



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 factors encountered 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. Skakkebæk, 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