# Contents

**Message from the Director** 3  
**Executive summary** 4  
**Current research projects** 5  
- Understanding the willingness of emergency nurses to respond to a healthcare disaster 5  
- Context-aware mobile decision support systems for medical emergency management in mass gatherings 5  
- Medication preparedness during extreme weather events 5  
- Disaster response in aged care facilities 6  
- Presentations of young people at music festivals 6  
- Emergency department impact and patient profile of H1N1 influenza 09 outbreaks in Australia: a national survey 6  
- Assessing the health and safety risk of public events: Phase 1: evaluation of the event safety guide 1999 for medical resource allocation 6  
- World Youth Day patient presentation characteristics 7  
- Celebration without hospitalisation: understanding how young people prepare for Schoolies 7  
- Implications for nursing workforce of catastrophic fire rating days in rural South Australia 7  
- Identification of the health care needs of homeless people during extreme weather events in SA 7  
- Faculty Infrastructure Grant 8  

## Publications 9  
- Book Chapters 9  
- Refereed Research Papers 9  
- Editorials 10  
- Non-refereed Research Papers 10  
- Conference presentations 10  
- Workshop presentations 11  

## Main activities in 2010 12  
- Flinders University Research Program for Disaster Nursing 12  
- Nursing Insight: a publication of WADEM 12  
- Centre launch 13  
- Visiting scholar 13  
- Visiting academics 13  
- 2010 Australian Safer Community Award 14  
- Workshop for Disaster Response in aged care facilities 15  
- Master Class on Mass Gathering Medicine 15  
- Research Innovation Showcase 15  

## Staff 16  
- Director 16  
- Deputy Director 16  
- Management Board 17  
- Associate members of the Centre 19  
- Adjuncts 20  
- Research students 21  
- Resthaven Research Scholarship 21  

## Acronyms 22
The Asia Pacific region is one of the most disaster prone in the world and in comparison to other regions, experiences disaster at a rate disproportionate to its land mass. The region is diverse with both developed and developing economies, a rich mixture of cultures, and geography ranging from the driest continent on earth to small tropical island nations that barely rise above sea level.

Disaster events in the region are diverse. In recent times these have included terrorist attacks such as the Bali bombings, devastating wildfires such as the 2009 Black Saturday fires in Victoria, Australia and volcanic eruptions such as the 2010 Mount Merapi eruption in Indonesia. Hurricanes and flooding such as the category 5 hurricane ‘Megi’ that hit the Philippines in 2010 and earthquakes and tsunamis arising from the Indo-Australian plate including the 2004 Sumatra-Andaman earthquake and tsunami and the 2010 Indonesian tsunami continue to impact on the region. Most recently disastrous flooding and tropical cyclone Yasi have caused extensive damage in Queensland and New Zealand has experienced the devastating Christchurch earthquakes.

In the South-East Asian and Western Pacific region a single disaster event frequently impacts on many nations, covers extraordinary distances, and requires a multi-national response. For example, recent wildfires in Indonesia have resulted in smoke haze and respiratory distress as far afield as Singapore, Malaysia and Australia. The 2009 Samoa earthquake was the largest recorded in that year and the resulting tsunami affected many nations including American Samoa, Samoa and Tonga where more than 189 people were killed, Fiji, the northern coast of New Zealand and Rarotonga in the Cook Islands.

Disasters in this region are truly multi-national events and require an international response for relief and recovery. The region is characterised by a broad range of approaches to the provision of pre-hospital, primary health and emergency medicine services. These range from local village clinics and mobile outreach services to advanced tertiary trauma care centres in major cities of the region. In each of these settings there is a need for a stronger research base and for the further development of emergency care practice. Many nations in this diverse region either provide or receive humanitarian aid which is often directed to building the capacity and capability for disaster and emergency medicine preparedness and relief.

There are many examples that illustrate the desire for development and the engagement with disaster and emergency health science and practice in the South East Asian and Western Pacific regions. These examples highlight the very great need for education and science based policy and practice for the health professions in these countries.

In Adelaide, the Flinders University Research Centre for Disaster Resilience and Health (FURCDRH) is a leader in disaster and emergency research in the region. Thus far, the members and associates of the Centre have successfully gained research funds to the amount of $441,012 of which $176,012 is held at Flinders University. The academic output for 2010 includes publication of 5 book chapters and 21 refereed research papers. This is an extraordinary success for the first year since establishment of the Centre and indicates both the commitment of staff and the great need for disaster research and evaluation.

In 2011 the Centre will continue to work on high impact research projects. Key among these will be the conduct of disaster evaluations utilising the recently developed WADEM Framework for Disaster Research and Evaluation. There is very little evidence to support disaster health practice and an urgent need for evaluation of the effectiveness of relief and recovery strategies. The FURCDRH will provide leadership internationally in conducting disaster relief evaluations. In addition, working with the World Health Organisation’s Advisory Group for Mass Gathering Health the Centre will assess current knowledge and systematically review the evidence underpinning emergency and public health practice for major events such as the Olympic Games.

To support this important work the Centre will be seeking financial backing from sponsors with a commitment to building knowledge and improving practice in disaster health planning, response and recovery.

Professor Paul Arbon AM,
Director
Flinders University Research Centre for Disaster Resilience and Health
Executive summary

The Flinders University Research Centre for Disaster Resilience and Health was established in mid-2009. The Centre’s vision is to enhance research in the area of disaster resilience at both national and international levels. The establishment of the Centre provides the foundation for a coordinated research program providing up-to-date knowledge for health practice in disasters.

Since its establishment, the Centre has employed a variety of activities to address the urgent need for more evidence-based solutions to the health problems associated with catastrophic emergencies and disasters and to assist in building the resilience and preparedness of communities at risk.

The Centre is working to improve our understanding of how disasters develop and impact on communities, of the health effects of disasters and how we can prepare and respond more effectively, and of current trends in disaster management and the issues that we have not yet addressed adequately.

Current areas of focus include:

- workforce issues including willingness to respond
- emergency services volunteerism
- multi- and mass casualty triage
- mass gathering medicine
- building community resilience including care of vulnerable groups
- development of the capacity and capability of individuals, organisations and communities
- emergency services interfaces, emergency management and coordination
- public health and community care strategies
- preparedness, planning, relief, recovery and development phases of disaster
- responding to pandemic influenza
- evaluation of emergency warning systems.

The Centre provides a focus for collaborative ventures between Flinders University and other national and international organisations relevant to disaster health.

The Centre has partnered with the International Council of Nurses (ICN), the World Association for Disaster and Emergency Medicine (WADEM) and the newly established Torrens Resilience Institute. Both WADEM and ICN are member organisations of the United Nation’s Global Health Cluster, established to coordinate the international response to disaster and humanitarian emergencies.

The Centre works with WADEM in assisting in the coordination of the Nursing Section of the association and producing the WADEM publication Nursing Insight.

The Centre has also been accredited as a research and development centre of the ICN for the Flinders University Research Program for Disaster Nursing. The Centre provides research infrastructure and an environment for researchers and other practitioners in the area of disaster health that facilitates the translation of research outcomes into practice.
Current research projects

Understanding the willingness of emergency nurses to respond to a healthcare disaster

**Principal Investigator**
Arbon, P, Flinders University, SA

**Researchers**
Bahnisch, L, Flinders University, SA
Considine, J, The Northern Hospital and Deakin University, Vic
Cusack, L, Flinders University, SA
Hammad, K, Flinders University, SA
Kako, M, Flinders University, SA
Mitchell, B, The Northern Hospital and Deakin University, Vic
Ranse, J, University of Canberra, ACT
Shaban, R, Griffith University and Princess Alexandra Hospital, Qld

**Funding**
$38,000, Industry Partnership Grant: Flinders University

**Summary**
Disaster response is an emergency nursing responsibility. However responding to disasters is becoming more hazardous as terrorism, pandemics and chemical industrial accidents challenge the safety of nurse responders and their families. International experience has shown that nurses can become victims of disasters and that fear of contaminating family and friends may prevent nurses from attending work or returning home during a disaster response. This research contributes to disaster planning by providing insight into the factors that affect the willingness of Australian emergency nurses to respond to disasters. The research will facilitate disaster planning and policy development at national and health agency levels that better supports the personal needs of emergency nurses during disaster response.

**Contact:** Paul Arbon, paul.arbon@flinders.edu.au

Context-aware mobile decision support systems for medical emergency management in mass gatherings

**Researchers**
Arbon, P, Flinders University, SA
Burstein, F, Monash University, Vic
Zaslavsky, A, Monash University, Vic

**Funding**
$158,000, Australian Research Council Linkage: Monash University

**Summary**
The project contributes to gaining a clearer understanding of the nature and requirements of medical emergency during mass gathering events. We will build and test a mobile real-time decision support tool for improving the efficiency of medical decisions to strengthen Australia’s ability to manage potential health-related hazards. This project addresses the research priorities of promoting and maintaining good health. It capitalises on smart information use and will be of benefit to mass gathering emergency management.

**Contact:** Paul Arbon, paul.arbon@flinders.edu.au

Medication preparedness during extreme weather events

**Principal Investigator**
Mayner, L, Flinders University, SA

**Researchers**
Arbon, P, Flinders University, SA
Smyth, V, SA Health, SA

**Funding**
$46,000, Industry Partnership Grant: Flinders University

**Summary**
When natural disasters occur people with chronic diseases who depend on a constant supply of medication become highly vulnerable. In many cases
medication is essential on a daily basis and lack of medication may result in death. Continued supply of medication may be a problem when a disaster occurs and, depending on the type of emergency, medication supply can be disrupted for a considerable amount of time. The aim of this project is to compile a chronic disease medication requirement list and compare medication demand in normal and extreme conditions.

Contact: Lidia Mayner, lidia.mayner@flinders.edu.au

Disaster response in aged care facilities

Principal Investigator
Cusack, L, Flinders University, SA

Researchers
Arbon, P, Flinders University, SA
Siegloff, L, Flinders University, SA

Funding
$3,000, Resthaven Inc.: Flinders University

Summary
A literature review of disaster management in the aged care sector and an analysis of the emerging key issues was undertaken. This led to a report summarising the key issues for managers of aged care services to consider in their planning for hazards and potential disastrous events. From this report a number of collaborative strategies were identified. One of these was the provision of basic training for aged care service administrators and staff about the process of undertaking disaster management contingency planning. A workshop on this topic was developed and supported by Aged & Community Services SA & NT, Resthaven Inc. and the SA Health Director of Emergency Management.

Contact: Lynette Cusack, lynette.cusack@flinders.edu.au

Presentations of young people at music festivals

Principal Investigator
Hutton, A, Flinders University, SA

Researchers
Arbon, P, Flinders University, SA
Ranse, J, Canberra University, ACT

Funding
$8306, St John Ambulance Australia Research Grant: Flinders University

Summary
This project seeks to identify the number and types of patient presentations that young people sustain at music festivals. Data will be used to develop harm minimisation strategies, assist in planning of events and feedback to event managers.

Contact: Alison Hutton, alison.hutton@flinders.edu.au

Emergency department impact and patient profile of H1N1 influenza 09 outbreaks in Australia: a national survey

Principal Investigator
FitzGerald, G, Queensland University of Technology, Qld

Researchers
Aitken, P, James Cook University, Qld
Arbon P, Flinders University, SA
Clark, M, Queensland University of Technology, Qld
Considine, J, The Northern Hospital and Deakin University, Vic
Shaban, R, Griffith University, Qld

Funding
$106,000, National Health and Medical Research Council: Queensland University of Technology

Summary
This project responds to the urgent call for research to assess the impact of the 2009 outbreak of H1N1 influenza in Australia. The project surveys members of nursing and medical colleges and accident and emergency departments throughout Australia and provides a review of the nature of presentations, the effect on staffing and workload and the strategies adopted to effectively manage patients presenting to emergency departments.

Contact: Paul Arbon, paul.arbon@flinders.edu.au

Assessing the health and safety risk of public events: Phase 1: evaluation of the event safety guide 1999 for medical resource allocation

Principal Investigator
Zeitz, K, Flinders University, SA

Researchers
Arbon, P, Flinders University, SA
Kako, M, Flinders University, SA

Funding
$7706, St John Research Grant: Flinders University

Summary
This project is an evaluation review of a current event workload planning tool for medical resource
allocation, The safety event guide (1999)\textsuperscript{1}. The project uses existing data to determine the predictive accuracy of this tool and determine its viability as a component of a risk measurement system.  

Contact: Kathryn Zeitz  
kathryn.zeitz@fonaustralia.com.au

World Youth Day patient presentation characteristics

Principal Investigator  
Arbon, P, Flinders University, SA

Researchers  
Ranse, J, Canberra University, ACT (Flinders University Adjunct Lecturer)  
Kako, M, Flinders University, SA  
Xiao, L, Flinders University, SA

Funding  
Unfunded pilot study

Summary  
This project aims to establish a database of patient presentations and mass gathering event profiles across all events during the four days of World Youth Day in Sydney in 2008, in order to analyse quantitative data from the event and compare findings across the WYD events and with existing predictive modelling data to provide a more sophisticated understanding of the key factors that affect patient presentations at mass gatherings.  

Contact: Paul Arbon, paul.arbon@flinders.edu.au

Celebration without hospitalisation: understanding how young people prepare for Schoolies

Principal Investigator  
Hutton, A, Flinders University, SA

Researchers  
Arbon, P, Flinders University, SA  
Cusack, L, Flinders University, SA  
Zannettino, L, Flinders University, SA

Funding  
$15,000, Faculty of Health Sciences Seeding Grant: Flinders University

Summary  
Schoolies Festivals are events that give young people the opportunity to celebrate the end of their school life. In Adelaide, young people celebrate Schoolies in a dry zone, however prior to entering this zone a substantial amount of alcohol is ingested in caravan parks, surrounding hotels and residences. The aim of this research is to identify and explore, through the retrospective accounts of 60-80 young people, the ways that young people prepare to minimise and/or be free from alcohol-related harm at Schoolies. The knowledge generated will be used to make recommendations about the development of health information strategies that aim to reduce the number of young people requiring hospitalisation due to alcohol related injury at Schoolies.  

Contact: Alison Hutton, alison.hutton@flinders.edu.au

Implications for nursing workforce of catastrophic fire rating days in rural South Australia

Principal Investigator  
Arbon, P, Flinders University, SA

Researchers  
Cusack, L, Flinders University, SA  
Siegloff, L, Flinders University, SA  
Mayner, L, Flinders University, SA  
Kako, M, Flinders University, SA

Funding  
Unfunded pilot study

Summary  
This project explores whether or not there is an increase in the absentee rate of nurses from health services in rural South Australia when a catastrophic fire rating day is declared, and what the factors are that influence nursing staff absences on such a day. The proposed research will inform workforce planning in rural areas and the contingencies that may be required for catastrophic fire rating days to enable health services to be adequately staffed. This research will help to determine what issues and circumstances affect the availability of the nursing workforce and what strategies may mitigate against the impact of the new fire risk ratings on workforce availability.  

Contact: Paul Arbon, paul.arbon@flinders.edu.au

\textsuperscript{1} Health and Safety Executive 1999, The event safety guide: a guide to health, safety and welfare at music and similar events (HSG 195), HSE Books, Norwich.
Identification of the health care needs of homeless people during extreme weather events in SA

Principal Investigator
Arbon, P, Flinders University, SA

Researchers
Cusack, L, Flinders University, SA
Gilbert, S, Flinders University, SA
Kralik, D, Royal District Nursing Service (Flinders University Adjunct Professor)

Funding
$43,000, Industry Partnership Grant: Flinders University

Summary
Homelessness is a major cause of poor health and exposure to extreme weather is one of the numerous risks faced by people who are homeless. Governments and non-government agencies respond to these weather events in a variety of ways. This project seeks to identify health care needs of homeless people during extreme weather events, government and non-government organisations providing services to these people, and their response during extreme weather. On the basis of this analysis, recommendations will be made as to how organisations can provide support.

Contact: Paul Arbon, paul.arbon@flinders.edu.au

Faculty Infrastructure Grant

Principal Investigator
Hutton, A, Flinders University, SA

Funding
$18,000, Flinders University

Summary
Funding sought to support Mass gathering research in the Flinders University Centre for Disaster Resilience and Health.

Contact: Alison Hutton, alison.hutton@flinders.edu.au
Book Chapters


Refereed Research Papers


Mayner, L & Arbon, P 2010 ‘Climate change, health and the need to increase resilience and capacity’, Collegian, vol. 17, no. 4, pp. 151-152.


Non-refereed Research Papers


Conference presentations


Editorials


Main activities in 2010

Flinders University Research Program for Disaster Nursing

The International Council of Nurses (ICN) is a federation of nurses’ associations, representing nurses in more than 132 countries on behalf of more than 13 million members. An initiative of the ICN in the professional practice area is the development of International Classification for Nursing Practice (ICNP®). In turn, the ICNP® has established numerous research and development projects, and nine research and development centres. Flinders University School of Nursing & Midwifery in 2009 was accredited by the ICN as an ICNP® centre and has established the Flinders University Research Program for Disaster Nursing (FURPDN).

The aim of the FURPDN is to enhance professional nursing practice through the development of the ICNP®, with a focus on specific areas of practice in which the School of Nursing & Midwifery has expertise. Initially our goals will be concentrated on disaster nursing, including strengthening communities through primary nursing care. The Centre will develop an ICNP® catalogue for disaster nursing harmonised with the WADEM- and National Library of Congress-led terminology consensus project. The Centre will also collaborate with the ICN and ICNP® centres for guidance and support for the development of the ICNP® catalogue for disaster nursing. The Centre will update the catalogue to reflect current concepts and developments in disaster nursing.

Over the past year a number of national and international academics have visited and collaborative research has been established between several universities nationally and internationally. Lidia attended the annual meeting of the Asia Pacific Emergency and Disaster Nursing Network in Auckland, New Zealand and presented an update on the work of the FURPDN. Currently the compilation of terminology for disaster health and nursing is nearing completion. Lidia visited James Cook University, in June and gave a presentation on the importance of establishing ICNP® centres to members of the School of Nursing at both Cairns and Townsville campuses.

The School of Nursing & Midwifery is privileged to have this Centre as it promotes the School as a world leader in the area of disaster nursing, an area that is fast gaining momentum internationally due to such factors as climate change, global warming and the ever-increasing number of world disasters.

Dr Lidia Mayner
Director (FURPDN)

Nursing Insight: a publication of WADEM

Nursing Insight is published to keep members of the Nursing Section of WADEM up-to-date with developments in the field of disaster health that have particular significance to nurses. Relevant articles are selected, reviewed and commented upon by experts in disaster and emergency nursing. The reviewers not only analyse the evidence base of the papers selected but also point out the significance of the findings for nursing. The Nursing Insight coordination team, led by Prof Paul Arbon, Dr Mayumi Kako and Dr Lynette Cusack, liaises with the editors from WADEM and health professionals globally. To capture readers worldwide, Nursing Insight is translated into Chinese (Mandarin) and Spanish. Nursing Insight is published online and distributed to WADEM members approximately three times a year.

Laura Bahnisch
Centre launch

Health Minister John Hill opened the Flinders University Research Centre for Disaster Resilience and Health at a ceremony on Friday, 12 March 2010. The event also marked the launch of the Flinders University Research Program for Disaster Nursing.

Professor Paul Arbon gave the opening speech focussing on enhancing research in the area of disaster and resilience nationally and internationally.

“There is an urgent need for more evidence-based solutions to the health problems associated with catastrophic emergencies and disaster and to assist in building the resilience and preparedness of communities at risk,” Professor Arbon said.

“The Centre, with its partners such as the International Council of Nurses and the World Association for Disaster and Emergency Medicine, aims to enhance disaster health research.”

Visiting scholar

In February 2010, the School of Nursing and Midwifery welcomed Dr Huahua Yin from the Third Military Medical University in Chongqing, China, for a twelve month visit. Her goal during this time has been to develop research linkages between our universities and to consolidate the collaborative agreement that we have with TMMU.

Dr Yin lectures in the Department of Emergency Nursing within the School of Nursing, where she teaches emergency nursing, nursing research and evidence based nursing education. Dr Yin has qualifications from China which include a doctorate in Medicine (Surgery) with a Masters in Medicine (Nursing) and is a Registered Nurse, having worked in neurosurgical intensive care nursing, health education, clinical research and education with specialist skills in trauma nursing.

Dr Yin has participated in many of the Centre’s activities during 2010 and been involved with some of the research projects. She has also written two papers on aspects of disaster education and management, with one titled ‘Nurses’ Skills in Wenchuan Earthquake Disaster Sites: Implications for Disaster Training’, accepted for publication by the Journal of Advanced Nursing.
Visiting academics

February
Assistant Professor Elizabeth (Ibby) Tanner from Johns Hopkins University visited the School of Nursing & Midwifery for a two week period. Professor Tanner attended the Workshop for Disaster Response in Aged Care Facilities and had several research development sessions with the Centre’s Management team which has established the foundations for collaborative research in the area of disaster health in older people.

March
Professor Kim Usher from James Cook University attended the opening of the Research Centre and spent time initiating collaborative links with the Population Health team members. Professor Usher also collaborated on the review of heat wave strategies and assisted in developing links with the Asia Pacific Emergency and Disaster Nursing Network (APEDNN).

April
Professor Julita Sansoni from the La Sapienza University, in Rome visited the Centre. Professor Sansoni is a board member of ICN and is well known in Europe for her work on older people, nursing education and palliative care. While here, Professor Sansoni began talks to establish collaborative research focussing on the community resilience and nursing intervention in L’Aquila following the 2009 earthquake.

July
During the week of 26-30 July the Centre hosted academic colleagues of the World Association for Disaster and Emergency Medicine (WADEM), Professor Kristine Gebbie, Professor Marv Birnbaum and Ms Elaine Daily. During the week several seminar sessions were presented including: ‘Understanding Disaster’ (Professor Birnbaum; Professor Gebbie; Ms Daily); ‘Current Research Projects of the Centre’ (Members of the Research Centre for Disaster Resilience and Health); ‘Introduction to the International Council of Nurses Disaster Nursing Program’ (Dr Mayner).

December
Ramon Shaban (Queensland University of Technology), Julie Considine and Belinda Mitchell (Northern Health, Vic) and Jamie Ranse (University of Canberra) visited to meet with the team working on a project assessing the factors affecting willingness of Emergency Department nurses to work during disasters.

Dean, Faculty of Nursing Airlangga University, Surabaya, Indonesia and staff, visited to discuss possible collaborations including assistance with a national conference Professor Arbon will present on disaster nursing.

2010 Australian Safer Communities Award
The 2010 Australian Safer Communities Awards, sponsored by the Commonwealth Attorney General’s Department in conjunction with States and Territories, recognise innovative practices and achievements across the nation that are making communities safer, stronger and better prepared for emergency situations. At an award ceremony on 4 November 2010, Minister Michael Wright presented Dr Alison Hutton and her team from the Flinders University Research Centre for Disaster Resilience and Health with a Highly Commended Award for their project titled ‘Staying Safe and Healthy at Adelaide Schoolies Festival’.

This project is an independent analysis of operational events and the benefits it offers in identifying both what is being done well, and what avenues can be explored to further improve.

The project team included academic researchers, members of Encounter Youth (the event organisers) as well as other stakeholders including emergency and health services, local government and Schoolies themselves.

This project had three (3) main aims in relation to staying safe:
- to identify what is important to young people
- to understand their perspectives on risk choices
- to evaluate whether the event environment supported the health and safety of young participants.

Research findings suggest a change of focus from health driven information strategies to addressing the socio-cultural landscape of the event, through event management practices that more effectively enhanced the safety of the event.
These findings have national applicability in relation to other mass gathering events and have influenced a number of changes to pre-event education seminars and altered practices within the event venue to create a safer environment for young people and reduce the impact on other support agencies.

**Workshop for Disaster Response in aged care facilities**

*Presented by:* Professor Paul Arbon, Dr Lynette Cusack and Ms Lesley Siegloff

Summary: A literature review of disaster management in the aged care sector and an analysis of the emerging key issues was undertaken. This led to a report summarising the key issues for managers of aged care services to consider in their planning for hazards and potential disastrous events. From this report a number of collaborative strategies were identified. On the 18th February 2010 a four and a half hour workshop on building the resilience of aged care facilities was provided by three members of the Flinders University Centre for Disaster Resilience and Health. This was in partnership with Resthaven Inc and Aged Care and Community Services. The evaluation indicated a very positive response. Most of the participants found the workshop very useful. They were able to develop a reasonable understanding of emergency management contingency planning and indicated that it was very relevant for people working in the aged care sector. The opportunity to discuss the issues with a mixed group of people from a range of aged care settings was very positive. The style of the workshop provided the opportunity to obtain information and to share/discuss the issues arising from the participants’ own workplace.

**Master Class on Mass Gathering Medicine**

*Presented by:* Professor Paul Arbon

The Master Class brought together leaders in mass gathering medicine research as presenters with senior managers responsible for the health aspects of these major events to discuss the latest evidence and practice in this field. The two day event held on 19 April 2010 at Flinders University, was well attended by local and interstate and international participants. Several of the leading authors in this field are members of the Centre including Professor Paul Arbon, Associate Professor Kathryn Zeitz, Dr Alison Hutton and Mr Jamie Ranse.

**Research Innovation Showcase**

Held on 30 September 2010 at Flinders University’s Science Innovation Learning Centre (SILC Building), the Research Innovation Showcase displayed some of the University’s best research and technology in twelve showcase booths. Featuring addresses from the Vice-Chancellor Professor Michael Barber, Deputy Vice-Chancellor (Research) Professor David Day, Director of Flinders Partners Mr Anthony Francis, Chief Executive of Innovate SA Mr Greg Boundy, and keynote speaker Mr Richard Sauerman, the exhibition provided a valuable opportunity to network with investors, government, industry, researchers and students.

The Centre was represented in the ‘Health, Society and Equity’ booth with a comprehensive display featuring research information, posters, emergency kits and a disaster relief exhibit. Management Board members Dr Lynette Cusack, Ms Lesley Siegloff and Dr Mayumi Kako were in attendance to promote the Centre’s research projects and activities.
Deputy Director

Dr Lidia Mayner, Senior Lecturer, BSc (Adel), BSc Hons (Flin), BN (UniSA), GradCertTertEd (Flin), PhD (ANU), MRCNA

Lidia is the inaugural Director of the Flinders University Research Program for Disaster Nursing, an ICN accredited Research and Development Centre for the International Classification for Nursing Practice (ICN®). She is also Deputy Director of the Flinders University Research Centre for Disaster Resilience and Health. Lidia’s research currently focuses on a variety of aspects of disaster health within the community locally, nationally and internationally.

The research projects involve the following areas: medication preparedness among people with chronic conditions before, during and after disasters; epidemiology of patient presentations, triaging and diagnosis in Emergency Departments during extreme weather periods; medication readiness and availability in centres when people are evacuated from their homes; and management of pain during disasters for those people with chronic pain conditions.

Additionally, Lidia is compiling a current disaster health terminology for use as a classification guide for disaster nursing and bringing this into a disaster nursing practising catalogue.

Lidia is Co-Chair of the WADEM Nursing Section Education Committee and is an invited member of the Asia Pacific Emergency and Disaster Nursing Network.

Contact details
GPO Box 2100, Adelaide SA 5001
Ph: +61 8 8201 3337
email: lidia.mayner@flinders.edu.au

Director

Professor Paul Arbon AM, Professor of Nursing (Population Health), BSc, DipEd, Grad Dip Health Ed, Med (Studies), PhD (Sydney), RN, FRCNA

Paul is the inaugural Professor of Nursing (Population Health) in the School of Nursing & Midwifery, Faculty of Health Sciences at Flinders University and Dean of the School. His current research focuses on community capacity-building and resilience and includes the study of triage decision-making, community resuscitation training, first aid, and innovative approaches to care such as the potential roles of nurse practitioners. His research is applied and aims to strengthen community resilience by building evidence-based capacity and capabilities.

As well as being Director of the Flinders University Research Centre for Disaster Resilience and Health, Paul is President of the World Association for Disaster and Emergency Medicine and Chief Commissioner of St John Ambulance Australia.

Population health builds on the long traditions of public health, community health and health promotion. A population health approach recognises that multiple factors and conditions contribute to health.

The School’s program of population health research involves researchers from a range of professional groups and organisations and is carried out with individuals, families and communities. The program’s aim is to contribute positively to the goals of a population health approach in:

- community capacity-building and resilience
- disaster response
- health and safety in mass gatherings.

Contact details
GPO Box 2100, Adelaide SA 5001
Ph: +61 8 8201 3558
email: paul.arbon@flinders.edu.au
Management Board

**Dr Lynette Cusack**, Postdoctoral Research Fellow (Population Health), BAc (SACAE), MHA (UNSW), PhD (Flin)

Lynette is a Postdoctoral Research Fellow (Population Health) at the School of Nursing & Midwifery, Flinders University. She has extensive experience working in the community in health prevention, promotion, community development, as well as home nursing. Lynette has worked for many years in the addiction field in South Australia as a Director of Community Services.

Lynette’s research interests focus on disaster management and the impact on health issues. This includes building and supporting community resilience. In particular, Lynette has undertaken research related to the effects of disasters on vulnerable groups in the population, such as the elderly in residential care and people with mental health and/or alcohol and other drug issues. The other aspects of disaster management Lynette is interested in include the impact on health professional standards of care and professional responsibilities, and exploring the role of nursing students in a disaster event.

**Contact details**
GPO Box 2100, Adelaide SA 5001
Ph: +61 8 8201 7645
e-mail: lynette.cusack@flinders.edu.au

---

**Lesley Siegloff**, Senior Lecturer (Nursing/Aged Care), RN, DipT (NEd), BEd (NStud), MNA (UNSW), FRCA

Lesley is the Associate Dean (Practice Development) in the Flinders University School of Nursing & Midwifery. Her research is concerned with the preparedness of rural communities and the rural health workforce and of older people and aged care facilities to respond to disaster and extreme weather conditions, and the impact of climate change policy on the ability of the health services workforce to deliver safe, quality care.

Lesley has worked for many years in senior management roles in rural health services and residential aged care in South Australia, Victoria and New South Wales. She has extensive experience in strategic planning, quality, safety and risk management, community development and workforce development and is interested in the impact of policy on service delivery and the workforce. Lesley is also the current Chair of the South Australia Chapter of the Royal College of Nursing Australia.

**Contact details**
GPO Box 2100, Adelaide SA 5001
Ph: +61 8 8201 3770
e-mail: lesley.siegloff@flinders.edu.au
Dr Alison Hutton, Senior Lecturer, RN, DipAppSc, PaedCert (SACAE), BNg, MNg, PhD (Flin), MRCNA

Alison’s current work revolves around young people, health promotion and harm minimisation. The philosophy underpinning Alison’s work is that by involving youth in decisions about their behaviour and life choices, they will feel supported and safe in choices that can impact on their health and their behaviour. Alison currently works with non-government organisations in Adelaide such as Encounter Youth and St John Ambulance Australia. Alison has authored many publications on creating supportive environments for adolescents in health care. Alison works as a Senior Lecturer at Flinders University in the School of Nursing and Midwifery, where she is Honours Coordinator. She is a nominated Youth Advocate and Vice President on the Board of the Association for Well-being of Children in Australia; an Associate Editor (Paediatric) for the Neonatal, Child Health and Paediatric Nursing Journal, and reviews for four international nursing journals.

Alison is also the Chapter President for the College of Children and Young People’s Nurses in South Australia, and has recently been highly commended for her work through receiving an Award in the South Australian 2010 Safer Communities Awards. As a member of WADEM, Alison is an active member of the Nursing Section where she is Co-Chair of the WADEM Nursing Section Research Committee.

Contact details
GPO Box 2100, Adelaide SA 5001
Ph: +61 8 8201 3429
e-mail: alison.hutton@flinders.edu.au

Dr Mayumi Kako, Research Assistant, RN, BNG, MNG, PhD (Flin), MRCNA

Mayumi’s research interests are the preparedness and willingness of nurses to participate in disaster health, health professionals’ competence in disaster health, and development of methodologies to research disaster health.

She has also participated as a health professional in disaster situations, which has provided a practical approach to her research activities.

Contact details
GPO Box 2100, Adelaide SA 5001
Ph: +61 8 8201 7637
e-mail: mayumi.kako@flinders.edu.au

Flinders University Research Centre for Disaster Resilience and Health

GPO Box 2100
Adelaide SA 5001

Phone: As per staff member
Fax: +61 8 8276 1602
web: flinders.edu.au/nursing/FURCDRH
## Associate members of the Centre

### Professor Peter Leggat
Head, School of Public Health, Tropical Medicine and Rehabilitation Sciences, James Cook University; Adjunct Professor, Queensland University of Technology;
Conjunction Professor, University of Newcastle

### Professor Gerry Fitzgerald
Professor of Emergency Medicine and Public Health, School of Public Health, Queensland University of Technology

### Professor Frank Archer
Director, Community Emergency Health and Paramedic Practice, Faculty of Medicine, Nursing and Health Sciences, Monash University

### Professor Kristine Gebbie
Joan Hansen Grabe Dean, School of Nursing, Hunter College, City University of New York

### Professor Kim Usher
School of Nursing, Midwifery and Nutrition, James Cook University

### Professor Nancy Cromer
Head, Environmental Health, Flinders Medical Science and Technology, Flinders University

### Professor Hugh Grantham
Paramedic Department, School of Medicine, Flinders University

### Assoc Prof Peter Aitkin
School of Medicine and Dentistry, James Cook University Senior Staff Specialist, Emergency Department, Townsville Hospital

### Associate Professor Arthas Flabouris
Staff Specialist, Intensive Care Unit and MedSTAR Retrieval Service, Royal Adelaide Hospital; Clinical Associate Professor, Dept of Anaesthesia and Intensive Care, University of Adelaide

### Adjunct Assoc Professor Kathryn Zeitz
School of Nursing & Midwifery, Flinders University

### Ms Val Smith
Director, Emergency Management Unit, Public Health & Clinical Coordination, SA Health

### Dr Andy Robertson
Director, Disaster Management, Regulation and Planning, Public Health Division, Western Australian Department of Health; Adjunct Professor, James Cook University

### Mr Graham McColl
Emergency Management Advisor (Southern), Emergency Management Team, Ministry of Health, Christchurch, New Zealand

### Mr Alan Eade
Chief Professional Officer and Chief Paramedic, St John Ambulance Australia (Vic)

### Dr Julie Considine
Senior Research Fellow, Deakin University – North Health Clinical Partnership

### Mr Ramon Shaban
Research Fellow, School of Nursing and Midwifery, Griffith University; Editor, Australasian Journal of Emergency Nursing

### Mr Tim Pointon
Head, Paramedic Unit, Flinders Clinical Effectiveness, School of Medicine, Flinders University

### Dr Louise Reynolds
Flinders Prevention, Promotion and Primary Health Care, Social Health Sciences, School of Medicine, Flinders University

### Dr Virginia Plummer
Senior Lecturer, Deputy Director, Mobile Health Research Group, Faculty of Medicine, Nursing and Health Sciences, Monash University

### Mr Jamie Ranse
Lecturer, Faculty of Health, Nursing and Midwifery, University of Canberra; Chief Nursing Officer, St John Ambulance Australia; Associate Editor- Pre-hospital and Disaster, Australasian Emergency Nursing Journal; Adjunct Lecturer, School of Nursing & Midwifery, Flinders University

### Ms Joyce Williams
Assistant Professor, Disaster and Emergency Management, Johns Hopkins University, Baltimore

### Mr Dave Tingey
Clinical Manager, MedSTAR Emergency Medical Retrieval, SA Health

### Mr Geoff Davies
Executive Officer, St John Ambulance Australia (WA)

### Ms Karen Hammad
Lecturer, Flinders University, School of Nursing & Midwifery

### Mr Robert Eliot
Clinical Manager, SA Ambulance Service; Member, Flinders Clinical Effectiveness, School of Medicine, Flinders University

### Ms Lisa Conlon
Lecturer, Nursing, Midwifery and Health, University of Technology, Sydney

### Mr Anthony Pryzibilla
Area Clinical Team Leader, SA Ambulance Service

### Dr Steve Brown
Acting Head of Tourism, Senior Lecturer, School of Humanities, Department of Tourism, Flinders University

### Mr Brett Aimers
State Professional Officer, St John Ambulance Australia (Vic); Senior Advisor, Health Emergency Management, Victorian Department of Health

### Dr Huahua Yin
Lecturer, School of Nursing, Third Military Medical University, Chongqing, People’s Republic of China
Adjuncts

**Professor Kristine Gebbie**, DrPH, RN Associate Professor Adjunct, Joan Hansen Grabe Dean, Hunter-Bellevue School of Nursing, New York

Professor Gebbie was named Joan Grabe Dean at Hunter in September of 2009. She served for 14 years as Elizabeth Standish Gill Professor of Nursing and Director, Center for Health Policy at Columbia University School of Nursing where she led multiple research projects related to emergency preparedness, competency-based education, public health practice and nursing. Her current research continues her interests in public health infrastructure and public health law, and she continues to be a leader in developing the public health workforce for the 21st century.

In addition to service in professional societies, she is a member of the Board of Trustees of Lutheran Medical Center, Brooklyn, New York. She is widely published in nursing, public health and policy journals. Her education includes a BSN from St Olaf College, Minnesota; MN from UCLA School of Nursing and DrPH from University of Michigan School of Public Health. She is an elected member of the American Academy of Nursing, the Institute of Medicine and the New York Academy of Medicine.

**Professor Debbie Kralik**, DipNsg, BNg, MN, PhD (Flin)

Debbie joined the Royal District Nursing Service (RDNS) in 1998 as the Director of Research, and was appointed the General Manager, Strategy and Research of the Royal District Nursing Service (RDNS) in 2009. Additionally, Debbie is a Professor at the Flinders University and Senior Editor of the Journal of Advanced Nursing. Debbie has an internationally recognised reputation in community health research, evidence-based practice and publication.

Debbie is currently involved with the Centre’s ‘Identification of the health care needs of homeless people during extreme weather events in SA’ research project, building on a collaborative relationship that exists between RDNS Health and Flinders University.

**Mr Jamie Ranse**, BNurs (UCan), GCertClinEd (CSturt), GCertClinEpi (Newcastle), MCritCareNurs (UCan), RN, MRCNA

Jamie has research interests in the area of disaster and mass gathering health. His work has been supported by competitive research grants, published in peer-reviewed journals and presented at national and international conferences. Jamie is an associate editor of the Australasian Emergency Nursing Journal, holding the pre-hospital portfolio. Additionally, Jamie peer-reviews for a number of national and international journals in the areas of disaster and primary health care.

Jamie volunteers as the Chief Nurse for St John Ambulance Australia; in this role he engages in high-level strategic decision-making concerning mass gathering and emergency health care. Jamie is an Assistant Professor at the University of Canberra.

Research students

**Karen Hammad**, Associate Lecturer, RN, BN (Hons), GradDipEmergNurs

Karen has recently completed an honours degree through Flinders University titled ‘Emergency nurses and disaster response: an exploration of South Australian emergency nurses’ knowledge and perceptions of their roles in disaster response’. Karen presented the study at the International Conference for Emergency Nurses and has also published it in the Australasian Emergency Nursing Journal.

Karen is an emergency nurse with over 14 years of clinical experience. Karen is currently the Vice-President of the South Australian branch and national board member of the College of Emergency Nursing Australasia. Karen is passionate about disaster and emergency preparedness for health professionals, specifically in relation to emergency nurses. Karen is about to commence a PhD in this field.

**Resthaven Research Scholarship**

The Resthaven Research Scholarship has been established to support a suitably qualified graduate to carry out a program of study in disaster management in residential aged care facilities and older people in the community leading to the award of Doctor of Philosophy. One scholarship is available with a value of $30,000 per annum. The applicant will undertake a PhD under the supervision of Professor Paul Arbon at Flinders University in the School of Nursing and Midwifery.

Resthaven Inc is a private provider of residential aged care services and community home care support for older Australians and the research will be undertaken in partnership with the Flinders University Research Centre for Disaster Resilience and Health.

In November 2010 the Resthaven Research Scholarship was awarded to Vicki Cornell. Vicki is the Principal Project Manager at the State Recovery Office, a unit based in the Department for Families and Communities of the South Australian Government which works across the government and non-government sectors increasing the State’s disaster recovery capacity. Vicki has been at the State Recovery Office for three years and during that time has written the State Recovery Plan, developed a State Recovery Operations Manual and coordinated recovery activities following state emergency events.

Starting full-time in January 2011, Vicki intends to investigate the implications and effectiveness of emergency management planning education and training, to aged care service provider agencies and their staff who provide home care support.
Acronyms

ANU          Australian National University
ICN          International Council of Nurses
ICNP®        International Classification for Nursing Practice
FRCNA        Fellow of the Royal College of Nursing Australia
FURCDRH      Flinders University Research Centre for Disaster Resilience and Health
FURPDN       Flinders University Research Program for Disaster Nursing
MRCNA        Member of the Royal College of Nursing Australia
RDNS         Royal District Nursing Service
SACAE        South Australian College of Advanced Education
TMMU         Third Military Medical University (Chongqing, China)
UCLA         University of California, Los Angeles
UNSW         University of New South Wales
WADEM        World Association for Disaster and Emergency Medicine