



Tabatha Rando.

## Pioneering wound care: help us bring innovation to the bedside

### Implementing a new technology to re-write wound infection detection.

Hospitals have long battled with bacteria lurking in wounds, with early detection being key to faster healing. Traditional methods rely on experience, intuition, or lab tests that take days. Enter *fluorescence imaging*—a game-changing device that makes invisible bacteria visible, giving doctors and nurses a high-tech advantage.

This device uses specific light wavelengths to make harmful bacteria glow in real time, providing **instant, actionable insights** without swabs or lab waits. It's like giving nurses and doctors night-vision goggles for spotting infections before they worsen. For patients, this means **faster detection, more precise treatment, reduced need for antibiotics, less painful procedures, and shorter hospital stays.**

Clinical trials in the USA have shown that **skin grafts assessed with this technology are more likely to take and heal.** Implementing this device allows clinicians to target problem areas with accuracy, leading to better outcomes.

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*"Measuring the impact of this new device in preparing wounds for skin grafting could be a game changer for patients with large or difficult-to-heal wounds. Your kind donation will assist better outcomes through researching the implementation and evaluation of this new technology."*

Tabatha Rando, Nurse Practitioner – Wound Management

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This cutting-edge technology is critical for modern hospitals like the Royal Adelaide, aiming to stay ahead of medical challenges.

**More efficient infection diagnosis and treatment** ease the burden on healthcare systems, reduce costs, and save lives. As antibiotic resistance grows, tools like fluorescence imaging ensure treatments are used only when necessary.

**With innovations like this, the future of healthcare is about smarter solutions that directly impact patient care. Help us bring this vital technology to life.**

Visit: [www.rahresearchfund.com.au/support-us/wound-care](http://www.rahresearchfund.com.au/support-us/wound-care) or scan the QR code to donate today.

**Thank you.**

**Your generosity will change lives.**





## A message from Associate Professor Liz Sutton

Director, Research,  
Central Adelaide Local Health Network

### Hello Supporters,

It is always inspiring to share the groundbreaking research being conducted at Central Adelaide Local Health Network. Our latest nursing research projects are prime examples of innovation improving patient care.

Fluorescence imaging technology is transforming wound care by allowing instant detection of bacteria in wounds, leading to faster, more precise treatments and better patient outcomes. This cutting-edge tool reduces hospital stays and minimises antibiotic use, addressing the growing challenge of antibiotic resistance. Nurse Practitioner Tabatha Rando and her team are leading this important work, and your support will help implement this technology across our hospital.

We are also proud of our new Metaverse Virtual Reality Training Project, designed by the Executive Director of Nursing Workforce & Patient Experience, Amanda Clarke. This pilot project offers immersive hand hygiene training, improving staff engagement and compliance in a realistic digital environment. This initiative is set to enhance nursing education and, most importantly, patient safety.

These exciting projects are made possible through your generous support. Thank you for partnering with us to drive innovation in healthcare. Together, we are making a real difference.

## The positive impact of nurse-led research



Professor Sheree Smith

Professor Sheree Smith is committed to driving innovation, currently leading projects on mental health interventions and improving healthcare communication. Her dedication to nurse-led research inspires the next generation of nursing professionals.

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*"Nursing research has a profound impact on patient care, and it has opened doors to incredible career opportunities for me and other nurses."* Professor Sheree Smith, CALHN Professor of Nursing.

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With expertise in respiratory care, Professor Smith's career includes a Master of Social Planning and Development, a PhD in Public Health, and postdoctoral research at the University of Oxford. Her work with Imperial College Healthcare introduced her to using technology in patient care and building workforce models for clinical trials now embedded in hospitals across the UK.

She remains dedicated to nurse-led research, currently exploring 'green social prescribing' for mental health support in chronic lung disease patients and improving patient questionnaire accuracy in care settings. Sheree's leadership continues to drive innovation in nursing care and inspire the next generation of nurse researchers.



## Donor Christmas Event 2024

The Royal Adelaide Hospital Research Fund held a donor event to thank donors as well as hear from some researchers featured throughout the year.

In 2025 we will be holding more events showcasing researchers and thanking donors for support.

If you would like to know more call **7074 1445**  
or email [contactus@rahresearchfund.com.au](mailto:contactus@rahresearchfund.com.au)







# The specialist lung cancer nurse project: a response to lung cancer screening

In response to the challenges faced by rural and remote communities in accessing healthcare, the **CALHN Lung Foundation Specialist Lung Cancer Nurse (SLCN) Project** is making significant strides in advocating for patients who travel long distances for specialist care.

Lung cancer patients from rural areas often experience delayed diagnoses and poorer health outcomes, highlighting the need for improved care coordination and communication.

As Australia prepares for the **2025 National Lung Cancer Screening Program**, SLCN findings are shaping CALHN's strategies to meet growing demands. The focus remains on **optimising resources, improving efficiencies, decreasing hospital stays, and advocating for patients throughout their lung cancer journey.**

The SLCN Project nurse recently visited **England** to review the Target Lung Health Check (TLHC) screening program, gaining valuable insights into screening processes, low-dose CT scans, eligibility assessments, and referrals. These learnings will

help optimise lung cancer nursing support—from screening to treatment and survivorship. This knowledge is now shaping efforts to improve health outcomes for patients undergoing lung cancer surgery and treatment at CALHN.

The SLCN Project aims to:

- **Improve patient literacy** on lung cancer diagnosis, surgical options, and psychosocial support. By enhancing health literacy, patients will be better equipped to understand their condition and make informed decisions about their treatment.
- **Coordinate multi-specialty treatment** to ensure comprehensive care. The project will focus on self-management strategies for psychosocial support and assess eligibility for neo-adjuvant therapies. **Smoking cessation advice** will also be provided to help improve long-term health outcomes.
- **Ensure comprehensive post-discharge follow-ups** via **telehealth for rural patients** or **in-person home visits for metro patients.**

This initiative strengthens **patient support from diagnosis to recovery.**

## Expected Outcomes with the SLCN Project:

- ✓ Reduced length of stay and readmission rates.
- ✓ Direct ward admissions to avoid emergency department visits.
- ✓ Comprehensive Care Plan Management.
- ✓ Optimised primary care communication.
- ✓ Increased health literacy and self-management.
- ✓ Fewer patients lost to follow-up.

These initiatives will ensure **timely, compassionate, and high-quality care** across South Australia and beyond.

**Your generosity will change lives – please support this life-changing project**



Marija Juraja and Xiumei Li (Jessie)

# Revolutionising nursing education: building a safer future through virtual reality

## CALHN Metaverse Virtual Reality Education and Training Project.

Healthcare training is evolving, and CALHN is committed to leveraging advanced technologies to stay at the forefront of innovative, high-impact education for our healthcare professionals. Traditional learning methods, such as e-learning and face-to-face workshops, often lack interactivity, leading to lower engagement and effectiveness.

Hand hygiene is critical for patient safety, yet compliance remains a challenge. The **Five Moments of Hand Hygiene** is a globally recognised standard essential for infection control and improved outcomes. Recognising this, Amanda Clark, the Executive Director of Nursing Workforce & Patient Experience at CALHN, saw an opportunity to enhance nursing education through virtual reality.

This led to CALHN's first **Metaverse Virtual Reality Prototype** for nursing professionals—an immersive,

simulation-based training program designed to improve engagement, competency, and compliance in a realistic risk-free environment.

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*"Our commitment to improving patient outcomes drives us to embrace advanced training solutions. With your support, we can enhance nursing education and ensure our staff are well prepared for real-world challenges."*

CALHN Nursing Education Team

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Metaverse virtual reality training offers an engaging and interactive digital clinical environment, ensuring staff are well prepared while also supporting compliance with mandatory training requirements. This initiative will not only improve training outcomes but also position CALHN as a leader in healthcare education, setting the stage for broader virtual reality applications in healthcare.