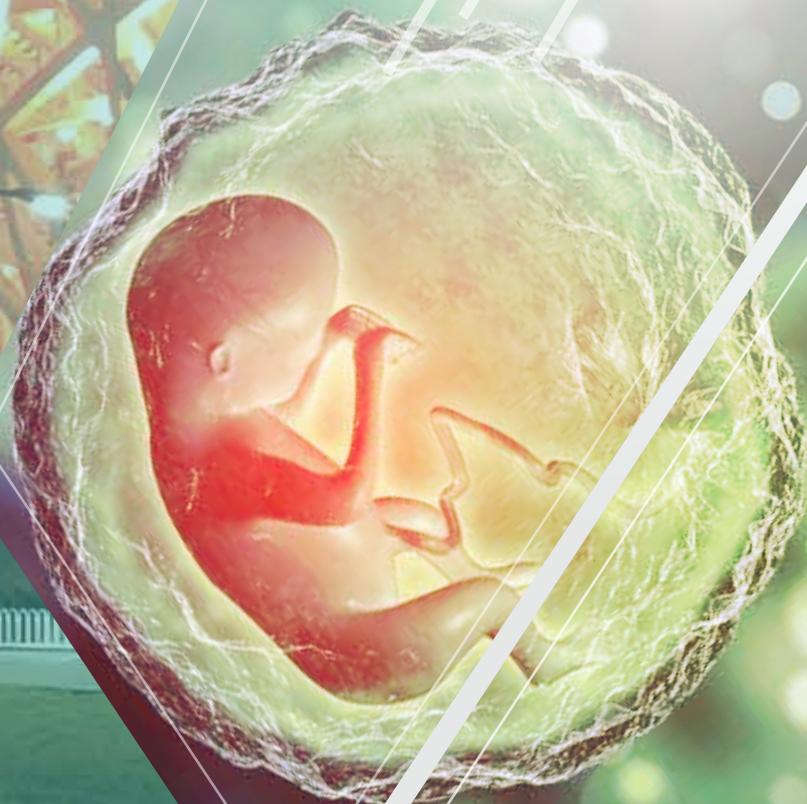


Aspire

MASTERCLASS



11 – 13 October 2017

Reproductive Medical Center,
Peking University Third Hospital, Beijing, China

**Preimplantation Genetic Testing:
Screening and Diagnosis**

WELCOME MESSAGE



Dear Colleagues,

I would like to welcome you to the ASPIRE 3rd Masterclass on PGD/PGS to be held in Beijing, China. Preimplantation Genetic Diagnosis (PGD) and Preimplantation Genetic Screening (PGS) are two techniques that can be used during in vitro fertilization (IVF) procedures to test embryos for genetic disorders prior to their transfer to the uterus. PGD and PGS make it possible for couples or individuals with serious inherited disorders to decrease the risk of having a child who is affected by the same problem. Both of these techniques involve the use of the micromanipulator to remove a cell from an embryo. This cell is then sent to a diagnostic lab to determine the embryo's normalcy. Acceptable embryos can then be transferred into the patient, decreasing her odds of having an affected child. PGS has also been reported to increase the pregnancy rates of some women with chromosomal disorders that result in either lower implantation rates of embryos or higher miscarriage rates.

In planning this meeting, we have some of the best experts in the area who will discuss their latest techniques with you, and will be available for case and personal discussions. With the deliberate low attendance at the meeting, you will have ample opportunity to get to know the speakers and interact with them. We are restricting it to only 100 participants and, with an outstanding faculty representing the region, Europe and the United States, we will be able to tackle many of the major problems of PGD/PGS that you encounter in your IVF-lab practice.

We would welcome you to come to this old and modern, historical and wonderful city with the good autumn weather, and at the same time learn about a compelling condition that is going to become increasingly important.

With best wishes,

A handwritten signature in black ink that reads "Jie Qiao Rong Li".

Professor Jie Qiao and Rong Li
Chair, ASPIRE 3rd Masterclass

INVITED SPEAKERS



PROFESSOR JIE QIAO

Peking University Third Hospital (PUTH), Beijing, China

Prof. Qiao is a reproductive medical doctor & biological scientist. She is serving as the President of Peking University Third Hospital and Reproductive Medical Society of Chinese Medical Doctor Association. She is also the chairman for both National Clinical Research Center on Obstetrics and Gynecology Disease and Assisted Reproduction Key Laboratory, Ministry of Education. As the foregoer of combination with basic research and clinical reproductive medicine in China, she has been focusing on the basic research of reproductive development, mechanism of infertility, and improvement of new techniques in infertility diagnosis and management. She has made outstanding contribution to transforming basic research to clinical application. Prof. Qiao built a research team combined with basic and clinical medicine, and established a series of prominent clinical research database. Her research reveals critical mechanisms of infertility and developmental regulation.



DR RONG LI

Peking University Third Hospital (PUTH), Beijing, China

Dr. Li is serving as the Deputy Director for Reproductive Medical Center and Department of Obstetrics and Gynecology, Peking University Third Hospital. She specializes in clinical treatment, education and medical researches within the fields of Obstetrics and Gynecology with research directions on reproductive medicine, female fertility evaluation, endometrial receptivity and PCOS. She published more than 60 SCI articles in medical journals, including Cell, Nature, Lancet, et al. Her researches had been funded through variety of grants, such as National "Twelfth Five-Year" Plan for Science & Technology Support.

INVITED SPEAKERS



DR CLARE BOOTHROYD

IVFMed, Greenslopes Specialist Centre, Queensland, Australia

Dr. Boothroyd is currently the chair of the training committee of the CREI (reproductive endocrinology and infertility subspecialty of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists). She is a past and current member of the Board of the Fertility Society of Australia (FSA) and is a founding member of two of the special interest groups of the FSA: REproduction and Collaborative Trials in Australia and New Zealand (REACT-ANZ). She is the national representative from Australia for ASPIRE and chair of the Academic Scientific Committee of ASPIRE. She is Vice President of Australian and New Zealand Society of Specialists in Reproductive Endocrinology and Infertility. She completed an executive MBA in 2015 and is a member of the Board of True (True Relationships and Reproductive Health). She established an independently owned IVF unit in 2008, Care Fertility of which she is Medical Director and oversaw the introduction of PGT to the unit in 2016.



DR WONG PAK SENG

Sunfert International, Malaysia

Dr. Wong graduated from the National University of Malaysia and obtained a Masters of Medicine from University of Malaya. After becoming a Member of the Royal College of Obstetricians & Gynaecologists (RCOG), United Kingdom (UK), he pursued a Fellowship in Infertility and Reproductive Medicine at the London Fertility Centre under the tutelage of Prof Ian Craft. Dr. Wong has recently been elevated to the Fellowship of the RCOG. He has worked in several IVF centres before founding Sunfert International in 2009 from ground-up. Sunfert International is currently a leading fertility group in Malaysia, performing over 1000 IVF cycles annually in its 4 centres. His current interest is in embryo selection using both morphokinetic markers and pre-implantation genetics.

INVITED SPEAKERS



DR ALPESH DOSHI

Embryology and PGD Academy

Having completed his postgraduate studies in Human Reproductive Biology at Imperial College in 1997, Alpesh obtained his training in clinical embryology at the Churchill Clinic in London. Alpesh joined The Centre of Reproductive and Genetic Health (formerly the Assisted Conception Unit at UCLH) in 1999, a clinic that has consistently achieved one of the highest live birth rates in the UK. He is currently the Head of Embryology and also an honorary consultant at the UCLH NHS trust. Alpesh is an HFEA licenced ICSI and Embryo Biopsy practitioner. In 2004 he became recognised by the Health Professions Council as a state registered clinical embryologist and in 2008 he was in the first group of to qualify with ESHRE as a European Senior Clinical Embryologist. In 2009 Alpesh was accepted for Diplomate Membership of the Royal College of Pathologists. In addition he is an executive committee member of Alpha – Scientists in Reproductive Medicine and the Association of Clinical Embryologists (UK). He has authored several papers in peer review journals and has contributed book chapters in 5 International Embryology publications edited by renowned scientists in the field. Alpesh is well renowned in the field of embryology and PGD. He has been an invited speaker in several International and National workshops and Conferences and has organised embryo biopsy hands on workshops in India, Turkey and Africa.



DR ALAN THORNHILL

Igenomix, United Kingdom

Prof. Thornhill is the UK's country manager for Igenomix, an international research led Company specialising in advanced reproductive genetic testing services. Following post-doctoral work in single cell genetics with Professor Marilyn Monk at the Institute of Child Health, London, he trained as a clinical embryologist at Kings College and St Thomas' Hospital (with Professor Alan Handyside) before directing IVF laboratories in the USA (Mayo Clinic, Rochester, Minnesota) and UK (Guy's Hospital, The Bridge Centre and London Fertility Centre), specialising in Preimplantation Genetics. While at the Bridge Centre Alan, who is registered as a clinical scientist by the UK's Health and Care Professions Council, also worked as Laboratory Director for Bridge Genoma, the UK's first private Preimplantation Genetic Diagnosis (PGD) laboratory and later took over as Person Responsible for the IVF clinic. Prof. Thornhill's research interests include reproductive genetics, PGD and improving the safety and effectiveness of IVF.

INVITED SPEAKERS



Dr GEORGE LIPERIS

Westmead Fertility Centre, University of Sydney, Australia

Dr Liperis is an ESHRE certified Clinical and Research Embryologist with a background in Assisted Reproduction and Reproductive sciences, practicing Clinical Embryology, combining genetic analysis and research in Human reproduction. He is currently a Senior Clinical Embryologist/Post-doc Researcher at Westmead Fertility Centre, University of Sydney. For his PhD at the University of Leeds, he investigated the roles of specific genes that regulate oocyte growth and maturation, since the detailed understanding of these mechanisms underpins the development of improved methods of assisted conception. Over the last year, Dr Liperis have also balanced the role of Clinical Genetic technologist at VIAFET genomics center, involved in the genetic analysis for patients undergoing PGT. His list of publications includes book chapters in routine quality control and control of variables in the IVF laboratory.



DR HIROKI KURAHASHI

Fujita Health University, Japan

Dr. Kurahashi was originally a pediatrician. After clinical practice as a pediatrician for seven years, he started research activity for molecular cytogenetics in 1991. His main interest is a mechanism for chromosomal abnormalities. He is working as a researcher in the Department of Molecular Genetics, ICMS, Fujita Health University, as well as a medical geneticist in the Department of Genetic Counseling in the Fujita Health University Hospital. He is a board member of Japanese Society of Human Genetics and an Associate Editor of Journal of Human Genetics.



DR JAN LIEBELT

Repromed, Adelaide, Australia

Dr Liebelt is a senior clinical genetics consultant who has worked in the field of Preimplantation genetic diagnosis since 1999, helping to establish some of the first PGD programs in Australia at both Melbourne IVF and Repromed in Adelaide, South Australia. She is currently Clinical Director of the PGD program at Repromed in Adelaide who offer a broad range of embryo screening services including NGS and karyomapping and consults on all aspects of fertility related genetics. She also works for the South Australian Clinical Genetics Services in the Pediatric and Reproductive Unit with a special interest in prenatal testing and NIPT and research interests in isolation of fetal cells from maternal blood.

INVITED SPEAKERS



DR EILEEN TAN

Illumina Inc, Singapore

Dr. Tan is the Asia-Pacific Market Development Manager for Illumina Inc, a market leader in next generation sequencing technologies, where she focused in the area of Preconception and Fertility. Prior to this role, she was the Team Leader for the regional applications scientist team in Life Technologies Holdings and then Thermo Fisher Scientific, providing training and support on the applications of Next Generation Sequencing technologies in different market segments including Reproductive and Genetic Health. She received her post-doctoral trainings at the Institute of Molecular and Cell Biology (IMCB), A*STAR, and Cancer Science Institute (CSI) in Singapore, and her research area was around human cancer and genetics. From her many years in the industry, she has built a strong technical expertise and knowledge around next generation sequencing technologies.



DR JIN HUANG

Peking University Third Hospital (PUTH), Beijing, China

Dr Huang is an embryologist for more than 10 years. From 2004, she focused on PGD/PGS field, from FISH to array and NGS. She can do both embryo biopsy and genetic diagnosis.

She published more than 10 papers about PGD/PGS on the international journals, such as Fertility and Sterility, Prenatal Diagnosis and so on. Moreover, she is an associate editor of the book "Laboratory Technology of ART".

She got the second award of the National Scientific and Technological Progress in 2011 and the first award of outstanding achievements in scientific research by the Ministry of education in 2014. Furthermore, she got the scientific and technological achievements award by China birth defects intervention foundation in 2016.

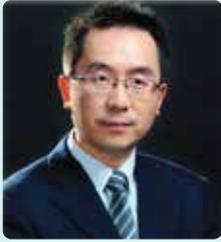


ASSOCIATE PROFESSOR YANG YU

Peking University Third Hospital (PUTH), Beijing, China

Assoc. Prof. Yu is the Principal Investigator in the ART Engineering Group and the Vice Director of Beijing Key Laboratory of Reproductive Endocrinology and Assisted Reproductive Technology. Assoc Prof Yu is also the Academic editor for PLoS ONE Journal and members of International Society for Stem Cell Research (ISSCR) and American Society of Reproductive Medicine (ASRM).

INVITED SPEAKERS



DR YAN JUNHAO

Shandong University

Dr. Yan is the member of Youth Committee of Chinese Society of Reproductive Medicine (CSRМ); and the Vice President of Youth Committee of Reproductive Medicine Branch, Shandong Medical Association. His research interests are Preimplantation Genetic Diagnosis/Screening (PGD/PGS), Recurrent Miscarriage and Recurrent Implantation Failure. He has published 48 papers in domestic and international journals. As the main clinical operator, Dr. Yan participated in the work of the first healthy baby birth in China after PGD treatment for a couple of deafness gene carriers. And this achievement was reported by Xinhua as “The birth of an IVF infant with interruption of severe hereditary deafness transmission,” which was evaluated as one of top ten news of medical science and technology in China in 2015.



PROFESSOR YANWEN XU

First Affiliated Hospital of Sun Yat-sen University

Dr Xu Yanwen is the professor and director of the reproductive medical center of the First Affiliated Hospital of Sun Yat-sen University. She got the first successful PGD live birth in China 1999. Her main research interests are preimplantation genetic diagnosis, miRNA in human oocytes, and circadian clock regulation in female reproduction. Currently, she is the vice chairman of Society of Reproductive Medicine in Guangdong Province, vice chairman of the Youth Committee of Chinese Society of Reproductive Medicine.



DR LIU PING

Peking University Third Hospital (PUTH), Beijing, China

Dr. Liu, a Chief Physician in Obstetrics and Gynecology, is one of the leading experts on reproductive endocrinology, female infertility and ART. She is among the pioneers who established the IVF technology in China. With the efforts of Dr. Liu and her supervisor, Prof. Lizhu Zhang, the first IVF-ET baby in China was born in Peking University Third Hospital in 1984. Dr. Liu is also one of the key investigators for the accomplishment of the first fallopian tube embryo transfer, the first frozen-thawed embryo transfer, and the first donor egg/sperm IVF in China. She has been engaged in studying and performing the up-to-date ART in clinical work for almost three decades and has obtained the state scientific and technological progress award, and other technological progress awards by the ministry of health, the ministry of education and the Beijing Municipal Commission.

PROGRAMME

Wednesday, 11 October 2017

Time	Lectures and Hands-on Workshop	Speaker
8:30-8:45	Welcome Remarks and Assisted Reproductive Technology Training Center's Introduction	Jie Qiao and Rong Li
8:45-9:45	Reagents and Equipment	Yang Yu, Jin Huang, George Liperis
9:45-10:20	Hands-on Demo on Biopsy	Alpesh Doshi
10:20-10:30	Discussion	
10:30- 10:45	Morning Coffee-Break	
10:45-11:05	Morula Biopsy	George Liperis
11:05-11:30	Difficulties with Sample preparation	Facilitated by Jie Qiao
11:30-12:00	Lunch	
Hands-on Training (1 Hour per Rig)		
12:00-13:00	Rig 1: Trophectoderm Biopsy Rig 2: Blastomere Biopsy	Assisted by Local Scientists
13:00-14:00	Rig 3: Morula Biopsy Rig 4: Polar Body Biopsy	
14:00-14:15	Afternoon Coffee-Break	
Hands-on Training (1 Hour per Rig)		
14:15-13:15	Rig 1: Trophectoderm Biopsy Rig 2: Blastomere Biopsy	Assisted by Local Scientists
13:15-16:15	Rig 3: Morula Biopsy Rig 4: Polar Body Biopsy	
16:15-17:15	Free time with Mouse Embryos on Rig of Choice	

Thursday, 12 October 2017

Time	Lectures	Speaker
8:15-8:30	Welcome Remarks by 3rd Masterclass Chairpersons	Jie Qiao and Rong Li
8:30-9:10	Evidence to Support PGT	Jan Liebelt
9:10-9:50	When to Biopsy: Polar body, Cleavage stage, Blastocyst, Trophectoderm	Alpesh Doshi
9:50-10:10	When To Biopsy : Experience Of Morula Biopsy	George Liperis
10:10-10:30	Discussion	
10:30-10:45	Morning Coffee-Break	
10:45-11:20	Evidence to Reduce Recurrent Miscarriage with PGT	Yan JunHao
11:20-11:55	Karyomapping: An Effective Tool for PGD	Alan Thornhill
11:55-12:05	Discussion	
12:05-13:30	Lunch	
13:30-14:05	Technical Overview of NGS for PGS	Eileen Tan
14:05-14:40	Screening for Genetic disease within the Asian Context	Hiroki Kurahashi
14:40-14:50	Discussion	
14:50-15:05	Afternoon Coffee-Break	
15:05-15:25	Interpreting Mitochondrial DNA Copy Number for Embryo Selection	Alan Thornhill
15:25-15:45	Use of SNP (Single Nucleotide Polymorphisms) Past, Present and Future	Xu Yanwen
15:45-16:05	How to Set Up PGT in a Unit	Pak Seng Wong, Clare Boothroyd
16:05-16:15	Discussion	
16:15-16:30	Introduction to Difficult Problems for Discussion	George Liperis, Clare Boothroyd
18:00-19:00	Welcome Dinner	

PROGRAMME

Friday, 13 October 2017

Time	Lectures + Case Discussion	Speaker
9:00-9:50	Difficult Cases: Non-Diagnostic Cases and Discordant Results	Panel: Liu Ping, George Liperis, Jan Liebelt, Hiroki Kurahashi, Alan Thornhill, Xu Yanwen, Yan Junhao <i>Facilitated by Pak Seng Wong & Jie Qiao</i>
9:50-10:00	Morning Coffee-Break	
10:05-10:55	Difficult Cases: Dealing with Mosaicism	Xu Yanwen, Yan Junhao <i>Facilitated by Clare Boothroyd & Rong Li</i>
10:55-11:15	Video: Different Biospies	
11:30-11:45	Discussion	
12:00-13:30	Lunch	



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