



## DR TRACY PUTOCZKI

LUDWIG INSTITUTE FOR CANCER RESEARCH  
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### Almost every day we're discovering something new

One day, while she was still a student at the University of Toronto, Canada, Dr Tracy Putoczki was looking through a microscope trying to understand how neurons and blood vessels interact when she made a new discovery – a protein needed for blood vessel formation that also directs neuron development.

Tracy's undergraduate research supervisor said: "we're the first people in the world to ever see this – how cool is that?"

"He was right," says Tracy, "research is very cool. The opportunity to understand why cancers develop and to generate new methods of treating them – ultimately changing even just one person's life – is plenty of reason for me to get up and go to work every day."

This motivation has led Tracy, 30, now a fellow at the Ludwig Institute for Cancer Research in Melbourne, to her current study into gastrointestinal cancers.

These cancers arise when abnormal cells grow from otherwise normal tissue, with many of the processes involved in the stages of cancer being regulated by soluble molecules called cytokines.

Tracy's research will explore the potential of inhibiting a cytokine, Interleukin-11, for intervention in inflammation-associated gastrointestinal cancer.

#### **Bench to bedside**

The desired result? New treatments – an ability to take what she does on the bench and move it to the clinic. "Bench to bedside, it's every researcher's dream," she says.

After completing her undergraduate honours degree in Toronto, Tracy did her PhD at the University of Canterbury in New Zealand. She's now three years into her post-doctoral fellowship at the Ludwig Institute.

She reflects that she never made a conscious decision to pursue a scientific career; she always studied subjects she found most interesting, "which by default led me to where I am today".

There have been many "eureka" moments along the way, she says. "Almost every day we're discovering something new."

A winner of 11 scholarships and awards since she began her PhD in 2003, Tracy believes that grants to help make new discoveries, like Cure Cancer Australia's, are a critical driving force in research.

#### **Critical first step**

The opportunity to establish a research project, funded independently from the host laboratory, is a critical first step in making the jump from a post-doctoral fellow to a laboratory head, she says.

"However, there's no instruction manual for learning how to manage and run a lab for the first time," says Tracy.

"Together with the research support staff I supervise, this Cure Cancer Australia grant will provide me with the opportunity to learn how to manage all aspects of a research project, while I still have the safety net provided by my supervisor."