



## 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*
- 13.30-13.50 *Coffee/tea/water – break*
- 13.50-14.35 **Development of primordial germ cells to spermatogonia and introduction to the concept of Testicular Dysgenesis Syndrome**  
*Ewa Rajpert-De Meyts, Rigshospitalet, Copenhagen, Denmark*
- 14.35-15.20 **Normal spermatogenesis in humans and rodents**  
*Jorma Toppari, University of Turku, Finland*
- 15.20-15.50 *Coffee/tea/water – break*
- 15.50-16.35 **Sertoli and Leydig cell function**  
*Rod Mitchell, MRC Centre for Reproductive Health, Edinburgh, Scotland*
- 16.35-17.30 **Introduction to testicular biopsies and typical patterns in infertile men**  
*Niels Skakkebæk and Ewa Rajpert-De Meyts, Rigshospitalet, Copenhagen, Denmark*
- 17.30-18.30 Welcome reception.

### 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*
- 10.00-10.20 *Coffee/tea/water – break*
- 10.20-11.05 **Genetical aspects of fertility and infertility**  
*Csilla Krausz, University of Florence, Florence, Italy*

- 11.05-11.50 **DNA packaging during spermiogenesis**  
*Steve Ward, University of Hawaii, United States*
- 11.50-12.00 *Short break*
- 12.00 -12.45 **Epigenetics in spermatogenesis**  
*Timothy Jenkins, IVF and Andrology Laboratories, Utah, United States*
- 12.45-13.15 *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 Ca<sup>2+</sup> 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*
- 10.00-10.20 *Coffee/tea/water – break*
- 10.20-11.05 **Sperm ultrastructure, how a mature spermatozoa is organized**  
*David Mortimer, Vancouver, Canada*
- 11.05-11.50 **Capacitation**  
*Bart Gadella, University of Utrecht, Utrecht, The Netherlands*
- 11.50-12.00 *Short break*
- 12.00-12.45 **The fertilization process**  
*Bart Gadella, University of Utrecht, Utrecht, The Netherlands*
- 12.45-13.15 *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 (Practical)**  
*David Mortimer, Vancouver, Canada*
- 15.00-15.20 *Coffee/tea/water – break*
- 15.20-15.40 **Semen parameters: What is the normal range?**  
*Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark*
- 15.40-16.00 **New automated methods for semen analysis**  
*Kristian Almstrup, Rigshospitalet, Copenhagen, Denmark*
- 16.00-16.45 **Using seminal plasma for diagnostic testing in infertility**  
*Keith Jarvi, Mount Sinai Hospital, Toronto, Canada*
- 16.45-17.15 **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 **Sex chromosome abnormalities and infertility: mechanisms and potential treatments**  
*James Turner, University College London United Kingdom*
- 11.00-11.30 **Pathogenesis of various types of germ cell tumours**  
*Ewa Rajpert-De Meyts, Rigshospitalet, Copenhagen, Denmark*
- 11.30-12.30 **Evaluation of testicular biopsies (Practical)**  
*Niels E. Skakkebak, Rigshospitalet, Copenhagen, Denmark*
- 12.30-13.15 **Post-test**  
*Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark*
- 13.15-14.00 **Lunch, discussion of post-test and evaluation of course**  
*Niels Jørgensen, Rigshospitalet, Copenhagen, Denmark*