www.kent.ac.uk/bio/pgdis www.pgdis.org/

Preimplantation Genetic Diagnosis International Society (PGDIS) Annual Meeting

29th April – 2nd May 2014
University of Kent, Canterbury, UK

MerckSerono is the major supporter of this meeting MERCK

Programme

April 29th

Illumina workshops:

Please note that these workshops are by invitation of the company only:

09.00 - 17.00 Key Opinion Leaders: Seminar Room 5

09.00 - 17.00 User group workshop: Seminar Room 6

Research Instruments workshop:

09.00 - 17.00 Embryo biopsy workshop:

Seminar rooms 3 and 4

PGDIS committee meeting

17.30 - 18.30 PGDIS board members only

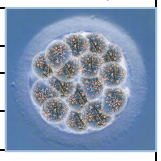
Seminar room 1

Welcome reception

19.30 - 21.30 Canterbury Cathedral Lodge
(delegates to make their own way to venue)

Kindly sponsored by Genesis Genetics

April 30th		
08.30	Opening of PGDIS 2014	
08.45 - 09.00	Semra Kahraman (TU), Darren Griffin (UK)	Welcome
Plenary lecture		
09.00 - 09.30	Jacques Cohen (US)	The future of PGD: A Vision
Session 1	**The science behind PGD-A: Aneuploidy and meiosis**	
09.30 - 09.55	James Turner (UK)	Novel insights into chromosome abnormalities and fertility
09.55 - 10.20	Pat Hunt (US)	Human aneuploidy: A conspiracy of age, sex and the environment
10.20 - 10.45	Eva Hoffman (UK)	Combined genome-wide crossover maps and chromosome segregation outcomes reveal crossover assurance and a novel segregation pattern in single, adult human oocytes
10.45 - 11.15	**Coffee Break**	
Session 2	**The science behind PGD-A: Mosaicism**	
11.15 - 11.40	Leeanda Wilton (AUS)	Chromosomal mosiacism in preimplantation embryos
11.40 - 12.05	Antonio Capalbo (IT)	Blastocyst stage aneuploidy testing
12.05 - 12.30	Guoping Fan (US)	Single cell RNA-seq analysis of preimplantation embryos and its implication on PGD
12.30 - 13.30	**Lunch**	
Session 3	**Free Communications – parallel sessions**	
	Main Auditorium	**Seminar rooms 5/6**
13.30 - 13.45	Alfarawati et al. A detailed analysis of embryos from translocation carriers: sex specific differences in segregation patterns and the presence of an interchromosomal effect	O'Neill et al. Screening for unexplained Premature Ovarian Failure
13.45 - 14.00	Babariya et al. Incidence of segmental aneuploidy in oocytes and pre implantation embryos	Ioannou D et al. A new arrangement for telomere organisation within the human sperm nucleus: Implications for fertilization and the developing embryo
14.00 - 14.15	Beyazyurek et al. The importance of aneuploidy screening in translocation carriers: Evidence from comprehensive chromosomal screening	García-Herrero et al. Impact of male factor (MF) in the clinical outcome of repetitive implantation failure (RIF) patients undergoing Comprehensive Chromosome Screening (CCS)
14.15 - 14.30	Lynch et al. Next generation sequencing for PGD of chromosome inversion inv(2)(p24.3-q33.3)	Garcia-Guixé et al. Prognostic value of preimplantation genetic screening (PGS) for patients with male factor (altered results in sperm fish analysis)
14.30 - 14.45	Jiménez-Macedo et al. Frequency of partial aneuploidies in preimplantation embryos analyzed using comprehensive chromosome screening	Mateiu et al. Characterization of 3'UTR length in sperm and post-fertilization tissues using RNA-sequencing and gene expression microarray probe-level data
14.45 - 15.00	Taylor et al. Euploid live births from embryos diagnosed as aneuploid at the cleavage stage	Bazrgar et al. Genetic variation between tissues of normal human fetuses due to genome instabilities in preimplantation development
15.00 - 16.00	**Extended Coffee Break with poster viewing**	
Session 4	**Alternatives to standard PGD**	
16.00 - 16.25	Alison Campbell (UK)	Morphokinetics and ploidy
16.50 - 17.15	Rob Taylor (UK)	Preventing the transmission of mitochondrial DNA disease
Special session		
17.15 - 17.45	Gina Glover	Art in ART (Artwork inspired by IVF and PGD)
17.45 - 18.45	Poster and artwork viewing	
Speaker Dinner		
19.00	Coaches depart for Shepherd Neame Brewery (invited speakers only)	
19.30	Arrival drinks	
19.45 – 20.15	Tour and beer tasting	
20.15 – 23.00	Speaker dinner (kindly sponsored by Illumina)	



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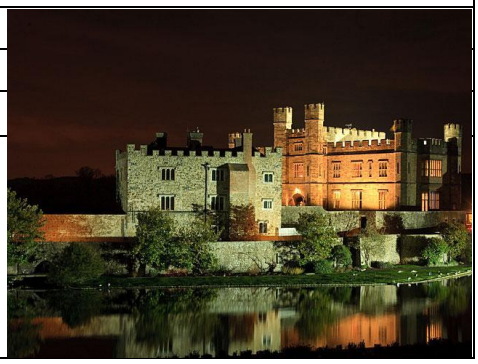
May 1st

Session 5	**Alternatives to standard PGD: Omics Corner**	
09.00 - 09.25	Elpida Fragouli (UK)	Alternative molecular approaches for aneuploidy detection and IVF outcome prediction
09.25 - 09.50	Daniel Brison (UK)	The impact of IVF on embryonic and long term health
09.50 - 10.15	Samir Hammamah (FR)	Cumulus cells and oocyte health
10.15 - 11.00	**Coffee Break**	
Session 6	**Free Communications – parallel sessions**	
	Main Auditorium	**Seminar rooms 5/6**
11.00 - 11.15	Zamani Esteki et al. Whole-genome single-cell haplotyping, a generic method for preimplantation genetic diagnosis	Ghevaria et al. Detection of pre-meiotic and meiosis I errors in human oocytes by array comparative genomic hybridisation (aCGH)
11.15 - 11.30	Putzová M et al. Aneuploidy detection by low-pass whole genome sequencing on the IonProton system	Buendía et al. Neither trophectoderm nor inner cell mass grade affect the implantation rates in chromosomally normal embryos
11.30 - 11.45	Xu et al. Comparison of traditional PCR-based method for β-thalassemia and HLA typing with more powerful targeted capture and MPS technique	Lynch et al. A retrospective analysis of PGD and PGS cases 2011-2013 demonstrates cleavage stage biopsy does not appear to affect human blastulation or implantation rates
11.45 - 12.00	Chatzimeletiou et al. Can metabolic profiling predict embryos at risk of chromosomal abnormalities and developmental arrest?	Penchev et al. Does the concentration of mtDNA in a single blastomere affect the cleavage rate of the human embryo?
12.00 - 12.30	**PGDIS business meeting (all members of PGDIS should attend)**	
12.30 - 13.30	**Lunch**	
Session 7	**Clinical experience of PGD: Dashboard of latest results from around the globe**	
13.30 - 13.55	Tony Gordon (UK)	Misdiagnoses and managing expectation
13.55 - 14.20	Semra Kahraman (TU)	Clinical aspects of successful PGD
14.20 - 14.45	Lauri Black (US)	Counselling patients for PGD and PGD-A
14.45 - 15.10	Joe Leigh Simpson (US)	Update on RCTs for PGD aneuploidy testing
15.10 - 15.35	Svetlana Rechitsky (US)	Combined PGD for single gene disorders and HLA typing with 24-chromosome aneuploidy testing
15.35 - 16.00	**Coffee Break with poster viewing**	
Session 8	**The ethics and legalities of PGD: Why are we doing what we're doing and should there be limits?**	
16.00 - 16.25	Stephen Wilkinson (UK)	Is there a case for testing for anything? Non-medical PGD
16.25 – 16.45	Malek J (selected abstract)	A Moral Duty to Use PGD for Medical Benefit?
16.45 – 17.30	Alan Thornhill (UK) and Karen Sage (UK)	Open questions and debate on the ethics and legalities of PGD, e.g.: • Are we ready to sequence the genome of embryos? • Do we need to regulate PGD?
Gala Dinner		
18.30	Coaches depart for Leeds Castle	
19.30 - 20.00	Drinks Reception	
20:00 - 00.00	Conference Dinner at Leeds Castle	

May 2nd		
Session 9	**Embryological aspects of PGD**	
08.30 - 09.00	Don Leigh (AUS)	The Embryo and PGD Outcomes….nature or nuture?
09.00 - 09.25	Monika Ward (US)	The effects of blastomere removal on placental function
09.25 - 09.50	Karen Sermon (BE)	Chromosomal abnormalities in human embryos and embryonic stem cells: causes, consequences and solutions
09.50 - 10.10	**Coffee Break**	
Session 10	**NGS and latest technologies for molecular diagnostics**	
10.10 - 10.35	Nathan Treff (US)	SNP array, qPCR and NGS based CCS: cross validation and clinical efficacy
10.35 - 11.00	Francesco Fiorentino (IT)	Validation and clinical application of a next-generation sequencing (NGS)-based protocol for 24-chromosome aneuploidy testing of embryos
11.00 - 11.25	Dagan Wells (UK)	Next generation sequencing and PGD
11.25 - 11.50	Thierry Voet (BE)	Single-cell SNP-array and genome sequence analysis to study individual blastomeres
11.50 - 12.30	**Keynote Lecture: Professor Lord Robert Winston (UK)** 	
12.30 - 13.30	**Lunch**	
Session 11	**Past present and future: An account of the earliest discoveries in PGD and how they have led to the most recent innovations**	
13.30 - 13.55	Luca Gianaroli (IT)	PGD/PGS: from chaos to order and back
13.55 - 14.20	Anver Kuliev (US)	Polar body diagnosis for genetic and chromosomal disorders
14.20 - 14.45	Darren Griffin (UK)	Counting chromosomes: from sexing to Karyomapping
14.45 – 15.00	**Coffee Break**	
Session 12	**Selected special presentations and late breaking news**	
15.00 – 15.20	Caroline Ogilvie (UK)	'Freeze all' and 'WISE' initiatives at Guy's Hospital
15.20 – 15.35	Monika Ward (US)	Two Y genes can replace the entire Y chromosome for assisted reproduction in the mouse: implications for ART and PGD
15.35 – 15.50	Carmen Rubio (SP)	Two new randomized controlled trials demonstrating Improved clinical outcome in advanced maternal age and male factor by PGD-A at cleavage stage using aCGH:
15.50 – 16.10	Gary Harton (US)	Karyomapping: clinical validation
And finally….		
16.10 – 16.25	Alan Handyside (UK)	A reflection on the last 4 days and the last (and next) 25 years
16.25 – 16.30	Prize giving and close of PGDIS	

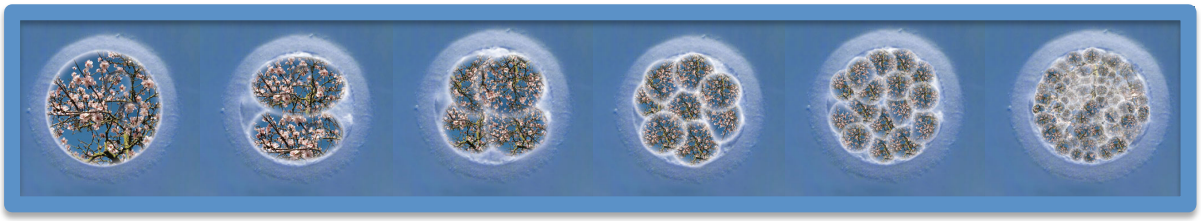
Sponsors

The organisers would like to thank the sponsors of this meeting and strongly encourage you to visit their stalls in the main foyer

Bookshop

There will be a wisepress bookshop in the exhibition area

ART



There will be an “art in ART” exhibition of the work of Gina Glover on display throughout the conference

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