

TECHNICAL CAREERS

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Present

2007

Senior Human Physiology Technician/Research Nurse, University of Nottingham

2006

MSc University of Nottingham (part time by dissertation)

2005

Staff Nurse (Neuro ITU/HDU), Sheffield Teaching Hospitals NHS Trust

2004

Staff Nurse (Neurology and Neurosurgery), Nottingham University Hospitals NHS Trust

2001

PGDip (Nursing), University of Nottingham

BSc (Hons), University of Newcastle

WHAT LED YOU TO BECOME A TECHNICIAN?

Initially it was a steppingstone for a year to get some research experience. I had in my mind I was on a pathway to a nurse specialist role (I had my sights set on an epilepsy nurse specialist but any of the neuro nurse specialist roles interested me – ironically, I was approached by the neuro team to apply for this role when I was on maternity leave with number 2 but it wasn't the right time to be going up to full time hours and starting a new job with a 6 month old and another on the way). The autonomy I sought in the specialist role whilst still applying clinical/technical skills rather than moving down a management pathway has been fulfilled in many ways in the technical role I took on and have evolved over time here.

HOW HAS YOUR CAREER PROGRESSED (WHERE ARE YOU NOW)?

My role has expanded, and my expertise has become more specialised with experience. I am heavily relied on by the group to execute many of the specialist techniques that are essential for our research. My range of technical skills and responsibilities has broadened and expanded over the 14 years I have been here. In terms of level within the job family this increased level of responsibility and expertise is not reflected in my career pathway and I am still in the level 4 technical role that I was employed into.

WHAT WERE THE MOST USEFUL ACTIVITIES THAT HELPED YOU PROGRESS IN YOUR CAREER?

Coming into the role with clinical experience and a Masters degree (the research element of which was very much self-directed) provided a strong foundation for my current role.

Since being in my current role a number of opportunities have supported my progress which have included being supported to undertake two masters level modules in sonography at the University of Derby (this cemented the theory underpinning the practical ultrasonography techniques that I have learnt to execute in my current role).

- Opportunity to work collaboratively with other groups such as SPMIC and clinical researchers.
- Opportunity to learn specific techniques e.g. retrograde cannulation, deep vein cannulation, euglycemic clamp and hyperinsulinemic clamp protocols, IVGTT, ultrasonography, DEXA operator.
- Responsibility of IRMER practitioner for the two DEXA facilities across the faculty.

Being assigned to a specific study where I am recognised by the researcher as being the expert that will deliver a particular technical element of a protocol or support the delivery of the protocol based on my clinical/scientific experience. Studies where I have gained the most are where I have been partnered with a researcher (usually a PhD student) who requires my expertise to execute the study and could not achieve this independently. For example a Paediatric Crohn's study required my technical expertise in siting the retrograde cannulas which were tricky due to their small vessels. This study also required my clinical experience for recruitment which was essential for liaising with the ambulatory care unit and the clinicians involved in the study. A more recent study in the MRI where a feed was delivered via NG tube was also a good development opportunity. This required the feed to be delivered over an hour but it hadn't been considered by the academics that the feed pumps that could deliver the feed over a set time were not MRI compatible. I took on the responsibility to solve this problem and set up a bespoke system using a pressure bag that is usually used in the hospital critical care setting to maintain pressure on fluid bags when patients have arterial lines in situ.

The system required various giving sets and connectors that I pieced together through liaising with the medical rep from the feed pump company and an enteral feed nurse specialist in the hospital. The control and experimental feeds were different viscosities so I spent some time in the lab calculating the drip rate for each feed so that it could be delivered to time. It was all a satisfying puzzle to solve and without it the protocol couldn't have been executed. These sorts of opportunities are also good for strengthening technical skills.

WHAT ARE YOUR CAREER HIGHLIGHTS AND WHAT HAVE YOU ENJOYED THE MOST?

A trip to the Faroe Islands for two weeks to execute a collaborative study last year with a Danish research group. Myself and another colleague from our research group were invited to run the hyperinsulinemic clamp element of the protocol in a group of patients with a genetic disorder. It was long days in the lab on 10 of the 14 days I was there working from 8 till 8. However the protocol was stimulating, the company of the team and the patients was exceptional, and the scenery of this beautiful country that I observed on my 4 days off was amazing.

The many patient cohort studies are an element that I particularly enjoy, translating my scientific expertise into clinical cohorts is satisfying coming from a clinical background. These studies are fortunately becoming more frequent in our group. I did particularly enjoy the NG tube study in the MRI for many reasons including the level of technical/clinical skills that the protocol called for, the method development challenges, and the team I worked with. I think that it is often the team and the volunteers that you are working with that bring the enjoyment to the role. It is the practical delivery of protocols in human studies that I particularly enjoy. The current post COVID study I am delivering with one of our research fellows at the moment is particularly enjoyable. Again this is a study where my clinical/technical skills are required, I am working with a group of fantastic volunteers and clinicians, and I have the opportunity in this study to learn a new technique for me as we are measuring motor unit function with iEMG using needle electrodes.

DO YOU HAVE ANY FUTURE CAREER ASPIRATIONS AND IF SO WHAT ARE THEY?

I would like my unique technical/clinical skill set combination to be recognised as a level 5 role and have the opportunity to develop translational human physiology research protocols into patient cohorts further. I feel my dual role sitting across the scientific and clinical world contributes something that technicians without a clinical background are not able to provide. By the same token research nurses who support the research of clinicians do not have the scientific insight that I have to execute our human physiology protocols to the same standards. I go backwards and forwards as to whether a PhD is something that I might embark on in the future. I am still undecided whether this is necessary to enhance my role as I have no desire to follow the academic pathway and run my own research group but I can see strengths I could gain from undertaking a PhD. It would have to be a specific PhD opportunity if I were to follow this route. I am quite happy following the technical specialist route which lends itself to my strengths.

WHAT CAREER ADVICE WOULD YOU GIVE TO YOUR YOUNGER SELF?

I think when you leave school you are given the impression that there are distinct careers to follow but my experience is that the route into some careers is not this straight forward. I had very clear plans at school that I would train to be a speech therapist and would follow this career pathway. This I did and I gained a degree in Speech and Language Sciences from Newcastle University which had the best reputation at the time for training in this vocation. However on completing my degree I then went on and trained as a nurse and became very focused on becoming a neurosciences nurse specialist utilising the head and neck/ neuro academic background from my undergraduate degree and applying it in the critical care environment. I fell into a research role which was supposed to be a stepping stone for a year and this is where I have stayed for the majority of my career.

It is good to have goals and career aspirations but I think what I would say to my younger self is that nothing is set in stone and sometimes opportunities present themselves that you can't plan for. Embracing these opportunities as they arise is definitely something I would recommend. Learning and training opportunities are always beneficial and even if their application may not be clear at the time in your planned career path it is good to remember that many of the skills we acquire along our path in life are transferable across a range of contexts.