

# PROCEEDINGS

Human Factors in Healthcare Symposium  
Human Factors and Ergonomics Society of New Zealand



18 September 2019  
Ernest and Marion David Library  
Auckland City Hospital



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## Symposium chair's message

Welcome to the inaugural HFESNZ healthcare symposium which provides a forum for those who share a common interest in improving the healthcare system for service users and providers alike. We hope the day provides you with an opportunity to meet new people and strengthen existing networks and enables us to offer more both as individuals and collectively for the betterment of healthcare in NZ. We hope the day extends your knowledge about human factors and ergonomics and its broad applications within healthcare and that you take something from the day that you can apply in your workplace. We would like to thank you for supporting the HFESNZ and hope to see you again at other events in the future.

- *Fiona Trevelyan, Chair of Healthcare Ergonomic Cluster*

## Symposium sponsor message

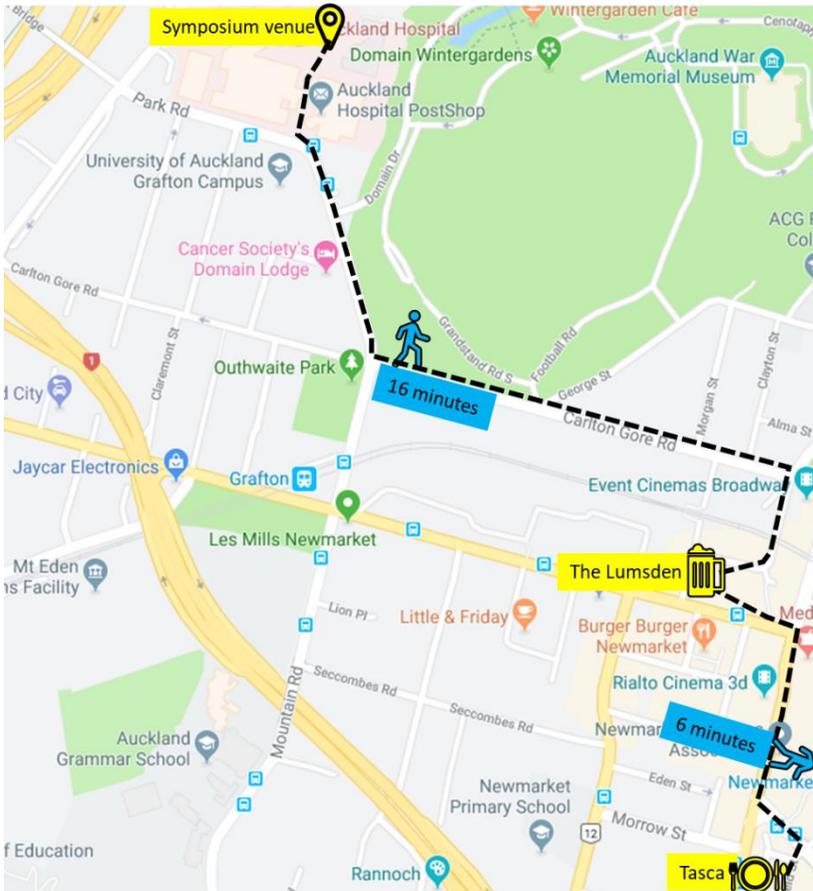
The Treatment Safety team at ACC are delighted to be sponsoring the Human Factors and Ergonomics Society of New Zealand Symposium and Conference 2019. Improving safety for patients is a collaborative effort across the health sector, government, and experts like those of you in the human factors and ergonomics field, and we are proud to be working with you to enhance the safety of treatment in New Zealand.

# Information about the social events

After the Symposium, two self-funded networking events will be held in Newmarket. Please refer to the map below.

**5:15pm – Post-Symposium Drinks at The Lumsden, 444 Khyber Pass Road.** A chance for you to network after the Symposium. It is a downhill(!) 16-minute walk from the Hospital. Or take an 8-minute bus (70, 75, 866, or INN).

**7pm – Post-Symposium Dinner at Tasca, 25 Nuffield St.** Tasca is a Spanish tapas restaurant. They cater to a wide array of dietary requirements. The restaurant is a 6-minute walk from the Lumsden.



# Symposium Programme

8:30	<b>Registration and welcome tea and coffee</b>	
8:50	Pōwhiri and Mihi whakatau	
9:00	<b>Introduction</b> – <i>Dr Fiona Trevelyan</i> (AUT, Healthcare Ergonomics Cluster Lead)	
9:10	<b>Keynote Speaker</b> – <i>Dr Alexandra Lang</i> (UK) – Once upon a time there was a White Paper for Human Factors in Health and Social care....	
9:45	<b>Morning Tea</b>	
10:05	<b>Keynote Speaker</b> – <i>Saskia Fursland</i> (UK) – Pioneering independent safety investigation in healthcare	
<i>Note that the 2-hour master classes are repeated to ensure all delegates can attend both sessions</i>		
10:40	<b>2hr Master Class</b> – Ernest Davis Hall <b>A systems approach to Incident investigation in healthcare</b> Presented by <i>Saskia Fursland</i>	<b>2hr Master Class</b> – Marion Davis Hall <b>Improving Health and Social care - what can Human Factors bring to the party?</b> Presented by <i>Dr Alex Lang</i>
12:40	<b>Lunch</b>	
1:30	<b>2hr Master Class</b> – Ernest Davis Hall <b>A systems approach to Incident investigation in healthcare</b> Presented by <i>Saskia Fursland</i>	<b>2hr Master Class</b> – Marion Davis Hall <b>Improving Health and Social care - what can Human Factors bring to the party?</b> Presented by <i>Dr Alex Lang</i>
3:30	<b>Afternoon Tea</b>	
4:00	<b>Healthcare Panel</b> – Turning research into reality: Creating a strategy for research, policy, and practice Panel members: <i>Alex Lang</i> (UK), <i>Saskia Fursland</i> (UK), <i>Ginette Spence</i> (ACC), <i>Caroline Tilah</i> (HQSC), <i>Carl Horsley</i> (Counties Manukau DHB). Audience participation encouraged. Facilitated by <i>Associate Professor Felicity Lamm</i> and <i>Danaë Anderson</i>	
4:55	Symposium concludes	
<b>Networking and Social Events</b>		
5:15	<b>Post-Symposium Drinks</b> (self-financed) The Lumsden, 444 Khyber Pass Road, Newmarket – <i>16-minute walk from Auckland City Hospital</i>	
7:00	<b>Post-Symposium Dinner</b> (self-financed) Tasca, 25 Nuffield Street, Newmarket – <i>6-minute walk from The Lumsden</i>	

# Keynote - Alex Lang

**Once upon a time there was a White Paper for Human Factors in Health and Social care....**

## Abstract

Dr Alexandra Lang will present the Chartered Institute of Ergonomics and Human Factors (CIEHF) White Paper on 'Human Factors for Health and Social Care'.

As one of the lead authors of this publication she will explain the CIEHF's vision for integrating Human Factors, system thinking and design methods to benefit patients, staff and their organisations. She will describe the Institutes' goals for building capacity and competency for sustainable change in a sector challenged by public sector funding and scarce resource. Looking ahead to the future and where, how and why Human Factors can promote and deliver better system performance for improved patient outcomes and staff wellbeing.

## Biography



Dr Alexandra Lang is a Human Factors Specialist currently working for Nottingham University Hospitals NHS Trust, the fourth largest acute healthcare trust in England and is an Honorary Associate Professor in Healthcare Human Factors at the University of Nottingham.

She has over 10 years' experience in applying and researching Human Factors in healthcare systems, in the UK and internationally. Alex's research interests and teaching focusses on the application of HFE to improve the quality and safety of healthcare provision and experience; designing, implementing and evaluating healthcare technologies and working environments, clinical pathways and patient safety.

Alex leads the Chartered Institute of Ergonomics and Human Factors (CIEHF) Healthcare Special Interest Group and recently co-led the authorship of the CIEHF White Paper - Human Factors for Health and Social Care. She is the Human Factors Expert Consultant for the Centre for Healthcare Equipment & Technology Adoption (CHEATA), Health Education England regional HF Steering team and the Difficult Airways Society HF Committee.

## Notes

# Keynote - Saskia Fursland

## Pioneering independent safety investigation in healthcare

### Abstract

Saskia Fursland, a National Investigator with the Healthcare Safety Investigation Branch, will present a whistle-stop tour of safety investigation in the English healthcare system. She will describe the background of incident investigation in the National Health Service (NHS) and the creation of the Healthcare Safety Investigation Branch (HSIB); the first of its kind in the world. She will provide an overview of HSIB, its approach to safety investigation and highlight the importance of integrating human factors into healthcare safety investigations.

### Biography



Saskia Fursland (née Revell) has a total of nine years' experience in applying Human Factors in incident investigations. Saskia is currently a National Investigator with the Healthcare Safety Investigation Branch (HSIB) in England, which was launched in April 2017. HSIB conducts independent investigations of patient safety concerns in NHS-funded care across England and is the first of its kind in the world. Throughout the investigation process, HSIB engage with patients, relatives, staff and national organisations, and make safety recommendations at a national level to improve patient safety.

Saskia has a keen interest in Human Factors investigation models and analysis methods. In her role as a National Investigator, she uses a range of systemic investigation approaches to collect and analyse evidence. She has adapted an aviation investigation framework to healthcare which is currently being used by over 120 of HSIB's maternity investigators.

Prior to joining the HSIB, Saskia worked for six and a half years' as an Aviation Psychologist at the Royal Air Force Centre of Aviation Medicine. As an Aviation Psychologist, Saskia provided Human Factors expert advice to all UK military air accident investigations, conducted proactive investigations to improve flight safety, and provided bespoke Human Factors input to UK civilian air accident investigations.

## Notes

# Masterclass - Alex Lang

## **Improving Health and Social care - what can Human Factors bring to the party?**

Dr Alexandra Lang will present an introduction to key concepts in healthcare Human Factors including its alignment with other safety disciplines such as Quality Improvement and Patient Safety. She will then present the current landscape of Human Factors within the UK, describing where the sector has come from and where and how traction is gaining in the development of awareness and capacity building of Human Factors within healthcare. This will include short examples of procurement, investigation, education, and improvement interventions, outlining the value and challenges associated with implementing Human Factors. The masterclass will offer the opportunity to focus on and discuss the healthcare service in New Zealand, inviting participants to consider ways in which HF integration could be promoted and encouraged within the local context.

The masterclass will be broken down into presentation and group discussion to enable attendees to explore various concepts and local challenges and opportunities for Human Factors in Health and Social care within New Zealand.

This masterclass will provide:

- learning about key concepts in healthcare Human Factors.
- provide examples of ways in which HF capacity can be developed within the healthcare sector.
- and will explore opportunities for HF integration within the healthcare system in New Zealand.

## Notes

# Masterclass - Saskia Fursland

## **A systems approach to Incident investigation in healthcare**

Be prepared to abandon Root Cause Analysis (RCA) and linear cause methods in this interactive session on incident investigation in healthcare. Saskia Fursland will describe the move in approach from focusing on individual behaviour to systems thinking in investigations. There will be opportunities to reflect on current approaches and practices used in healthcare investigations in New Zealand and to compare with those used in the UK.

The Masterclass will delve into the investigation process exploring aspects such as evidence collection and analysis to making recommendations to improve patient safety and staff wellbeing. The way in which Human Factors can be integrated throughout the investigation process will be revealed and brought to life using case studies.

## Notes

# Healthcare Panel

## Turning research into reality: Creating a strategy for research, policy, and practice

Panel members: Caroline Tilah (HQSC), Ginette Spence (ACC), Dr Carl Horsley (Counties Manukau DHB), Dr Alex Lang (UK), Saskia Fursland (UK).

Facilitated by Associate Professor Felicity Lamm and Danaë Anderson



**Caroline Tilah** is the Health Quality & Safety Commission's manager for patient safety. Before this she was the executive director operations for the quality improvement and patient safety directorate at Capital & Coast DHB. She has had a variety of quality and clinical roles, but her passion is improvement. Caroline is a registered nurse with post graduate qualification in occupational health and has completed the Institute for Healthcare Improvement's quality improvement advisor training.



**Ginette Spence** is a Project Manager at ACC, specialising in managing health and customer-related projects that use co-design and customer-centred techniques. She has delivered a range of people-centred solutions, including self-management for ACC clients, a Māori Strategy, and ambulance funding strategies. She founded and leads the ACC Women's Network.



**Dr Carl Horsley** MB ChB, FACEM, FCICM, is an Intensivist in the Critical Care Complex at Middlemore Hospital, Auckland. The focus of his last four years has been in understanding and exploring the implications of Safety-II and Resilience Engineering for frontline clinical work. He is an active member of the Resilient Healthcare Network (RHCN).



**Dr Alex Lang** is a Human Factors Specialist working for Nottingham University Hospitals NHS Trust in England and is an Honorary Associate Professor in Healthcare Human Factors at the University of Nottingham. For a detailed bio, see pg 5.



**Saskia Fursland** is a National Investigator with the Healthcare Safety Investigation Branch (HSIB) in England. She has a keen interest in Human Factors investigation models and analysis methods. In her role as a National Investigator, she uses a range of systemic investigation approaches to collect and analyse evidence. For a detailed bio, see pg 7.

## Notes

