



Organised by the ESHRE Special Task Force
Basic Science in Reproduction

Array technologies to apprehend developmental competence and endometrial receptivity: limits and possibilities

ESHRE Campus 2010
Brussels Belgium, 22 April 2010



ESHRE Campus workshop

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competence and endometrial receptivity:
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ESHRE'S PREMIUM CORPORATE MEMBERS

Labotect GmbH – Germany

Schering-Plough Global Meetings and Conventions – U.S.A

COURSE DESCRIPTION

Teaching aims and course description

The availability of technical platforms and whole genome microarrays has very rapidly generated a tremendous amount of information on molecular mechanisms in health and disease. In the field of reproduction access to germ cells and companion somatic cells in animal models and human fertility clinics have been subjected to microarrays. With the assistance of powerful bioinformatic programmes, the readouts from these microarrays produce long lists of genes of interest that need further validation by confirmatory experiments.

From the gene expression patterns of cumulus cell-oocyte and embryo-endometrial interactions, potential predictive markers have been proposed for clinical use. However, very few markers are common to different studies, which raise the question on their usefulness as non-invasive markers for the clinic.

Similar studies as on mRNA have also been done at the protein level, opening the possibility to measure secreted low amounts of factors in response to certain stimuli.

The experience of experts in different fields of experimental and clinical reproduction areas will be communicated during the course, emphasizing the potential methodological problems as well the useful information they could distil from these new approaches.

COURSE DESCRIPTION

Course description including main topics Representatives from Basic Reproduction Research and from Clinical Human Reproduction areas will demonstrate how hypothesis-driven research questions got approached by array techniques. The possible future utility and application of some of the promising markers will be discussed.

Course objectives Demonstrate how new microarray array technologies have been used to address basic and clinical questions in reproduction research.

Illustrate with practical examples how these techniques should be validated.

Learn about the potential advantages and pitfalls of a broad molecular analytical approach.

Promote the exchange of ideas between senior and junior researchers in animal and human reproduction.

Target audience Researchers in Reproduction, embryologists, geneticists, specialised medical doctors, PhD students, master students, molecular biology technicians and other Assisted Reproduction motivated professionals

FACULTY & ORGANISATION

Scientific Committee Richard Anderson (United Kingdom)
Ursula Eichenlaub-Ritter (Germany)
Carlos Plancha (Portugal)
Johan Smitz (Belgium)

Faculty Georg Arnold (Germany)
John Eppig (USA)
Samir Hamamah (France)
Mandy Katz Jaffe (USA)
Joop Laven (The Netherlands)
Marc-André Sirard (Canada)

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GENERAL INFORMATION

Venue Marivaux Hotel, Congress & Seminar Centre Brussels
Boulevard Adolphe Max 98
1000 Brussels
Belgium
Tel.: +32 (0)2 227 03 33
Fax: +32 (0)2 218 06 83
E-mail: banqueting@marivaux.be
Website: www.marivaux.be

Language The official language of the course is English.

About Brussels For more information about Brussels see:
<http://www.brusselsinternational.be/wabxlint/en/visitor/brussels-tourism-visit.act>

How to get there

By air From Brussels National Airport: a regular train service connects the airport with the train stations (3 trains per hour). Get off at the "Gare du Nord" and follow the directions for the city centre/ Rogier. Cross the "Place Rogier" at the Botanical Garden and follow the "Boulevard Adolphe Max". The hotel is situated on the right hand side of this Boulevard, some 200 metres from the Botanical Garden.

By train From the Gare du Midi (Eurostar / Thalys terminal): Take the tram number 52,56 or 81, direction "Gare du Nord". Get off at the "Place de Brouckère" and follow the directions for the "Boulevard Adolphe Max". The hotel is situated some 200 metres from the "Place de Brouckère".

From the Gare du Nord: Follow the directions for the city centre/ Rogier. Cross the "Place Rogier" at the Botanical Garden and follow the "Boulevard Adolphe Max". The hotel is situated on the right hand side of this latter, some 200 metres from the Botanical Garden.

By car Via the freeway E 19 from Paris: Take the exit Anderlecht. Follow the directions for the city centre. Keep driving straight ahead until you get to the “Gare du Midi”. Then follow the “Boulevard Lemmonier”: Pass by the “Bourse” and the “Centre de Monnaie” until you get to the “Place de Brouckère”. Take a right at the “Place de Brouckère” and follow the “Boulevard Adolphe Max”. The hotel is situated some 200 metres from the “Place de Brouckère” on the left hand side.

Via the freeway from Liege: Take the exit “Centre Bruxelles” and follow the directions “Centre/ Rue de la Loi”. Drive all the way down the “Rue de la Loi”, then turn right and follow the tunnel until you get to the exit “Bd.E. Jacquemain/ Rogier”. Take a left and follow the main road until you get to the traffic lights. The “Boulevard Adolphe Max” is situated on the left hand side.

Via the freeway from Antwerp: Take the exit 9 “Jette” and keep going straight until you reach “Basilique/Koekelberg”. Follow the tunnel , direction city centre and take the exit “Rogier/Botanique”. Keep following the directions for the city centre until you get to the place Rogier. Turn right, and you are on the “Boulevard Adolphe Max”. The hotel is situated some 200 metres on the right hand side.

Hotel accommodation For more information about hotels in Brussels and on-line hotel room bookings, please go to the following website: http://www.booking.com/city/be/brussels.html?label=gog235jc&sid=93071750bec481fb14f616b060d9f6c0&lang=en&selected_currency=hotel_currency (this website is available in different languages).

REGISTRATION

Registrations are only possible online. Please visit our website www.eshre.com, click 'Calendar' and then go to the pages of the "Array technologies to apprehend developmental competence and endometrial receptivity: limits and possibilities" course.

Registrations are limited to 80 participants. For availability of places, please check the ESHRE Calendar on <http://www.eshre.com/page.aspx/6>. The following fees apply:

1. Members of ESHRE = 150 Euro
2. Non-members of ESHRE = 200 Euro
3. Student members of ESHRE = 70 Euro
4. Student non-members of ESHRE* = 100 Euro

* "Student" applies to undergraduate medical students, residents, fellows and post-doctoral research trainees. A letter from the head of the department proving the participant's student status must accompany each student registration. The reduced student fee applies to students **younger than 35 years**, so please send also a copy of your passport/ID card.

PLEASE NOTE! The preferred methods of payment are either by bank transfer or credit card. Cheques and bank drafts will not be accepted.

Registration fees
1, 2, 3, and 4 include

- Attendance to all sessions
- Symposium syllabus
- Lunch
- Coffee breaks
- Certificate of attendance

Cancellation
policy

All cancellations should be made in writing. An administrative fee of 25 Euro will be charged for all cancellations. Cancellations received after 1 April 2010 will not be refunded.

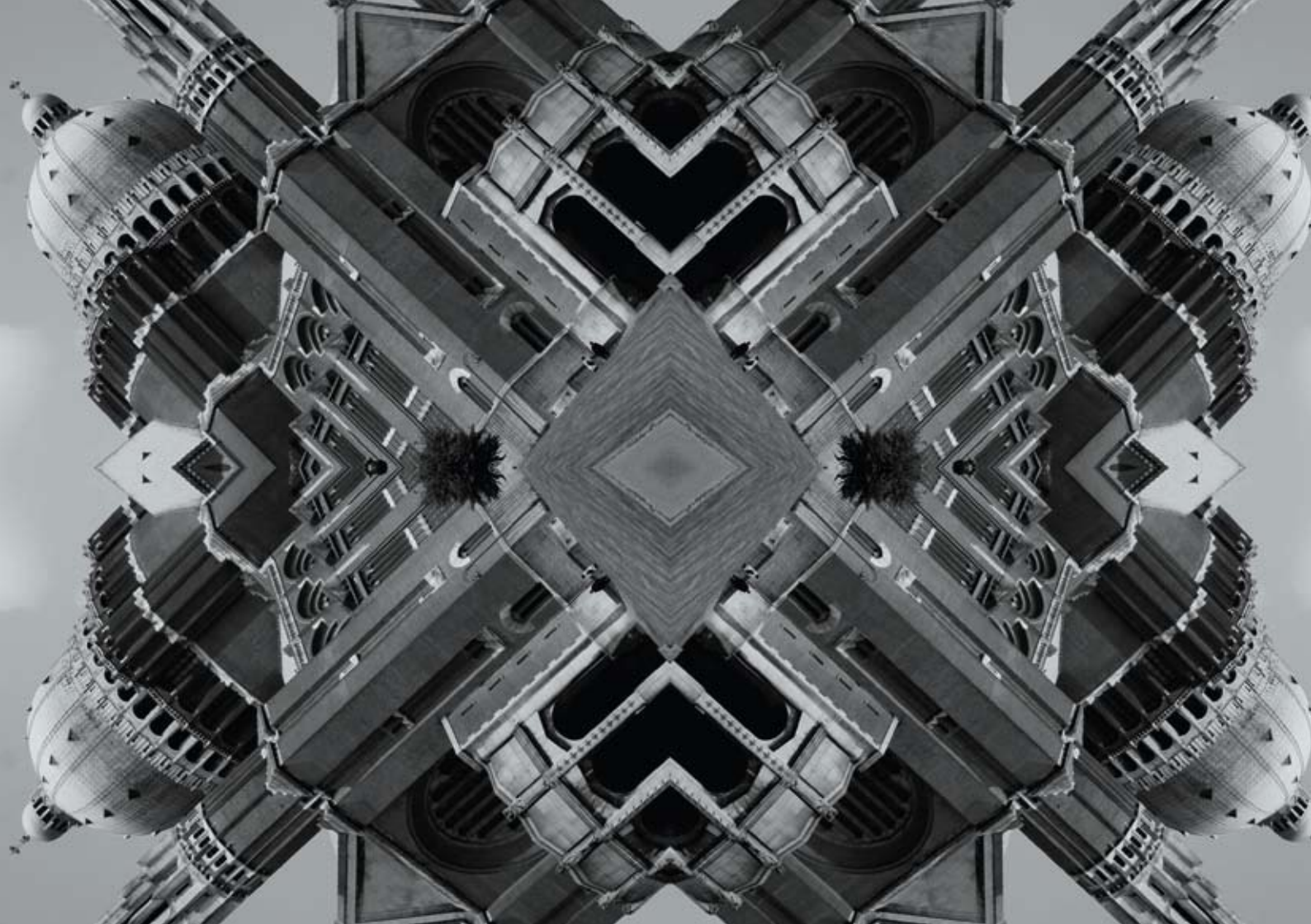
PROGRAMME – 22 APRIL 2010

- 09.00 – 09.30 The technical limitations of array technology:
accuracy, variability, validation and pitfalls – *Speaker TBA*
- 09.30 – 09.50 Discussion
- 09.50 – 10.20 Gene expression in the mammalian oocyte:
relations with the acquisition of its competence – *John Eppig (USA)*
- 10.20 – 10.40 Discussion
- 10.40 – 11.10 Coffee break
- 11.10 – 11.40 Search for non invasive markers of oocyte developmental capacity:
analysing cumulus biopsies in human ART – *Samir Hamamah (France)*
- 11.40 – 12.00 Discussion
- 12.00 – 12.30 Follicle growth PCO and oocyte quality:
did arrays help our understanding? – *Joop Laven (The Netherlands)*
- 12.30 – 12.50 Discussion
- 12.50 – 14.00 Lunch break

PROGRAMME – 22 APRIL 2010

- 14.00 – 14.30 Array data from relevant animal models to refine information from gene array data in human –
Marc-André Sirard (Canada)
- 14.30 – 14.50 Discussion
- 14.50 – 15.20 possibilities using protein array and downstream quantitations of secreted factors –
Georg Arnold (Germany)
- 15.20 – 15.40 Discussion
- 15.40 – 16.10 Coffee break
- 16.10 – 16.40 Secretome of embryos in culture – *Mandy Katz Jaffe (USA)*
- 16.40 – 17.00 Discussion
- 17.00 – 17.30 Endometrial tissue or secretory uterine fluid sampling to predict endometrial receptivity –
Speaker TBA
- 17:30 – 17:50 Discussion







Find out more about ESHRE at

www.eshre.com