

Lady Garden Foundation
Project Update 2018-2020

THE ROYAL MARSDEN HOSPITAL

FOUNDED IN 1851 BY
WILLIAM MARSDEN M.D.





Dear Lady Garden Foundation,

Your hard work and determination to make a positive difference to the lives of women diagnosed with gynaecological cancers is truly inspirational. We are delighted to be sharing this update with you and we hope you enjoy reading about the vital difference that your funding has made, since 2018.

The Lady Garden Foundation has helped The Royal Marsden's Gynaecology Unit open more research trials than any other cancer centre in the UK. The projects that you are supporting are at the forefront of innovation in gynaecological cancer research. You are helping to drive forward progress in personalising treatments based on the molecular profile of each individual cancer. This work will help to provide new treatments and new hope for women diagnosed with these cancers.

In 2019, we were delighted to welcome you into the President's Circle, having committed over £1million towards gynaecological cancer research at The Royal Marsden. Reaching this incredible milestone is a fantastic achievement, thank you to you all for your hard work.

Last year, we were so grateful to have you by our side as the hospital faced the COVID-19 pandemic. The contribution you made to our Emergency Appeal and to Dr Banerjee's research helped the hospital adjust to the challenges it faced, by implementing new initiatives to protect staff and patients.

Although 2020 wasn't the year any of us expected, your awareness raising campaigns have kept gynaecological health at the forefront of women's minds throughout the pandemic. You've encouraged so many women to be more aware of their bodies and to seek help if something doesn't seem right.

On behalf of all of us at The Royal Marsden Cancer Charity and the patients that are benefiting from your support, thank you. We can't wait for your fantastic events to return in style in 2021 and we are looking forward to working alongside you to accelerate even more breakthroughs in gynaecological health.

With kind regards,

Antonia Dalmahoy
Managing Director, The Royal Marsden Cancer Charity

LGF Achievements since 2018



Funded 1 more research fellow



Supported 2 innovative research projects



Enabled the collection of over 450 blood or tissue samples



Joined The President's Circle



Helped The Royal Marsden respond to the COVID-19 pandemic

Innovative gynaecological cancer research

Your generous donations have supported vital research into gynaecological cancers at The Royal Marsden. The projects you have supported aim to develop new, personalised treatment for gynaecological cancer patients based on their genomic profiles. Thank you so much for making these projects happen.

The ATARI trial

This trial, which is part-funded by the LGF, led by Dr Banerjee, hopes to revolutionise treatment options for women with rare, relapsed or advanced gynaecological cancers. Currently only one in ten of these women will see tumour shrinkage with chemotherapy, but laboratory results suggest that one in six women may have a greater chance of responding to a class of drug called ATR inhibitors. The multi-site trial tests an ATR inhibitor, known as Ceralasertib, as a single agent and in combination with the PARP inhibitor drug, Olaparib.

Since our last update, patient recruitment for the ATARI trial has begun. The Royal Marsden is leading the trial and was the first hospital to open for recruitment. The team recruited their first patient on 27th November 2019 and are aiming to recruit a total of 40 patients across UK trial sites. The Royal Marsden team are ahead of schedule for recruitment to the trial and have successfully recruited 22 patients so far. A second trial site opened in Manchester in July 2020, followed by sites in Glasgow, Edinburgh and an additional site in London. A sixth site will be established within the next few months. Sites in France and Canada have also recently been given approval to proceed. The trial is progressing well, and recruitment will continue until June 2022. The team anticipate that results from across all trial sites will be published towards the end of that year. If the results demonstrate that the use of ATR inhibitors leads to tumour shrinkage in some patients, the trial will be expanded, and a further group of patients recruited.

Although some research projects were paused during the first wave of the COVID-19 pandemic, we're pleased to report that the team on the ATARI project, which includes LGF research fellow Dr Julian Wampfler, have been able to continue. Dr Wampfler and the team were able to assess new patients for their suitability for the trial and they were able to monitor those already participating remotely.

LGF funding is supporting the translational research on the biopsies and blood samples taken during the trial. The work, which is being

carried out at the Centre for Molecular Pathology on The Royal Marsden's Sutton site and at the Institute for Cancer Research, has started on the samples that have been collected so far. The team are carrying out whole exome sequencing to examine the genetic makeup of the samples and they will try to identify which genes may be responsible for resistance to the ATR inhibitors used within the trial. This translational work will carry on once the recruitment to the trial has been completed and will continue to be funded by LGF.

This trial is incredibly exciting and has the potential to change standard care for these women. It could also help develop a greater understanding of which patients will benefit from this new treatment option. Thank you to everyone at LGF for so kindly supporting this project.

The OCTOPUS study

The Lady Garden Foundation kindly agreed to support some of the translational research within phase II of the OCTOPUS trial, a national study led by Dr Banerjee. Phase II of the trial involved 140 patients with relapsed ovarian cancer. They were either given chemotherapy with the targeted therapy drug Vistusertib or chemotherapy with a placebo. This phase of the trial was the first of its kind to test whether this type of targeted therapy used alongside chemotherapy could improve outcomes for women with ovarian cancer.

Dr Banerjee presented the phase II trial findings at the European Society for Medical Oncology conference in Barcelona in September 2019. The results found that the treatment which combined chemotherapy and the targeted therapy drug Vistusertib was not superior to chemotherapy as a treatment on its own. However, the translational work which was part funded by the LGF, identified that patients with a certain molecular profile may benefit from the combination of targeted therapy and chemotherapy more than others and this is being analysed further as part of a collaboration

between The Royal Marsden, the Institute of Cancer Research and Imperial College. The results from this phase of the trial will be published in late 2021.

The translational research from phase II of the Octopus trial is helping shape future studies by developing an understanding around which patients respond better to targeted therapy drugs. Further stages within the OCTOPUS study are being planned. These will test other targeted therapy drugs, either with or without chemotherapy, as a possible treatment for women with relapsed ovarian cancer.

“The support of the Lady Garden Foundation is critical to the development of research that could change the way women with gynaecological cancers are treated in the future.”

Dr Susana Banerjee, Consultant Medical Oncologist and Clinical Research Lead at The Royal Marsden

BRCA testing

As detailed in the 2018 report, LGF funding helped support a pilot study which was undertaken to refine the BRCA gene test, to provide accurate and efficient results that could guide patient treatment. The BRCA gene test identifies whether patients carry BRCA 1 or BRCA 2 gene mutations. The gene test result helps patients to get the best management for their cancer. Evidence shows that patients with these genes may benefit from targeted therapies like Olaparib, the PARP inhibitor used in the ATARI study.

This successful pilot study has helped to develop how BRCA tests are carried out on women diagnosed with ovarian cancer and since our last report, The Royal Marsden team worked with AstraZeneca to implement this test as part of routine practice in NHS Trusts across the UK. Tumour samples are taken from patients at their local hospitals and they are sent to be analysed in one of five laboratories across the country which include The Royal Marsden's Centre for Molecular Pathology in Sutton as well as sites in Bristol, Manchester, Aberdeen and Glasgow. The testing is ideally carried out shortly after diagnosis and the results, which help guide treatment plans, are returned within 4 weeks. This method is more effective at identifying

the BRCA gene in women with ovarian cancer because it identifies both types of mutations, those that are inherited and those that are not, from within the tumour itself. This method can identify 50% more women with the BRCA mutation within their cancer than through a blood test alone. This means that more patients are being identified that could benefit from PARP inhibitors and other drugs that target BRCA mutations.

Thank you for supporting this vital pilot study which has helped clinicians across the UK personalise treatment for women with gynaecological cancers.

Obtaining consent and samples

Research fellows funded by LGF have supported a project collecting blood and tissue samples from patients diagnosed with gynaecological cancers to be used in current and future research projects. Patient samples are a precious commodity in cancer research. Without them, it would simply not be possible to carry out meaningful research into the causes and consequences of cancer, or to develop and test new therapies.

Dr Julian Wampfler joined the project team in 2019 and since our last report, the team have focused on increasing the number of tissue and blood samples collected. Dr Wampfler has helped obtain consent from a further 50 patients as well as collecting an additional 450 tissue and blood samples. The team are delighted to have obtained this number of samples as the collecting, processing and preserving of samples is a technical and time-consuming process. Since the project started in 2016, a total of 750 patient consents and 650 samples have been obtained. The samples that have been collected are being carefully stored, to be used when required on current and future research projects undertaken by the gynaecology unit at The Royal Marsden.



The Research Fellows

Since 2015 the LGF has been committed to supporting the next generation of cancer experts by funding research fellows at The Royal Marsden. The fellows you have supported under Dr Banerjee have gained international recognition for their work. By supporting research fellows, you are investing in the development of cancer experts who will continue to treat patients and progress research around the world for decades to come.

Dr Jenny McLachlan

Dr Jenny McLachlan was the first fellow funded by LGF, joining the gynaecological cancer team in 2015. Dr McLachlan's research focused on cervical cancer and a rare form of ovarian cancer called a low-grade serous tumour. Whilst at The Royal Marsden, she contributed to the CORAL trial which was the first trial of androgen receptor targeted therapy in ovarian cancer to be completed. Androgen receptor drugs aim to stop or slow the spread of cancer by inhibiting androgen hormones. The androgen receptor drug that was tested is called Abiraterone and although it is used very successfully to treat men with prostate cancer, it did not have the same effect on women with ovarian cancer.

After her fellowship, Dr McLachlan achieved a position of consultant medical oncologist specialising in gynaecological cancers in her native New Zealand – thereby taking the experience she had learnt at The Royal Marsden back to treat women in her country.

Dr Clare Pate

Joining in 2016, Dr Pate worked on clinical trials for patients with gynaecological cancers, as well as being part of a specific project to understand more about ovarian cancer patients who have the BRCA mutation, particularly those who previously had breast cancer. The project explored whether their breast cancer treatment affected the length of time before the ovarian cancer returns. The project focused on the treatment of over 575 women at The Royal Marsden between 2013 and 2017. Results showed that there was no difference in the length of time that the cancer took to return for women who had previously been treated for breast cancer. These results were presented at the 2019 European Society of Medical Oncology (ESMO) International Congress.

Like Dr McLachlan, after her fellowship at The Royal Marsden, Dr Pate successfully gained a position of consultant medical oncologist in New Zealand.

Dr Cecilia Orbegoso

Dr Orbegoso joined The Royal Marsden as a research fellow in 2016. Dr Orbegoso originally trained as a consultant oncologist in Spain, where she treated patients with a range of gynaecological cancers. At The Royal Marsden, her work included testing for molecular abnormalities called Microsatellite Instability - this can direct treatment such as immunotherapy and identify women with a genetic predisposition to a condition called Lynch syndrome, which increases the risk of women developing gynaecological and colon cancers. Testing for Microsatellite Instability is now routine practice at The Royal Marsden, helping to identify patients who may benefit from immunotherapy. This is partly thanks to the research undertaken by Dr Orbegoso. In November 2018, Dr Orbegoso was invited to present the above work at the ESMO Asian conference in Singapore, which is a very high accolade. Dr Orbegoso won a Merit Award for her work.

Since her fellowship, Dr Orbegoso has taken up a position at AstraZeneca, helping to develop new drugs for gynaecological cancer patients.

Dr Lucy Dumas

Dr Dumas joined in 2015, and then re-joined after maternity leave in 2017. Her research, for a higher degree, focused on improving outcomes for older women with ovarian cancer. For this group of patients there is an urgent need to expand research into improving the treatments, outcomes, and care of women over the age of 65 who have gynaecological cancer. The project focused on predicting outcomes based on toxicity, survivorship, level of support from relatives and friends, as well as patient and carer experiences.

Dr Dumas won the Young Investigator Award at the International Society of Geriatric Oncology conference in Amsterdam in 2018. She was selected to present at the conference and won the award for part of her research which focused on improving outcomes for older women with ovarian cancer.

This work has led to the development of a multi-centre, national study called FAIRO, led by Dr Banerjee, which is currently open at The Royal Marsden. Dr Banerjee is Dr Dumas' supervisor and she has submitted results for publication and her MD viva is later this year.

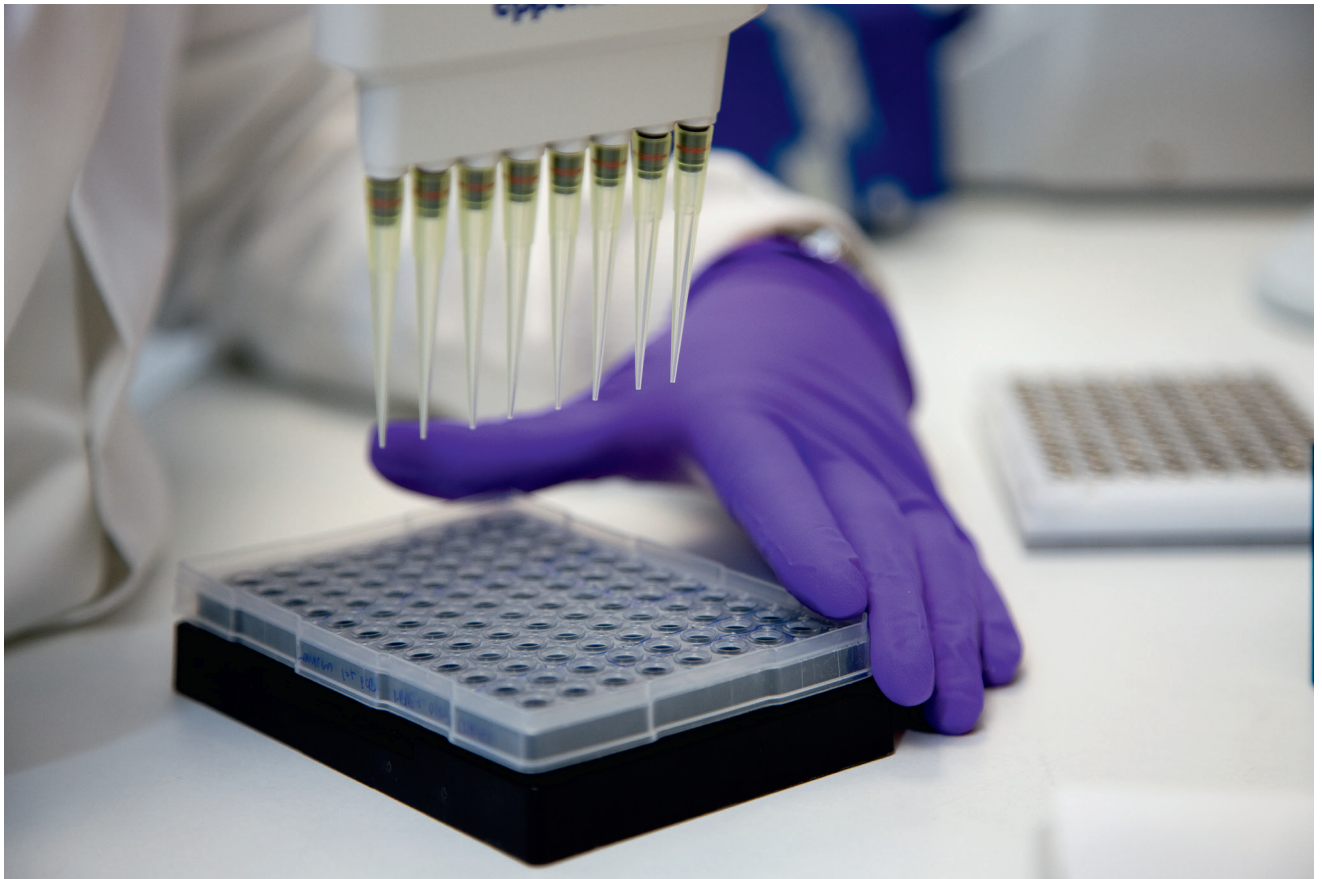
Dr Julian Wampfler

Dr Wampfler joined the team in December 2019 and will finish his fellowship in March 2021. Dr Wampfler played a vital role, as part of the team, ensuring the ATARI trial could continue recruiting patients at The Royal Marsden, despite other research projects being paused during the pandemic. He will be submitting a paper on the treatment and survival of women with stage 4 ovarian cancer and another paper addressing the response to cancer treatment after ovarian cancer patients are treated with PARP inhibitors. PARP inhibitors are designed to prevent cancer cells from repairing themselves after they have been damaged by other treatment. We look forward to sharing the results of Dr Wampfler's work once his paper has been published.

Once his fellowship ends in March, Dr Wampfler will be taking up position as consultant at the University of Bern and will continue gynaecological research collaborations with Dr Banerjee.

“Funding from the LGF has been so important in the development of our understanding of the molecular or genomic make up of gynaecological tumours over the past 7 years. We have been able to test new, personalised treatments which is helping to improve patient outcomes. Thank you to all of the fantastic supporters at LGF for making this happen.”

Dr Susana Banerjee, Consultant Medical Oncologist and Clinical Research Lead at The Royal Marsden



The impact of COVID-19 in oncology – burnout and well-being led by Dr Susana Banerjee

Dr Banerjee's national study, which is funded by LGF, is exploring the effect of COVID-19 on the mental health of clinicians working with cancer patients. Working alongside researchers at Lancaster University, she hopes the findings will help to develop well-being initiatives and shape supportive policies throughout the NHS during COVID-19 and beyond.

The study was launched in June 2020 and a survey was sent to frontline NHS staff members who work with cancer patients across the country to measure burnout, resilience and well-being. Over 1,038 doctors, nurses, pharmacists, administrators and allied health professionals such as dieticians and physiotherapists working in oncology took part in the survey.

The results, which were selected to be presented by Dr Banerjee at the virtual National Cancer Research Institute Showcase in November 2020, found that whilst 66% of staff felt able to do their job without compromising their personal safety, 42% of staff felt they were likely to be 'at risk' of poor wellbeing and 34% indicated signs of burnout. The survey also uncovered the coping strategies staff use, with doctors tending to use planning and humour as strategies, whereas allied health professionals sought out emotional support and information from others. Staff were also asked how valued they felt by their organisation and by the public. Overall, 68% said they felt valued by the public and 66% said they felt valued in the workplace. These results are due to be published in Spring 2021.

Two more surveys are due to be sent out to NHS staff who work with cancer patients in 2021, one in March and another later this year. These aim to gain a deeper understanding of how burnout has affected staff throughout the pandemic. The team will use a wellbeing thermometer which is a framework that has been put together by the Royal College of Physicians to measure the levels of burnout experienced by staff.

A second part of the study involves focused, semi-structured interviews of staff who have been treating cancer patients during the

pandemic. Key staff groups will be interviewed, such as trainees, staff who have been redeployed to work outside of their regular roles, and individuals who have had to self-isolate. The interviews will focus on four main areas:

- how the pandemic influenced decision making and provision of care to patients
- how staff have coped and the support they have received
- how the pandemic has affected interactions with patients
- what staff have found has been useful during the pandemic.

Dr Banerjee hopes that the information collated in this study will inform new supportive policies in the NHS, to help staff overcome new challenges in the future and prevent burnout. For example, knowing that many staff felt at risk of poor wellbeing during the pandemic could influence when interventions are taken to protect staff. Understanding what type of initiatives different staff groups found helpful, could lead to the development of initiatives tailored to specific groups.



Thank you

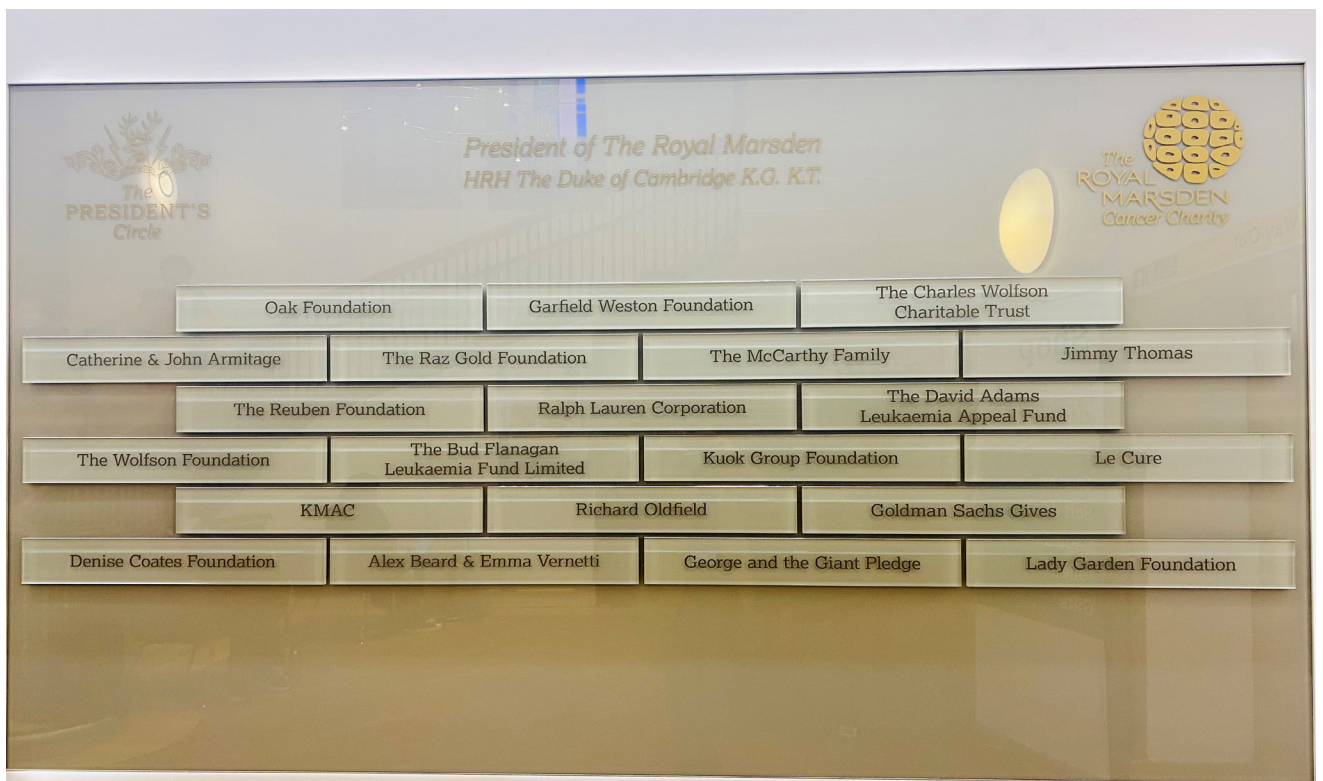
The Lady Garden Foundation is a very special supporter of The Royal Marsden Cancer Charity. We admire your passion, commitment, and dedication as you drive forward innovations in gynaecological cancer treatment at The Royal Marsden.

Since our last report, recruitment for the ATARI trial opened, and is progressing well at sites across the UK. This trial could lead to a new drug becoming available for women with rare, relapsed or advanced gynaecological cancers, who previously may have had limited treatment options left.

Dr Julian Wampfler joined the team as an LGF funded research fellow under the guidance of Dr Banerjee and has been an important part of the team ensuring the ATARI trial could continue to recruit patients throughout the pandemic. He has also developed his own research in ovarian cancer and has been part of the team that has collected patient consent and samples to be used to make breakthroughs on current and future research projects. Without funding for this position, we would not have made as much progress last year, especially with staff resource stretched by the pandemic.

Last year, you helped support The Royal Marsden throughout the COVID-19 pandemic by contributing towards our emergency appeal and towards Dr Banerjee's COVID-NOW study. We were delighted to have your support through this difficult time. You enabled the hospital to adapt to the changing situation posed by the pandemic, protecting patients and staff. Dr Banerjee's project is helping to shape wellbeing initiatives for NHS oncology staff across the country. By gathering vital information on how staff have been affected by the pandemic, there is an opportunity to better protect staff across the UK in the future. You have made all this possible. We hope you have enjoyed reading our update on all the amazing work you have supported. This year will be incredibly exciting, and we look forward to working with you to make more discoveries and to continue making a difference for women with gynaecological cancers.

Thank you to all the Lady Garden Foundation founders, trustees, committee members and supporters for everything you do to improve the lives of women affected by gynaecological cancers.



Lady Garden Foundation became members of The Royal Marsden's President's Circle in 2019.

The Royal Marsden Cancer Charity

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