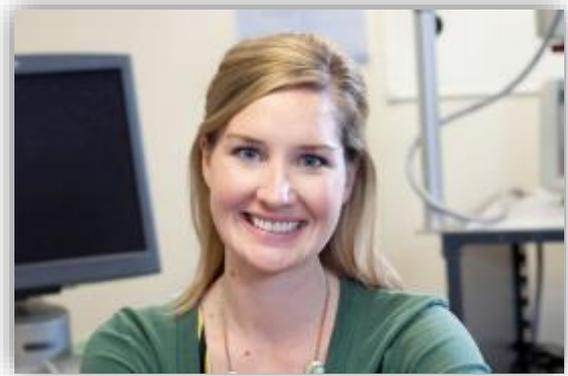


Doctor Kristin Gozdzikowska

Pharyngeal high resolution Manometry

I am an American Citizen and a New Zealand Resident. I received my Master's Degree at the University of Washington, working in the intensive and acute care unit at a hospital in Seattle, Washington. I moved to New Zealand to complete my Doctoral studies.



I began clinical work as a Speech Therapist in acute care and inpatient rehabilitation, developing a specific interest in the assessment and management of swallowing impairments after neurologic impairment. My doctoral programme centred round an international, multi-site project to investigate dysphagia in acute neurological injuries. I am focused in the area of dysphagia; our research helps to contribute to the evidence base from which clinicians can make sound evaluation and treatment decisions.

I work in the newly-created Rose Centre for Stroke Recovery and Research. The field of Speech and Language therapy is expansive in its scope across many neurologic domains, including communication, swallowing and cognition. Our research is unique worldwide. The Centre is one of the most sophisticated swallowing research laboratories in the southern hemisphere, possibly the world. It is led by Professor Maggie-Lee Huckabee, who is a world-leading expert in this field. Applying our research to clinical practice will not only add tremendous value to the patients in the Canterbury region, but will continue the great tradition of New Zealand being a world leader in cutting edge health research.

We need to understand exactly how people swallow. After accidents where people sustain brain injuries or have a stroke where their brain doesn't get enough oxygen or bleeds from within, they can have changes to the way their muscles work. Some people can't walk while others can't talk; approximately 30% of patients lose the ability to swallow. This has a very big impact on their life as so much of what we do involves food, making sure we have enough nutrition and hydration for survival. This project will help us understand how healthy people swallow using new technology, which we will then trial in patients who have a brain injury.

By understanding how to best evaluate swallowing disorders, we can relay this information to clinicians in front-line healthcare to have an immediate impact on patient care. By collecting normative data in healthy participants, we can continue to advance the understanding of normal

swallowing, which moves the field forward in its understanding of subtle changes in function for those patients with early onset Parkinson's or Motor Neurone disease. This knowledge is paramount for adequate rehabilitation and minimisation of negative secondary symptoms such as malnutrition, dehydration or even mortality.

Our research is important because swallowing is integral for survival, optimal health, as well as just for pure enjoyment. Our patient's dream of having a bite of chocolate or a sip of water, life without these basic human needs at times feels futile. Eating and drinking also play a great role in our day-to-day life and relationships. Whether it's morning tea at work, toasting with champers at a wedding, a roast lamb and veges or the delight of sharing the Christmas turkey with family, eating is an integral part of how we connect with others. Losing the ability to safely and effectively swallow will not only have substantial health risks, but can be socially isolating leading to a profound deficit on a person's quality of life.



Our research is for health management, while a swallowing disorder may not always be able to be reversed; having the highest level of accuracy for assessment is a key focus for targeted rehabilitation. After a stroke, the majority of patients will experience difficulties swallowing. Swallowing impairments can place patients at a high risk of chest infections or mortality if not managed appropriately. We want to further investigate a technique called manometry, which measures throat pressure when swallowing. This is a tool which measures swallowing objectively, but there is disagreement on the most valid and reliable way to analyse this data. Our project aims to compare manometry to swallowing x-rays in order to further clarify measurement methods.

This project is my first post-Ph.D. project grant through the Canterbury Medical Research Foundation (CMRF). The staff at the University of Canterbury; are outstanding mentors from which to learn. As an emerging researcher; it is always difficult initiating independent research. With competitive funding rounds, it can be an intimidating prospect for recent graduates to demonstrate the skills and experience needed attract funding prospects. Therefore, I greatly appreciate funding by CMRF who purposefully endeavour to fund emerging researchers, providing the opportunities to develop fulfilling and clinically meaningful research programmes.

I would like the donors to know how truly life-changing their contributions are. The work we conduct has a clear impact on positive outcomes in people with difficulty swallowing. We can't thank the donors enough for making this research a reality!