



Bringing Together a Global Team to Mend the Gap

An interview with **Mend the Gap researchers:**

Molly Shoichet, Biomedical Engineer, Professor, University of Toronto

Peter Zandstra, Biomedical Engineer, Director, UBC School of Biomedical Engineering

Dena Shahriari, Biomedical Engineer, Assistant Professor, UBC School of Biomedical Engineering

Molly Shoichet

Mend the Gap is a group of scientists and social scientists from around the world who have come together to try and mend the gap. The gap is what forms after a traumatic spinal cord injury. There's a communication pathway between the brain and the rest of the body, and when that communication is severed you lose function below that site of injury. And even though there's been more research and greater understanding of the challenges, we still don't have any solutions.

Peter Zandstra

What's really exciting about Mend the Gap, which is being hosted by the School of Biomedical Engineering, the problems are really starting to converge on ones that take advantage of the skill sets of biomedical engineers. Can we design better materials with electrical conducting properties? And how might electrical stimulation, mechanical stimulation, and other things help overcome some of the challenges associated with spinal cord injury that heretofore have been really not possible to tackle?

TODAY'S RESEARCH. TOMORROW'S REALITY.



Dena Shahriari

It really sits at the core of bringing in scientists, engineers, social scientists, and clinicians to work on one single problem. Maybe if we put them together it's going to get us to really improving function after spinal cord injury.

Molly Shoichet

We're really excited about helping people walk again but we're also really excited about giving them back just some additional function - whether that's bladder function or sexual function - that would make a huge difference into an individual's life. So we've got that big vision that we're all going down that same highway, but we also see a series of off-ramps, you know, a little bit like the trip to the moon. There were all these different technologies that came out of that. So we have that continuum all the way from, I wonder if we can actually do this, to connecting with the patient community to see how they will receive it. And that's really exciting.

