

1. Other local transport costs
2. Extra hotel nights
3. Other hotel costs
4. Dinner and extra meals
5. Any other costs

Procedure for registration

- Please fill in the attached registration form at:

<http://www.xenome.eu/>

- Please send the registration form to:

Dr Claudia Schiavon

claudia.schiavon_01@sanita.padova.it

REGISTRATION FORM

Please provide all requested information. Checked is yes, un-checked is no. You will receive a confirmation of your registration by e-mail.

First name	
Family name	
Date of birth	
Home address	
Telephone	
E-mail	
Title	
I am a PhD student	
Institute	
I need a certificate of attendance	

**MEETING POINT FOR THE ATTENDEES:
MILANO LINATE AIRPORT MONDAY THE 19TH AT 12.00**

Travel information	
Date of arrival Enter date in D-M-YYYY format	
Time of arrival Please indicate for the organisation of local bus transport	
Flight number of arrival	
Date of departure Enter date in D-M-YYYY format.	
Time of departure Please indicate for the organisation of local bus transport	
Flight number of departure	

• Please send the registration form to:

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