In August 2018, the Moroccan Society for Endometriosis and Reproductive Medicine Action Endometriosis and Reproductive Biology Research Group including the IRIFIV Fertility Center was founded on August 31, 2020, at the initiative of a group of gynecologists and reproductive biologists, who are eager to help couples with impaired fertility and here we provide medical consultations, scientific and medical articles about reproduction, medicine, embryology, genetic reproduction, presentations, and medical lectures to publish the scientific literature of university students and beginners in embryology and andrology. The purpose of the development of scientific research techniques and new information in writing articles is to show recent information, preparations, stimulation, and fetal alternatives, and also to present more research about fertility, especially to the suffering of husbands, since unfortunately it has rarely been shared with their relatives and families.MSERM Scientific Research brings this medical specialty to the fore along with major technological advances in women's health care in the world.



Dr. Mohamed ZARQAOUI Dr. Noureddine LOUANJLI Dr. Mustafa ZAKARIA

## Moroccan Society for Endometriosis and Reproductive Medicine

RESEARCH SEEKS THE FOCUS BY SCIENCE - 10th Edition MSERM 2022



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Moroccan Society for Endometriosis and Reproductive Medicine

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str. A.Russo 15, of. 61, Chisinau-2068, Republic of Moldova Europe

Printed at: see last page ISBN: 978-620-4-98152-9

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The Moroccan Society for Endometriosis and Reproductive Medicine, "MSERM"

#### RESEARCH SEEKS THE FOCUS BY SCIENCE



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The Moroccan Society for Endometriosis and Reproductive Medicine

10th Edition MSERM 202



# Moroccan Society for Endometriosis and Reproductive Medicine

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## Moroccan Society for Endometriosis and Reproductive Medicine – MSERM

RESEARCH SEEKS THE FOCUS BY SCIENCE

The Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) Objectives: To promote high-quality practice in the provision of fertility treatment. To provide a common forum for members of various disciplines having an interest in the science and treatment of infertility. To promote high-quality scientific and clinical research in the causes and treatment of infertility. To provide professional leadership in the provision and regulation of infertility services. To promote high-quality practice in the organizing and execution of Scientific events across the globe with people from different scientific backgrounds coming together and participating in MSERM events.

Initiated for conducting online and Physical events globally. involves planning, Organizing, and executing Scientific events across the globe with people from different scientific backgrounds coming together and participating in these events. Our attendees include academicians, professors, students, and Industrialists who come together to join and share their knowledge. Our organization believes in imparting holistic and sustainable development with the mission to ignite young Turks and prepare them for future challenges.

#### PRIVACY POLICY

#### **MSERM**

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#### A partial listing of these sites include:

- I. The Journal of Endometriosis and Reproductive Biology (JERB)
- II. Infertility Research & Analytics (IRA)
- III. Physicians Education Resource (PER)
- IV. Pharmacy Times
- V. Pharmacy Times- Continuing Education (PTCE)
- VI. OncLive
- VII. HCPLive
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This Statement was last revised December 23, 2021.

#### Journal of Endometriosis and Reproductive Biology (JERB)

Endometriosis is a common disease affecting 10% of reproductive-aged women. Its chronic inflammatory condition causes dysmenorrhea, dyspareunia, chronic pelvic pain and infertility. The pathology of endometriosis and its inflammatory reaction makes 50% of women with endometriosis are infertile, The different theories are discussed with different Diagnostic approaches and theses provides insights into possible mechanisms of infertility, especially in women with milder forms of the disease, endometrioma or its treatment may lead to reduction in the ovarian reserve that can have a further reduction in the fertility. The ovarian reserve is affected either by the long term chronic inflammatory effect of endometrioma or the surgery of ovarian cystectomy. Ovarian reserve plays an essential role in the success of management. Treatment of endometriosis associated with infertility, includes surgical management which is usually laparoscopic is cost-effective and offers the potential for improvement in cycle fecundity. Many of the medical treatment may interfere with the management of infertility and ovarian stimulation and may unnecessarily delay further fertility therapy. Medical management has not been proven outside of in vitro fertilization.

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- 7) To contact you regarding CME/CE activities, news, or other resources and to advise you of products or services that may be available;

- To display content we think may be of interest to you and customize your visit to the Site and with communications;
- 9) To notify you about website maintenance, updates, and new features;
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- 11) To send and manage educational outcomes measurement surveys;
- 12) To get your feedback to assess user-satisfaction or other needs and interests;
- 13) To perform information analysis, compliance audits, and data metrics;
- 14) To evaluate the use and the effectiveness of the Services that we offer which can include the effectiveness of content, advertising or programs; and to help us create new tools, features, and services and improve our Site, content, and Services:
- 15) To provide required reporting on CME/CE activity to the appropriate monitoring bodies and involved CME/CE providers;
- 16) To study our CME/CE activities for effectiveness and understand educational needs;
- 17) To maintain archival records of your participation for historical and research purposes, subject to retention limits imposed by applicable laws;
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- Otherwise in rendering, administering, and improving the Site, our Services, and our business.

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We promote a patient-centred culture by constantly improving and prioritising quality of working in Endometriosis and Reproductive Medicine as well as ensuring patients' satisfaction, safety, wellness and privacy.

Dr. Mustafa ZAKARIA – MD. RB Chairman of the Executive Committee of The MSERM

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#### 14. Indemnification

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By using the any of the Sites you acknowledge and agree that you release, remise, and forever discharge MSERM, its subsidiaries, its affiliates, and their respective officers, directors, employees, suppliers, licensors and agents (and its and their successors, officers, directors and employees) from any and all claims, complainants, demands, causes of action, proceedings, liabilities, obligations, legal fees, costs, and disbursements of any nature whatsoever, whether known or unknown that arise out of or are in any way related to your use of this Website and/or Services.

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#### 17. Miscellaneous

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#### Contacting MSERM

If you have any suggestions, comments, and/or questions about the Site and/or these Terms of Use, please contact MSERM at <a href="mailto:mserm-congress@mserm.org">mserm-congress@mserm.org</a>

Annual MSERM, Worldwide Online Congress Mailing Address: 1 Rue Mansour Saadi 20100: Quartier Racine Casablanca. Casablanca-Settat, 20100 Morocco

Prof. Sarah DIVAD - MD.PhD. United Kingdom Secretary General of the Moroccan Society for Endometriosis and Reproductive Medicine



## SCIENTIFIC RESEARCH Research Seeks the Focus by Science

### Introduction



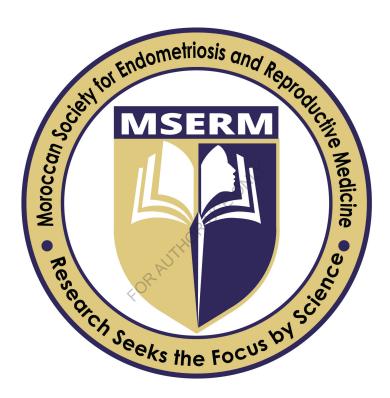
#### MSERM - History

In August 2018, the Moroccan Society for Endometriosis and Reproductive Medicine Action Endometriosis and Reproductive Biology Research Group that includes the IRIFIV Fertility Center was founded on August 31, 2020, at the initiative of a group of gynecologists and reproductive biologists, who are eager to help couples with impaired fertility and here we provide medical consultations, scientific and medical articles about reproduction, medicine, embryology, genetic reproduction, presentations, and medical lectures to publish the scientific literature of university students and beginners in embryology and andrology.

The purpose of the development of scientific research techniques and new information in writing articles is to show recent information, preparations, stimulation, and fetal alternatives, and also to present more researches about fertility, especially to the suffering of husbands, since unfortunately it has rarely been shared with their relatives and families.

MSERM Scientific Research brings this medical specialty to the fore along with major technological advances in women's health care in the world. Therefore, caring for informed couples is becoming less difficult and sometimes they become applicants for additional checks from the biological clinic team.

Objective of the Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) Maintaining consistent and reliably high success rates is a monthly challenge for in IVF labs, the IRIFIV Fertility Center in Casablanca, Morocco Department of Reproductive Medicine and Reproductive Biology and Embryology, advocacy of interdisciplinary Department of Reproductive Medicine and Reproductive Biology and Embryology study, encompassing the areas of research, collections and publishing Articles.



#### SCIENTIFIC RESEARCH













#### Amélioration rapide de la fatigue Sans constipation

(\*) SCOGS: Select Committee on GRAS Substances Opinion: Iron and Iron Salts - Report Number: 35 - NTIS Accession Number: PB80178676 - 1980.



#### MSERM - Quality Chart

In a piece of knowledge and an innovation-based society characterized by fast-paced scientific discoveries, but also by knowledge transfer and international competitiveness, educational and scientific research organizations and associations hold a special place to promote challenges of the present as well as those of the future.

Their responsibility is to be leaders in decisive knowledge progress, to promote and transfer but also to establish and implement qualified expertise. In order to live up to this major responsibility, it is necessary for these organizations to consolidate the bonds of trust with their various members and partners.

As the foremost vector for development and scientific research, it is our duty to implement pillars that are focused on promoting best practices in research and continuous training for fellow members and colleagues, but also on raising awareness amongst the community, setting out ethical benchmarks, and last but not least, on establishing clear and commonly known procedures to prevent and correct potential ethical deviations.

Our quality chart aims to define explicit criteria of a painstaking and ethical scientific process, that applies in the course of our relationship with both national and international members and partners.

Through its professional activities, the IRIFIV-AISRG group is committed to ensuring:

- The quest for excellence in research to meet the future's scientific challenges
- An attractive and innovative training offer designed specifically for health professionals
- Efficient and prospective monitoring in the service of a new culture
- Strong statement of our organization's social responsibility
- A group open to the world and committed to innovative research development



#### **MSERM** - Mission and Vision

#### Mission

The Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) is dedicated to the advancement of the science and practice of reproductive medicine. The Society accomplishes its mission through the pursuit of excellence in evidence-based, lifelong education and learning, through the advancement and support of innovative research, through the development and dissemination of the highest ethical and quality standards in patient care, and through advocacy on behalf of physicians and affiliated healthcare providers and their patients.

#### **Objectives:**

- To explore the latest research developments.
- To strengthen the research knowledge among the readers.
- To contribute to the progress in scientific research.
- To provide high quality online platform for publishing original research works to (MSERM)

#### Vision

The Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) will continue to be the national and international leader for multidisciplinary information, education, advocacy, and standards in reproductive medicine and science, with the goal of ensuring accessible, ethical, and quality reproductive care for every person and explore the latest research developments and strengthen the research knowledge among the readers.

#### Values:

 At the Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) we value:

- Learning, including IVF-long education, Workshops and training in IVF laboratories and the open participation of international associations in reproductive medicine, infertility and knowledge are the most important results and developments, and the open sharing of information and knowledge.
- Discovery, including advancing the care of patients world-wide through innovative research and invention.
- Advocacy, including prioritizing patients' reproductive care and emotional wellbeing, access to care, reducing disparities, and the fundamental right to family building.
- Diversity, Equality and Inclusion, including a commitment to promote diversity within the MSERM membership and leadership and to promote access to quality reproductive care for all patients.
- Integrity, including honesty, trustworthiness, transparency, and ethics in all our interactions and initiatives.
- Collaboration, including collegiality, teamwork, and cooperation to achieve our mission and global vision.
- Excellence, including distinction and quality in all our endeavors



#### MSERM - What We Do?

#### **Our scientific activities**

Our vast MSERM -Endometriosis and Reproductive Medicine network provides a full spectrum of integrated Endometriosis and Continuing Education In Endometriosis treatments and Reproductive Medicine for Gynecologists and Clinical Embryologists

Investigation in how Endometriosis is spreading and poorly taken care of and in how to manage the economic consequences of work Absenteeism.

- Surgeon Training in Endoscopic Surgery for Infertility and Endometriosis treatments.
- Uro-Andrologist Training in Male infertility Management
- · Gynecologists training in the Reproductive Medicine, Infertility Explorations,
- Assisted Reproductive Technology: "A.R.T." Practice and IVF Protocols Optimization
- Embryologists Training in the Field of Andrology, Clinical Embryology, IVF Laboratory techniques and Quality Control Assurance Initiation of multicenter Studies at international level in the field of Endometriosis and Reproductive Medicine
- Organization of international annual online Congress within four days expert meetings Highlighting at the same time the great Moroccan history and its multiple cities
- Strengthen the relationship with numerous National societies in Reproductive medicine worldwide
- Accreditation by EACCME is an institution of the European Union of Medical Specialists (UEMS)



#### MSERM - Our Main Goals

#### The goals and activities of the association

Scientific Research and Sharing Knowledge between Multiple Fertility Centers Worldwide, Continuing Education In Endometriosis treatments and Reproductive Medicine for Gynecologists and Clinical Embryologists, Investigation in how Endometriosis is spreading and poorly taken care of, and how to manage the economic consequences of work Absenteeism.

Surgeon Training in Endoscopic Surgery for Infertility and Endometriosis treatments, Uro-Andrologist Training in Male infertility Management Gynecologists training in the Reproductive Medicine, Infertility Explorations, Assisted Reproductive Technology: "A.R.T." Practice and IVF Protocols Optimization

Embryologists' Training in the Field of Andrology, Clinical Embryology, IVF Laboratory techniques, and Quality Control Assurance

Initiation of multicenter Studies at the international level in the field of Endometriosis and Reproductive Medicine

Organization of international annual online Congress within four days of expert meetings Highlighting at the same time the great Moroccan history and its multiple cities

Annual Congress of the Moroccan Society for Endometriosis and Reproductive Medicine - Worldwide Online Congress

Explore the Exciting Program - https://www.mserm-congress.org/

Promote Communication between the Moroccan Society for Endometriosis and Reproductive Medicine and other Related Associations National and International in Reproductive Medicine and Embryology and Research Scientific

Encourage courses, meetings, Congresses, and Research

Strengthen the relationship with numerous National societies in Reproductive medicine worldwide

Organization of an Annual Exam worldwide with CESMA-UEMS Accredited Certification in Reproductive Medicine and Clinical Embryology

Assist Pharmaceutical industries to promote their latest products

Easy Membership access via the website subscription www.mserm.com

- Over the 1000 Member for Worldwide .
- Association Structure
- 6 Years of providing Educational
- Scientific Objectives

- Our publications since 2016
- Historical Editice For the MSERM



#### MSERM - Chairman Statement Executive

66

We promote a patient- centered culture by constantly improving and prioritizing quality of working in Endometriosis and Reproductive Medicine as well as ensuring patients' satisfaction, safety, wellness and privacy.

## Dr. Mustafa ZAKARIA – Ph.D. MRB Chairman of the Executive Committee of the Moroccan Society for Endometriosis and Reproductive Medicine



#### Dear Colleague,

Forging forward after a year of unparalleled challenges presented by a pandemic, Health of the Endometriosis and Reproductive Medicine (MSERM) will continue tenaciously to strengthen the trust we have been cultivating with all our stakeholders. This is key if we are to realize our vision of become the first local and global network in health care services about Endometriosis and Reproductive Medicine and the most scientific research and studies and to enhance people's confidence. In a global environment still threatened by COVID-19 and rife with economic, political and other uncertainties, trust forms the bedrock of our resilience and sustainable growth and is central to our governance culture. With an ingrained culture of trust, we can be confident of sustainable success, given our solid fundamentals, robust corporate oversight and the prudent management of our operations.

#### Engendering Trust for Sustainable health Fertility and Infertility and Endometriosis and Reproductive Medicine

Fertility and Infertility and Endometriosis and Reproductive Medicine with 28 International associations across 16 countries, MSERM was on the front line of the pandemic in 2020. Like many other businesses, we realized that this unprecedented health crisis demanded that we transform the way we operate and review.



## **SCIENTIFIC RESEARCH**

Research Seeks the Focus by Science

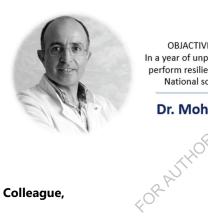
## Endogest® Diénogest

## Luttons contre l'Endométriose





#### MSERM - President Message



OBJACTIVE: RESEARCH SEEKS THE FOCUS BY SCIENCE In a year of unprecedented challenges, our people enabled us to perform resiliently. Strengthen the relationship with numerous National societies in Reproductive medicine worldwide

Dr. Mohammed ZARQAOUI- MD. PhD President of the MSERM

#### Dear Colleague,

Like much of the world, MSERM was buffeted by the winds of COVID-19 this past year. our Team, we performed resiliently amidst the challenges. Throughout 2020, we stood by our colleagues on the frontline of the Scientific Activities and Scientific Research and Sharing Knowledge between Multiple Fertility Centers Worldwide, Continuing Education In Endometriosis treatments and Reproductive Medicine for Gynecologists and Clinical Embryologists, Investigation how Endometriosis is spreading and poorly taken care of and in how to manage the economic consequences of work Absenteeism.

Surgeon Training in Endoscopic Surgery for Infertility and Endometriosis treatments, Uro-Andrologist Training in Male infertility Management, Gynecologists training in Medicine, Infertility Explorations, Assisted Reproductive Reproductive Technology: "A.R.T." Practice and IVF Protocols Optimisation.

Embryologists Training in the Field of Andrology, Clinical Embryology, IVF Laboratory techniques, and Quality Control Assurance, Initiation of multicenter Studies at the international level in the field of Endometriosis and Reproductive Medicine



#### MSERM - Leadership

The Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) Visit this page for more information about the MSERM Executive Team:

- > Dr. Mustafa ZAKARIA-MD, President Executive Officer
- Dr. Wassym SENHAJI –MD, Vice-President Executive Officer
- > Prof. Eman El-GENDY -MD, Chairman of the Scientific Committee of MSERM, Egypt.
- Dr. Noureddine LOUANJLI Vice-President of the Scientific Committee of MSERM,
- > Prof. Sarah DIVAD -MD Secretary-General of MSERM, United Kingdom
- > As. Pr. Abdelhafid NATIO Vice-Secretary General of MSERM
- Mrs. Asmaa NAJI, Chief Financial Officer An Assistant treasurer and Administrative Coordinator of MSERM.

#### **MSERM Committees**

The Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) utilizes several committees to develop resources and publications, as well as support the mission of MSERM.

#### **Coding Committee**

This committee develops resources for reproductive medicine and coding professionals to aid with reimbursement and correct coding of procedures. Key

programs: Postgraduate course, Coding Corner questions, online learning. EN - FR

#### Members:

- ✓ Dr Mohammed ZARQAOUI, MD, PhD
- ✓ Dr.Wassym R.SENHAJI, MD, PhD
- ✓ Dr Noureddine LOUANJLI MSc, PhD
- ✓ Dr. Abdelhafid NATIQ PhD
- ✓ Dr Moncef Benkhalifa PhD





#### MSERM - Our Founders



Prof. Yacoub KHALAF - UK
Honorary President of the Moroccan
Society for Endometriosis and
Reproductive Medicine

Prof. Yacoub Khalaf is Honor President of the Moroccan Society for Endometriosis and Reproductive Medicine and consultant gynecologist and renowned reproductive medicine expert, specializing in infertility, assisted conception, fibroid management, PCOS and recurrent miscarriage at Guy's Hospital. After completion of Royal College of Obstetricians and Gynecologists (RCOG) subspecialty training in reproductive medicine and surgery at Guy's and St Thomas', Yacoub became a consultant in gynecology and reproductive medicine in 2001. He is a recognized international expert in management of infertility and assisted conception. Together with his ACU team, he has helped thousands of couples fulfill their dream of having children. Yacoub is a national and international expert in the conservative management of uterine fibroids. In a newspaper survey, fellow consultant colleagues voted him among the experts in management of uterine fibroids in the UK. He was described as one of the safest pair of hands in fibroid surgery. Yacoub is renowned for his dedication and prides himself on offering a truly patient-centered care and is accessible to his patients 24/7.

He has lectured at major national and international conferences and published widely on all aspects of assisted conception, reproductive medicine and surgery in major medical journals including NEJM, Lancet, BMJ and Nature Cell Biology.

Yacoub is Professor of Reproductive Medicine and Surgery at King's College, London and has national

and international experience in research degrees' supervision and assessment. He is expert advisor to the National Institute for Health Care and Clinical Excellence (NICE).



Dr. Mohammed ZARQAOUI - Morocco
President of the Moroccan Society
for Endometriosis and
Reproductive Medicine

Dr. ZARQAOUI is President of the Moroccan Society for Endometriosis and Reproductive Medicine MD. Gynecologist | Graduated from University of Lille Obstetrics and Gynecological Laparoscopic Surgery | General Medical , Director for the IRIFIV Fertility Center in Casablanca, Morocco.

Our center, in collaboration with the LES IRIS Clinic, our main mission is to help couples who have difficulty conceiving a baby and thus enable them to have a child. Treat your infertility by having access to the science and the sophisticated technique of assisted reproduction with the most advanced treatments: IVF (in vitro fertilization), ICSI (intra cytoplasmic sperm injections), IUI (artificial insemination), ovarian stimulation .

Dr . ZARQAOUI is a member of the American Society for Reproductive Medicine in 2010 and Member of The European Society of Human Reproduction and Embryology (ESHRE) 2008 and Member of The Association for Scientific Research of the (IRIFIV-AISRG) 2018 and the Moroccan association of fertility and contraception (CFMS) From the founders.



Dr. Mohammed ACHOUR - Morocco Vice President of the Moroccan Society for Endometriosis and Reproductive Medicine

Dr. Mohamed ACHOUR is Vice President of the Moroccan Society for Endometriosis and Reproductive Medicine

Born July 15, 1975 in Agadir Moroccan nationality Married Academic background :PCEM1: received the first time in 1994 Lille Internship competition: received on the first try in 2000 Doctorate in Medicine 2005 Bordeaux Antilles Guyana DES Gynecology Obstetrics 2005 Bordeaux Advanced laparoscopy diploma from Kiel school of endoscopy (Germany) IUD reconstructive and restorative breast surgery (Paris)European IUD gynecological oncology surgery Diploma in Medicine and Reproductive Biology (Paris) Professional career Private practice Part-time PH Current professional practice Liberal (Agadir) + CNSS (Agadir)Professional interests: Minimal invasive surgery Gynecological and breast oncology.



Dr. Mustafa ZAKARIA - Morocco

# Chairman Executive Committee of the Moroccan Society for Endometriosis and Reproductive Medicine

Dr. ZAKARIA **Chairman Executive Committee** of the Moroccan Society for Endometriosis and Reproductive Medicine and Senior Clinical Embryology and Assisted Conception

Dr. M. ZAKARIA extensive experience covers all aspects of clinical embryology and andrology, including maintaining the highest possible standards in the IVF laboratory, oocyte and embryo culture, intracytoplasmic sperm injection, blastocyst culture, assisted hatching, embryo biopsy, fertility cryopreservation by verification, and in vitro oocyte maturation. Dr. ZAKARIA obtained a Master's degree in Clinical Embryology and Assisted Conception from Northwestern University, • USA . and ART, consultant Reproductive Biology in the IVF laboratory, fertility center IRIFIV, Casablanca, Morocco and group vice president of scientific research in 2018, and obtained a Research Fellowship Certificate (RFC) from IRIFIV-AISRG 2020 Clinical Reproductive Sciences in November 2019., ZAKARIA has acquired a distinct interest for oocyte and somatic cell communication, embryo morphology, and optimizing quality in the clinical IVF lab. Dr. ZAKARIA is a member of the American Society for Reproductive Medicine in 2017 and Member of The European Society of Human Reproduction and Embryology (ESHRE) 2018 and Member of The American College of Embryologists (ACE). 2020 and Member of The Society for Reproductive Biology (SRB). 2020 and the Association of Reproductive and Clinical Scientists (ARCS) 2020 and Pacific Coast Reproductive Society.(PCRS) 2020 and the Moroccan Society of Reproductive Medicine (SMMR) 2018 and the Association of Resident Doctors of Casablanca, Morocco (ARC) 2019 and the Royal Society of Medicine (RSM) 2020. my website / https://www.drmustafazakaria.org/



Dr. Wassym SENHAJI - Morocco Vice-Chairman Executive Committee of the

## Moroccan Society for Endometriosis and Reproductive Medicine

Dr. Wassym SENHAJI is Vice Chairman of the Executive Committee of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM"

Graduated from Paris University (France). Gynecologist & Obstetrician (Diploma in 1998). Endoscopic surgeon & Fertility expert. Bureau Member of CMF (Moroccan Fertility College) and FMRH (Moroccan Federation of Human Reproduction). Main interest: IVF & Endoscopy é Research (Moroccan Society for Endometriosis and Reproductive Medicine). Associated practitioner at IRIFIV Fertility Center – Casablanca Morocco.



Prof. Eman El-GENDY- Egypt Chair of Scientific Committee of the Moroccan Society for Endometriosis and Reproductive Medicine

Prof. Eman Elgindy, She Chair of Scientific Committee of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM"

MD.( Zagazig University, Egypt), PhD (Maastricht University, the Netherlands) Is Professor Obstetrics and Gynecology, Zagazig University and Clinical Director of Rahem fertility center, Egypt. Prof. Elgindy She is the Secretary General of EFRE and the Director of Egypt IVF registry. Prof. Elgindy authored and co-authored many research studies published in both national and international journals and has been a reviewer for many prestigious journals. Her research interests include ovarian reserve, optimizing controlled ovarian stimulation protocols, optimizing the outcome of frozen cycles and fertility preservation.



Dr. Noureddine LOUANJLI - Morocco Vice-Chair of Scientific Committee of the Moroccan Society for Endometriosis and Reproductive Medicine

Dr. LOUANJLI is the Vice Chair of Scientific Committee of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM" Graduated from Medicine at the University of Strasbourg. I Department of Clinical Biology, Strasbourg, Alsace-Champagne-Ardenne, France. Reproductive Biology, Head of LABOMAC Laboratory for Clinical Analysis and Assisted Reproductive Technology, IRIFIV Center Fertility, African Fertility Center, Casablanca Morocco Dr. LOUANJLI is a member of the American Society for Reproductive Medicine in 2005 and Member of The European Society of Human Reproduction and Embryology (ESHRE) 2006 and Member of The Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) From the founders 2018 and the Moroccan Society of Reproductive Medicine (SMMR) From the founders.



Prof. Sarah DIVAD - UK

## Secretary General of the Moroccan Society for Endometriosis and Reproductive Medicine

Prof. Sarah David is Secretary General of the Moroccan Society for Endometriosis and Reproductive Medicine

Prof. Sarah David has a Consultant working in Center of Obstetrics and Gynecology since 2002. She is an NHS trained consultant, with experience that includes working at St Bartholomew's Hospital and being a member of the Royal College of Obstetricians & Gynecologists since 2010. His advanced training in Subfertility and Reproductive Health together with Acute Gynecology and Early Pregnancy ensures he is able to deliver highly specialized and advanced care for his patients. Dr. Sarah David is also part of the gynecology surgical team at the Royal Center of Obstetrics and Gynecology. His multitude of specialisms means he truly understands the full reproductive process comprehensively from beginning to end, allowing him to explore all avenues to achieve a successful pregnancy for his patients. At The Center of Obstetrics and Gynecology we pair doctors to patients whom we think they are most compatible with, which also means you will have the same doctor follow you throughout your journey. Dr. Sarah David truly believes in this approach and feels it is imperative to form a relationship with all his patients, this helps him understand them better from a medical perspective, and also means he feels personally connected with each patient's journey. Prof. Sarah David sees it as a personal goal to achieve pregnancy for his patients via the quickest and least invasive method as possible. He has personally been exploring new methods using growth hormones to aid in the success of IVF and has even had some success with achieving natural pregnancy via this method.



As. Prof. Abdelhafid NATIQ - Morocco

## **Vice-Secretary General of the Moroccan** Society for Endometriosis and Reproductive Medicine.

Dr. NATIQ is Vice Secretary General of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM"

Graduated from the Graduated from Medicine at the University of Mohammed V I Souissi (UM5S) IN PhD in Science in Genetic Specializing in classical cytogenetics and Department of Medical Genetics National Institute of Health Rabat, Morocco Researcher in the Moroccan Society for Endometriosis and Reproductive Medicine. Dr. .NATIO is a member of the American Society for Reproductive Medicine and Member of The European Society of Human Reproduction and Embryology (ESHRE) and The Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) From the founders 2018 and the Moroccan Society of Reproductive Medicine (SMMR) and the Moroccan FORAUTHORUSEOMIT association of fertility and contraception (CFMS).



Mrs. Asmaa NAJI - Morocco

**Treasurer of the Moroccan Society** for Endometriosis and Reproductive Medicine.

Mme. Asmaa NAJI is the Treasurer of the Moroccan Society for Endometriosis and Reproductive Medicine. Department of Administrative Coordinator of the MSERM Asmaa NAJI is a Member of The Moroccan Society for Endometriosis and Reproductive Medicine. From the founders 2018



Dr. Yasmine LOUANJLI - Morocco Vice-Treasurer of the Moroccan Society for Endometriosis and Reproductive Medicine

Dr. Yasmine LOUANJLI is the Vice Treasurer of the Moroccan Society for Endometriosis and Reproductive Medicine. Graduated from UCAD at the Dakar Senegal, Department of Biology, at work of the LABOMAC Laboratory for Clinical Analysis Casablanca Morocco and Vice Treasurer of the Moroccan Society for Endometriosis and Reproductive Medicine Dr. Yasmine LOUANJLI is a Member of The Moroccan Society for Endometriosis and Reproductive Medicine. From the founders 2018





## MSERM - Our Team Active members



Dr. Ritu SANTWANI - India Member of the Moroccan Society for Endometriosis and Reproductive Medicine

Graduation from M.B.B.S – G.S.V.M. Medical College, Kanpur M.D (Obstetrics and Gynecology), King George's Medical College, Lucknow F.I.C.O.G, FICOG, FIAOG, AMRCOG, ART-Singapore Honorary professor Obs & Genec-VIMS Medical college, Garjula – India Society for Assisted Reproduction (ISAR).



Dr. Aya AL-IBRAHEEMI - UK Member of the Moroccan Society for Endometriosis and Reproductive

### Medicine

Embryologist, graduated from University of Nottingham, United Kingdom, with a MMedSci degree in assisted reproductive technology.

BSc in biomedical sciences. The founder of the MEEI society. Beside of working as operation manager and healthcare specialist at Sustainer Health.



Dr. Modou Mamoune MBAYE – Senegal
Member of the Moroccan Society
for Endometriosis and Reproductive
Medicine

Graduated from the faculty of sciences Ain-Chock of Casablanca (Morocco).Bachelor's degree in plant biotechnology, Master's degree in physiology cellular and Molecular Biology and Doctorate in cellular and Molecular biology. Doctoral Research Associate at the fertility center Irifiv a researcher in the Scientific Research Group – Dakar Senegal.



Dr. Muhjah FALAH – Iraq Member of the Moroccan Society

## for Endometriosis and Reproductive Medicine

MD. Lecturer at Karbala University /college of medicine/Iraq. Had a degree of master of science in clinical embryology and assisted reproductive techniques/PhD in infertility and clinical reproduction from high institute for infertility diagnosis and assisted reproductive techniques. Had many publications in different scientific journals. Trained at fertility center /al Sadr Medical City/Al-Najaf AL-Ashraf /Iraq.



FORAUTHORUSEOMIT

Dr. Ferhat CENGIZ - Turkey Member of the Moroccan Society for Endometriosis and Reproductive Medicine

Graduating from Istanbul University Biology Department, completed his master's degree in Histology and Embryology at Trakya University. MSc. Ferhat Cengiz is Head of IVF laboratory of Göztepe Medical park Hospital, a research center in the İstanbul Country in Turkey specializing in in vitro fertilization research and embryology technologies. Formerly he was also Head of the Department of Embryology different IVF Centers. During this

time, he has investigated in sperm cell morphology, having an ample and multidisciplinary view of Round spermatid ejection research.



As. Prof. Hayder Mossa - Iraq
Member of the Moroccan Society
for Endometriosis and Reproductive
Medicine

He is an A

He is an Assistant Professor in Reproductive Physiology and Laboratory Assisted Reproductive Technologies(ART's) at Al-Nahrain University-High Institute for Infertility Diagnosis and ART's. A Lecturer, trainer and supervisor for many academic degrees(postgraduates):Ph.D. in Clinical Infertility & Reproduction, M.Sc. Applied Embryology, High Diploma (equivalent to M.Sc. degree) in Clinical Infertility and ART's and training Fellowship in Infertility and IVF. He is also a member of the Iraqi Fertility Society(IFS) -Clinical Embryology & Medical Laboratories Committee. In addition to that Dr. Mossa worked as Laboratory ART's Specialist & Scientific Consultant for some Fertility & IVF centers in Baghdad -IRAQ.



# FloraPlus À base du complexe breveté 2QR



La solution rapide et efficace qui agit contre les problèmes liés aux mycoses vaginales



- Agit contre les problèmes liés aux mycoses vaginales
- Soulage immédiatement les démangeaisons, les irritations et les pertes
- ▶ Une stimulation prébiotique des lactobacilles
- Optimise le pH vaginal

Pas d'effet secondaire connu et n'interagit pas avec les autres médicaments. Aucune contre-indication à l'utilisation durant la grossesse et l'allaitement.

#### POSOLOGIE:

Utiliser une monodose en interne avant le coucher pendant 5 jours consécutifs.

Chaque monodose correspond à une seule application.

Problèmes liés aux mycoses vaginales ?





# MSERM - Our Structure in Strategic Plan & Initiatives

The Moroccan Society for Endometriosis and Reproductive Medicine "MSERM" Strategic Plan & Initiatives

2022-2030 Strategic Plan: Goals and Strategies

2022-2030 The Moroccan Society for Endometriosis and Reproductive Medicine "MSERM" Strategic Plan: Goals and Strategies

**Diversity Task Force** 

The Moroccan Society for Endometriosis and Reproductive Medicine "MSERM" is passionately committed to promoting diversity within our membership and leadership, and promoting access to quality reproductive care for all patients without regard to race or ethnicity. We know that, not only does racism interfere with the ability of individuals to access proper and equal medical care, it also represents a pervasive barrier to educational, economic, and social success.

## 2022-2030 Strategic Plan: Goals and Strategies

## **Membership and Engagement:**

Goal: Every individual with an interest in the field of reproductive health, science, and policy, both domestic and international, will find sufficient value and be an engaged member of the Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) .

## Strategies:

Engage, and mentor early career professionals reflecting the diversity of the field and population, utilizing innovative technology, social media, and contemporary communication resources.

Review, research, and update current membership benefits and membership structure to identify improvements in the value to, and engagement of, all current and potential members.

Explore the availability of technology to develop and implement a robust membership portal offering a single point of contact to all of Moroccan Society for Endometriosis and Reproductive Medicine MSERM's diverse content, including continuing education, networking, and other valued resources.

### Patients:

Goal: Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) will be recognized as the premier and trusted source for evidence-based unbiased information for patients regarding reproductive health and family building.

## **Strategies:**

Provide information and educational resources regarding inclusive reproductive care and diverse family-building options.

Include patients in the development of Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) patient-facing and physician-facing educational materials.

Innovate and improve the delivery of patient education content. Advocacy:

#### Goal:

Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) will effectively use the expertise and power of its members to leverage science, educate the public advocate for national and international policies that advance the science and clinical practice, and expand access to reproductive care by addressing social, cultural, demographic, and economic barriers.

Engage with other medical and scientific organizations, payors, employers, and policymakers in advocating for equitable, inclusive, and affordable access to reproductive health and reproductive care.

#### Research:

Goal: MSERM and its Research Institute will invest in the promotion, support, and mentorship of a diverse group of researchers focused on the public health, clinical, translational, and basic reproductive sciences.

## **Strategies:**

Increase the MSERM Research Institute endowment, engaging the MSERM membership, the reproductive science community, and external donors, while communicating current and ongoing research findings and the impact of these investments.

Provide mentorship and support for junior investigators to foster successful careers in reproductive science research.



## MSERM - Chairman's Statement Executive Committee

Dear Colleague,

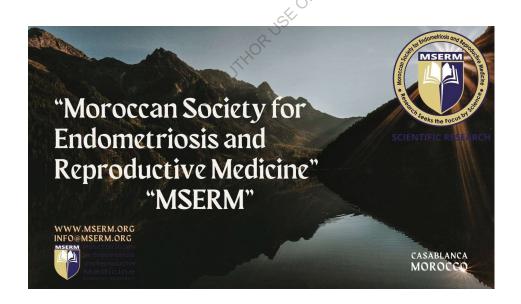
Forging forward after a year of unparalleled challenges presented by a pandemic, Health of the Endometriosis and Reproductive Medicine (MSERM) will continue tenaciously to strengthen the trust we have been cultivating with all our stakeholders.

This is key if we are to realize our vision of becoming the first local and global network in health care services about Endometriosis and Reproductive Medicine and the most scientific research and studies and to enhance people's confidence.

In a global environment still threatened by COVID-19 and rife with economic, political and other uncertainties, trust forms the bedrock of our resilience and sustainable growth and is central to our governance culture. With an ingrained culture of trust, we can be confident of sustainable success, given our solid fundamentals, robust corporate oversight and the prudent management of our operations.

## **Engendering Trust for Sustainable health Fertility and Infertility and Endometriosis and Reproductive Medicine**

Fertility and Infertility and Endometriosis and Reproductive Medicine with 28 International associations across 16 countries, MSERM was on the front line of the pandemic in 2020. Like many other businesses, we realised that this unprecedented health crisis demanded that we transform the way we operate and review.



## MSERM - Special Interest Group

# MSERM - Endometriosis and Endometrial Disorders



Welcome to the site of the Special Interest Group for Endometriosis & Endometrial Disorders (SIG-EED) of the Moroccan Society for Endometriosis and Reproductive Medicine (MSERM). Here you can read more about us, our activities and our recommended reading.

## Strategic Coverage and fields of interest

The "SIG-EED" brings together two areas of women's health that are closely related: endometriosis and endometrial disorders. We are interested in the role of the endometrium in reproductive physiology and in gynaecological disorders such as endometriosis, adenomyosis, fibroids, abnormal uterine bleeding, and pelvic pain syndrome. The SIG-EED addresses all aspects of these disorders: pathogenesis (including endometrial biology), epidemiology, diagnosis, medical treatment, quality of life, social consequences of the disease, and complementary approaches to treatment including surgical techniques, topic that is covered in cooperation with the corresponding "SIG-S" Reproductive Surgery.

Objectives Overview of the Special Interest Group for Endometriosis & Endometrial Disorders (SIG-EED):

- To maximise public and awareness of endometriosis and endometrial disorders
- To disseminate cutting-edge knowledge on endometrial pathophysiology through the various means offered by MSERM
- To update guidelines for the diagnosis and management of endometriosis and endometrial disorders.
- To bring together experts from different disciplines to address in 360-degree perspective the personal and societal impact of endometriosis and endometrial disorders.
- To promote evidence-based practice in clinic (e.g., MSERM guidelines) and promote the use of protocols and SOPs in research that are harmonised and standardised in coordination with other societies (e.g., ASRM)

The Chairman Endometriosis & Endometrial Disorders SIG-EED board
Dr. Mohammed ZARQAOUI - Morocco

## MSERM - Endoscopic surgery



## **Reproductive Surgery SIG-S:**

Welcome to the section dedicated to the Special Interest Reproductive Surgery. Here you can read more about us, our activities and our recommended reading.

## **Strategic Coverage and fields of interest:**

SIG-S Reproductive Surgery is concerned to promote the usefulness of minimal invasive diagnostic tools in reproductive gynecology as well as to promote the surgical therapy of organic causes (such as malformations, polyps, endometriosis, adenomyosis, fibroids, hydrosalpinges...) leading to infertility, by appropriate "preservation" and/or as first step of treatment of infertile couples in order to reestablish fertility or create the best conditions to improve ART outcome. As Primum non nocere also safety in surgery is on the scope. Knowledge on safe surgical access, correct use of instruments in particular electric ones, prevention of surgery-correlated injuries specially in endoscopic techniques have to be correctly acquired form young surgeons before starting.

## **Objectives Overview of the Reproductive Surgery SIG-RS:**

- The organization of meetings and live surgery sessions involving expert clinicians.
- The organization of training activities with a particular care addressed to residents and young clinicians.
- To cooperate with other endoscopic societies in order to create a network of teaching institutes.

The Chairman Reproductive Surgery SIG-S board Dr. Wassym SENHAJI - Morocco

MSERM - ART



## Safety and Quality in ART "SIG-SQ-ART":

Welcome to the section dedicated to the Special Interest Group Safety and Quality in ART. Here you can read more about us, our activities and our recommended reading.

## **Strategic Coverage and fields of interest:**

The aim of SQART is to educate and support assisted reproduction practitioners in developing and sustaining top quality fertility care. For us, the desired outcome of ART is a healthy baby and a safe treatment that respects the personal integrity of the patients.

SQART is committed to quality of care and safety of patients. We continuously strive to improve care, decrease errors and meet patients' expectations by providing educational programs to support assisted reproduction practitioners in developing and sustaining top quality fertility care. SQART is tasked with improving fertility care worldwide, defining quality healthcare as doing the right thing at the right time in the right way to achieve the best possible outcome.

We network with other Special Interest Groups colleagues to promote the goal of improving medical care, patient satisfaction in all clinical and laboratory ART aspects and the wellbeing of children born after fertility treatments. This is why our steering committee members are a mix of clinicians, embryologists and quality managers. In addition, we participate to the development of MSERM's guidelines which aim to harmonize ART practices. An important part of our work is the interaction with our members, from whom we receive important feedback to help us in setting priorities for our tasks.

In other sections you can find:

- · Guidelines published by MSERM
- Other guideline documents
- Reference list of national guidelines and legal regulations
- Forthcoming activities

The Chairman Safety and Quality in ART "SIG-SQ-ART" board
Dr. Mustafa ZAKARIA - Morocco



## MSERM - Embryology



Welcome to the section dedicated to the Special Interest Group (SIG-E) Embryology

The SIG Embryology is home to the central scientific concepts upon which MSERM is founded. The broad scope of SIG-E Embryology encompasses basic scientific advances through to laboratory practices and policy influence. The areas of interest of SIG-E include oocyte growth and maturation, in vitro models of follicle culture, fertilization, embryo development, embryo metabolism, embryo culture, oocyte and embryo micromanipulation, embryo assessment, oocyte and embryo cryopreservation as well as quality control and optimization of methods in the embryology laboratory. These areas are the primary interest for many MSERM members who are interested in the present and future developments of clinical embryology.

## Objectives Overview of the "SIG-E" Embryology:

- To organize and promote educational activities, and disseminate the latest high quality research related to Clinical Embryology for Reproductive Scientists and Clinical Embryologists
- To promote, support and develop the profession of Clinical Embryology
- To contribute to the development of the MSERM Certification for Embryologists
- To develop and update sources of knowledge for embryologists an (e.g. the online Workshop of Embryology)
- To support young researchers, embryologists, practitioners and all those with an interest in Clinical Embryology in their development and career path

To date, the SIG has focussed on organising Precongress Courses and Workshops in embryology, developing an SIG-E of embryology, producing consensus guidelines for laboratories in clinical embryology and setting up a Certification for Embryologists. These have been valuable contributions to the community of clinical embryologists.

The Chairman SIG-E embryology board Dr. Noureddine LOUANJLI - Morocco

## MSERM - Genetics and reproductive Medicine



Welcome to the section dedicated to the Special Interest Group Reproductive Genetics SIG-G. Here you can read more about us, our activities and our recommended reading.

## Strategic Coverage and fields of interest:

Reproductive Genetics focuses on a range of topics that involve the genetic and epigenetic aspects of both natural and assisted reproduction. It is a field constantly evolving due to the rapid technological advances and it is our focus to constantly explore how technologies can be used to help understand the biology of reproduction. Our interest expands to investigate available genetic tests to identify couples at risk of passing a genetic mutation to their offspring, to study the genetics of infertility, to acquire information about the genetic characteristics of embryos, to improve our understanding on the genetic and epigenetic regulation during development, the genetic and epigenetic impact of assisted reproduction, the use of preimplantation genetic testing (PGT), the ability to detect or correct genetic disease in human gametes and embryos, the current status of prenatal screening and diagnosis.

#### Introduction

Reproductive Genetics deals with the relationship between the genotype and reproduction. This includes studying the transmission of the genetic material and its epigenetic modifications from one generation to the next and also the effects of abnormalities in this genetic material on reproduction. In genetic terms, reproduction of an individual or couple is essential. However, the genetic make-up can hamper reproduction and the insight into how this is brought about has made genetic diagnosis and counseling important

### Relationship between ART and genetics

In order to keep the chromosome number of 46 in the human constant from generation to generation the diploid number has to undergo reduction during male as well as female gametogenesis. However, the resulting gametes do not always contain the correct 23-chromosome haploid set. At fertilization this may result in aneuploid zygotes. Through abnormalities arising at fertilization normal gametes may give rise to chromosomally abnormal embryos. Finally, it is possible that a perfectly normal zygote will become a mosaic embryo through aberrant mitosis during the first cleavage divisions. With the introduction of IVF and other ART techniques it has become possible to monitor cytogenetic abnormalities in gametes, zygotes and early embryos. Human preimplantation embryos used for research purposes often originate within the context of infertility treatment and are not suitable for either transfer to the patient or cryopreservation. They therefore do not reflect the normal situation. However, it has become possible to study normal oocytes from couples with male factor infertility and vice versa. Furthermore, the introduction of preimplantation genetic diagnosis (PGD) has made embryos from couples with a normal fertility available and has allowed more unbiased studies to be carried out. The various types of fluorescent in situ hybridisation now available have led to reliable estimates of aneuploidy rates in individual blastomeres, and the contribution of chromosomal mosaicism to early embryonic death to be determined. Much is expected of the more complete picture of the embryonic chromosomal complement that will be offered by single cell array-Comparative Genomic Hybridisation (array-CGH).

These technical developments in cytogenetics have resulted in a better understanding of how chromosomal abnormalities may explain the natural limits of human fecundity. This has also clear implications for where the limits of success may lie for IVF.Recently, a number of papers have pointed out the relationship between ART and epigenetic defects. Whether these are patient or technique related still needs to be sorted out.

## The genetics of infertility

So far it has been very difficult to clearly establish the genetic and epigenetic consequences of ART. One reason for this is our poor understanding of human gametogenesis, which itself is linked to the absence of a human model. We propose that one way to decipherer human gametogenesis is the genetic approach and more precisely the genetics of infertility. This implies a common research effort between all the actors of the field, clinicians, geneticists, embryologists and researchers. Genetic aspects of human reproduction are studied in the clinical practice as well as at the basic level using experimental animal models. Usually clinical recognition is attempted by the detection of mutations associated with an infertile phenotype of the male or female partner. Mutations can be present at the chromosomal, which are microscopically visible, as well as at the gene level studied using molecular techniques. Presently, the most commonly found genetic defects underlying male infertility are different types of chromosome aberrations and Y chromosome microdeletions in one of the three AZF regions. While female reproductive failure may also be caused by chromosome aberrations, particularly in X chromosome or by chromosome translocations, the most common conditions associated with female infertility seemd to be complex in genetic etiology. The best known molecular genetic defects associated with male infertility are mutations in the CFTR gene and with female infertility mutations in the FMR1, FOXL2 and BMP15 gene. However, these represent rare causes of infertility. From animal model studies more than 3000 genes are expected to cause male and/or female infertility if functionally disrupted. Consequently, genetic networks controlling gametogenesis and the complete reproduction cycle have to be unraveled before it is possible to come to an understanding of the molecular basis of genetic infertility. It is popular to study these networks in the mouse. However, the function in reproduction of the genes studied might be different in the human. Prominent examples are mutations of the FSH receptor (FSHR) gene causing different pathologies in mouse and human and the DAZ gene family on the Y-chromosome which is absent in the mouse but has an essential function in male fertility in the human. So far, no mutation has been described with a non-syndromic phenotype affecting spermatogenesis exclusively, but with the emergence of new genetic technologies, such as microarray analysis and genome sequencing, this field is becoming very active.

Recently, four mutated genes have been identified as responsible for different infertility phenotypes: CATSPER1in asthenozoospermic patients; SPATA16 and DPY19L2 in Globozoospermic patients and AURKC in macrocephalia or enlarged headed spermatozoa. It is clear that in the near future, many more genes will be identified, which will change the way to take care of our patients. Besides FISH, the introduction of molecular techniques at the single cell level as a research tool has contributed tremendously to the study of the genetic content of single cells, be it

oocytes, sperms, zygotes or blastomeres. This has given answers regarding very fundamental questions (for instance with respect to the start of embryonic genome expression and the regulation of genomic imprinting during gametogenesis) as well as applications with respect to PGD.

#### Mission statement

The aims of the SIG-G Reproductive Genetics are:

- A. -Bring together novel insights and research studies on the topics of interest, to stimulate discussion and encourage research;
- B. Increase awareness and understanding of the role of genetics in reproduction;
- C. -Conduct ongoing reviews of any arising issues in genetics (by formulating dedicated workgroups);
- D. -Evaluate the appropriateness of genetic tests and develop standards for the application of genetic testing in reproduction;
- E. -Collect data on current PGT practice (availability, range of referrals, accuracy, reliability, effectiveness, safety), formulate expert recommendation documents to promote best practice, encourage networking between PGT scientists (via the practice of the PGT Consortium).

The Chairman Reproductive Genetics SIG-RG board
Dr. Abdelhafid NATIQ - Morocco

## MSERM - Andrology



Welcome to the site of the Special Interest Group for Andrology (SIGA), one of the larger SIGs in MSERM with more than 200 members.

The specific interests of the SIG Andrology are: male infertility evaluation and diagnosis; sperm function, physiology and biology; sperm freezing and banking, male prognostic biomarkers of success in ART; enhancement of reproductive outcomes acting on the male and/or the sperm; male infertility and the effects of ART to treat them in the offspring.

## Objectives Overview of the "SIG-A" Andrology:

- Promote scientific/clinical Andrology within MSERM and other scientific societies by engaging researchers to exchange knowledge, enabling networking and collaboration to promote joined projects, education, and debate
- Contribute to the improvement of the quality of services provided by andrology laboratories/practitioners, via education, training and consensus guidelines development
- Increase awareness and interest in Andrology by organizing meetings, precongress courses or sessions in the main MSERM meeting on relevant topics
- Impulse the collaboration with other SIGs concerning related topics
- To serve the executive committee and scientific committee of MSERM, defining meetings' sessions, topics and speakers, selecting reviewers, referees and chairmen
- To provide expert advice to the lay public concerning Andrology related topics



## MSERM - Membership

About MSERM membership Being an MSERM member means being part of the world's leading society in reproductive science and medicine. MSERM membership has many benefits: reduced fees on events and journals, the newsletter Focus on Reproduction, access to the e-learning platform, ...

MSERM can bring you up-to date knowledge, networking, funding of your research, continuing education, guidelines, trials, data collections, certification of your skills, high-quality practice, advancement in your career, Membership of the Society is open to all individuals active in the field of reproductive medicine and science including medical doctors, scientists, students and support personnel. Read more about benefits, membership types and fees

## How to get involved

Interested to become an MSERM mentor or (at a later stage) mentee? If you're an MSERM member, you can apply with the following application form. The form collects information that will help us match mentors and mentees based on a number of criteria including mentoring domain of interest, years of expertise or language. Based on the information collected in the forms, we will match mentors and mentees as best we can, this may take some time if a particular subject or topic is requested.

Not an MSERM member yet? Find Our more about MSERM membership.

# MSERM Membership categories There are two different membership categories:

Category	Applies to	Euro 1 year	Euro 3 years
1. Ordinary	Individuals with a medical degree (MD) or higher scientific degree (i.e. PhD, M.Sc.)	60	180

2. Allied professionals and students (*)	nurses / midwives, laboratory technicians / clinical embryologists (BSc level), counsellors / psychologists / social workers,	40	120
	undergraduate, graduate and medical students residents & research trainees		

(\*) If you apply for category 2 membership, you will be requested to send a proof of status. Please make sure you have it close before your start filling the online application form as you will not be able to proceed without it. If you have to send it later to complete your file, you can do so by e-mail. Allied professionals and students need to send a confirmation letter from their Head of Department to prove their status or a copy of their student card showing the expiration date. Embryologists have to register at the ordinary membership fee unless we receive a letter in which their Head of Department confirms they work in a routine environment as a lab technician. You can download and use this template.

If we do not receive a proper proof of status within 2 weeks after the membership application is submitted, your application will be cancelled. Please allow 2 days up to one week for your membership to be (re-)activated. To avoid the process of having to renew your membership every year, MSERM offers its members the possibility of signing up as a member for three years. This means that when you renew your membership, you pay a fee of 180 Euro (3 x 60 Euro instead of 3 x 70 Euro) for ordinary membership or 120 Euro (3 x 40 Euro) for category 2 membership. Your membership will then be activated for three consecutive years.

## **Frequently Asked Questions**

Q: When can I become a member of MSERM?

A: You can become a member of MSERM at all times. Membership always starts at the beginning of the month and lasts for 12 or 36 months.

Q: How can I become a member of MSERM?

A: To become a member of MSERM, please use this membership form.

Q: How can I check my membership status?

A: You can check your membership status here.

Q: Where can I find my membership ID?

A: When logged in, you can find your membership ID on the membership overview page.

Q: What does it cost to be an MSERM member?

A: There are two different membership categories (Ordinary & Allied professionals and students); the corresponding fees can be found here.

Q: Can I apply for allied professional and student membership?

A: The conditions for allied professionals and students can be found here.

Q: What do you mean by "proof of status"?

A: When you apply for allied professional and student membership, we need a proof you indeed have student and/or allied professional status. You can use this form to proof your status. Don't forget to ask your head of department to sign and stamp it.

Q: I want to change my payment method. How can I do this?

A: Go to this page and click on the "pay now" button. You can select "bank transfer" or "credit card".

Q: I cannot renew my membership online. What should I do?

A: Your membership probably expired. Please fill in the application form. If you cannot access this page, please send an e-mail in which you clearly mention your first name, last name, e-mail address and (previous) membership ID.

Q: How do I register a group of people for membership, where can I find the form?

A: Please go to this page and click on "add membership". You can search for a member by membership ID or by entering a combination of name, e-mail address & country. You can also add a completely new member or you can select a member from a dropdown list whose membership you previously sponsored.



# Allier la FSH recombinante à l'activité réelle de la LH

Pergoveris®: La première et la seule association fixe de 150 UI rFSH + 75 UI rLH (ratio 2:1)





## MSERM - Mentorship programme

## Mentoring - Aim of the programme

MSERM has developed a mentoring programme with the aim to support young scientists and/or clinicians working in the field of infertility and looking for support in ways to expand their expertise, by connecting them with mid-career/senior scientists or clinicians to bridge the gap. The hope of the programme is to support and build partnerships between mentors and mentees to provide guidance, experience and opportunities to mentees looking to reach new heights in their field. The programme is open to MSERM members only.

#### Commitment

To facilitate individual 1:1 virtual or in-person (when possible) mentoring sessions between mentees and mentors on a regular basis during a full calendar year, mentors and mentees will be paired as best as possible based on the details provided in the application forms with a focus on the mentees interests. All information on or between the mentee and mentor is confidential information and should not be shared unless explicit consent has been received.

Both parties will be expected to meet a minimum of four times per year. This is not exhausted and if more regular meetings are requested and agreed between both the mentor and their mentee, they are welcome to do so.

## Preparation

There will be no set structure to the meetings, to allow for flexibility and freedom to explore different directions, possibilities, interests and more. It is up to the mentors and their mentees to agree on their agenda for each meeting and topics such as the mentees career goals, research questions, field guidance etc.

Mentors are there to guide and support the mentees, but are not expected to have all the answers or to find them for the mentee – but to help the mentee find these answers themselves, through self-discovery, recommendations.

Mentors and mentees will be introduced to each other via e-mail, it is then up to both parties to be in contact with each other and set up their 1:1 meetings.

**Membership of the Society MSERM** is open to all individuals active in the field of reproductive medicine and science including medical doctors, scientists, students and support personnel (such as nurses, midwives, laboratory technicians, counsellors, psychologists, social workers and MSERM certified clinical embryologists). Since it was founded in 2018, MSERM has seen its membership increase from 200 to more than 4500 members. Overall, the membership is distributed over 50 different countries, with a majority of members in Europe.

### Membership of the Society includes

Membership of the Society offers many benefits, including reduced registration fees. For instance - based on MSERM 2022 rates - a member who participates in the Annual MSERM Worldwide Congress will save 150 Euro on the registration for the main programme.

A member will save at least 150 Euro when registering for an MSERM Campus symposium.

A member subscribing to the Journal of Endometriosis and Reproductive Biology "JERB" will save up to 700 Euro for the printed journal (based on 2022 subscription rate)!

## PREMIUM ACCESS TO MEMBER-ONLY INFORMATION AND EDUCATIONAL MATERIAL

Free access to the e-learning platform of MSERM Free access to the on-demand courses 6 months after the event date Regular alerts on the latest research from Human Reproduction

#### BIG SAVINGS THANKS TO OUR SPECIAL DISCOUNTS

Reduced registration fees for all MSERM activities (2nd Annual MSERM Worldwide Congress) Reduced subscriptions fees to MSERM journals (up to 700 Euro based on 2022 subscription rate).

#### AND MORE ...

**Submit an Apply for a research grant from MSERM** with the Laboratory and IVF Laboratory at the Fertility Center IRIFIV. (For Projects that Come Out and Scientific Research in the Field of Fertility, Sterility and Spermology)

Apply for the MSERM certification exams (compulsory membership or reduction depending on the scheme) Join the mentorship programme

## How to get involved

Interested to become an MSERM mentor or (at a later stage) mentee? If you're an MSERM member, you can apply with the following application form. The form collects information that will help us match mentors and mentees based on a number of criteria including mentoring domain of interest, years of expertise or language. Based on the information collected in the forms, we will match mentors and mentees as best we can, this may take some time if a particular subject or topic is requested.

#### Terms and conditions

I agree to the terms and conditions of membership. The information I have given is accurate and truthful. MSERM can contact me on matters related to MSERM membership. Membership is non-refundable and non-transferable. I will inform MSERM immediately, should my contact details change at any time. I hereby authorize MSERM to initiate electronic funds entries to my credit card. Should any membership deduction not be honored by my bank for any reason, the membership will be invalid and I will be notified. This authorization to deduct funds remains in effect until MSERM has received 30-day written notification from me indicating my desire to cancel my membership.

## Membership categories

Ordinary membership	70 Euro (for one year)	180 Euro (for three years)
Allied professional and student (*)	50 Euro (for one year)	120 Euro (for three years)

(\*) Allied professional and student membership applies to nurses / midwives, laboratory technicians/clinical embryologists (BSc level), counsellors / psychologists / social workers, undergraduate, graduate and medical student's residents and post-doctoral research trainees

### Terms of payment

All membership payments must be submitted in EURO or USD.

Payment can be made by any of the following methods of payment: credit card (Amex, Visa, ECMC) or bank transfer.

Bank transfer payments (in EURO, or USD) have to be made to:

Belfius Bank, 49 Rue Prince Moulay Abdellah Casablanca, Morocco. MSERM:

International Account Number (IBAN): MA64 007 780 0004295000305468 77

**BIC: BCMAMAMC** 

National (Morocco) Account Number: 007 780 80004293000305476 50

Please quote your MSERM member ID or your full name with every bank transfer. Remittance should be free of charge to the recipient.

Members failing to pay their membership fee for one year will be automatically excluded from the MSERM membership records.

MSERM reserves the right to terminate a membership due to a member's committed violation. Such a violation is seen as a behaviour which is harmful to the Society's objectives or a delay in payment contribution for at least a year. The exclusion of a member is decided by the General Assembly of members on recommendation by the Executive Committee.

## **MSERM - Annual Exam**

Accreditation and Certification
Certification Programmes for MSERM Members

MSERM - Gynaecology, Endoscopic surgery & ART



## **International Fellowship in Reproductive Medicine**

MSERM's collaboration with the International Fellowship in Reproductive Medicine and the College of Obstetrics and Gynecology (IFRM-COG) goes back almost 14 years in setting a syllabus for subspecialty training in reproductive medicine.

Now, in a move to enhance this collaboration further and validate individual skills and training in reproductive medicine, MSERM is introducing a subspecialty examination in which successful candidates will become International Fellowship in Reproductive Medicine(IFRM) and qualified to use the title MSERM-COG.



The examination aims to assess the knowledge and skills gained by candidates during their subspecialty training in reproductive medicine and provide formal recognition of them.

#### Disclaimer

While the certification by MSERM® is based on compliance with certain objective criteria at a given point in time, certification cannot - under any circumstance - be a guarantee for successful future treatments. MSERM®, its agents or any of its personnel shall not be liable, in any way, for (in)direct or consequential damages that might occur following the certification (such as - but not limited to - damage to third parties).

The MSERM examination consists of two parts:

- ✓ Part 1 is a knowledge General Exam
- ✓ Part 2 is an objective clinical examination in 2023

Candidates can only sit the Part 2 examination after they have passed Part 1.



# Eligibility criteria

The following eligibility criteria are required:

Candidates should be MSERM members. If they are not a member of MSERM, they will have to pay an extra amount of 100 euros in their registration fee for each part of the Examination (Part 1 and Part 2).

Candidates should be graduates of a Medical School. They should also be Obstetricians and Gynecologists. They must be registered as Obstetricians and Gynecologists in their own country or in the country in which they work.

Candidates from outside the European Union and its associated countries should have previously passed the MSERM-COG examination

Candidates can sit the exams after they have completed at least 2 years of clinical and laboratory training in Reproductive Medicine according to the MSERM subspecialist training programmer, demonstrated by their personal training logbook. It is evident that the subspecialty training starts after they have become Obstetricians and Gynecologists.

Participation in research is mandatory, either as a third year research activity or as first, second or last author of at least two publications in peer review journals.

Training in Reproductive Medicine should have been provided to the candidates in an MSERM/COG recognized training unit or in a unit recognized for higher training in Reproductive Medicine by the countries' authorities.

Candidates of countries in which the subspecialty of Reproductive Medicine has not been recognized can only sit the exams if they provide proof that they have been trained for at least 2 years according to MSERM subspecialist training programme. They should have a dedicated logbook.

# Online home exam policy

#### 1. General

Your compliance with the Online Home Exam Policy is essential to participate in and complete the online exam. MSERM can thus never be held liable – direct nor indirect – for your inability to comply with the Online Home Exam Policy (irrespective of whether this non-compliance is non-intentional or due to your negligence or willful misconduct).

You must accept this Online Home Exam Policy by accepting each article individually via opt-in and this is upon receipt of the invitation letter whereby you will need to confirm its content in order to get access to your installation data. Without your acceptance, you will not be able to receive the installation data and commence with the required installation of the examination software.

## 2. Privacy

The processing of your personal data by MSERM within the context of the online exam shall take place in accordance with the provisions of MSERM's privacy declaration. This privacy declaration includes information about the personal data collected by MSERM, as well as the manner in which MSERM uses and processes this personal data. The privacy declaration can be consulted on the MSERM website and must be read together with the cookie policy.

Furthermore, given the online format of the exam, MSERM appeals on a third party software provider which is specialized in remote examination extension software (AI technology) for online examinations. This implies that said third party software provider shall process your personal data as a processor on behalf of MSERM. In this respect, MSERM – as controller – undertakes to conclude a data processing agreement with the third party software provider, which will contain the necessary guarantees in respect of the confidentiality and privacy of your personal data.

I acknowledge and agree explicitly that MSERM shall process my personal data in accordance with the MSERM privacy declaration (as published on the MSERM-CONGRESS website)

# 3. Preparation for the online exam

MSERM will send you timely an invitation letter to initiate the preparation required to participate in the online exam, including instructions to get access to your installation data.

Furthermore, said invitation letter shall also make reference to the specific installation instructions from the third party software provider.

I acknowledge and agree explicitly that it is my sole responsibility to read both the preparation information as well as the installation instructions carefully and thus be fully prepared before the installation of the examination software

#### 4. Installation of the examination software

Once you have confirmed the content and receipt of the invitation letter as well as have accepted the Online Home Exam Policy, you will get access to

your installation data. You will be asked to enter your last name and your personal booking code.

Please note that you have to complete the installation of the examination software before the deadline expressly stated in the invitation letter or you will not be able to participate in and complete the online exam, without any right of compensation from both MSERM and the online exam software provider.

# It is your sole responsibility to have read and comply fully with the following essential installation instructions (non-exhaustive list):

- ✓ To install the examination software, you should accept the software as a safe programmer;
- ✓ Your computer needs to be updated to one of the following operating systems: Windows 10 11 (64-bit) / Mac 10.14 or later;
- ✓ Your computer has a functioning camera (external cameras are not allowed );
- ✓ You have full user rights to install the examination software on your computer (when using a work computer, check with your IT department);
- ✓ Your computer has a stable internet connection;
- ✓ Any VPN connections should be switched off before the installation of the examination software;
- ✓ Close all other programs potentially running on your computer.

In the event you experience problems with the installation of the examination software, which cannot be addressed by the specific installation instructions from the third party software provider, you should always contact the third party software provider via their support helpdesk and submit a ticket. If you have sent one ticket there is no need to send another one. Any request for support not submitted via the proper communication channel of the third party software provider shall be considered nonexistent and shall thus not be resolved.

As MSERM cannot provide you with support in this matter, you may not contact MSERM. Any request related herewith shall be considered by MSERM as nonexistent

I acknowledge and agree explicitly that:

- It is my sole responsibility to fully comply with the installation instructions; and MSERM can never be held liable for any direct or indirect damage resulting from my inability to (i) fully comply with the installation & preparation instructions and/or (ii) complete the installation of the examination software before the installation deadline (irrespective whether this non-compliance is non-intentional or due to your negligence or wilful misconduct).

# 5. Preparation of the exam room

On the day of the online exam, your desk should be empty, except for:

- ❖ Your computer (any additional screens to the computer are not allowed and should thus be removed);
- ❖ Your mobile phone (which can only be used in accordance with art. 3.9);
- ❖ A clear bottle of water.

Use proper lighting as it is important for our human observers (invigilators) and the examination software (AI technology) to have a clear image of your face in order to execute the enhanced security (in accordance with art. 3.7). Your room should be equipped with proper power outlets. Hence, MSERM nor the online exam software provider can be held liable for your inability to participate in or complete the online exam due to a lack of (electric) power. There is no need to empty the whole room, however no pictures of people's faces should be on the wall behind you as they could be perceived as other persons in the room by the examination software.

I acknowledge and agree explicitly that I have to prepare my room in accordance with the abovementioned instructions as it concerns prerequisites for a fair examination for all.

# 6. Attending the online exam

You have to be present in the virtual exam room at the timing specified in the confirmation email. Attending the online exam shall no longer be possible if you are not present in the virtual room before the set deadline, irrespective of the reason (e.g. lost track of time, the examination software was not timely and/or properly installed (cf. art. 3.4), etc.).

You may leave the virtual room at any time. However, if you leave, you are unable to re-enter the virtual room until the end time for that part of the online exam. It is thus advised to use the facilities before the start of the online exam. I acknowledge and agree explicitly that being present on time in the virtual room is essential to participate in the exam and that I will thus not be entitled to any refund or other compensation from MSERM in the event I am not present on time in the virtual room.

# 7. Enhanced security during the online exam

Due to the online format of the exam on-site invigilation is no longer possible. However, since the security of the exam is of utmost importance for MSERM to maintain the high standards of the MSERM certifications, additional security measures were taken by MSERM.

During the online exam you will remotely be monitored by human observers (invigilators) through your computer. In addition, sophisticated Artificial Intelligence (AI) technology – as installed via the examination software – will be used to assist the invigilators to detect any suspicious patterns. The AI technology will monitor your interaction with the exam software, patterns, and also make periodic recordings. These recordings will be analyzed to detect and identify that it is you, that only you are sitting by the computer, and for other patterns.

## Therefore, it is thus essential that:

- No other people are in the room once you attend the virtual room;
- No pictures of people's faces should be visible on the wall behind you as they
could be perceived as other persons in the room by the examination software;
- You do not have access to any additional computer equipment during the online
exam, other than the computer to participate in the online exam.

# Furthermore, it is strictly forbidden during the online exam to:

- ✓ Access the internet, any technology devices, any information sources (such as but not limited to books, journals, notes, research) or any other methods that improve your results beyond your own un-assisted knowledge.
- ✓ Take any pictures of the questions (including screenshots).
- ✓ Use any camera or video recording equipment;
- ✓ Communicate with any other person, except when you are contacted by the support team of the third party software provider (cf. art. 3.9). Your mobile phone can thus only be used for that specific reason.

# Finally, the data will be stored and analysed after the online exam (cf. art. 3.8).

Any breach of the above security rules is considered grounds for disqualification and can be qualified as fraud. In the event you breach one or more of these security rules, the exam board reserves the right:

- To notify the regulatory body and/or national society of the country/countries you are working in and/or your employer(s);
- II. To prevent you for participating in exams at a future timepoint;
- To disqualify your participation in the online exam and/or consider your exam results as inadmissible;
- To revoke the awarded certification following your participation in the online exam if the breach/fraudulent actions are only detected after the certification has been granted.

Instances of fraud will result in exclusion from MSERM, whereby this decision shall be published on the MSERM-CONGRESS website.

I acknowledge and agree explicitly that compliance with the security rules is a prerequisite to be able to participate in and complete the online exam. Any form of non-compliance/fraud can lead to disqualification and/or the inadmissibility of my exam results and — where appropriate — to the withdrawal of my certification (if already granted by MSERM), without any right of compensation from MSERM.

# 8. Data monitoring, recording and processing

As part of the enhanced security, all data will be sampled and stored, before and during the online exam. This data includes all of your interactions with software (mouse, keyboard, data traffic etc) and periodic images taken by the camera on your computer.

This data will be processed by algorithms including AI to detect patterns.

These data models will detect patterns in your exam response, body language, facial features as well as presence of any unauthorized persons (not you).

You will also be monitored by one or more invigilators. This data gathering is intrusive but serves the purpose of creating a safe environment for participating in the online exam.

Furthermore, all such data will also be recorded and the recorded data will be merged with other data sources to analyses your exam performance and detect any suspicious patterns.

This analysis will be performed during the online exam, and more extensively after the online exam.

Your exam data and periodic images during the online exam will be kept for a maximum of two (2) years for reason of proof.

I acknowledge that such data monitoring, recording and processing by MSERM is essential to safeguard the high standards of the MSERM certification and detect any non-compliance with this Online Exam Home Policy or fraud in general. MSERM shall be entitled to undertake such processing activities based on the contractual basis between myself and MSERM regarding the online exam.

# 9. Support during the online exam

In case you (i) have installed the examination software on time and in accordance with the installation instructions, (ii) have performed all the required preparation and (iii) are in the virtual room on time (cf. art. 3.4 - 3.6) but still encounter issues to enter the virtual room or during the online exam (such as problems with the exam software, compatibility, connectivity or similar), you must contact the helpdesk of the third party software provider by submitting a ticket. Any request for support not submitted via the proper communication channel of the third party software provider shall be considered nonexistent and shall thus not be resolved.

As MSERM cannot provide you with support in this matter, you may not contact MSERM. Any request related herewith shall be considered by MSERM as nonexistent.

To solve the ticket, it might occur that someone of the (technical) support team of the third party software will call you on your mobile phone. The use of your mobile phone during the online exam will be monitored in order to verify whether you use your mobile phone for this purpose only. If you happen to make a phone call during your online exam, which cannot be redirected to a question for (technical) support, the provisions of art. 3.7 regarding fraud are applicable.

However, in case of non-compliance with paragraph 1, point (i), (ii) and/or (iii), you will not be able to participate in and/or complete the online exam. MSERM can never be held liable for any direct or indirect damage (including

the impossibility to participate in and/or complete the online exam) resulting from said non-compliance, irrespective whether this non-compliance is non-intentional or due to your negligence or willful misconduct.

I acknowledge and agree explicitly that any non-compliance with the installation and preparation instructions and/or not being on time in the virtual room (cf. art. 3.4-3.6) shall imply that I will not be able to participate in and/or complete the online exam. In this respect I will not be entitled to any refund from MSERM nor can MSERM be held liable for any direct or indirect damage resulting from said non-compliance, irrespective whether this non-compliance is non-intentional or due to your negligence or willful misconduct.

I explicitly acknowledge having read the Online Home Exam Policy and accepting the Online Exam Home Policy in its entirety.

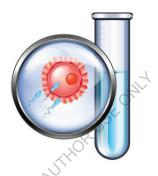


# **MSERM Certification for Clinical Embryologists**









# SENIOR CLINICAL EMBRYOLOGISTS

**Exam Applicants** 

# **MSERM - Senior Clinical Embryology**









EMBRYOLOGIST CAN SELECT THE BEST
GUALITY EMBRYO FOR THE IVF PROCEDURE

THE SUCCESS RATE OF THE IVF TREATMENT

BLASTOCYST TRANSFER FOLLOWS THE

# CLINICAL EMBRYOLOGISTS

**Exam Applicants** 

# **MSERM - Clinical Embryology**

# What to prepare for your application?

- ✓ A copy of your highest obtained diploma in natural science. A copy of your BSc will be asked when uploading your MSc or PhD
- $\checkmark$  An official English translation of your diploma
- ✓ A copy of your academic transcript (list of scores)
- ✓ An official name change document (if necessary)

- ✓ A copy of your passport or ID
- ✓ One or more logbooks signed by applicant and respective supervisor. Only the format available in the application will be accepted. If you have applied before, make sure to update your current logbook
- ✓ Two references, different from your supervisor
- ✓ A resume in format CV.

# All documents should be uploaded in PDF format!

You will need to sign a submission form after completing your application. This form will only become available when your application is ready. Make sure you are applying for the correct level (clinical or senior). It will not be possible to change your exam level after submitting your application. All submitted applications are confirmed by e-mail. You will receive a separate e-mail containing a payment link for the 170 Euro (excl VAT) exam fee. Only paid applications will be reviewed.

If you have any more questions regarding your application, please contact certification@mserm.org

# Why would clinical embryologists do it?

- ✓ To demonstrate basic or advanced knowledge of Clinical Embryology
- ✓ To obtain the most internationally recognised clinical embryology certification
- ✓ To acquire an international MSERM certificate formally recognized by CESMA (Council for European Specialist Medical Assessment)
- ✓ To officially record your Clinical Embryologist status on the list of MSERM certified clinical embryologists
- ✓ To be able to participate in the MSERM Continuing Professional Development (CPD) System
- ✓ To receive an official (produce/print) annual CPD certificate demonstrating educational, professional and scientific activity
- ✓ To officially record your CPD status on the world map of MSERM -certified and CPD-active clinical embryologists
- ✓ To facilitate the opportunity to practice internationally

## Disclaimer

While the certification by MSERM ® is based on compliance with certain objective criteria at a given point in time, certification cannot - under any circumstance - be a guarantee for successful future treatments. MSERM ®, its agents or any of its personnel shall not be liable, in any way, for (in)direct or consequential damages that might occur following the certification (such as but not limited to - damage to third parties).



# **Background**

IVF is now a routine medical subspecialty. In the early 1980s, IVF was successfully established by clinical teams that incorporated collaboration with research scientists skilled in laboratory culture methods. In the absence of any opportunity for professional training in these methods, the laboratory aspects were subsequently undertaken by personnel from a variety of backgrounds, frequently with experience not specialized in laboratory IVF. As a result of this situation, the scientific aspects were learned either on an "apprenticeship" basis or by self-education. Since the mid-1990s, assisted reproduction/IVF has

experienced a revolution in biotechnology such that its success is even more dependent upon updated scientific knowledge and expertise.

Today's clinical embryologists require a foundation to prepare for and adapt to the new technologies, understand the relevance and application of advances in cell biology and genetics and apply good clinical practice. It is essential that those dedicated to achieving high professional standards should be able to obtain certification that demonstrates their level of expertise and knowledge. The establishment of clinical embryology as a professional status and standards on an international basis has thus become imperative. In line with this, MSERM's Executive Committee in 2018 under the guidance of former chairman Arne Sunde set up a group to define a scheme for certification of clinical embryologists. The aim was to certify competence of clinical embryologists working in IVF and to develop a formal recognition for clinical embryologists. This group has been formalised as an MSERM subcommittee (Clinical Embryologists' Certification Committee), working in close collaboration with both the Executive Committee and the SIG-Embryology. The system provides two levels of certification: one for senior level clinical embryologists and one for clinical embryologists.

# **FAQ** for Embryologists

- 1- What should I do if I don't have enough conventional IVF cases to...
- Q: What should I do if I don't have enough conventional IVF cases to meet the logbook requirements?
- A: You must have the 50 cases of conventional IVF as part of the logbook. If you are unable to undertake this in your own clinic, we recommend considering this work in collaboration with another clinic.
- 2- How to count oocytes/embryos cryopreserved by different embryologists?
- Q: If a patient during one cycle has many oocytes/embryos cryopreserved but different embryologists did the cryopreservation in each oocyte/embryo, how can we count them?
- A: There is no limit in the number of oocytes/embryos to be cryopreserved for

a case to be accountable for the logbook, so, it is acceptable to consider that more than one embryologist did one case of oocyte/embryo cryopreservation provided the whole procedure was undertaken.

3- What happens if my previous boss doesn't endorse my logbook? We rely on the professionalism of your previous employer to provide a true account of embryology tasks undertaken at that clinic. However, MSERM cannot get involved in politics between clinics.

4- Are there any changes in the logbook requirements due to the COVID-19 pandemic?

No, the minimum requirements of 30 cases/cycles for each of the 9 procedures remain.

5- Can I also use a USB-plugin webcam for the online exam?

No, you need a laptop with an integrated camera because we need all cameras to be in the exact same position during the exam. There is no time to check/confirm the camera position of each participant individually.

6- Can I apply directly to NUFFIC for validation of my diploma(s)? It is possible to apply individually via IDW - International Credential Evaluation but it costs 148,83EUR per validation. It is recommended to follow the MSERM validation procedure as we have negotiated a reduced fee.

7- Can I use my training experience (with spare material) for my logbook? Training with spare material is not considered as regular experience. Only the treatment procedures with real patients count.

8- Can MD holders practising embryology apply for the senior embryology exam?

Sure, MD is regarded as equivalent to MSc/PhD regarding the academic qualification for becoming a senior clinical embryologist. You must however document that you have the necessary practical experience working as an embryologist, to be allowed to sit the exam.

9-Do embryo transfers (ET) also include the ETs from the category thawing/warming?

For the logbook, an embryo transfer is any event where an embryo(s) is transferred. This includes transfer of thawed/warmed embryos.

10- Do I have to buy all of the books on the reading list?

No, we simply advise you to follow the curriculum. We have a suggested reading list. However, you are welcome to find your own books on the topics. If you have recommended texts, please let us know.

11- How can I attach additional documents to my application when it is under review?

When you type something in "My comments" 2 buttons will appear "More options" and "Save". If you click "More options" you will have the possibility to attach a file.

# 12- How do I validate my degree through NUFFIC?

MSERM will take care of the validation process. The costs for diploma validation are covered by the exam fee. After submitting your application you will be informed by email about the payment procedure. If the exam fee is not received within the given deadline it will be declined and replaced by the next one on the waiting list.

13- How should I count the logbook procedures for zygote and embryo evaluation?

This should be counted per patient and not per embryo.

I have enough years of experience but the system doesn't allow me to submit. For at least 5 of the 9 procedures, you need to have 3 years (for the clinical exam) or 6 years (for the senior exam) hands-on experience in order to submit your application.

14- I'm not sure my application is submitted correctly. What should I do?

If you filled the application form correctly, you will be able to print your submission statement form. You will only be able to officially submit your application after having uploaded this form (signed!) back into the online application form. You will receive an email to confirm your submission and in another email you will receive the link to settle the payment of the exam fee.

If there are still missing items in your application, you will not be able to print your submission statement form but you will see a "validate" button at the bottom. The sections which missing items will be marked with a red line on the right side. By clicking on these red sections, you will be able to complete them.

If your application doesn't contain your signed submission statement form, it will not be considered for review.

15- I'm the lab director. Can I sign as a supervisor for my own logbook? No, you cannot be your own supervisor.

In exceptional circumstances the supervisor can be someone without IVF laboratory experience, provided this person is an MSERM member and can guarantee that you have actually done what is in your logbook.

16- Is the start date of my contract also the start date of my logbook procedures?

No, you need to mention the start date of the 9 procedures separately in the order you started to perform them (without assistance).

17- Should I send any hard copies (logbook, qualifications) to the central office?

No, all required documents should be uploaded into your online application form.

What happens when my laptop is not working on the day of the exam? Unfortunately, after the installation period, the exam software cannot be installed on another device so you will not be able to take the exam.

Make sure to inform us via certification@mserm.org that you will not be participating.

18- What to do with a person who was in IVF for 7 years

then 8 years in human genetics lab and now back in IVF? Does this count for the logbook experience?

Those years in the lab do count as logbook experience if the applicant can provide signed logbooks for at least 3 or 6 years and was working again in the lab within the 2 years prior to the exam.

19- When will I know whether I'm accepted or not to sit for the exam?

All applications for which the exam fee has been received will be reviewed by the Embryology Certification Steering Committee. Applicants will be informed of their decision by end of March.

If the exam fee is not received within the given deadline, the application will be declined and replaced by the next one on the waiting list.

20- Where can I check if I missed any messages about my application? In the section "My received e-mails" you can find an overview of the messages we have sent regarding your application.

You can also use this EXAM link: <a href="https://www.mserm-congress.org/registration/faqs/">https://www.mserm-congress.org/registration/faqs/</a>

# 21- Where can I find the submission statement form?

This form can only be printed when your application has been validated. There is a validation button at the bottom of the application form and by clicking it, all sections which are not completed yet will be marked with a red line on the right side. You can click directly on the section to open it.

22- When all sections are correctly filled, a green line will show on the right side after using the validation button and the button to print the submission statement form will appear. This form needs to be printed and signed before

uploading it back into the application form in order to formally submit your application. After correct submission of the application form the applicant will receive a confirmation by email. An example of the submission statement form can be found below. This example cannot be used to submit. All data will be automatically filled with the applicant's data when clicking the button to print the submission statement form. Please make sure your browser is not blocking pop-ups in order to generate/print the submission statement form.

#### 23- Who can be listed as a reference?

Is it better that they are clinicians than embryologists?

In principle a reference can be either, provided that they can testify that the candidate has a relevant and sufficient practical experience. However, they should preferably be MSERM members/MSERM certified embryologists. References should be different from logbook supervisors.

# 24- Who will evaluate the applications?

The certification process will be managed by the MSERM Embryology Certification Steering Committee.

# Info for exam applicants

Information for exam applicants
Applications for the 2022 certification exam.
The exam will take place online on Saturday 27 November
2022. Accepted applicants will receive further instructions via
the platform.

If you have any questions, please contact us by e-mail.

Curriculum

Applicants will be expected to have a good knowledge of the following aspects of clinical embryology.

# Curriculum

Applicants will be expected to have a good knowledge of the following aspects of clinical embryology.

#### 1. Basic Cell Biology

- 1.1 The cell
- ✓ Internal organisation
- ✓ Cell cycle control, checkpoints
- ✓ Mitosis and meiosis
- ✓ Reproductive cells: spermatozoa and oocytes

#### 1.2 Cell-cell interaction

- ✓ Membrane receptors: function, type, regulation
- ✓ Signalling
- ✓ Junctions

#### 1.3 Basic genetics of the cell

- ✓ DNA chromatin and chromosomes
- ✓ Concept of a gene
- ✓ Mutations
- ✓ Epigenetics

#### 1.4 Basic gene regulation

- ✓ Translation
- ✓ Transcription
- ✓ Expression✓ Imprinting

#### 2. Genetics

- 2.1 Basic genetics principles
- ✓ Genotype and phenotype
- ✓ Basic Mendelian inheritance patterns
- ✓ Monogenic diseases
- Mutations, copy number variation (CNV), de novo mutations
- ✓ Chromosomal abnormalities: numerical, structural
- ✓ Interpretation of an inheritance / family tree / pedigree

#### 2.2 Genetic analysis and diagnosis

- ✓ How and why is it performed
- Diagnostic methods: cytogenetics (e.g. karyotyping, FISH), molecular genetics (e.g. PCR, array CGH, NGS)
- 3. Developmental Biology
- 3.1 Embryonic stem cells
- ✓ Origins, definitions, characteristics
- 3.2 The fetal ovary
- ✓ Factors regulating development
- ✓ Primordial germ cells
- ✓ Cell migration
- √ Time scale (days / week)

#### 3.3 The fetal testis

- ✓ Factors regulating development
  - ✓ Primordial germ cells
  - Cell migration
- √ Time scale (days / week)
- 3.4 Gamete interaction until 1st cleavage
- √ Fertilization
- ✓ Acrosome reaction
- ✓ Sperm- oocyte signaling
- ✓ Sperm decompensation
- ✓ Oocyte activation
- ✓ Meiosis II, pronuclear and spindle formation
- 3.5 Embryo development from first cleavage to implantation
- ✓ Metabolism, cell positions, embryonic axis
- √ Kinetics, timing, regulation
- ✓ Apoptosis

#### 3.6 Implantation

✓ Hatching, adhesion, invasion, endometrium

#### 3.7 Post-implantation embryology

- ✓ Gastrulation
- ✓ Organogenesis
- ✓ Sex differentiation

#### 3.8 Early pregnancy

- ✓ HCGproduction, biochemical and ongoing pregnancy
- ✓ Implantation, ultrasound (sacs, heartbeat)
- ✓ Extra uterine pregnancies
- Spontaneous abortions
- ✓ Embryo factors vs. uterine factors in implantation/implantation failure

#### 4. Female Reproduction

- √ 4.1 Anatomy and function of the female reproductive system
- ✓ Role of accessory systems
- ✓ Function of the organs

#### 4.2 Oogenesis

- ✓ Regulating factors
- Hypothalamus, pituitary, gonad axis
- Endocrine regulation
- Theca & granulosa cells
- Maturation biochemistry and metabolism of the oocyte
- ✓ Oocyte morphology/structure
- ✓ Function of each structure

#### 4.3 The oocyte: markers of competence

- ✓ Nuclear maturity
- ✓ Cytoplasm
- ✓ Polar bodies
- ✓ Zona pellucid ✓ Cumulus cells

#### 4.4 Clinical workout

- ✓ Evaluation of (in)fertility: a etiology, medical/physical aspects, genetic diagnosis, hormonal evaluation, treatment
- ✓ Definitions, primary infertility, secondary infertility
- Serological screening for patients and/or donors
- Effects of treatment
- ✓ Oocyte donation

#### 4.5 Ovarian hyper stimulation

- ✓ Basic principles
- ✓ Types of medication
- ✓ Stimulation regimes (types, rationales)

# 5.2 Spermatogenesis

- ✓ Regulating factors
- Hypothalamus, pituitary, gonad axis
- Endocrine regulation
- ✓ Levden & Sterol cells
- Differentiation and maturation
- Biochemistry and metabolism of the sperm cell
- Sperm morphology/structure
- ✓ Function of each structure

#### 5.3 Diagnosis of male infertility

- ✓ Semen analysis (functional analysis, microscopic analysis)
- ✓ WHO & MSERM guidelines
- ✓ CASA systems

#### 5.4 Clinical workout

- ✓ Evaluation of (in)fertility: a etiology, medical aspects, genetic diagnosis, hormonal evaluation, physical aspects, treatment options, etc.
- ✓ Definitions, primary/secondary infertility
- ✓ Serological screening for patients and/or donors
- ✓ Sperm donation

options, etc.

5. Male Reproduction

- ✓ Complications of treatment
- √ 5.1 Anatomy and function of the male reproductive system
- ✓ Role of accessory systems ✓ Function of the organs

#### 6. ART Laboratory Procedures

- √ 6.1 Strategies for choosing fertilization procedures
- ✓ IUI, IVF or ICSI, criteria
- ✓ IVM
- ✓ PESA, TESA, TESE
- Donor sperm in relation to serological tests (different handling and storage)

#### 6.2 The sperm sample: preparation methods

- ✓ Gradient centrifugation, swim-up, swim-out, etc.
- Advanced diagnostic tests (evaluation of DNA damage, chromatin condensation, etc.)
- ✓ When to use what, why, differences

#### 6.3 ART techniques

- Practicalities for IUI, IVF and ICSI (timing, preparation procedures, materials, etc.)
- ✓ Pick-up, oocyte handling
- ✓ IVF insemination
- ✓ Denudation prior to ICSI
- ✓ ICSI procedure

#### 6.6 **PGT**

- ✓ Timing of biopsy
- ✓ Tubing techniques
- ✓ Zona opening (pros and cons)
- ✓ Different biopsy types, number of cells to evaluate
- ✓ Techniques used for evaluation of the cells biopsied
- ✓ Results and recommendations upon transferring embryos after PGT

#### **6.7 Culture conditions**

- ✓ Media
- ✓ Type of culture systems
- ✓ Requirements for consumables
- ✓ Physiochemical parameters (temperature, pH, osmolality)
- √ Stage specific requirements

#### 6.8 Non-routine methods:

 Examples of non-routine methods, e.g. in vitro maturation, polar body evaluation, assisted hatching, etc.

#### 6.4 Embryo scoring, Day 1 - 6

- ✓ PN scoring
- ✓ Morphology criteria
- ✓ Kinetics, genetics, physiology (e.g. amino acids, oxygen metabolism)
- √ Time-lapse
- Destination of embryos: selection criteria for transfer, cryopreservation, biopsy, etc.

#### 6.5 Embryo transfer

- ✓ Identity check
- ✓ Selection and criteria for number of embryos to be transferred
- Catheter loading and transfer procedure
- ✓ Assisted hatching: pros-cons, evidence

#### 7. Cryopreservation

#### 7.1 Principles of cryopreservation

- ✓ Basic cryobiology
- ✓ Cry protectants, additives
- ✓ Slow freezing
- **✓ Vitrification**
- ✓ Advantages/disadvantages with different methods
- Fertility preservation in oncology cases

#### 7.2 Cryopreservation of sperm

✓ Theory and practice

#### 7.3 Cryopreservation of oocytes

✓ Theory and practice

#### 7.4 Cryopreservation of embryos

✓ Theory and practice

#### 7.5 Cryopreservation of ovarian tissue

√ Theory and practice

#### 7.6 Cryopreservation of testicular tissue

✓ Theory and practice

#### 7.7 Equipment

- ✓ Machines
- ✓ Straws/ampoules
- ✓ Contamination risk from storage medium
- ✓ Minimal safety requirements
- ✓ Security

#### 7.8 The cryopreservation-thawed/warmed embryo treatment cycle

- ✓ Monitoring and timing of the thawing/warming cycle
- ✓ Controlled and natural cycles

#### 8. Laboratory and Quality Management

- √ 8.1 Patient data
- ✓ Identity check
- ✓ Confidentiality
- ✓ Keeping records
- ✓ Safety, storage of data
- ✓ Single European Code

#### 8.2 Type and treatment choices

- ✓ Surgical
- ✓ Hormone stimulation
- ✓ Insemination IVF / ICSI.
- ✓ Use of fresh or frozen gametes
- ✓ Gamete and embryo donation

#### 8.5 Equipment and facilities

- ✓ Calibrations
- ✓ Validation, monitoring, logbooks, maintenance and control
- ✓ Microscopes
- Principals of optical system, calibrations, maintenance and control
- ✓ Technical requirements in a ART lab facility

#### 8.6 Statistical analysis

- ✓ Sample size evaluation
- ✓ Study design
- ✓ Statistical variance
- ✓ Interpretation of results

#### 8.3 Treatment outcome

- ✓ The health of the children
- ✓ Risk factors
- ✓ Maternal factors
- ✓ Paternal factors
- ✓ Multiple pregnancies
- Chromosomal factors
- ✓ Malformations
- ✓ Imprinting

#### 8.4 Quality assurance

- ✓ Identification procedures
- ✓ Laboratory and clinical KPIs
- ✓ Standard operating procedures
- √ Traceability of samples/material
- ✓ Validation procedures
- ✓ Risk analysis
- ✓ Logbooks
- ✓ Introducing new methods

#### 8.7 Legislation

- ✓ MSERM guidelines
- \* Ethical considerations

#### 8.8 Reducing risks/ dealing adverse events/ troubleshooting

- ✓ Contaminated samples
- Processing and storage of contaminated samples with contagious agents
- ✓ Personal protective equipment (PPE)
- ✓ Hygiene and disinfectants used at ART lab
- ✓ Protective measures (alarm, sensors, etc.)
- ✓ Actions upon injury
  - ✓ Risk of mix-up of gametes, loss or damage during handling
  - ✓ Transfer of wrong embryos
- ✓ Breakdown of equipment, back-up strategies

# Example of how to fill in the logbook(s):

Type of Procedure	Start date	Stop date	Total number of clinical cycles performed by yourself since the start of your employment in this clinic	Total number of clinical cycles performed in the clinic (by yourself and others) in 2021 only
Oocyte pick up	August 2014	Still ongoing		124
Semen analysis	June 2010	September 2018		
Semen preparation	June 2010	Still ongoing		121
IVF insemination	June 2014	Still ongoing		
ICSI	August 2015	Still ongoing		220
Zygote and embryo evaluation		Still ongoing		1465
Embryo transfers	June 2014	Still ongoing		
Cryopreservation of oocytes / embryos	February 2014			
Thawing / warming of oocytes / embryos	May 2014			

Minimum number of cases for application as Clinical Embryologist or Senior Clinical Embryologist:

Procedures

1) Oocyte pick up	50
2) Semen analysis	50
3) Semen preparation	50
4) IVF insemination	50
5) ICSI	50
6) Zygote and embryo evaluation	50
7) Embryo transfers	50
8) Cryopreservation of oocytes/embryos	50
9) Thawing/warming of oocytes/embryos	50

All applicants must guarantee that they truly fulfil the required criteria for the "Clinical" (basic level) or "Senior Clinical" (advanced level) Embryologist certification as stated below:



Please note that in order to be accepted for the exam, ALL requirements need to be fulfilled.

## The exam

- 4.1 The exam will be in English.
- 4.2 During the exam, the participant must behave according to currently stated rules (including rules of silence, no communication with other participants, etc.). If fraud/inappropriate behavior is detected during the exam, the participant will be forced to terminate the exam and leave the (virtual) exam room. In such cases, the exam will be considered invalid. In case the infraction is discovered afterwards, the certificate can be revoked. All detected cases of fraud/inappropriate behavior discovered during or after the exam will result in exclusion from future MSERM activities.
- 4.3 Participants will have to accept the "online home exam policy" before starting the exam.
- 4.4 The exam results will be released to the participant. A score of at least 60% is required to pass the exam. The resulting outcome is not negotiable.
- 4.5 Exam questions represent MSERM's intellectual property. Due to the risk of abuse, participants will not be able to see the exam afterwards or have access to the correct answers.

- 4.6 Applicants will be allowed only three consecutive attempts at sitting the exam. If an applicant is accepted to sit the exam, but does not attend the exam and has not informed MSERM about the non-attendance before the exam has started, this will be counted as one of the attempts.
- 4.7 Participants will not be allowed to switch to another exam level on the day of the exam.
- 4.8 In exceptional cases, complaints will be evaluated by the Embryology Certification Steering Committee, and if necessary, the MSERM Executive Committee. The decision of the Executive Committee is final.
- 4.9 If fraud or cheating is suspected MSERM will discuss the possible consequences with its legal advisors

Info for exam applicants



The Clinical Embryology Certification Committee does not organize or endorse any preparatory course for the MSERM Clinical Embryology exam.



# Moroccan Society for Endometriosis and Reproductive Medicine

# MSERM - Research Fellowship Certificate (RFC)

Our Program in Research Fellowship Certificate of the Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) and opportunities in human reproduction and infertility represents one of the most active programs of its kind in the Kingdom of Morocco.

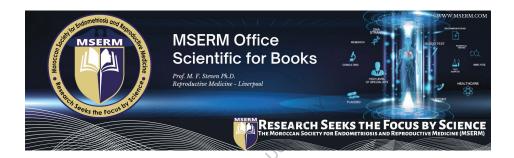
#### Who can apply?

Recent medical graduates, residents, physicians, and scientists interested in conducting cutting-edge basic science or clinical research in reproductive medicine can apply to our program Research Fellowship Certificate of the Moroccan Society for Endometriosis and Reproductive Medicine (MSERM).

## How to apply:

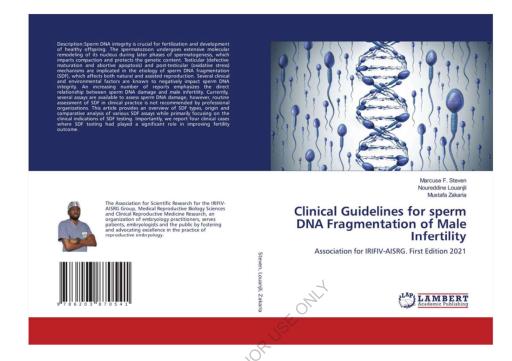
Please click here for our online application and document submission form. <a href="http://www.irifiv-aisrg.com/applicationform/">http://www.irifiv-aisrg.com/applicationform/</a>

- ✓ Reproductive nurse (CCRFRN)
- ✓ Reproductive Endocrinology (CCRFER)
- ✓ Reproductive Biology (CCRFRB)
- ✓ Reproductive Medicine (CCRF-RM)



# MSERM - Books

Clinical Guidelines for sperm DNA Fragmentation of Male Infertility

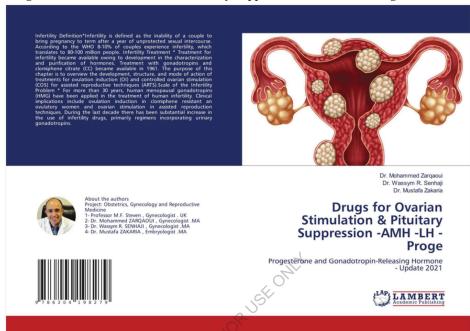


Description: Sperm DNA integrity is crucial for fertilization and development of healthy offspring. The spermatozoon undergoes extensive molecular remodeling of its nucleus during later phases of spermatogenesis, which imparts compaction and protects the genetic content. Testicular (defective maturation and abortive apoptosis) and post-testicular (oxidative stress) mechanisms are implicated in the etiology of sperm DNA fragmentation (SDF), which affects both natural and assisted reproduction. Several clinical and environmental factors are known to negatively impact sperm DNA integrity. An increasing number of reports emphasizes the direct relationship between sperm DNA damage and male infertility. Currently, several assays are available to assess sperm DNA damage, however, routine assessment of SDF in clinical practice is not recommended by professional organizations. This article provides an overview of SDF types, origin and comparative analysis of various SDF assays while primarily focusing on the clinical indications of SDF testing. Importantly, we report four clinical cases where SDF testing had played a significant role in improving fertility outcome.

#### READ MORE

https://www.morebooks.shop/store/gb/book/clinical-guidelines-for-sperm-dna-fragmentation-of-male-infertility/isbn/978-620-3-87054-1

## Drugs for Ovarian Stimulation & Pituitary Suppression -AMH -LH - Proge

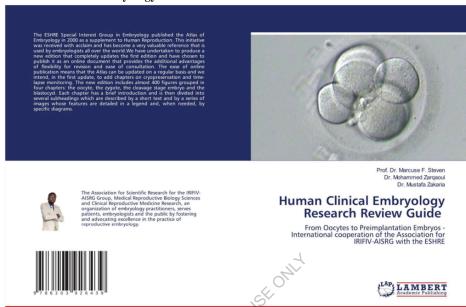


Infertility Definition\*Infertility is defined as the inability of a couple to bring pregnancy to term after a year of unprotected sexual intercourse. According to the WHO 8-10% of couples experience infertility, which translates to 80-100 million people. Infertility Treatment \* Treatment for infertility became available owing to development in the characterization and purification of hormones. Treatment with gonadotropins and clomiphene citrate (CC) became available in 1961. The purpose of this chapter is to overview the development, structure, and mode of action of treatments for ovulation induction (OI) and controlled ovarian stimulation (COS) for assisted reproductive techniques (ARTS). Scale of the Infertility Problem \* For more than 30 years, human menopausal gonadotropins (HMG) have been applied in the treatment of human infertility. Clinical implications include ovulation induction in clomiphene resistant an ovulatory women and ovarian stimulation in assisted reproduction techniques. During the last decade there has been substantial increase in the use of infertility drugs, primarily regimens incorporating urinary gonadotropins.

#### READ MORE

https://www.morebooks.shop/store/gb/book/drugs-for-ovarian-stimulation-pituitary-suppression-amh-lh-proge/isbn/978-620-4-19827-9

#### Human Clinical Embryology Research Review Guide

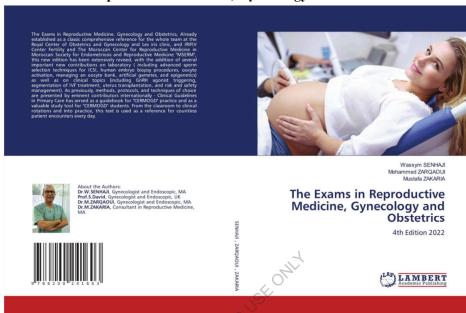


The history of in vitro fertilization (IVF) goes back more than half a century. In 1959 the first birth in a nonhuman mammal resulting from IVF occurred, and in 1978 the world's first baby conceived by IVF was born. As medicine advanced, IVF was transformed from natural research to a stimulated clinical treatment. Reproduction is one of the naturally desired human purposes and is indispensable for the continuation of every society, However, approximately 8% of couples worldwide and 10% to 15% of those in developed countries have difficulty conceiving. In many societies, especially in low and middle-income countries, infertility means not only the inability to conceive but also a failure to achieve parenthood and assure the family lineage Thereby, it exposes its sufferers to stigmatization, social isolation, and loss of status. In addition to the psychological stress and anxiety, infertility is also responsible for a major cost burden for the patients and the health care system. Thus, it represents a common concern to public health professionals and public policymakers. Although assisted reproductive technology has significantly improved the chances of conception.

#### READ MORE

https://www.morebooks.shop/store/gb/book/human-clinical-embryology-research-review-guide/isbn/978-620-3-92643-9

The Exams in Reproductive Medicine, Gynecology and Obstetrics

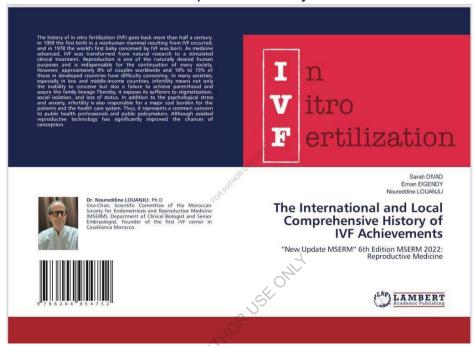


The Exams in Reproductive Medicine, Gynecology and Obstetrics, Already established as a classic comprehensive reference for the whole team at the Royal Center of Obstetrics and Gynecology and Les iris clinic, and IRIFIV Center Fertility and The Moroccan Center for Reproductive Medicine in Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", this new edition has been extensively revised, with the addition of several important new contributions on laboratory (including advanced sperm selection techniques for ICSI, human embryo biopsy procedures, oocyte activation, managing an oocyte bank, artificial gametes, and epigenetics) as well as on clinical topics (including GnRH agonist triggering, segmentation of IVF treatment, uterus transplantation, and risk and safety management). As previously, methods, protocols, and techniques of choice are presented by eminent contributors internationally - Clinical Guidelines in Primary Care has served as a guidebook for "CERMOGD" practice and as a valuable study tool for "CERMOGD" students. From the classroom to clinical rotations and into practice, this text is used as a reference for countless patient encounters every day.

#### READ MORE

https://www.morebooks.shop/store/gb/book/the-exams-in-reproductive-medicine,-gynecology-and-obstetrics/isbn/978-620-0-24160-3

#### The International and Local Comprehensive History of IVF Achievements



The history of in vitro fertilization (IVF) goes back more than half a century. In 1959 the first birth in a nonhuman mammal resulting from IVF occurred, and in 1978 the world's first baby conceived by IVF was born. As medicine advanced, IVF was transformed from natural research to a stimulated clinical treatment. Reproduction is one of the naturally desired human purposes and is indispensable for the continuation of every society, However, approximately 8% of couples worldwide and 10% to 15% of those in developed countries have difficulty conceiving. In many societies, especially in low and middle-income countries, infertility means not only the inability to conceive but also a failure to achieve parenthood and assure the family lineage Thereby, it exposes its sufferers to stigmatization, social isolation, and loss of status. In addition to the psychological stress and anxiety, infertility is also responsible for a major cost burden for the patients and the health care system. Thus, it represents a common concern to public health professionals and public policymakers. Although assisted reproductive technology has significantly improved the chances of conception.

#### READ MORE

https://www.morebooks.shop/store/gb/book/the-international-and-local-comprehensive-history-of-ivf-achievements/isbn/978-620-4-95475-2

# Cell-free DNA (cfDNA) determination by RT-qPCR a Perspective in PMA





odou Mamoune Mbaye Noureddine Louanjli Abdelaziz Soukri



Academic and research experience: Doctor Researcher at the Scientific Research Centre for Fertility and Infertility - 2015-2021. Doctor in Cellula and Molecular Biology- 2012-2014. Master in Physiology - Cellular and Molecular Biology- 2012 2014. Bachelor in Plant Physiology and Biotechnology Research Field: Molecular Biology, Biotechnology.

2014, bachelor in Hant Physiology and blo Research field: Molecular Biology, Biotechn



Cell-free DNA (cfDNA) and male infertility



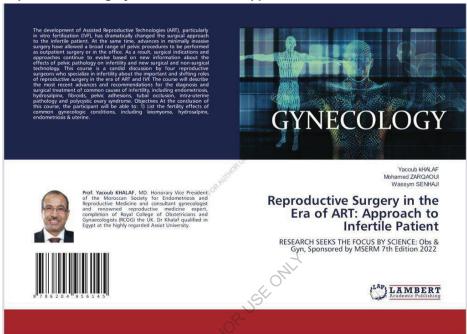
The use of circulating nucleic acids as diagnostic and/or prognostic tools in oncology has been widely documented. Likewise, in gynecology and obstetrics, the development of a non-invasive prenatal diagnostic tool, based on the study of these biomarkers, has confirmed their growing interest in this discipline. Apart from the oncological interest of these free DNA fragments, Assisted Reproduction has discovered an easily measurable molecular tool guiding the management of infertile couples. Several studies have focused on the microRNAs present in the ovarian follicle and their involvement in folliculogenesis. Regarding the assay of cell-free DNA in seminal plasma of men with sperm alterations, there are no solid data yet. The level of cell-free DNA varies depending on the pathophysiological context and reflects the proportion of apoptotic and/or necrotic events occurring in the body. Therefore, its blood test could provide additional help to practitioners in the assessment of ovarian functional status. The cell-free nucleic acids could constitute new biomarkers predictive of oocyte and/or embryonic quality and

#### READ MORE

https://www.morebooks.shop/store/gb/book/cell-free-dna-cfdna-determination-by-rt-qpcr-a-perspective-in-pma/isbn/978-620-3-92385-8

represent a promising avenue in the prevention of implantation failures

## Reproductive Surgery in the Era of ART: Approach to Infertile Patient

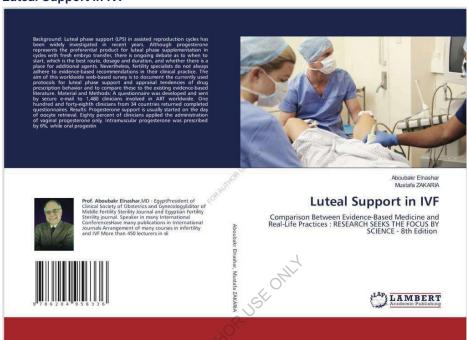


Target Audience Educational activities are developed to meet the needs of surgical gynecologists in practice and in training, as well as, other allied healthcare professionals in the field of gynecology. Accreditation The Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians accredits MSERM. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS As a provider accredited by the Accreditation Council for Continuing Medical Education, MSERM must ensure balance, independence, and objectivity in all CME activities to promote improvements in health care and not proprietary interests of a commercial interest. The provider controls all decisions related to identification of CME needs, determination of educational objectives, selection and presentation of content, selection of all persons and organizations that will be in a position to control the content, selection of educational methods, and evaluation of the activity. Course chairs, planning committee members, presenters, authors, moderators, panel members, and others in a position to control the content of this activity are required to disclose relevant financial relationships with commercial interests related to the subject matter of this educational activity.

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https://www.morebooks.shop/store/gb/book/reproductive-surgery-in-the-era-of-art:-approach-to-infertile-patient/isbn/978-620-4-95614-5

### **Luteal Support in IVF**



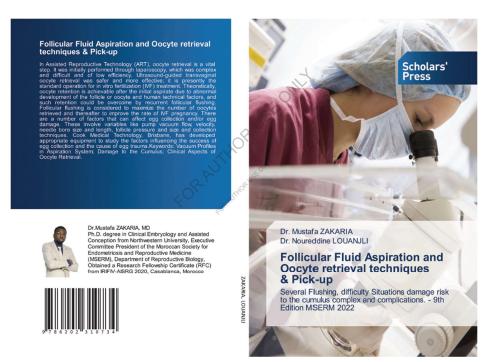
Background: Luteal phase support (LPS) in assisted reproduction cycles has been widely investigated in recent years. Although progesterone represents the preferential product for luteal phase supplementation in cycles with fresh embryo transfer, there is ongoing debate as to when to start, which is the best route, dosage and duration, and whether there is a place for additional agents. Nevertheless, fertility specialists do not always adhere to evidence-based recommendations in their clinical practice. The aim of this worldwide web-based survey is to document the currently used protocols for luteal phase support and appraisal tendencies of drug prescription behavior and to compare these to the existing evidence-based literature. Material and Methods: A questionnaire was developed and sent by secure e-mail to 1,480 clinicians involved in ART worldwide. One hundred and forty-eighth clinicians from 34 countries returned completed questionnaires. Results: Progesterone support is usually started on the day of oocyte retrieval. Eighty percent of clinicians applied the administration of vaginal progesterone only. Intramuscular progesterone was prescribed by 6%, while oral progestin or subcutaneous progesterone were each prescribed by 5% of clinicians, respectively. Progesterone was administered until 8-10 weeks' gestation by 35% and 12 weeks by 52% of respondents. Conclusions: Vaginal administration was the preferred route for luteal phase support. The reported

emerging use of the oral route confirms the expected shift in clinical practice as a result of recent evidence showing a reassuring safety score of oral progestin's. In spite of the lack of evidence supporting the continuation of luteal support until 12 weeks' gestation, this practice was adhered to by more than half of the clinicians surveyed, highlighting the difference between evidence-based medicine and real-life practices

#### READ MORE

https://www.morebooks.shop/store/gb/book/luteal-support-in-ivf/isbn/978-620-4-95633-6

# Follicular Fluid Aspiration and Oocyte retrieval techniques & Pick Up (OPU)



Background: In Assisted Reproductive Technology (ART), oocyte retrieval is a vital step. It was initially performed through laparoscopy, which was complex and difficult and of low efficiency. Ultrasound-guided transvaginal oocyte retrieval was safer and more effective; it is presently the standard operation for in vitro fertilization (IVF) treatment. Theoretically, oocyte retention is achievable after the initial aspirate due to abnormal development of the follicle or oocyte and human technical factors, and such

retention could be overcome by recurrent follicular flushing. Follicular flushing is considered to maximize the number of oocytes retrieved and thereafter to improve the rate of IVF pregnancy. There are a number of factors that can affect egg collection and/or egg damage. These involve variables like pump vacuum flow, velocity, needle bore size and length, follicle pressure and size, and collection techniques. Cook Medical Technology, Brisbane, has developed appropriate equipment to study the factors influencing the success of egg collection and the cause of egg trauma.

#### READ MORE

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## MSERM Awards: International Scientific Research Awards in Reproductive Medicine and Embryology

### Dear Colleague,

Invite your colleagues to join International Scientific Research Awards in Reproductive Medicine and Embryology.

#### **About the Award**

Young Scientist Research awards is the Researchers and Research organizations around the world in the motive of Encouraging and Honoring them for their Significant contributions & Achievements for the Advancement in their field of expertise and International Scientific Research Awards in Endometriosis and Reproductive Medicine and Embryology. Researchers and scholars of all nationalities are eligible to receive young Scientist awards. Nominees are judged on past accomplishments, research excellence, and outstanding academic achievements.

#### What does the award include?

The profile of the award winners of each category be listed on our website and it will be maintained forever.

- **1- Gynecologist Awards :** 500 euro to project on Clinical Embryologist "Sperm Freezing and Cryopreservation of low numbers of sperm"
- **2- Clinical Embryologist Awards :** 700 euro to a project focusing on the theme Gynecologist "How to Protecting and Why does Endometriosis Cause Infertility" .

The certificate, medal, and Memento, and photographs will be a testimony. Further, this recognition and additional proof of hard work and achievements must be globally accessible for Researchers and hence will be available online 24/7.

It's an indicator of success Enhances the reputation improves the benchmark –it's a matter of pride – Motivation – Raises the visibility of the success

MSERM Awards for Scientific Research in Reproductive Medicine 2022 – 2024

- 1- Gynecologist Awards
- 2- Clinical Embryologist Awards

MSERM Research Awards are designed to support scientists and clinicians (investigators) by funding proposals in basic and clinical research in the field of reproductive medicine.

MSERM will provide appropriate and adequate support to excellent scientists and/or clinicians, whatever their nationality, with the only restriction of them being an MSERM member. Projects will be selected for funding based on scientific excellence, originality and feasibility.

The applicant who will submit to us will be 10 research articles, and the titles of articles will be sent every three months, and also after you finish writing an article, you must send it to us in order to publish it in the largest reproductive medicine journals and coordinate the project with the head of the scientific committee / Prof. Eman Elgindy and he will be the main contact person for MSERM.

The MSERM research grants are awarded every other year. In 2022, MSERM awarded a Research Grant of 500 euro to project on — Clinical Embryologist "Sperm Freezing and Cryopreservation of low numbers of sperm" and 700 euro to a project focusing on the theme — Gynecologist "How to Protecting and Why does Endometriosis Cause Infertility" .

The grant awardees are listed in the section "2nd Congress MSERM – Online 2022". The call for proposals for the grant of 2022 will be launched in January 2024.

What to prepare for your application:

A copy of your highest obtained diploma in natural science. A copy of your BSc will be asked when uploading your MSc or PhD,

- 1- An official English translation of your diploma
- 2- A copy of your academic transcript (list of scores)
- 3- An official name change document (if necessary)
- 4- A copy of your passport or ID

One or more logbooks signed by applicant and respective supervisor. Only the format available in the application will be accepted. If you have applied before, make sure to update your current logbook

Two references, different from your supervisor
A resume in CV editor
and upload the PDF
All documents should be uploaded in PDF format!
You will need to sign a submission form after completing your application.
You will receive a separate e-mail containing a payment link for the 250 Euro (excl VAT) exam fee. Only paid applications will be reviewed.

To support researchers gathering much needed knowledge on COVID-19 between August 2022 to April 2024.

## Click Here to Request Registration in the Scientific Research Program

https://docs.google.com/forms/d/e/1FAIpQLSfNqPX9U4W8tT2XGqNE0B1vO3ZykFWeLZHNMI0f2fWHxMS2pA/viewform

The first scientific research awards will be issued on April 2024.
MSERM Research Awards Supervisor
Prof. M.F.STEVEN





## **Members Council MSERM**

Mohammed ZARQAOUI<sup>1</sup>, Yacoub KHALAF<sup>2</sup>, Mustafa ZAKARIA<sup>3\*</sup>, Wassym SENHAJI<sup>4</sup>, Eman El-GENDY<sup>5</sup>, Noureddine LOUANJLI<sup>6</sup>, Sarah DIVAD<sup>7</sup>, Abdelhafid NATIQ<sup>8</sup>, Asmaa NAJI<sup>9</sup>, Yasmine LOUANJLI<sup>10</sup>.

- Department of Endoscopic surgeon & Gynaecologist, President of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", Casablanca, Morocco
- <sup>2</sup>Department of Gynecology & Obstetrics, Vice President of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", Casablanca, Morocco
- <sup>2</sup>Department of Gynaecologist and renowned reproductive medicine expert, specializing in infertility, assisted conception, Honor Vice President of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", United Kingdom
- <sup>3</sup>Department of Reproductive Biology, Senior Clinical Embryology and Assisted Conception, Chairman of the Executive Committee of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", Casablanca, Morocco
- <sup>4</sup>Departement of Endoscopic surgeon and Gynecologist & Fertility expert, Vice Executive Committee of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", Casablanca, Morocco
- <sup>5</sup>Departement of Obstetrics and Gynecology, Chair of Scientific Committee of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", Cairo, Egypt.
- <sup>6</sup>Department of Clinical Biology, Senior Embryologist Vice-Chair of Scientific Committee of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", Casablanca, Morocco.
- Departement of Endoscopic Surgeons & Gynecologist Secretary-General of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM", United Kingdom.
- <sup>8</sup>Departement of Medical Genetics National Institute of Health Rabat, Vice Secretary-General of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM" Casablanca, Morocco.
- Department of Administrative Coordinator of the MSERM, Treasurer of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM" Casablanca, Morocco.

<sup>10</sup>Department of Biology, Vice-Treasurer of the Moroccan Society for Endometriosis and Reproductive Medicine "MSERM" Casablanca, Morocco.

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\*Corresponding

The Moroccan Society for Endometriosis and Reproductive Medicine, "MSERM" Location: 1.Mansour Saadi Street, O - Racine, Casablanca, Morocco. CP 20100

MSERM conferences: Contact the organizing committee: mserm-congress@mserm.org

#### **MSERM**

Welcome to the Moroccan Society for Endometriosis and Reproductive Medicine (MSERM) Initiated for conducting online and Physical events globally. involves planning, Organizing, and executing Scientific events across the globe with people from different scientific backgrounds coming together and participating in these events. Our attendees include academicians, professors, students, and Industrialists who come together to join and share their knowledge. Our organization believes in imparting holistic and sustainable development with the mission to ignite young Turks and prepare them for future challenges.

SCIENTIFIC RESEARCH

Writer, researcher, and designer in research on the history of the International and Local Comprehensive History of IVF Achievements.



Executive Committee President of the Moroccan Society for Endometriosis and Reproductive Medicine (MSERM), Department of Reproductive Biology, Casablanca, Morocco





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