**John Pearl, Department of Respiratory Sciences (31.05.22)**

My name’s John Pearl, and I’m a T&R [Teaching and Research] Lecturer based in the Medical Sciences Building in the Department of Respiratory Sciences here at the University of Leicester.

I have a core set of interests scientifically, however, like most people my interests sometimes are distracted perhaps by fun and interesting problems that we encounter along the way. My work has previously used infection to probe basic immune mechanisms. The cool part about that is that we have a certain set of tools, we have tools that involve low psychometry, we have tools that involve being able to assess, say, mitochondrial function in these lymphocytes and immune cells that come out of the model animals.

The obstacles are pretty clear - to get the grants off my desk and to a research organisation, either a charity or the government, it goes through a set of internal reviews. Sometimes it’s difficult, because we end up talking in language that’s maybe outside of the core - your silo; and yet that silo is sometimes a little bit ‘gatekeep’ when it comes to the work that goes out, it’s an unexpected vocabulary, and often we may not know what to make of these crazy ideas. Fortunately, we’re seeing more and more of that. We’re seeing a lot more, hardcore mathematics and modelling that are associated with some basic microbiology and immunology, and that’s fantastic, because the more that we talk to people - you kind of have to learn the vocabulary of both disciplines, and that’s certainly been one of the harder things for me.

The great thing that’s been happening in the last few years at the university is that we’ve had a lot of events that have been purposely designed to cross disciplines – you know, matchmaking – and so I’m a really big fan of the engineering folks, in fact we’ve got some engineering students that we’re working with that do manufacturing process engineering, and so they’re the ones that are helping us make silicon that’s injection-mouldable.

When I used to work with the folks in the Space Research Centre, I’d make the walk between the MSB [Maurice Shock Building], across the Adrian bridge, up through the plaza and then over to the Michael Atiyah building. That’s a great walk, and the reason it’s a great walk is because it allows you to see all the areas of university buildings, it allows you to see a large slice of the student demographic. The thing that attracted me to Leicester was this highly diverse student body, and I think that diversity combines to really make it a vibrant place to be. And then, as you walk underneath the Engineering building, that one corner, you can see into the park, and for me that really encapsulates this idea of, you know, what we’re about. It’s not just some kind of weird ivory tower thing, no, it’s – you know, the work that we do will hopefully benefit modern kids, you know, grandparents taking a walk in the park.