

**American College of Embryology** 

Defining Standards in Clinical Embryology

## American College of Embryology launches "Know Thy Embryologist" campaign

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#### FOR IMMEDIATE RELEASE

Houston, TX (April 23, 2013) – To educate patients and the public about the essential role of embryology practitioners in achieving a healthy pregnancy using In Vitro Fertilization, American College of Embryology (EMBCOL) launches "Know Thy Embryologist" campaign.

Embryology practitioners are individuals who create human embryos in an Embryology Facility using In Vitro Fertilization (IVF). The best known embryology practitioner, Sir. Robert Edwards, PhD, was awarded a Nobel Prize in 2010.

Embryology practitioners perform essential parts of the IVF treatment cycle: IVF itself, ICSI, Assisted Hatching, embryo culture, cryopreservation and thawing, embryo biopsy and all other embryology procedures.

In addition to embryology practitioners performing technical tasks, there are Reproductive Embryologists with the knowledge and expertise to connect embryological observations with the patient's history and laboratory tests. They decide the parameters and duration of embryo culture, which embryos are worth transferring into the uterus and which ones no longer have a chance to continue development, whether to apply an Assisted Hatching, when and how to freeze embryos or oocytes, whether to use ICSI or conventional insemination and many other embryological questions. They help the fertility doctor to determine the most promising strategy of achieving a healthy pregnancy. For example, their input contributes to the decision of, when it is time to transfer embryos into the uterus and how many or whether the genetic testing of embryos is indicated - decisions which will not only affect the chance of pregnancy but also the chance of multiple pregnancies and thus indirectly the health of the children born as a result of the IVF treatment.

Because of the complexity of reproductive embryology procedures, the embryology practitioner's occupation demands a high level of knowledge and expertise.

Therefore the choice of the embryology practitioner is very important, particularly because embryology procedures are the most costly portion of an IVF cycle.

Patients are entitled to expect that the best embryology practitioner is providing care for their embryos. However, because there are no national standards of embryology training or credentialing, there is a vast variation in expertise between embryology practitioners practicing at different clinics.

One of the objectives of the "Know Thy Embryologist" campaign is to help patients in selecting a clinic with the most qualified embryology practitioners.

EMBCOL recommends the following basic embryology due diligence when selecting a fertility clinic:

- Fertility clinic which has a highly qualified embryology practitioner on staff, will usually profile him or her along side of fertility doctors. If you don't see the embryology practitioner's name and credentials on the web site, we recommend that you ask.
- Ask about the expertise, training and credentials of other embryology practitioners on site
- Ask about the workload for embryology practitioners. If the embryology practitioner is overworked, the chance of errors increases, while the quality suffers. American Society for Reproductive Medicine recommends: 2 practitioners for up to 150 cycles a year, 3 practitioners for up to 300 cycles a year, 4 practitioners for up to 600 cycles a year and an additional practitioner for each 200 additional cycles.
- Many clinics offer a consultation with an embryology practitioner. This is a great opportunity to get to know your embryologist.

As a part of the campaign EMBCOL will also:

- select and profile embryology practitioners of the month, who may or may not be an EMBCOL member.
- host profiles of embryology facility staffing for IVF clinic

EMBCOL is an organization of embryology practitioners that serves patients, embryologists, and the public by fostering and advocating excellence in the practice of reproductive embryology. To learn more about the College of Embryology visit <a href="https://www.embcol.org">www.embcol.org</a>.

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Dr. Wiemer has an extensive clinical and scientific background and experience in cell and embryo culture, cryopreservation of embryos, embryo morphology and assessment, co-culture, blastocyst development, IVF lab design, and supervision.

Klaus Wiemer, PhD, HCLD, EMB

### (Kirkland, Washington)

He received his doctorate in Reproductive Physiology (Embryology) in 1989 from Louisiana State University, Baton Rouge, LA, USA. Dr Wiemer has over 20 years of experience directing IVF Laboratories and has been involved in over 10,000 IVF procedures. He was the Scientific Director of the Institute for Assisted Reproduction, Charlotte, NC, USA for 10 years, and Laboratory Director for NorthWest Center for Reproductive Sciences, Kirkland, WA, USA for 7 years.

He and his partner Dr. Mike Opsahl are pleased to announce the opening of a new practice named Poma Fertility in Kirkland, Washington. Poma Fertility, a new world-class infertility treatment medical practice featuring a staff renowned for their top success rates, individualized treatment approach and clinical excellence, is announcing the opening of their first fertility center in Kirkland, Washington; a fertility practice unparalleled in the Pacific Northwest.

The IVF clinics that Dr Wiemer has directed or been associated with have consistently been in the top 10% nationwide. The practices that he has been involved with have always incorporated the latest techniques and most innovative clinical embryology practices in order to ensure that these centers maximize their outcomes. In his most recent practice, Dr Wiemer was part of the team that reported the first frozen oocyte pregnancies, vitrified blastocyst pregnancies, and pregnancies following blastocyst biopsy in Washington State. This center also produced some of the first array-CGH pregnancies in the world. His world-wide affiliations have produced over 200 pregnancies resulting from vitrified oocytes.

Dr Wiemer has published over 75 peer-reviewed articles and book chapters on a wide range of topics in the area of clinical embryology. He has received numerous awards for his research, including the Overall Grand Prize awarded by the American Society for Reproductive Medicine.

His main interests are in embryo culture systems, improving laboratory outcomes and studying the effects of follicular stimulations on subsequent oocyte and embryo quality. He is currently conducting research on developing an embryo morphology grading system that can be used to predict rate and quality of blastocyst development. Other projects include various aspects of oocyte as well as blastocyst vitrification systems.



Dr. Alikani started her career in the field of assisted reproduction in 1983, two years after the birth of the first IVF baby in the United States.

#### Mina Alikani, PhD, HCLD, EMB

#### (Long Island, New York)

Dr. Mina Alikani is an Embryologist, certified by the American College of Embryology (EMBCOL) as a Reproductive Embryologist and by the American Board of Bioanalysis (ABB) as a High Complexity Laboratory Director. She currently serves as the Director of the IVF Laboratory and Tissue Bank at the Center for Human Reproduction of North Shore University Hospital in Manhasset, New York, USA.

Dr. Alikani started her career in the field of assisted reproduction in 1983, two years after the birth of the first IVF baby in the United States. Her long career includes appointments at The Center for Reproductive Medicine at Cornell University Medical Center-New York Hospital in New York (1989 - 1995), and the Institute for Reproductive Medicine and Science at Saint Barnabas Medical Center in New Jersey (1995 - 2004). Dr. Alikani proudly worked alongside Dr. Jacques Cohen, a pioneer in IVF, and the excellent medical teams at these two distinguished institutions to establish their IVF programs as major centers of excellence.

Dr. Alikani completed her PhD in 2006 through the external PhD program of Monash University at Monash Immunology and Stem Cell Laboratories, in Clayton, Australia, under the mentorship of the internationally renowned scientist and current President of the California Institute for Regenerative Medicine (CIRM), Professor Alan O. Trounson. Her PhD research was supervised by Dr. Steen M. Willadsen, a pioneer in many areas of embryology including cloning and embryo cryopreservation. Her dissertation on the origin and consequences of abnormal cell division in human embryos was reviewed and approved by two preeminent scientists, Professor Martin Johnson of Cambridge University (UK), and Professor Jean Paul Renard of Institut National de la Recherche Agronomique (France). Dr. Alikani takes special pride in the fact that she has had the opportunity to work with and learn from such exceptional scientists.

Dr. Alikani has authored or co-authored more than 60 peer-reviewed articles and book chapters on assisted reproduction and lectured extensively around the world on ART-related topics. She undertook several research projects while working as a Senior Research Scientist at Tyho-Galileo Research Laboratories (2006 – 2011), including derivation and cryopreservation of human embryonic stem cells. Dr. Alikani's areas of interest include spindle and division dynamics in mammalian eggs and embryos, fragmentation and other abnormalities of human embryo development in vitro, mitigating human gamete and embryo abnormalities, and improving IVF laboratory outcomes.

She is an active member of several professional organizations, including the American Society for Reproductive Medicine, the New York Academy of Sciences, and the Union of Concerned Scientists. She serves on the Advisory Board of the American College of Embryology. Dr. Alikani serves as a Section Editor for the journal Reproductive Biomedicine Online. She also serves on the Editorial Board of the Open

Reproductive Science Journal and functions as an ad hoc reviewer for many leading scientific and medical journals including Fertility and Sterility, Human Reproduction, Reproduction, Future Drugs, Cell Biology International, Human Fertility, Journal of Assisted Reproduction and Genetics, and Regenerative Medicine, among others. The editors of Human Reproduction recently recognized Dr. Alikani as a 'best reviewer' based on her contributions to the Journal in 2011.



Since 2000, Dr. Hill has served as Scientific Director for ART Reproductive Center Southern California Reproductive Center in Beverly Hills.

# David Hills, PhD, HCLD (Beverly Hills, California)

Dr. Hill received his undergraduate degrees from California Polytechnic State University, San Luis Obispo, California, and received his doctoral degree in Pathobiology in 1983 from the University of Connecticut.

He trained in two postdoctoral fellowships, the first at the Dana Farber Cancer Institute in Boston, and the second at the John Muir Cancer and Aging Research Institute in Walnut Creek, California.

Dr. Hill became co-director of John Muir Medical Center's In Vitro Fertilization Program in 1986, and Director of the Center for Reproductive Medicine at Century City Hospital in 1987. Since 2000, Dr. Hill has served as Scientific Director for ART Reproductive Center / Southern California Reproductive Center in Beverly Hills.

Dr. Hill has published, lectured and taught on various aspects of assisted reproductive technology for twenty years. He is a Board member for the Pacific Coast Reproductive Society, a member of the American and European Societies for Reproductive Medicine as well as the Preimplantation Genetic Diagnosis International Society and the Society for Assisted Reproductive Technology. He is board certified through the American Association of Bioanalysts as a High Complexity as well as an Embryology Laboratory Director.

He is a reviewer for the ASRM journal, Fertility and Sterility, and serves on the editorial board for the Journal of the Clinical Embryologist. Dr. Hill's IVF clinic processes 1200 cases per year, and was rated as one of the Top Ten IVF Centers in the United States in 2005 in a poll taken by Child Magazine. Dr. Hill holds an Assistant Clinical Professorship in the Department of Obstetrics and Gynecology, David Geffen School of Medicine at UCLA Medical Center. He also holds a Research Scientist appointment at Cedars-Sinai Medical Center in connection with ongoing stem cell research, and also serves on the Stem Cell Research Oversight Institutional Review Board for Cedars-Sinai Medical Center.



Dr. Itsykson is a Director of Embryology Facility in IVF Unit at Assuta Rishon Medical Center in Israel.

Pavel Itsykson, Ph.D.

(Israel)

He was born in Ukraine in 1971. He repatriated to the State of Israel at age 19. He earned B.Sc. in Biology in 1997 and M.Sc. in Life Sciences in 1999 from Bar-Ilan University, Ramat Gan, Israel. He conducted research under guidance of Professor Benjamin Bartoov and focused on the influence and prevention of oxidative stress in ram spermatozoa. Simultaneously, Dr. Itsykson participated in the first Israeli bi-annual education program in Clinical Embryology.

He started his career as a trainee Embryologist in 1999 at Barzilai Hospital in Ashkelon. In 2008 he became Lab Director of IVF Unit, Assuta Medical Center, Rishon Le-Zion. He earned PhD in 2010 from Hebrew University of Jerusalem at the laboratory of Professor Benjamin Reubinoff. His research focused on controlled neural differentiation of human embryonic stem cells. The Assuta Medical Center in Rishon Le-Zionin developed rapidly to the second largest IVF clinic in Israel employing 15 Embryologists and performing about 4000 fresh and 1200 frozen cycles a year. This IVF unit was the first in Israel to achieve pregnancy from virtified-warmed human oocytes in 2010.

Dr. Itsykson is continuously making efforts to advance the profession of Reproductive Embryology. In 2010 he was elected as Secretary of Israeli Fertility Association. He has published his work in renounced scientific journals.