



“ Through diagnostic activity we’re helping patients today and through research we’re helping the patients of tomorrow. ”

Professor Manuel Salto-Tellez
Centre for Cancer Research and Cell Biology,
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MOLECULAR PATHOLOGY: AT THE FOREFRONT OF CANCER CARE

For Professor Manuel Salto-Tellez, the official opening of NI-MPL – the Northern Ireland Molecular Pathology Laboratory – at Queen’s in 2013 was more than an occasion to take pride in achievement. It was a moment to take stock.

He says, ‘What that day highlighted was a recognition that genomic medicine – an aspirational concept ten years ago – was going to be one of the main pillars in the development of medicine in the future. We were ready to take up the challenge and what we’ve been doing since that official opening is exactly that.’

‘If you look at the level and the number of publications since then, supported by NI-MPL, the amount of competitive grant funding with NI-MPL as a key supporter, the number of patients we’ve been able to help

by direct molecular testing, you’ll see that the opportunity has been embraced significantly.’

The facility is a partnership between Queen’s Centre for Cancer Research and Cell Biology and the Belfast Health and Social Care Trust. Manuel, who came to Queen’s four years ago, is Chair of Molecular Pathology and one of the Deputy Directors of the Centre, as well as consultant with the Belfast Trust.

He says, ‘I was attracted to Queen’s because of strong direction, a very clear vision of where the institution wanted to go. There was a clear understanding of what the key areas were in which we could show leadership, in this case cancer research and cancer treatment.’

‘And there was the possibility to innovate. I came with a vision of how molecular pathology should be done that in other places had been considered too risky – but Queen’s and the Belfast Trust accepted the challenge and we’re now seeing the rewards.’

Manuel believes that it is essential to integrate morphological and molecular research to gain the best outcome for patients. ‘I came to pathology because I was curious not only about diagnosis of disease but also the reasons why disease occurs. Molecular pathology was a natural fit.’

The programme he leads is at the forefront of collaboration between academia and healthcare and one of the keys to its success is concentration of resources.

‘It’s cost effective. If we’re doing several things at the same time in the laboratory we’re maximising the technology. There’s also a concentration of talent. If you put three or four good brains together, working all the time, the result is synergistic, not additive.’

There is a portfolio of work with industry but there are also discussions about whether the laboratory itself could provide a business opportunity.

Manuel says, ‘Because of our diagnostic activity we’re helping cancer patients today and through our research activity we’re helping the cancer patients of tomorrow. Every year there are approximately 1,000 patients with cancer who get diagnosed from a molecular point of view in our laboratory.’

‘That is a tangible deliverable that is happening today. We’re helping and fostering the science that comes from the Centre in a way that’s very clinical, very applied, so that every time we have a discovery our scientists understand what the relevance is, both clinically and practically.’

‘This is an influence that spreads outwards. I think Northern Ireland is well positioned to be a knowledge economy. What we’re doing will help to deliver that. This isn’t science *per se* – it’s science with a purpose, and that will have an economic translation.’