



***Royan International Virtual Congress (2021);
22nd Royan International Congress on Reproductive Biomedicine
(1-3 September 2021) & 17th Royan Congress on Stem Cell Biology &
Technology (4-5 September 2021)*** was inaugurated at 9:00 a.m. (Tehran
Local Time) on Wednesday 1 September 2021 in Royan Educational
Deputy;

“Omid” Educational Studio

International Invited speakers

29 distinguished scholars joined Royan Virtual Congress (2021) scientific sessions from a variety of countries;

Austria, Australia, Canada, China, Denmark, Egypt, Germany, India, Italy, Netherlands, Pakistan, Qatar, Russia, Singapore, Spain, Switzerland, Turkey, UK, USA


Session
September 5, 2021



Invited Speaker
Dr Andreas Bender (UK)
New Technologies for Stem Cell Research
Using AI and Biological Data to Influence Stem Cell Differentiation

17th Virtual Congress on Stem Cell Biology & Technology

Session
September 3, 2021



Invited Speaker
Dr Rupin Shah (India)
Advances in the Management of Varicocele
Varicocele Repair: Controversies & Recommendations

22nd Virtual Congress on Reproductive Biomedicine

Session
September 4, 2021



Invited Speaker
Dr James St John (Australia)
Stem Cell and Regenerative Medicine I
Olfactory Ensheathing Cell Transplantation to Repair Spinal Cord Injuries: Stimulating Cells to Improve Efficacy

17th Virtual Congress on Stem Cell Biology & Technology


Session
September 3, 2021



Invited Speaker
Dr Alison Van Eenennaam (USA)
Nuclear Reprogramming and Transgenesis in Farm Animals
Genome Editing Opportunities in Livestock

22nd Virtual Congress on Reproductive Biomedicine

Session
September 3, 2021



Invited Speaker
Dr Ramadan Saleh (Egypt)
Advances in the Management of Varicocele
CRISPR/Cas9-Mediated Editing of Major Genes Affecting Muscle Hypertrophy in Iranian Goat

22nd Virtual Congress on Reproductive Biomedicine


Session
September 5, 2021



Invited Speaker
Dr Tiziano Serra (Switzerland)
Micro/ Nano Technologies for Stem Cell Research
Sound-Induced Morphogenesis of Multicellular Systems for Rapid Orchestration of Vascular Networks

17th Virtual Congress on Stem Cell Biology & Technology

Session
September 3, 2021



Invited Speaker
Dr Björn Petersen (Germany)
Nuclear Reprogramming and Transgenesis in Farm Animals
CRISPR-Mediated Gene-Edited Farm Animals at the FLI in Germany

22nd Virtual Congress on Reproductive Biomedicine

Session
September 5, 2021



Invited Speaker
Dr Henry Klassen (USA)
Stem Cell and Regenerative Medicine II
Retinal Progenitor Cells for Treatment of Retinitis Pigmentosa

17th Virtual Congress on Stem Cell Biology & Technology

Session
September 4, 2021



Invited Speaker
Dr Seyed Mehdi Jafarnejad (UK)
Stem Cell In Cancer Development and Therapy
Dysregulation of the Cap-Dependent mRNA Translation in Cancer

17th Virtual Congress on Stem Cell Biology & Technology

Session
September 3, 2021

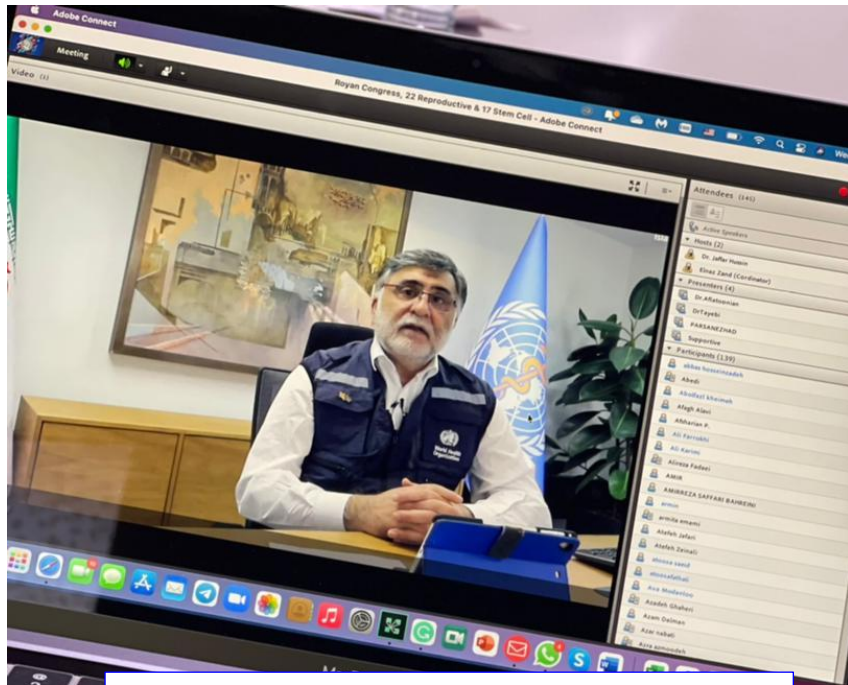


Invited Speaker
Dr Mohamed Arafa (Qatar)
Advances in the Management of Varicocele
Varicocele and Male Infertility Research: The Search for Answer Continues

22nd Virtual Congress on Reproductive Biomedicine

Dr. Abdolhossein Shahverdi
President of Royan Institute

Opening Ceremony
Joint Session for Two Congresses

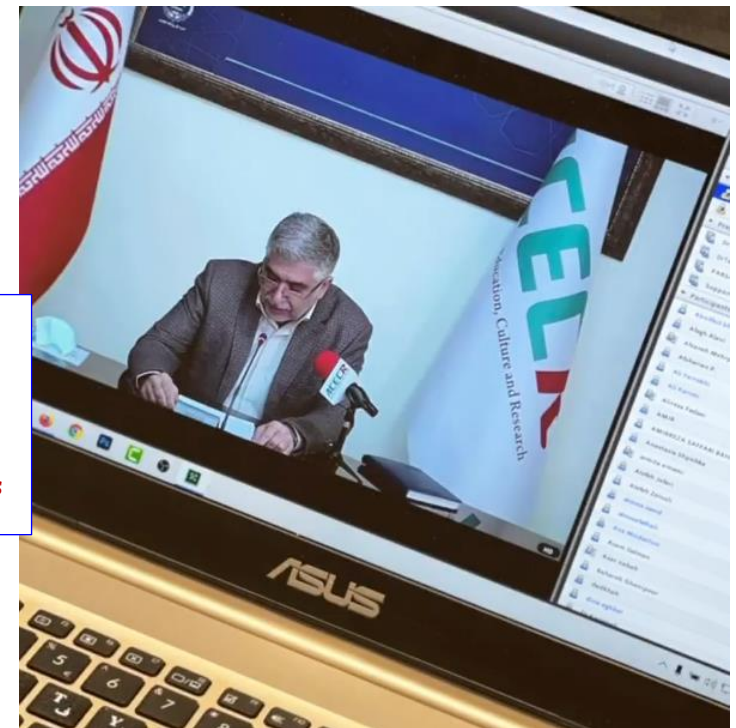


Dr. Syed Jaffar Hussain (Pakistan
Representative and Head of Mission, WHO
Islamic Republic of Iran

Opening Ceremony
Joint Session for Two Congresses

Dr. Hamidreza Tayyebi
President of ACECR

Opening Ceremony
Joint Session for Two Congresses





Dr. Marjan Sabbaghian

*Scientific Chairperson of 22nd Congress on
Reproductive Biomedicine*

*Opening Ceremony
Joint Session for Two Congresses*

Dr. Fereshteh Karamali

*Scientific Chairperson of 17th Congress on
Stem Cell Biology & Technology*

*Opening Ceremony
Joint Session for Two Congresses*





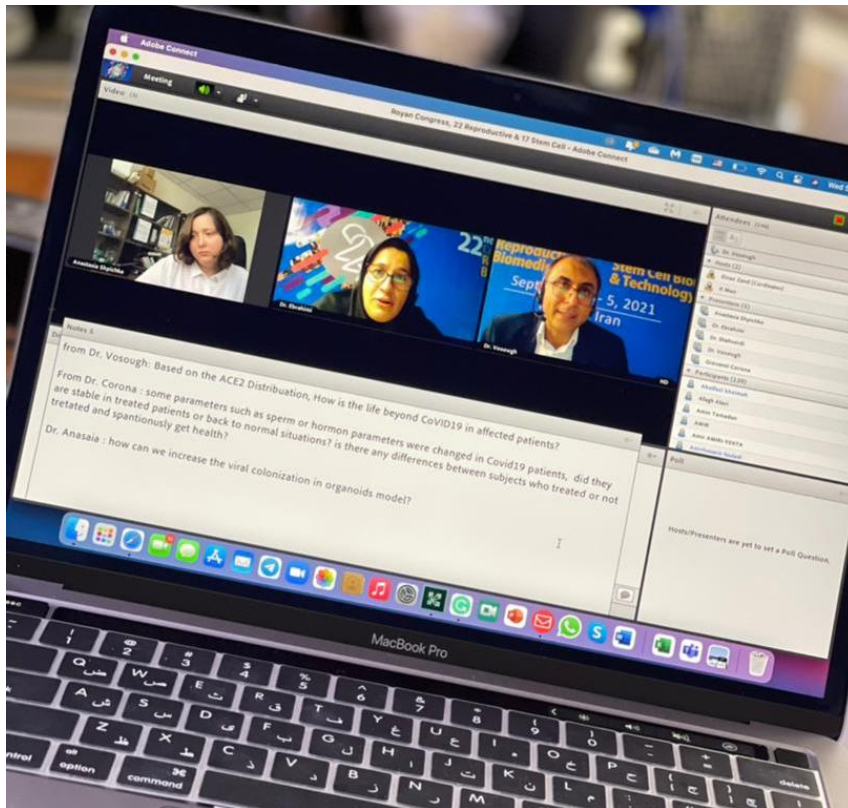
Dr. Marziyeh Ebrahimi

*Keynote Session
Joint Session for Two Congresses*



Dr. Masoud Vosough

*Keynote Session
Joint Session for Two
Congresses*



From left:

Dr. Anastacia Shpichka (Russia), Dr. Marziyeh Ebrahimi, Dr. Masoud Vosough

*Keynote Session
Joint Session for Two Congresses
Covid & Stem Cell Studies*



Dr. Firouzeh Ghaffari
Chairperson
Early & Late ART Outcome

Dr. Mahnaz Ashrafi
Invited Speaker
Early & Late ART Outcome



Dr. Ashraf Moini
Invited Speaker
Early & Late ART Outcome





Dr. Parvaneh Afsharian

*Chairperson
ART: Laboratory Aspects*



Dr. Reza Ommani Samani

*Invited Speaker
ART: Laboratory Aspects*



16th Royan Seminar on Nursing & Midwifery

From right:

Dr. Hessamoddin Sajadi, Dr. Maryam Hafezi,

Dr. Maryam Bagheri

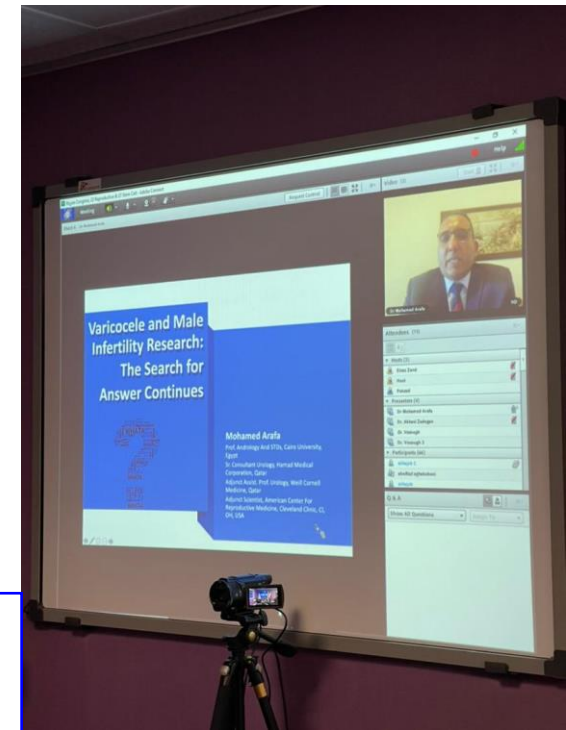


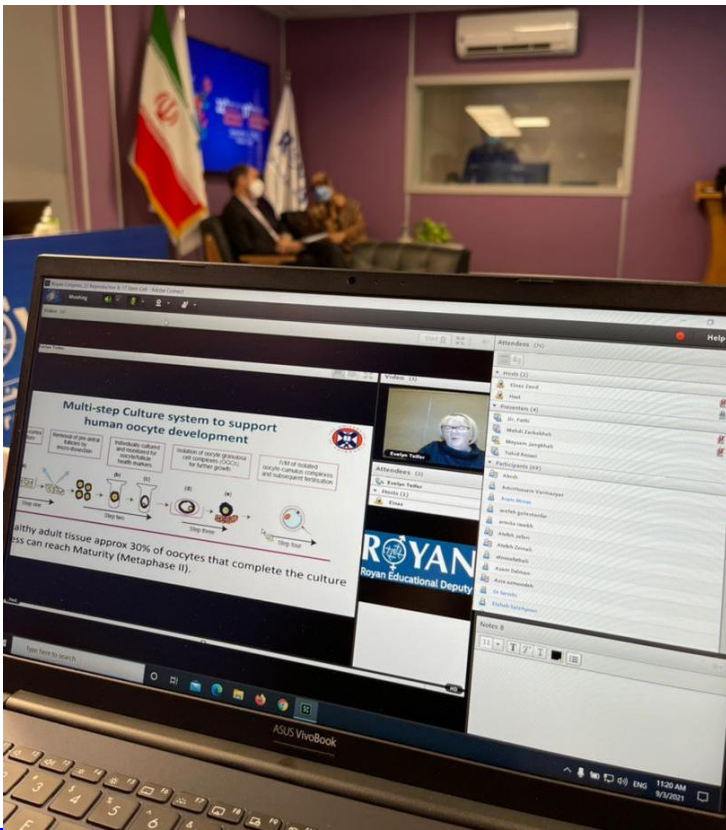
Dr. Ahmad Vosough Taghi Dizaj

Invited Speaker
Advances in the Management of Varicocele

Dr. Mohammad Arafa

Invited Speaker
Advances in the Management of Varicocele





From top:
Dr. Mohamad Sadeghi, Dr. Mojdeh Salehnia
Chairperson

In Adobe connect:
Prof. Evelyn Telfer *Invited Speaker*

Generation of Artificial Gamete

From right:
Dr. Mohamad Reza Sadeghi
Dr. Rouhollah Fathi

Generation of Artificial Gamete



From right:
Dr. Mojdeh Salehnia
Dr. Rouhollah Fathi

Generation of Artificial Gamete



Invited Speakers

Titles



Dr. Mina Alikani
Director of Northwell Health Fertility
Laboratories,
USA

Key Research Areas:
embryology

*22nd International Congress on
Reproductive Biomedicine*

- PGT-A Use and Overuse



Dr. Mohamed Arafa
Professor in the Urology Department,
Hamad Medical Corporation,
Qatar

Key Research Areas:
*male infertility diagnosis and treatment, Andrology
laboratory procedures, semen analysis, sperm
cryopreservation*

*22nd International Congress on
Reproductive Biomedicine*

- Varicocele and Male Infertility
Research: The Search for Answer
Continues



Dr. Andreas Bender

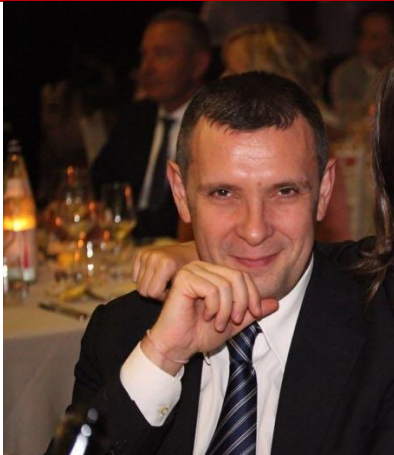
Director of Digital Life Sciences at
Innovation Campus Berlin (ICB)/Nuvisan
Co-founder of Healx Ltd & PharmEnable
Ltd
Germany

Key Research Areas:

*Cheminformatics, Bioinformatics, Drug Design,
Chemogenomics*

*17th International Congress on
Stem Cell Biology & Technology*

- Using Gene Expression Data for Stem Cell Differentiation



Dr. Giovanni Corona

Endocrinology Unit of Maggiore-Bologna
Hospital,
Italy

Key Research Areas:

andrology, endocrinology

*22nd International Congress on
Reproductive Biomedicine*

- Andrological Consequences of COVID-19



Dr. Elena Della Bella

Research Scientist, AO Foundation, AO
Research Institute Davos,
Switzerland

Key Research Areas:

Bone and cartilage, Stem cell differentiation, Mesenchymal stem cells, Regenerative medicine, Noncoding RNA

***17th International Congress on
Stem Cell Biology & Technology***

- Controversial Role of Dexamethasone on Mesenchymal Stem Cells Differentiation Toward Osteogenesis and Chondogenesis



Dr. Alison Van Eenennaam

Cooperative Extension Specialist,
Animal Genomics and Biotechnology,
Department of Animal Science,
University of California,
USA

Key Research Areas:

animal cloning and genetic engineering of livestock and science communication

***22nd International Congress on
Reproductive Biomedicine***

- Genome Editing Opportunities in Livestock



Dr. Jianping Fu

Professor of Mechanical Engineering
Adjunct, Biomedical Engineering,
Cell & Developmental Biology
University of Michigan (Ann Arbor)
USA

Key Research Areas:

*bio-mems and microfluidics, bio-nanotechnology,
molecular and cellular biomechanics, tissue engineering
and regenerative medicine*

***17th International Congress on
Stem Cell Biology & Technology***

- Bottom-Up Synthetic Embryology for Understanding Early Human Development



Dr. Luca Gianaroli

Scientific Director of the Italian Society for
the Study of Reproductive Medicine
(SISMeR),
Chairman of the Italian Society of
Reproduction and of ESHRE,
Italy

Key Research Areas:

*Obstetrics, Embryo Cryopreservation, Oocyte Retrieval
Embryo Transfer, Assisted Reproductive Techniques,
Hysteroscopy, Laparoscopy, In Vitro Fertilization, ICSI*

***22nd International Congress on
Reproductive Biomedicine***

- Blastocoel Fluid DNA Analysis for Embryo Selection



Dr. Sibylle Grad
Principal Scientist in the Regenerative
Orthopaedics Program,
AO Research Institute Davos (ARI)
AO Foundation
Switzerland

Key Research Areas:
Intervertebral disc degeneration and regeneration,
Articular cartilage repair and regeneration

***17th International Congress on
Stem Cell Biology & Technology***

- Chondrocyte and Stem Cell-Based Cartilage Regeneration: Effect of Biomaterial and Biomechanics



Dr. Jennifer Gruhn
Assistant Professor in Human Reproductive
Genetics and Infertility, Department of
Cellular and Molecular Medicine,
University of Copenhagen,
Denmark

Key Research Areas:
*human meiosis, the maternal age effect, and the origin of
aneuploidy*

***22nd International Congress on
Reproductive Biomedicine***

- Chromosome Errors in Human Eggs Shape Natural Fertility Over Reproductive Life Span



Dr. Yu Hanry

Professor, Mechanobiology Institute,
National University of Singapore,
Singapore

Key Research Areas:

*Cell and Tissue Engineering, therapeutics and drug testing
applications in pharmaceutical and healthcare industry*

*17th International Congress on
Stem Cell Biology & Technology*

- In Vitro Morphogenesis Model for
Intra-Hepatic Bile Duct
Development



Dr. Syed Jaffar Hussain

Regional Director of the World Health
Organization (WHO),
WHO Country Representative and Head of
Mission, Islamic Republic of Iran
Pakistan

*22nd International Congress on
Reproductive Biomedicine*



Dr. Seyed Mehdi Jafarnejad, PhD
Principal Investigator and Patrick Johnston
Research Fellow,
Patrick G. Johnston Centre for Cancer
Research,
Queen's University Belfast,
UK

Key Research Areas:

*Cancer, mRNA translation, miRNA Ribosome Quality
Control, Stem Cells*

***17th International Congress on
Stem Cell Biology & Technology***

- Dysregulation of the Cap-Dependent mRNA Translation in Cancer



Prof. James St. John

Head of the Clem Jones Centre for
Neurobiology and Stem Cell Research,
Griffith University, Griffith Institute for
Drug Discovery and Menzies Health
Institute Queensland,
Australia

Key Research Areas:

*spinal cord injury, peripheral nerve injury, the role of
microbes in neurodegeneration*

***17th International Congress on
Stem Cell Biology & Technology***

Olfactory Ensheathing Cell
Transplantation to Repair Spinal
Cord Injuries: Stimulating Cells to
Improve Efficacy



Prof. Henry Klassen

Director of Stem Cell & Retinal Regeneration Program, Ophthalmology School of Medicine, University of California, Irvine, USA

*Key Research Areas:
Stem cell, retinal regeneration*

*17th International Congress on
Stem Cell Biology & Technology*

- Retinal Progenitor Cells for Treatment of Retinitis Pigmentosa



Dr. Jenneke Klein-Nulend

Professor of Oral Cell Biology, Academic Centre for Dentistry Amsterdam (ACTA), Department of Oral Cell Biology, University of Amsterdam and Vrije University, The Netherlands

*Key Research Areas:
Cell Biology, Bone adaptation, Bone regeneration, Mechanical loading, Tissue Engineering*

*17th International Congress on
Stem Cell Biology & Technology*

- Blood Vessel Formation and Bone Regeneration Potential of Human Adipose Stem Cells in Combination with Calcium Phosphate Ceramics for Jaw Bone Augmentation



Dr. Nick Mcklon

Medical Director of London Women's Clinic
UK

Key Research Areas:

ovarian stimulation, endometrial receptivity

*22nd International Congress on
Reproductive Biomedicine*

- Assessing the Endometrial factor in Recurrent Implantation Failure'



Dr. Björn Petersen

Department of Biotechnology, Institute of
Farm Animal Genetics, Friedrich-Loeffler-
Institute,
Germany

Key Research Areas:

*Xenotransplantation, Gene editing in farm animals,
Somatic cell nuclear transfer, In vitro production of
embryos, Molecular genetics and cell biology*

*22nd International Congress on
Reproductive Biomedicine*

- CRISPR-Mediated Gene-Edited Farm Animals at the FLI in Germany



Dr. Sajad Razavi Bazaz

Biomedical and Tissue Engineering Lab
Ph.D. Candidate, School of Biomedical
Engineering
University of Technology Sydney
Australia

Key Research Areas:

*Microfluidics, 3D printing, Micromixers, Inertial
microfluidics*

*17th International Congress on
Stem Cell Biology & Technology*

- Advanced 3D Printed Microfluidic Technologies for Stem Cell Research



Dr. Nicholas Rivron

Group Leader of the Laboratory of Synthetic
Development
Institute of Molecular Biotechnology
Austrian Academy of Sciences
Vienna,
Austria

Key Research Areas:

*blastocysts and blastoids, multicellular patterning, cellular
decision making*

*17th International Congress on
Stem Cell Biology & Technology*

- Blastoids: Modeling Blastocyst Development and Implantation



Dr. Denny Sakkas

Scientific Director in Boston IVF Center,
USA

Key Research Areas:

*hormonal stimulation, embryo freezing and
micromanipulation*

*22nd International Congress on
Reproductive Biomedicine*

- Selecting the Most Viable Embryo:
Towards Non-Invasive
Technologies



Dr. Ramadan Saleh

Prof. of Dermatology, Venereology and
Andrology, Faculty of Medicine, Sohag
University,
Egypt

Key Research Areas:

male infertility, ART, sexology and dermatology

*22nd International Congress on
Reproductive Biomedicine*

- Controversies in Varicocele
Management: Rational Approach
to Varicocele Associated
Azoospermia



Dr. Tiziano Serra

Research Scientist, AO Foundation, AO
Research Institute Davos,
Switzerland

Key Research Areas:

Biomaterials, Tissue Engineering, Bio fabrication, 3D cell culture

***17th International Congress on
Stem Cell Biology & Technology***

- Sound-induced morphogenesis of multicellular systems for rapid orchestration of vascular networks



Dr. Rupin Shah

Consultant Andrologist & Microsurgeon,
Lilavati Hospital & Research Center,
India

Key Research Areas:

microsurgical vaso-epididymal, anastomosis for obstructive azoospermia, microsurgical vasectomy reversal, microsurgical varicocelectomy, testicular sperm retrieval

***22nd International Congress on
Reproductive Biomedicine***

- Varicocele Repair: Controversies & Recommendations



Dr. Anastasia Shpichka

Leading Researcher Fellow,
Institute for Regenerative Medicine,
I.M. Sechenov First Moscow State Medical
University,
Russia

Key Research Areas:

*regenerative sciences, covid 19 & regenerative medicine,
cancer*

***17th International Congress on
Stem Cell Biology & Technology***

- Engineering a Model to Study COVID-19 Infection: Bioprinting, Microfluidics, and Organoids



Prof. Hugh S. Taylor

President of ASRM (American Society for
Reproductive Medicine),
Professor of Obstetrics and Gynecology,
Professor of Molecular, Cellular and
Developmental Biology
Yale University
USA

Key Research Areas:

*endometrium, stem cells, endometriosis, uterus,
implantation*

***22nd International Congress on
Reproductive Biomedicine***

- COVID and Reproduction: An Update



Prof. Evelyn Telfer

Professor of Reproductive Biology
University of Edinburgh,
UK

Key Research Areas:

Oocyte, ovary, fertility preservation, follicles

*22nd International Congress on
Reproductive Biomedicine*

- In Vitro Growth (IVG) of Human Oocytes: Next Steps Towards Clinical Application



Dr. Alberto Vaiarelli

Medical Doctor, Gynecologist,
GENERA Center for Reproductive Medicine,
Valle Giulia Clinic in Rome,
Italy

Key Research Areas:

management of poor ovarian responders, reproductive endocrinology, efficacy and efficiency of IVF treatment

*22nd International Congress on
Reproductive Biomedicine*

Efficient Cryopreservation Program for Oocytes and Embryos is an Important Tool for Maximizing Effectiveness and Efficiency Treatment in Art: Clinical Perspective



Dr. Ali Zarrabi

Associate Professor and Principal Investigator at SUNUM, Nanotechnology Research and Application Center, Sabanci University, Turkey

Key Research Areas:

nanomedicine, drug delivery, medicinal chemistry, cancer, neurodegenerative disease

***17th International Congress on
Stem Cell Biology & Technology***

- Cancer Nanotechnology and Personalized Medicine: Recent Advances and Future Direction of Cancer (Stem) Cells with RNA Delivery Systems



From Right

Dr. Alberto Vaiarelli (Spain),

Dr. Firouzeh Ghaffari (Iran)

Pre-congress Workshop

Workshop of
**The Optimal Method of
Controlled Ovarian Stimulation
in Cancer Patients**

**31 August 2021
Royan Institute**



MERCK

No. 12+1, Royan Alley, Banihashem St. Shahid Soleimani Ave, Tehran, Iran Phone: +98-21-23562177
Website: www.royancongress.com <https://www.royan-edu.ir>



The Pre-Congress Workshop on:

*The Challenges of Endometrial Examination in
Infertile Women
(26 August 2021)*

From right:

*Dr. Elham Amirchaghmaghi, Dr. Mehri Mashayekhi,
Dr. Maedeh Goudarzian*

The Pre-Congress Workshop on:

*The Challenges of Endometrial Examination in
Infertile Women
(26 August 2021)*

Dr. Firoozeh Ahmadi, The Scientific Chairperson





The Pre and Post Congress Workshops on:

*Principles of Flowcytometry (29-30 August 2021)
Advanced Flowcytometry & Cell Sorting (7-9 September 2021)*

The Post Congress Workshop on:

*The Comprehensive Course on
Nanobiotechnology*



