



merrion
FERTILITY CLINIC



ANNUAL REPORT 2023

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Located in Dublin city centre and closely associated with the National Maternity Hospital, our highly experienced Consultants offer individualised care.



3,222

Doctor consultations

923

Egg collections

7,090

Ultrasound scans

471

Surgeries

1,238

Embryos frozen

In 2023, we were delighted to serve an unprecedented number of patients, making it our busiest year yet.

155

Onco-fertility preservations

9,923

Eggs collected

6

Laparoscopic egg collections

1,587

Semen samples

4,461

Blood tests

41%

Live birth rate

956

Embryo transfers

79

IUIs

50%

Clinical pregnancy rate

68

Number of staff

8

Research papers published

12

Talks/poster presentations given

26

Merrion Fertility Foundation funded cycles

85%

PGT clinical pregnancy success rate

331

Babies born (2022)

It is with immense pride and gratitude that I present to you the Annual Report of Merrion Fertility Clinic for the year 2023.



85%

pregnancy rate achieved with Pre-implantation Genetic Testing (PGT) of embryos

Dear Readers,

It is with immense pride and gratitude that I present to you the Annual Report of Merrion Fertility Clinic for the year 2023. This is our very first Annual Report; for many years, we have had our own section in the Annual Report of the National Maternity Hospital, where we present our key statistics and give an update on our services and research projects carried out during the year.

As we reflect on the milestones achieved and the strides the clinic has made in advancing reproductive medicine, I would like to acknowledge the collective efforts of our dedicated staff, the support from our patients, and the visionary leadership that has guided us on this remarkable journey.

Founded in 1998 by Professor Mary Wingfield, Merrion Fertility Clinic was established with a singular mission: to provide accessible fertility services of the highest standard. From its modest beginnings, the clinic has grown organically, driven by a commitment to patient care rather than profit. As a charity and not-for-profit organisation, our primary focus has always been on medical excellence and achieving the best outcomes for our patients.

Throughout the years, we have remained steadfast in our dedication to advancing reproductive medicine, embracing new technologies and treatments to better serve our patients. In 2023, we celebrated a significant milestone with the launch of Pre-implantation Genetic Testing (PGT) of embryos, a service that holds immense promise in improving IVF success rates and reducing the likelihood of miscarriage and genetic abnormalities. This service has been very successful, with a pregnancy rate of 85% in 2023.

I am delighted to announce that in late 2023, our long-standing advocacy for publicly funded fertility treatment finally bore fruit with the launch on September 25th of assisted reproduction services by the Health Service Executive (HSE), with Merrion Fertility Clinic being chosen by the National Women & Infants Health Programme (NWIHP) as an approved provider for this service. We plan to work with NWIHP in the coming years to expand the criteria for funding eligibility, the services offered and the number of cycles available per patient.

As part of our commitment to making fertility treatment available to all, our sister charity, Merrion Fertility Foundation, contributed €84,750 to 25

different patients for their fertility treatment during the year. The foundation has now adjusted its policies to expand the access criteria to allow patients who would not otherwise be covered by the HSE public funding system.

Since 2020, we have worked with the Irish Cancer Society to provide fertility preservation for adolescent and young adult (AYA) oncology patients. On 29th May, we held a national study day for healthcare professionals involved in care of AYA patients with cancer. The event was attended by clinical and nursing staff from oncology hospitals right across the country. During 2024, we plan to advocate for public funding for this service.

Looking ahead to 2024, we are excited to introduce new fertility treatments that will further support families on their journey to parenthood. The launch of Reciprocal IVF and the introduction of an egg donation service reflect our commitment to inclusivity and innovation in fertility care. Also, we intend to become a leading fertility clinic in the area of male factor infertility by having a Consultant Andrologist provide consultations and by creating a novel pathway for MicroTESE.

This year we are launching our very first Fertility Study Day, scheduled for October 2024. This event, aimed at healthcare professionals, underscores our commitment to knowledge-sharing and continuous learning in the field of reproductive medicine. We believe that by fostering collaboration in the medical community and by exchanging expertise, we can improve outcomes for all patients who may need fertility treatment.

As a further part of our commitment to this area, the Clinic runs a subspecialty European accredited Clinical and Research Fellowship program, providing training at specialist level for obstetrician and gynaecologists and who in addition, complete a postgraduate doctorate degree (MD) through University College Dublin. In 2023, we celebrated Dr Laurentina Schaler as our most recent MD graduate. We were also delighted to welcome Dr Sarah Petch and Dr Niamh Joyce to our research program in July and September 2023, respectively. I am proud to say that we are the only clinic in Ireland providing this level of training in reproductive medicine at Consultant level.

During the year, our research team were busy working on studies covering topics such as the COVID-19 vaccine, endometriosis, low ovarian reserve, and the Assisted Human Reproduction legislation, soon to be introduced in Ireland. We presented our research findings at international conferences; six of our researchers presented at the British Fertility Society (BFS) annual conference in January 2023, with Dr Laurentina Schaler and Dr Sorca O'Brien, both shortlisted for the prestigious BFS Early Career Clinician award. Three of our team also presented their research at the 39th Annual Meeting of ESHRE, held in Copenhagen Denmark in June 2023. I am honoured to lead a clinic that makes such a significant contribution to furthering the knowledge required to improve patient care in fertility medicine.

In conclusion, I would like to express my deepest gratitude to our dedicated team of staff whose commitment to our patients have made all our achievements possible. I also extend my heartfelt thanks to our patients for entrusting us with their care. The overarching vision of Merrion Fertility Clinic is to help our patients create families, and to do this in the least stressful way possible. This is a mission that we are all passionate about, and I very much look forward to what 2024 and beyond will bring.

Dr David Crosby

“

Throughout the years, we have remained steadfast in our dedication to advancing reproductive medicine, embracing new technologies and treatments to better serve our patients.

Our Board of Directors

Our board is made up of Dr David Crosby, our CEO and Clinical Director, Prof Shane Higgins, Master of the National Maternity Hospital, Prof Declan Keane and Dr Orla Sheil, both holding the role of Consultant Obstetrician & Gynaecologist at the National Maternity Hospital, Fiona Duffy, Solicitor & Partner at the law firm Patrick F. O'Reilly & Co. Solicitors, Mary Doherty, owner of Red Dog Creative Agency, and Dr Peter Joyce, a General Practitioner.

Prof Mary Wingfield, who founded the Clinic in 1998 and acted as Clinical Director until June 2022, stepped down from the board in March 2023.

The board meet regularly during the year and are responsible for governance, strategy and oversight of how the Clinic is being managed.

Charitable Objectives

Merrion Fertility Clinic is incorporated as a Company Limited by Guarantee and is a registered charity (Registered Charity Number 20039660).

The principal object for which the Clinic was established is to benefit the community by the promotion of health by providing treatment for persons who require reproductive medicine services and to advance education by conducting research in the field of assisted reproduction.

Throughout this report you will learn more about the work done by our Clinic to benefit the local and global community, including our Clinical Fellowship Programme, a fertility training programme for Consultants with fertility as a specialist area of interest, our research programme, overseen by our Head of Research, Dr Louise Glover PhD, the Childhood Cancer Fertility Project, which we operate in conjunction with the Irish Cancer Society, the advocacy we have carried out for publicly funded fertility treatment and the implementation of legislation to govern the provision of fertility treatment, and our support for our sister charity, Merrion Fertility Foundation.

Senior Leadership Team



Our current Senior Leadership Team (SLT) was formed when Prof Mary Wingfield stepped down as Clinical Director in 2022. It comprises Dr David Crosby, CEO & Clinical Director, Dr Renato Bauman, Medical Director, and Georgina Kearney, Chief Operating Officer. The team meets once a week to discuss and make decisions on any matters arising across the various departments.

The SLT work with the board of directors to create the Clinic strategy and to ensure that this strategy is then embedded in the day-to-day operational planning. They also review patient feedback which is received each year through our annual patient survey and is also received on an ad hoc basis. The aim of the SLT is to create a culture of continuous improvement throughout the Clinic, with a view to making the patient journey as smooth as possible.

Department Managers



Georgina Kearney
Chief Operating Officer



Jennifer Cullinane
Laboratory Manager
& Person Responsible



Anitha Baby
Nursing Manager



Carol Whelan
Patient Services Manager

MEET OUR DOCTORS



Dr David Crosby
CEO & Clinical Director
Expertise: Genetic services



Dr Renato Bauman
Medical Director
Expertise: Surrogacy



Prof Cathy Allen
Consultant Gynaecologist
& Obstetrician
Expertise: Male factor, recurrent miscarriage, genetic services



Dr Fiona Martyn
Consultant Gynaecologist
& Obstetrician
Expertise: Donor sperm & egg services, transgender, surgery



Dr Nita Adnan
Consultant Gynaecologist
& Obstetrician
Expertise: Cryostorage of eggs, sperm & embryos



Dr Maebh Horan
Consultant Gynaecologist
& Obstetrician
Expertise: Fertility preservation for oncology patients



Clinical Fellows



Dr Sarah Petch



Dr Andrew Downey



Dr Niamh Joyce



Quality and patient safety remained at the forefront of Merrion Fertility Clinic's 2023 agenda. This is evidenced by a series of three external inspections that underscored our commitment to excellence.

The year began with a significant milestone: an on-site inspection conducted by the HPRA as part of our PGT application process. Not only was this inspection successful, but it also strengthened our positive rapport with the HPRA, showcasing our dedication to collaboration and surpassing regulatory standards.

In July, CHKS conducted a remote inspection, our first monitoring inspection post-accreditation. The outcome was a great success, with no instances of non-compliance identified. CHKS is a highly prestigious accreditation that

recognises healthcare organisations whose processes and standards meet internationally recognised best practice.

November brought our final quality inspection, which was an on-site audit by SGS, our ISO9001:2015 awarding agency. This audit was also very successful, free from any non-conformance issues, showing our adherence to quality standards and best practices.

Integral to our quality management system were the various internal audits conducted throughout the year.

These audits played a pivotal role in driving continuous improvement across all operational facets, covering critical areas such as health and safety, infection control, patient pathways, traceability, and equipment standards.

Patient safety is central to all aspects of our operations. An initiative aimed at enhancing safety within our theatre department saw the completion of an internal alarm system installation. This proactive measure ensures swift responses to any incidents within the theatre or during the recovery process, further solidifying our commitment to patient wellbeing.

IT Security

IT security is of the utmost importance to the Clinic because of the sensitivity of our patient records. We have invested significantly in additional security systems in recent years.

Merrion Fertility Clinic has excellent IT security in place, with weekly patches to detect and fix vulnerabilities in our devices, a system of firewalls and anti-virus software, regular penetration testing, and a security operations centre monitoring our system to detect and investigate any security threats. We also have daily backups to a secure cloud location and our servers are fully encrypted.

Sustainability

Sustainability and protecting our environment is very important to Merrion Fertility Clinic. We have had an ongoing 'paperless' project for a number of years; our medical records are now 95% digital, meaning that we use very little paper in our practice. We have employed this 'paperless' approach across all systems within the Clinic.

We recycle wherever possible, and all rooms and offices have designated recycle bins. We avoid using disposable cups and all our staff received their own 'forever' branded Merrion Fertility Clinic coffee mug in 2023.

Our clinic is filled with plants, improving the air quality and creating a pleasant environment for our patients. We encourage our staff to either use public transport or a bike to travel to and from work by providing tax saver tickets and the bike to work scheme.

“ Patient safety is central to all aspects of our operations. ”



Jess Quinn, Quality Manager



We are Ireland's only not-for-profit fertility clinic, offering evidence-based care with excellent success rates.

The Clinic was established in 1998 by Prof Mary Wingfield, whose vision was that fertility services should be provided as part of the public health system. As this was not possible at the time, she instead created a private fertility clinic that would be closely associated with the National Maternity Hospital.

Merrion Fertility Clinic started very small and grew organically over the years, with all funding coming directly from patient income. The Clinic was set up as a not-for-profit entity, so that it would never be under pressure to earn profits in order to pay shareholders. The Clinic manages its finances to ensure a surplus of income over expenditure, with funds available to invest in equipment and technology.

Eileen Barrett, our Theatre Nurse Manager, has been with the Clinic since its inception and many staff have been with us for over fifteen years, including Fertility Nurse Caroline Keogh, Lab Manager Jennifer Cullinane, our Head of Patient Experience Orla O'Leary, and Patient Services Manager, Carol Whelan.

For the first few years of operation, only follicle tracking, ovulation induction and intrauterine insemination (IUI) were provided. This was because, in the early days, the Clinic had to request permission to expand its services from the National Maternity Hospital Board of Directors. This board was quite conservative, and it took a lot of persistence on the part of Prof Mary Wingfield to finally persuade them to allow IVF to be offered as part of the Clinic's fertility treatment services.



“Undoubtedly, the biggest achievement has been the thousands of babies born and families created in the 25 years since the Clinic opened its doors.”

Since its inception, eight Consultants have completed this sub-speciality training programme, including three Consultants who currently work with Merrion Fertility Clinic, Dr David Crosby, Dr Fiona Martyn and Dr Maebh Horan.

As new scientific advancements in fertility were made, these were successively implemented within the Clinic. This included advances such as cryopreservation of eggs, sperm and embryos, our donor sperm service, and very recently our genetics service. In 2024, we will launch our Reciprocal IVF and our Donor Egg Program.

In 2009, the Clinic established itself in its current location, as part of the National Maternity Hospital campus. This works very well, as many of our Consultants are employed in both locations.

Undoubtedly, the biggest achievement has been the thousands of babies born and families created in the 25 years since the Clinic opened its doors. Another big achievement has been the establishment of the Clinical Fellow programme. Since its inception, eight Consultants have completed this sub-speciality training programme, including three Consultants who currently work with Merrion Fertility Clinic, Dr David Crosby, Dr Fiona Martyn and Dr Maebh Horan. We are proud to say that we are the only fertility clinic in Ireland providing a fertility training programme for Consultants, with fertility as a specialist area of interest.

Education is immensely important to the Clinic and our staff frequently attend and present at international medical and scientific conferences.

Another huge achievement has been the volume of research studies carried out by the Clinic, under the management of our Head of Research, Dr Louise Glover PhD. This body of research has been featured in many prestigious publications and we frequently present our research findings at the annual conferences of the British Fertility Society and European Society of Human Reproduction & Embryology.

Throughout the years, Prof Mary Wingfield and many of our team have campaigned tirelessly for publicly funded fertility treatment. Thankfully, in September 2023, this finally became a reality. The vision of the Clinic has always been that fertility treatment should be available to everyone who needs it, regardless of their financial situation. To this end, Merrion Fertility Foundation was established in 2012, which has made it possible for many of our patients to have either fully or partially funded fertility treatment.

We are delighted to have celebrated 25 years of Merrion Fertility Clinic in 2023, and we look forward to many more years to come.



Dr Renato Bauman speaks on surrogacy at 7th Congress of the Croatian Society of Clinical Embryologists Opatija in September 2023

“We are proud to say that we are the only fertility clinic in Ireland providing a fertility training programme for Consultants, with fertility as a specialist area of interest.”

OUR CONNECTION WITH THE NATIONAL MATERNITY HOSPITAL



Nurse Patricia Crummey reviewing a scan image

Many of our doctors work in both Merrion Fertility Clinic and the National Maternity Hospital (NMH) at Holles Street. There are many ways that our connection with the hospital benefits our patients and here we list some of the main advantages.

Consultant Anaesthetists

Egg retrieval is very painful and, therefore, sedation is a standard part of our procedure. All of our patients undergoing egg retrieval have sedation carried out by a Consultant Anaesthetist from the National Maternity Hospital medical team. Sedation is also provided by a Consultant Anaesthetist for patients who require surgical sperm retrieval (SSR).

This ensures that our patients have the most comfortable experience possible and that they receive the best quality of care when under sedation.

Fertility Procedures

The NMH provides an important diagnostic and treatment facility for women with a range of gynaecological and fertility problems.

- **Outpatient hysteroscopy (OPH):** this procedure examines the inside of the uterus using a thin telescope-like device, called a hysteroscope. The doctor performing the OPH procedure can then determine whether there are any problems that may need further investigation or treatment.
- **Theatre services:** our doctors also carry out fertility-related surgery including laparoscopy and hysteroscopy to diagnose and treat conditions which may impact on fertility, such as endometriosis, tubal surgery, intrauterine polyps or fibroids.
- Our patients are referred for gynaecological services by our doctors when medically indicated.



Egg retrieval is very painful and, therefore, sedation is a standard part of our procedure. All of our patients undergoing egg retrieval have sedation carried out by a Consultant Anaesthetist from the National Maternity Hospital medical team.

Emergency Situations

The NMH has an emergency room for women who have complications during pregnancy and for the first 6 weeks after birth. Suspected miscarriage and ectopic pregnancies would be common reasons for presenting to the emergency room.

Our patients can liaise with our nursing team if they are experiencing difficulties and, in these situations, we will often refer them to the emergency room. Our doctors and nursing team will always follow up with patients who have had to be referred for emergency hospital care.

Continuity of Care When Pregnant

Our NMH Consultants all provide obstetric and pregnancy care, so it is often the case that our patients can continue with the doctor that they attended for fertility treatment for their obstetric care.

Radiology

From time to time, our patients are referred to the NMH for a Hysterosalpingogram (HSG) to evaluate whether their fallopian tubes are open (patent) or contain a blockage. During the HSG procedure, dye is injected into the uterus and fallopian tubes and an x-ray exam is carried out.

Merrion Fertility Clinic provide HyCoSy scans, which also check the health of fallopian tubes. HyCoSy uses a dye and ultrasound scan images, rather than x-ray. If a patient needs to have their tubal patency evaluated, we will generally refer them for a HyCoSy scan, but there may be cases where the doctor will recommend a HSG.



Merrion Fertility Clinic is Ireland's only fertility clinic with a dedicated research department and full time Head of Research.

Our research strives to advance scientific discovery in the field of subfertility and reproductive medicine to ultimately improve success rates for our patients. Over the years, our Clinic has established strong research links with some of Ireland's primary academic research institutions, including UCD, Trinity College Dublin and the National Institute for Bioprocessing Research and Training (NIBRT). Our research team frequently collaborates with expert scientific groups within UCD Schools of Medicine, Public Health, Veterinary Medicine and Food Science. Merrion Fertility Clinic is also a member of the UCD Perinatal Research Centre, led by Centre Director Professor Fionnuala McAuliffe, that coordinates national and international research in maternal health and its impact on maternal and infant outcomes. We also have longstanding and productive

collaborations with leading academic scientists in TCD School of Biochemistry and Immunology, with a particular focus on immune factors that may impact male and female fertility and embryo implantation in the uterus. Our research studies have been funded by grants from Health Research Board Ireland, Science Foundation Ireland and the National Maternity Hospital Medical Fund.

Merrion Fertility Clinic is also strongly committed to the training and education of doctors in fertility management, sound research methodology and evidence-based medicine. Since 2010, as part of our research and professional development program, MFC has provided out of program training at specialist registrar level for obstetrician and gynaecologist medical trainees, all of whom have also successfully completed postgraduate M.D. degrees

through the School of Medicine at UCD. Merrion Fertility Clinic is accredited by the European Society for Human Reproduction and Embryology (ESHRE) as an ESHRE/EBCOG (European Board and College of Obstetrics and Gynaecology) - affiliated subspecialist training centre in Reproductive Medicine and Surgery. ESHRE recognition of our subspecialty training program has formalised training at a senior level in Reproductive Medicine and allows our trainees to apply to become European Fellows of Reproductive Medicine (EFRM). Eight clinical fellows have now successfully graduated through our MD program, and several have returned to Merrion Fertility Clinic and the National Maternity Hospital as Consultants and fertility specialists.

In 2023 we celebrated Dr Laurentina Schaler, who completed her research studies on the impact of the COVID-19 pandemic on fertility patients, as our most recent MD graduate.

We were also delighted to welcome Dr Sarah Petch and Dr Niamh Joyce to our research program in July and September 2023, respectively. Dr Petch's MD research will focus on ovarian metabolic pathways in women with diminished ovarian reserve, and

she is currently investigating knowledge and attitudes among healthcare providers towards fertility management, with the goal of improving education in fertility for doctors, particularly general practitioners. This is especially timely, given the recent introduction of public HSE funding for assisted reproduction and the requirement for patients to be referred to this service by their GP.

Dr Niamh Joyce joined us as an Aspire Clinical Fellow, and will work with the Reproductive Medicine team at the NMH and collaborators at Children's Health Ireland Crumlin and St James's Hospital to further develop clinical care pathways for fertility preservation in children, adolescent and young adult (CAYA) patients affected by cancer and other disorders.

We were also delighted to welcome former clinical fellow Dr Maebh Horan back to Merrion Fertility Clinic as a Consultant and clinical lead for the CAYA fertility preservation program. While we were sorry to say goodbye to Consultant Dr Lucia Hartigan (and former clinical fellow!), we were excited to see her take on the prestigious role of Fertility Hub Lead for the University of Limerick Hospitals Group. We are so proud of her and wish her every success in her new role.



Congratulations Dr Laurentina Schaler, MD.

“ Merrion Fertility Clinic is also strongly committed to the training and education of doctors in fertility management, sound research methodology and evidence-based medicine. ”

Studies in 2023 spanned a range of research avenues, from the basic biology of infertility to identification of new clinical biomarkers, as well as investigations of patient and healthcare provider knowledge of proposed new AHR legislation in Ireland.

Louise Glover,
Head of
Research



8

Research papers published

COVID-19 vaccine and Fertility

Despite reassuring data and widespread support for COVID-19 vaccination before and after conception among international societies and reproductive medicine specialists, COVID-19 vaccine hesitancy continues to be observed among men of reproductive age in many jurisdictions. This collaborative study on the impact of COVID-19 vaccine on male fertility and inflammation parameters, led by Dr Laurentina Schaler, was carried out with the research team of Dr Vincent Kelly in TCD School of Biochemistry and Immunology. This work was presented at two international conferences (Fertility 2023 and ESHRE 2023) and is currently under review for publication in the Journal of Reproductive Immunology.

Novel biomarkers in endometriosis

Endometriosis is a debilitating gynaecological disorder that leads to painful periods, chronic pelvic pain and in some cases, infertility. While up to two-thirds of women with endometriosis will have no issue conceiving, it is one of the most common causes of reduced fertility in women seeking help to conceive. It currently takes on average 7.5 years to

diagnose endometriosis, and there are no non-invasive diagnostic tools available. The MFC research team collaborated with investigators at the National Institute for Bioprocessing Research and Training (NIBRT) to identify new, non-invasive markers of endometriosis. This work has shown unique changes in glycosylation patterns of serum proteins associated with endometriosis, that may shed light on both disease mechanism and potential future avenues for treatment. The study was published in Scientific Reports in June 2023.

Maternal endometrial environment in infertility

Ongoing research studies with TCD's Comparative Immunology group, led by internationally renowned immunologist Professor Cliona O'Farrelly, have focused on expanding our previous work looking at immune pathways in the uterine lining (endometrium) that may be disturbed in unexplained infertility (Crosby et al, 2021). This includes examining the increasingly recognized role of endometrial bacterial flora in embryo implantation and early pregnancy, and the maternal (host) immune responses to commensal (non-harmful) and pathogenic (harmful) microbes.

Ovarian follicular microenvironment in Premature Low Ovarian Reserve

Premature diminished ovarian reserve is a challenging condition in assisted reproduction. Ovarian reserve declines naturally with age and can be prematurely decreased due to ovarian surgery, endometriosis or gonadotoxic treatments such as chemotherapy. Studies by the Merrion Fertility Clinic research team are focused on identifying inflammatory proteins and gene expression signatures that may shed some light on the underlying biology of premature ovarian insufficiency.

AHR Legislation in Ireland

Ireland is one of only 5 European countries which currently lacks specific Assisted Human Reproduction (AHR) legislation. Draft legislation was introduced in 2017 and revised in 2022, with the hope that it will be enacted soon. In a study led by Dr Sorca O'Brien, we conducted a survey-based study of fertility patients' knowledge and attitudes towards the draft AHR bill. A majority of respondents disagreed with aspects of the draft bill regarding mandatory counselling, the timing of assignment of parentage in surrogacy, the exclusion of international surrogacy and the exclusion of men from posthumous AHR. This study was published in the European Journal of Obstetrics and Gynaecology in May 2023.

MFC Research Represented at International Conferences

In January, Merrion Fertility Clinic were fortunate to have many of our multi-disciplinary team attend and present their research at the 'Fertility 2023' annual conference, jointly hosted by the Association of Reproductive & Clinical Scientists (ARCS), the British Fertility Society (BFS) and the Society for Reproduction and Fertility. The theme of the conference was 'Reproduction in an Ageing World', a reflection not only on the increasing trend of delayed parenthood and reduced fertility rates, but also on the societal, environmental and medical factors that conspire to influence this.

Six MFC researchers were invited to present their studies at the conference; this included Clinical Fellow Dr Laurentina Schaler and former Aspire Clinical Fellow Dr Sorca O'Brien, who were both shortlisted for the prestigious BFS Early

Career Clinician award, and Dr Federica Giangrazi who was shortlisted for the BFS Young Scientist award. Dr Maebh Horan and Dr Rachel Elebert were each chosen to present a poster of their fellowship research projects, while Dr Andrew Downey was selected to give an overview of his work in a rapid-fire oral poster presentation.

Dr Elebert's and Dr Downey's work on embryo development and endometrial assessment, respectively, expands on our understanding of how advances in ART can be best applied to improve livebirth outcomes for our patients. As part of our collaboration with the Irish Cancer Society, the Merrion Fertility Clinic Childhood Cancer Fertility Project has given young people affected by cancer the opportunity to protect their future fertility, the subject of a poster by Dr Maebh Horan.

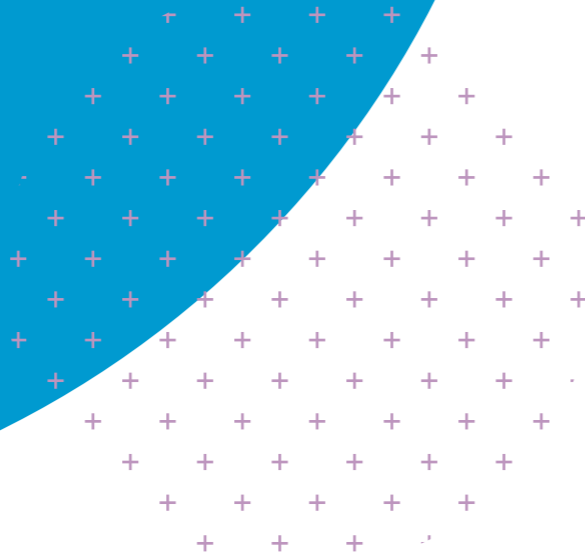
In recognition of her patient advocacy work on fertility funding and regulation, former Clinic Director Professor Mary Wingfield was invited to give a talk on Ireland's long road to assisted human reproduction (AHR) legislation, an important discussion given that an AHR bill is currently being debated in Dáil Eireann.

Three of our Merrion Fertility Clinic team also presented their research at the 39th Annual Meeting of ESHRE, held in Copenhagen Denmark in June 2023. We are so proud of our team for their excellent presentations, for their unwavering dedication to patient-centred research, and for representing MFC on the international research stage.

Dr Maebh Horan,
Dr Renato Bauman,
Dr Laurentina Schaler,
Prof Cathy Allen
and Joyce Leyden
at ESHRE 2023



Cancer treatment-
induced infertility
in young people has
enormous implications
for their long-term
quality of life.



Cancer treatment-induced infertility in young people has enormous implications for their long-term quality of life. Fertility preservation, the freezing of eggs and sperm, offers young patients the hope of establishing a family in the future, and we know that this hope can be transformative in their survivorship journey. The Childhood Cancer Fertility Project, a joint initiative between Merrion Fertility Clinic (MFC) and the Irish Cancer Society (ICS), has established a national referral pathway for Fertility Preservation in Adolescents and Young Adults (AYA). This project funds sperm and egg cryopreservation prior to cancer treatment for AYA patients up to the age of 18 years, as

well as fertility assessment and fertility preservation for survivors of childhood cancer currently aged between 17 and 26 years.

While these services have been and will be provided free of charge to patients through charitable funding from the Irish Cancer Society until December 2024, there is now an acute and urgent need for HSE funding of fertility preservation services in adolescent patients under the age of 18 years. In 2023, Merrion Fertility Clinic research and clinic staff continued to advocate strongly for state funding of this service, and made a number of notable contributions to the development of the AYA fertility preservation program:



The Childhood Cancer Fertility Project, a joint initiative between Merrion Fertility Clinic (MFC) and the Irish Cancer Society (ICS), has established a national referral pathway for Fertility Preservation in Adolescents and Young Adults (AYA).

Dr Sorca O'Brien,
Dr Lucia Hartigan,
Dr Aoife Campbell PhD,
Dr Louise Glover PhD,
Eileen Barrett, Dr Maebh
Horan who all presented
at the CAYA Healthcare
Professional Day



May 2023: Healthcare Professional Study Day, "Fertility preservation services for children, adolescents and young adults in Ireland" (May 29 2023)

On 29th May, we held a formal national study day at the National Maternity Hospital for healthcare professionals involved in care of AYA patients with cancer. The event was attended by clinical and nursing staff from AYA oncology and haematology hospitals all across the country. Topics covered also included AYA reproductive endocrinology and psychosexual issues and support of AYA patients.

We were fortunate enough to have a wonderful presentation from a patient advocate who availed of fertility preservation services through the Childhood Cancer Fertility Project program at MFC. Her testimonial was both emotional and inspirational, and eloquently articulated just how vital this service is for these young patients.

April 2023: Public Webinar 'Fertility considerations in AYA Cancer'

An information webinar for patients and the general public was hosted by the Irish Cancer Society, and featured guest speakers from Merrion Fertility Clinic, Children's Health Ireland (CHI) and from the Irish Cancer Society itself.



CAYA Research Study: A 2-year follow-up study of ovarian reserve in female survivors of childhood cancer

The research team at Merrion Fertility Clinic, in collaboration with CHI Crumlin, published a longitudinal study on ovarian reserve of female survivors of childhood cancer. This study, published in the Irish Medical Journal in June 2023, explored the incidence of premature ovarian insufficiency in young women who had been treated with gonadotoxic chemotherapies or radiotherapy after cancer diagnosis, and examined markers of ovarian reserve over a 2-to-3 year period. This work will help to further guide the clinical care pathway for young survivors of cancer.

ASPIRE Fellowship awarded for CAYA fertility services

In 2023, Merrion Fertility Clinic and the National Maternity Hospital (NMH) were awarded the prestigious HSE Aspire Fellowship to develop and consolidate comprehensive clinical care pathways for fertility preservation in children, adolescent and young adult (CAYA) patients. Dr Niamh Joyce, who joined us as Aspire Fellow in September 2023, will work closely with the Reproductive Medicine team at the NMH and collaborators at Children's Health Ireland to develop this regional service. This will include assessment and management of fertility in CAYA males and females with oncological (pre- and post-cancer), genetic (e.g. Turner's syndrome) and benign disorders (e.g. endometrioma).

Cross-sectional survey-based study examining Patient and Parent/Guardian experiences of the CAYA Fertility Service in MFC

As a team in Merrion Fertility Clinic, we acknowledge that we are meeting young patients recently diagnosed with cancer and their families at a very stressful and emotional time in their lives. Our interactions to date suggest that the patients and families find the fertility preservation consultation and treatment to be a positive experience and indeed, one that allows them to believe in and focus on their future beyond cancer. To assess this in a more formal way and to ensure we create a patient-centred, evidence-based practice, we conducted a cross sectional survey-based study modelled on a questionnaire previously validated for paediatric oncology patients.

Our findings suggest that the fertility preservation experience, while at times overwhelming, is something that families found positive. Responses indicate that this opportunity for fertility preservation is one that they are both happy to have availed of and grateful to the Irish Cancer Society for.

Fertility staff endeavour to provide as much information as possible, in a timely manner, without overwhelming the patients and their families. It is important that they feel in control of their treatment as well as supported through it. Results from this study suggest that the service has been largely successfully in striking this balance.

“
I personally found the service amazing and they made me feel so comfortable as a 15 year old going through cancer. They helped me so much and I have had nothing but positive experiences with the staff.
Patient

“
The staff were lovely and made it such a friendly environment and so easy for me in such a stressful time. I am so grateful for the Irish Cancer Society for funding my treatment otherwise it might not have been an option for me.
Patient

“
Helen was exceptional, can't express how grateful we were for her kindness and compassion, must say all staff we dealt with were amazing, so understanding, supportive and comforting at the start of a very difficult journey.
Parent

“
I felt comfortable and informed throughout the whole process.
Patient

“
In what was a very difficult time for us as a family following (patient's) diagnosis, everyone at Merrion Fertility couldn't have been kinder, particularly Helen (fertility nurse) who we had a lot of dealings with. She was so kind and caring. As hard as it is to think about fertility at 14, and took a little coaxing, Merrion were very supportive and (patient) was happy to have done it for the future and as her mum I'm very happy in spite of everything that the choice to be a mum in the future is there for her.
Parent

“
Without doubt - our son so deserves EVERYTHING life has to offer - he is a fabulous lad and will make a fantastic dad - every child who suffers this bad luck deserves the opportunity to enjoy all life has to offer (including becoming a parent) afterwards
Parent

ADVOCACY IN 2023

Advocacy for Irish Legislation regarding Assisted Human Reproduction

In 2000, a Commission on Assisted Human Reproduction was established by the Irish Government. Prof Mary Wingfield, the founder of Merrion Fertility Clinic, was a member of this commission. Since then, Merrion Fertility Clinic has actively engaged with the Oireachtas in the process of establishing legislation, both as an independent clinic and in association with the Institute of Obstetrics and Gynaecology, the Irish Fertility Society and Irish Clinical Embryologists.

Last year, 2023, saw a continuation of this work, with the establishment of the Assisted Human Reproduction group. The membership of this group includes senior staff from all clinics providing assisted human reproduction (AHR) treatments in Ireland. They produced an influential position document commenting on the draft Bill; the groups input was cited frequently as the bill moved through the committee stage in the Dáil.

Prof Wingfield and Dr Aoife Campbell PhD, Innovation Manager at Merrion Fertility Clinic, met with a number of politicians, both government and opposition, to discuss the document and advocate for individuals attending for AHR treatment in Ireland.

Separately, Dr Campbell appeared alongside Prof Wingfield before the Joint Committee on International Surrogacy to give evidence regarding the current position of surrogacy in Ireland. They advocated strongly for the provision and promotion of domestic surrogacy. The opportunity provided by the platform was taken to reiterate the need for public funding. The recommendations made by the committee were subsequently included in the AHR Bill.

“
Prof Wingfield and Dr Aoife Campbell PhD, Innovation Manager at Merrion Fertility Clinic, met with a number of politicians, both government and opposition, to discuss the document and advocate for individuals attending for AHR treatment in Ireland.



Orla O'Leary, Head of Patient Experience, Stephen Donnelly, Minister for Health and Georgina Kearney, Chief Operating Officer

NISIG Event

In November 2022, some of the Merrion Fertility Clinic team attended an event held by the National Infertility Support & Information Group (NISIG) to highlight how far behind Ireland was at the time in terms of government support for fertility treatment. Minister for Health Stephen Donnelly spoke at the event about the introduction of publicly funded fertility treatment and the Assisted Human Reproduction (AHR) legislation.



SERVICES LAUNCHED IN 2023



PGT

In January 2023, we successfully applied to the HPRA, the regulatory body we are governed by, to add Pre-implantation Genetic Testing (PGT) of embryos to our license. This was granted in March 2023 and the service commenced in June.

PGT is a procedure that involves taking a biopsy, which is a sample of cells, from the trophectoderm of an embryo and sending them to a genetics lab for analysis. Embryos are frozen while awaiting the genetic results and are thawed and transferred to the womb at a later date. The intention behind PGT is to avoid transferring embryos that are genetically abnormal and to only transfer embryos that have good potential of developing into a healthy pregnancy.

There are different types of genetic testing available to patients. **PGT-A**, with "A" standing for Aneuploidy, is the most common type of analysis; it checks if the embryo has the correct number of chromosomes. This option can be considered for patients who have had repeated failed cycles with

IVF treatment or have suffered a number of miscarriages, as it avoids transferring embryos likely to miscarry or fail to implant.

PGT-M, with "M" standing for Monogenic Disorders, and **PGT-SR**, where "SR" stands for Structural Rearrangements, are more bespoke types of genetic testing where couples may know they are carriers for specific defects or inheritable diseases, and the embryos can be tested for these; then only unaffected embryos can be transferred.

By the end of 2023, we had successfully completed 31 PGT cycles for our patients. In 2023, 7 of these patients returned to have an embryo transferred and 6 of these are currently pregnant. These early figures are very promising and are comparable with results we would expect for this service.

After a careful and successful initial launch, the service is now well established, and we have increased our capacity for PGT patients in 2024 to 200 cycles.

EmbryoGlue

IVF services are fraught with 'add-ons' and adjuncts to treatment that are often quite costly and may not have very strong evidence to support their effectiveness or even safety. Evidence based medicine is one of the core values of Merrion Fertility Clinic and we have a very strong research program to support this.

EmbryoGlue is a laboratory product used in IVF labs that is intended to support embryo implantation and assist the embryo in adhering to the womb following an embryo transfer. The European Society for Human Reproduction and Embryology (ESHRE) recently published a document stating their recommendations regarding "Add-Ons" and have recommended the use of EmbryoGlue.

We wanted to explore whether the use of EmbryoGlue would be of benefit to our patients so, in 2023, Dr Andrew Downey, a Clinical Fellow at Merrion Fertility Clinic, commenced a research project to investigate the Impact of Hyaluronic Acid (EmbryoGlue) on assisted reproduction outcomes in women with one or more failed embryo implantation. By the end of 2023, Dr Downey's study was close to concluding and, based on preliminary data and in conjunction with ESHRE's recent statement, the Clinic decided to introduce the use of EmbryoGlue in 2024. We look forward to seeing the final results from Dr Downey's research.

Publicly Funded Patients

In 2023, we were approved by the National Women & Infants Health Programme (NWIHP), a department of the HSE, to provide publicly funded fertility treatments. The Clinic has a long history of advocating for funding for fertility treatment to be provided by the government and thus were delighted to be part of the launch of this service.

We appreciate how expensive fertility treatment can be and the stress that this can cause our patients. It has always been at the heart of our mission that fertility treatment should be available to all who need it, regardless of income, which is why for many years we have supported our sister charity Merrion Fertility Foundation.

The service was launched in late September 2023; we received 53 referrals for treatment in the year and by the end of December, we had provided treatment for 9 of those patients.

While we are happy that publicly funded fertility treatment is now available, we will continue to advocate for the expansion of funding eligibility criteria for patients and the number of cycles funded.



Dr Andrew Downey in the research office

Merrion Fertility Clinic plans to expand our services to help support more diverse ways to create families. New treatments we will introduce in 2024 include Reciprocal IVF and an expansion of our egg donation service.



Aoife Campbell was appointed Innovation Manager in 2023. Her role is to research the latest advancements in the fertility field and the implement new services in the Clinic

Reciprocal IVF

This treatment pathway goes by many names - reciprocal IVF, shared motherhood and co-maternity, to name but a few.

It is a treatment option for couples who are female, those assigned female at birth, and transgender men to participate physically in a pregnancy.

Embryos are created from the eggs of one partner using IVF and donated sperm, and the second partner carries the pregnancy. This arrangement allows one partner to be a genetic parent, and the second partner to be a birth mother.

Male Fertility Care

The nature of fertility treatment means that often, much of the focus is centred on women. This year, Merrion Fertility Clinic aims to develop the level of care we can offer to our male patients. At times, when faced with a complex male fertility issue, we have no choice but to refer externally. To enable us to provide better wraparound care, we plan to have a Consultant Urologist with a sub-speciality in Andrology, who specialises in diagnosing and treating male reproductive system disorders, attend our Clinic. This will allow our patients to remain our patients and should reduce the wait time to access specialist care for those men who need it.

For fertility treatment, eggs are fertilised in the IVF lab. To achieve this, sperm must be collected and brought to the lab. If possible, sperm are collected in a special jar by masturbation. This is not a possibility for all men, and sometimes sperm must be collected directly from the testis. This surgical sperm retrieval procedure is currently performed successfully at Merrion Fertility Clinic. However, a small number of men need a more specialised type of surgical procedure, using an operating microscope, called a microTESE. In 2024, we plan to establish secure access for our patients to this procedure. Unfortunately, it will require our patients to travel to another Dublin hospital, but one of our embryologists will also attend to ensure the sperm are safely transported back to us for storage.

Egg Donation

The current egg donation programme at Merrion Fertility Clinic is limited to known donors, for example a sister who is healthy and willing to donate. This year we will launch a new service, partnering with a European donor egg bank. This will enable those who need donor eggs to select their own donor, prioritising what is important to them in their donor and have the eggs imported to the Clinic. The eggs will be thawed, fertilised, and allowed to grow into blastocysts here in Dublin. Any additional embryos available after transfer will be frozen and stored. Egg donation can help achieve a healthy pregnancy where previous cycles with your own eggs have failed, possibly because you have had a poor response to stimulation or previous gonadotoxic treatment such as chemotherapy.

Fertility Study Day

We are very excited to host our first ever Fertility Study Day in October of 2024. This will be aimed at healthcare professionals from all walks of life who wish to learn more about fertility treatment. Doctors and nurses who attend the study day can also avail of CPD accreditation.

Many of our own staff will speak on the day, including Dr David Crosby on PGT and genetics, Prof Cathy Allen on male factor infertility and Dr Fiona Martyn on laparoscopic egg collection. We will also have a number of guest speakers who will give talks on their various fields of expertise, including Dr Danielle O'Leary on fertility in general practice and dietician Orla Walsh who will speak about fertility and nutrition.

Those interested can attend either in-person or online by video connection. As we believe that sharing knowledge about fertility treatment is extremely important for the medical community and their patients, we intend to make this an annual event going forward.



PATIENT FEEDBACK

Merrion Fertility Clinic remains dedicated to providing exceptional care and support to our patients on their fertility journey.

As part of our commitment to continuous improvement, we actively seek and value feedback from our patients through various channels, ensuring their voices are heard and their concerns addressed promptly. We would like to highlight the initiatives and improvements implemented based on patient feedback and our ongoing efforts to enhance the patient experience.

At Merrion Fertility Clinic, we employ multiple channels to gather feedback from our patients, including our patient portal, phone calls, emails, in-person interactions, and correspondence. We are grateful for both positive and negative feedback, recording all comments on our quality system so that we may proactively identify areas for improvement.

Orla O'Leary,
Head of
Patient
Experience



Initiatives and Improvements in 2023

New Role: Head of Patient Experience

We understand the importance of clear and transparent communication with our patients. Therefore, we established a dedicated role, Head of Patient Experience, to ensure that patient feedback is actively listened to and acted upon.

Patient Charter

We created a Patient Charter which outlines our commitment to our patients and lets them know what they can expect when they undertake fertility treatment with us.

Reducing Wait Times

Patient feedback regarding wait times for appointments and treatment initiation prompted us to introduce weekly efficiency meetings. These meetings involve key staff, including nurses, doctors, and department managers, to monitor and promptly address any issues with wait times.

Additionally, we have assigned a designated nurse to manage the patient treatment diary, ensuring efficient scheduling and offering earlier treatment slots whenever possible.

Here are some quotes from patients about their experience at Merrion Fertility Clinic:

"I found the staff in MFC to be universally lovely. From the initial greeting from the friendly and kind receptionist to all the treating nurses and clinicians, I was always made to feel seen, heard, and respected."

"I can't say enough about how amazing the nurses have been. They have been the only reason I was able to continue on as long as I did, and we were lucky enough to have Dr Bauman, who is, in our opinion, the best person we could have seen and an asset not only to MFC but to the whole fertility sector."

"Nursing staff are excellent, knowledgeable, professional, and manage expectations honestly while still showing empathy. The theatre staff were reassuring and caring. Eileen and Ashling in the procedure rooms are just excellent."

"Throughout my time with MFC, I felt supported and positive, and I feel very lucky to have had the experience I have had. Cannot thank you all enough."

"Our experience with the MFC has been compassionate, caring and reliable. We have always felt safe in Dr Martyn's hands and are so grateful for everything she has done for us. Her humour and straight talk really helped us to manage expectations while staying positive."

"The nursing staff are absolutely incredible. They are the most gifted and kind-hearted people I've ever encountered. I'm grateful to the clinic and the amazingly talented staff that work there. Because of them, I have my two beautiful children."

"Niamh, our embryologist, was exceptional and made that more stressful phase of the IVF process so much easier with clear communication at every stage."

"Dr Downey took the time to listen to our concerns, answer our questions, and tailor a treatment plan that suited our specific needs."

Based on our annual patient feedback survey, the three main reasons why patients choose Merrion Fertility Clinic are as follows:

Reputation: The reputation of Merrion Fertility Clinic emerged as the top reason patients choose our services. This underscores individuals' trust and confidence in our Clinic due to our track record of successful outcomes and patient-centred care.

Recommendation from a GP/Consultant: A significant number of patients reported choosing Merrion Fertility Clinic based on recommendations from their GP or Consultant. This highlights our Clinic's professional endorsement and recognition within the medical community.

Link with a Maternity Hospital: The strong affiliation with the National Maternity Hospital was another influential factor in patients' decision-making process. Our partnership with a reputable maternity hospital assures patients of seamless continuity of care throughout their fertility journey.

We are proud of patients' trust and confidence in Merrion Fertility Clinic, as evidenced by their choice based on our reputation, recommendations, and affiliations. We remain dedicated to delivering exceptional care and to continually exceeding patient expectations.

SUPPORTING OUR PATIENTS' WELLBEING



At Merrion Fertility Clinic, we understand the emotional toll that fertility struggles can take on individuals and couples.

Our unwavering commitment to patient care extends far beyond medical treatment; we are dedicated to providing holistic support that addresses the emotional, social, and nutritional aspects of the fertility journey.

Fertility Counselling

Supporting our patients' wellbeing is a priority for us. By reaching out to one of our fertility counsellors, patients can receive the support they need to navigate the emotions that are experienced on the fertility journey and decisions that may have to be made. Our counsellors are equipped to provide guidance and understanding through the complexities of fertility treatments and ethical dilemmas.

Patient Support Group

As part of our patient-centric approach, we established a Patient Support Group to provide a secure and confidential environment where our patients can come together to share their experiences and offer each other support. By bringing patients together, we aim to create a supportive community where individuals can feel validated, understood, and empowered.

Feedback from patients who have attended our support groups has been very positive:

“

Great to hear shared experiences.

“

This group really helped me to understand that what I'm feeling is normal...

“

The format and group size were perfect.

Educational Initiatives

In 2023, we have prioritised educational initiatives aimed at enhancing patient care and empowerment. One key aspect of our approach has been the organisation of webinars focused on preconception nutrition and counselling. These sessions have served as invaluable resources, equipping our patients with essential knowledge and guidance as they navigate their fertility journey.

We are committed to extending our support beyond the walls of our Clinic. We routinely refer patients to external support services, such as the National Infertility Support & Information Group (NISIG) and support groups in the National Maternity Hospital, providing them with access to additional resources and community networks.

We regularly post on social media, covering a range of topics, from explanations of procedures to tips for optimising fertility, all designed to provide valuable insights and guidance.

Nutrition and Fertility

In 2023, we created a partnership with dietician Orla Walsh. Orla is committed to empowering individuals to optimise their health and wellbeing through diet and nutrition. She has been instrumental in guiding numerous women through fertility challenges, assisting them in implementing dietary and lifestyle modifications that have resulted in successful pregnancies.

The foundation was set up in 2012 to assist those who need fertility treatment but cannot afford it. Since then, it has helped hundreds of patients to avail of the fertility treatment that they needed.



Liz Gallagher is the administrator of the Foundation and liaises with patients on their applications.

25

During 2023, the foundation contributed €84,750 to 25 different patients for their fertility treatment.

Patients of Merrion Fertility Clinic and those who attend the fertility clinics at the National Maternity Hospital can apply to have their treatment funded, and these applications are reviewed quarterly by the committee. There are guidelines on medical and financial criteria that must be met in order for funding to be granted.

Committee members include Dr Renato Bauman, our Medical Director, and Georgina Kearney, our Chief Operating Officer. In December, three long standing committee members stepped down – Prof Mary Wingfield, former Clinical Director of Merrion Fertility Clinic, Noirin Hayes and Loretto O'Reilly, who had all served on the committee since the inception of the charity. New committee members are

Dr Fiona Martyn, a Consultant working with both Merrion Fertility Clinic and the National Maternity Hospital, and Laura Harrington, the Head Medical Social Worker at the National Maternity Clinic.

During 2023, the foundation contributed €84,750 to 25 different patients for their fertility treatment. In light of the availability of publicly funded treatment from September 2023, the foundation expanded its eligibility criteria and services covered. It will now accept applications from same sex couples and single women, as public funding only covers heterosexual couples. The foundation will fund egg freezing, required for medical reasons, and PGT services, when medically indicated, neither of which are provided as publicly funded treatments.

THANK YOU TO OUR AMAZING TEAM

Laboratory Team



We would like to thank our incredibly talented, dedicated, and passionate team of staff, who made everything we achieved in 2023 possible.

Members of our Onboarding and Accounts Team

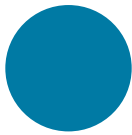
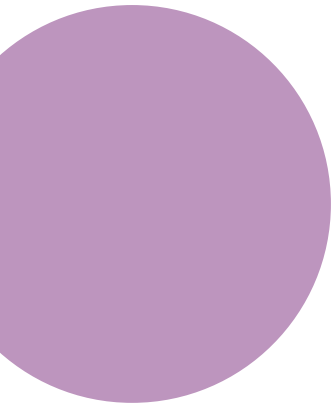


Members of our Theatre Team



Members of our Fertility Nurses & Midwives Team





60 Lower Mount Street
Dublin 2
Ireland
T +353 1 556 7900

Registered Charity Number 20039660

merrionfertility.ie

