



First announcement

EDMaRC Workshop: From primordial germ cells to spermatozoa

It is our pleasure to announce the EDMaRC Workshop: "From primordial germ cells to spermatozoa".

The workshop will take place:

From 24th to 27th of November 2015 at Rigshospitalet in Copenhagen, Denmark.

Target group:

It is our intention that this will be a highly specialised workshop. The target audience are young post graduate students (basic and clinical) and early career scientists/clinicians as well as more senior scientists/clinicians. The objective is to provide the participants with a state of the art profile of main issues in male reproductive health and to inspire them in their research and clinical careers.

EDMaRC:

The workshop, which is the second in a series, has been made possible by a Danish 4-year government supported initiative, EDMaRC (www.edmarc.net) to strengthen research and research training in endocrine disruption of male reproduction and child health. The aim of EDMaRC is to create an international research 'hub' where a critical mass of international senior scientists, post docs and Ph.D. students work together for shorter or longer periods with Danish colleagues to cover cutting edge topics within our research field.

Format:

The faculty members are all highly estimated researchers within their fields. The talks given by the faculty members of the workshop will provide a general brief introduction to the subject followed by a critical summary of where the field is and where it is likely to go. Some practical sessions have also been integrated into the program to provide the audience with some hands-on skills. The intention is that it will be a dynamic workshop where both audience and faculty members will have the opportunity to engage with each other at the event to allow for a significant exchange and rewarding educational and scientific experience for all.

Accreditation:

The course has been approved by The European Academy of Andrology (EAA) as an educational course in Clinical Andrology for trainees aiming at an EAA certification. Five credits can be obtained.

It is also expected that The University of Copenhagen will approve the workshop as a PhD-course.

Organisers:

Niels Jørgensen (main organizer), Ewa Rajpert-De Meyts, Niels E. Skakkebaek, Anders Juul, *University Department of Growth and Reproduction, Rigshospitalet, Copenhagen, Denmark.*

Christopher Barratt, *University of Dundee, United Kingdom.*

Language:

English.

Correspondence and registration:

By e-mail to EDMaRC coordinator Dina Muscat Meng. E-mail address dina.muscat.meng@regionh.dk

Fee:

Registration before November 1, 2015: 400 Euros

Registration November 1, 2015, or later: 475 Euros

The fee includes coffee/tea/water, fruit and lunches.

Hotel reservation:

The participants are expected to arrange and cover the costs of their accommodation themselves. However, the organisers will be able with suggestions.



EDMaRC Workshop: From primordial germ cells to spermatozoa

Tuesday, 24th November 2015

- 11.30-12.00 *Sandwich*
- 12.00-12.15 **Introduction to the workshop**
Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark
- 12.15-12.45 **The importance and strategy for placing male reproductive health centre stage in the political and research agenda**
Christopher Barratt, University of Dundee, Dundee, Scotland
- 12.45-13.30 **Pre-test**
Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark
- 13.30-13.45 *Coffee/tea/water – break*
- 13.45-14.30 **Development of primordial germ cells to spermatogonia**
Ewa Rajpert-De Meyts, Rigshospitalet, Copenhagen, Denmark
- 14.30-15.15 **Normal spermatogenesis in humans and rodents**
Jorma Toppari, University of Turku, Finland
- 15.15-15.30 *Coffee/tea/water – break*
- 15.30-16.15 **Meiosis in men**
James Turner, University College London United Kingdom
- 16.15-17.00 **Sertoli and Leydig cell function**
Rod Mitchell, MRC Centre for Reproductive Health, Edinburgh, Scotland
- 17.00-17.15 *Coffee/tea/water – break*
- 17.15-18.15 **Introduction to abnormal spermatogenesis in humans**
Niels Skakkebæk and Ewa Rajpert-De Meyts, Rigshospitalet, Copenhagen, Denmark

Wednesday, 25th November 2015

- 08.30-09.15 **Peritubular cells**
Artur Mayerhofer, Dept. of Cell Biology, Munich, Germany
- 09.15-10.00 **Regulation of spermatogenesis**
Richard Sharpe, MRC Centre of Reproductive Health, Edinburgh, Scotland
- 10.00-10.15 *Coffee/tea/water – break*
- 10.15-11.00 **Genetical aspects of fertility and infertility**
Csilla Krausz, University of Florence, Florence, Italy
- 11.00-11.45 **DNA packaging during spermiogenesis**
Steve Ward, University of Hawaii, United States
- 11.45-11.55 *Short break*

- 11.55-12.40 **Epigenetics in spermatogenesis**
Timothy Jenkins, IVF and Andrology Laboratories, Utah, United States
- 12.40-13.15 *Lunch*
- 13.15-14.00 **Characteristics and Clinical Utility of Sperm RNAs**
Stephen Krawetz, Wayne State University School of Medicine, Detroit, United States
- 14.00-14.20 **How to perform testicular biopsies for studies**
Ulla Nordström Joensen, Rigshospitalet, Copenhagen, Denmark
- 14.20-14.50 **How to prepare testicular specimen from rodents**
Jorma Toppari, University of Turku, Finland
- 14.50-15.05 **In vitro studies using "hanging drop cultures"**
Anne Jørgensen, Rigshospitalet, Copenhagen, Denmark
- 15.05-15.30 *Coffee/tea/water – break*
- 15.30-16.15 **Epididymis, an important organ for sperm maturation**
Sylvie Breton, Harvard Medical School, United States
- 16.15-17.00 **Sperm transport and interaction with the egg**
Christopher Barratt, University of Dundee, Dundee, Scotland
- 18.00 *Dinner, optional*
- Thursday, 26th November 2015**
- 08.30-09.15 **CatSper Ca²⁺ channels: polymodal sensors in sperm**
Timo Strünker, Center of Reproductive Medicine and Andrology, Münster, Germany
- 09.15-10.00 **Regulation of sperm motility by the sperm in the female tract**
Stephen Publicover, University of Birmingham, Birmingham, United Kingdom
- 10.00-10.15 *Coffee/tea/water – break*
- 10.15-11.00 **Sperm ultrastructure, how a mature spermatozoa is organized**
David Mortimer, Vancouver, Canada
- 11.00-11.45 **Capacitation**
Bart Gadella, University of Utrecht, Utrecht, The Netherlands
- 11.45-11.55 *Short break*
- 11.55-12.40 **The fertilization process**
Bart Gadella, University of Utrecht, Utrecht, The Netherlands
- 12.40-13.15 *Lunch*
- 13.15-14.00 **The molecular basis of defective sperm function**
John Aitken, University of Newcastle Australia
- 14.00-15.00 **Assessment of classical semen quality variables**
David Mortimer, Vancouver, Canada
- 15.00-15.15 *Coffee/tea/water – break*

- 15.15-15.35 **Semen parameters: What is the normal range?**
Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark
- 15.35-15.55 **New automated methods for semen analysis**
Kristian Almstrup, Rigshospitalet, Copenhagen, Denmark
- 15.55-16.40 **Using seminal plasma for diagnostic testing in infertility**
Keith Jarvi, Mount Sinai Hospital, Toronto, Canada
- 16.40-17.15 **Lifestyle factors affecting semen quality**
Tina Kold Jensen, Rigshospitalet, Copenhagen, Denmark

Friday, 27th November 2015

- 08.30-08.50 **Spermatogenesis after childhood cancer**
Kirsi Jahnukainen, University of Helsinki, Helsinki, Finland
- 08.50-09.10 **Testicular function following cancer treatment in adulthood**
Aleksander Giwercman, University of Lund, Malmö, Sweden
- 09.10-09.30 **Effect on semen quality of widely used non-cancer pharmaceuticals**
David Mortimer, Vancouver, Canada
- 09.30-10.00 **Endocrine disrupters and male fertility in animal models**
Ulla Hass, Technical University of Denmark, Copenhagen, Denmark
- 10.00-10.15 *Coffee/tea/water – break*
- 10.15-11.00 **Pathogenesis of various types of germ cell tumours**
Ewa Rajpert-De Meyts, Rigshospitalet, Copenhagen, Denmark
- 11.00-12.00 **Evaluation of testicular biopsies from infertile men**
Niels E. Skakkebaek, Rigshospitalet, Copenhagen, Denmark
- 12.00-12.45 **Post-test**
Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark
- 12.45-13.15 **Lunch and discussion of post-test**
Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark
- 13.15-13.30 **Evaluation of course**
Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark