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Senior Clinical Embryologist



Following a day in the life of a Clinical Embryologist working at the Bristol Centre for Reproductive Medicine.

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Driving into work and negotiating the Bristol traffic is normally when I start mentally running through my day, I am hoping that eggs have fertilised or that embryos have made it to the blastocyst stage and I worry about what I might say to the patients if it hasn't gone well.

Arriving at work, I get changed into scrubs, pull my hair back into a hat and prepare for the day. It begins with checking all of the embryos in the lab. For the patients using our standard incubation system I carefully remove the dish from the incubator and review the development under the microscope, being mindful that I need to get both an accurate picture and get the embryos back into their nice warm incubator as quickly as possible. For patients using the Embryoscope+ I can review the footage all of the weird and wonderful things that the eggs/embryos have been doing over the past 24 hours without disturbing them. Having an Embryoscope+ added to the lab has been really beneficial, because we have seen lots of things that we wouldn't usually see in our standard 30 second daily embryo checks. This type of technology and process is what makes embryology such an exciting scientific field to work in, as new discoveries are being made all the time.

The morning after egg collection (day 1), I work with the embryology team to look at the eggs for any signs of fertilisation. Our next task is to check all of the other embryos which may be anywhere between the day 2 and day 6 stage, grading the quality and development from the 2 cell stage all the way up to blastocysts (advanced embryos with over 50 cells). The team are looking to choose the very best embryo/embryos within the group, using extensive knowledge and clinical experience to decide which have the best chance of success when transferred or frozen.

After reviewing the embryos, the team phone all of the patients to update them on how their group of embryos is developing. I personally find this the most rewarding but hardest part of my job; I want so badly for everyone to do well and when it's good news it's lovely to share, but when things aren't going well, I always share people's disappointment.



A day in the life of an Embryologist...

Throughout the course of the morning the theatre is busy and more eggs are collected. Our consultant team always collect as many eggs as possible from each patient, the embryology team then make sure that the eggs are transferred carefully and safely into culture fluid before putting them into the incubator. At the same time the sperm samples are washed and prepared to get the best possible sperm, ensuring they have the greatest chance of being able to fertilise the eggs.

Lunch time is always a chance to catch up with colleagues about their day, enjoy a nice cup of tea and if we're lucky a slice of cake too. Once a week we have a multi-disciplinary team meeting to review patients and discuss if there's any improvements we could make, either for an individual patient or the processes that we follow as a team.

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Fertility Fact

Embryology, the study of the formation and development of an embryo and fetus.

Before widespread use of the microscope and the advent of cellular biology in the 19th century, embryology was based on descriptive and comparative studies.

After lunch I begin to inseminate collected eggs with the prepared sperm. This is really exciting but I also feel a huge responsibility to each and every patient, particularly when I am performing an ICSI. ICSI is one of the most technically challenging skills to master as an Embryologist, injecting the best sperm directly into the collected eggs.

In the afternoon we perform embryo transfers; despite having performed hundreds of transfers I always find this the most nerve-wracking part, I'm so aware that I literally have someone's hopes in my hands. Every time I do a transfer, I am willing the little embryo on and hoping that the next time I see it, it's a baby! I still find it amazing that something so tiny has such huge potential.

If requested as part of a patient's treatment, good quality embryos remaining after a transfer are then vitrified (frozen), for future use. This requires taking the embryos through a series of solutions to prepare and protect them during cryopreservation. Each embryo is then loaded on to a device in a tiny drop of fluid. This must be done in a matter of seconds to minimise the length of time the embryo is in the solution, at this point I take a deep breath to help steady my hand and once the embryo is safely frozen in liquid nitrogen, I exhale!

Once the lab work is finished and the embryos are safely tucked away in the incubators, I return to the office to answer queries, emails and prepare notes for upcoming cases.

The scientific training to become an experienced Embryologist is very rigorous and I feel privileged to be adding my skills to a great laboratory team supporting incredible patients. After 10 years of working with BCRM I can honestly say I love my job and look forward to coming into work every day.