Acknowledgment of Country

We would like to acknowledge the traditional custodians of the lands on which the south western Sydney UNSW campuses are located including the Darug, Gandangara and Tharawal peoples. We offer our sincere respect to Elders both past and present.

Acknowledgments

Thank you to all the staff, students and patients who have contributed content to this report. Photography by Craig Smith, Christopher Shain (2008) and Bubblegum Films (2011). Design of the Ian Webster Medal by Leo Carol. Design and production support by Wild Mind Studio.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short History of UNSW in the South West</td>
<td>1</td>
</tr>
<tr>
<td>Our People</td>
<td>3</td>
</tr>
<tr>
<td>Teaching</td>
<td>23</td>
</tr>
<tr>
<td>Skills and Simulation</td>
<td>26</td>
</tr>
<tr>
<td>Academic Infrastructure</td>
<td>27</td>
</tr>
<tr>
<td>Prizes and Awards</td>
<td>29</td>
</tr>
<tr>
<td>Best Overall Conjoint Teacher</td>
<td>30</td>
</tr>
<tr>
<td>Research Groups</td>
<td>31</td>
</tr>
<tr>
<td>Ingham Institute</td>
<td>45</td>
</tr>
<tr>
<td>Postgraduate Students</td>
<td>49</td>
</tr>
<tr>
<td>Independent Learning Projects</td>
<td>49</td>
</tr>
<tr>
<td>Grants</td>
<td>51</td>
</tr>
<tr>
<td>Papers</td>
<td>55</td>
</tr>
<tr>
<td>2010 Papers of the Year</td>
<td>84</td>
</tr>
<tr>
<td>Staff List</td>
<td>85</td>
</tr>
<tr>
<td>Becoming a Conjoint</td>
<td>87</td>
</tr>
</tbody>
</table>
UNSW established its presence in south western Sydney in 1989 following an agreement signed by the Vice Chancellor of UNSW and the Chairman of the Board of the South Western Sydney Area Health Service (SWSAHS). The agreement was to create a teaching Area Health Service and not simply a teaching hospital. It included the public hospitals of Liverpool, Fairfield, Bankstown, Campbelltown and Bowral as well as the associated community and public health services.

In 1990, the first students commenced terms in south western Sydney as an integral part of their fourth year program involving community medicine and general medicine and surgery. All of UNSW's medicine students rotated for a period of six weeks and were accommodated on the campuses across the south west. In 1991, approximately 20 were allocated for all of their clinical teaching in fourth, fifth and sixth years. Up to one hundred students were accommodated in facilities at any time in the south west.

UNSW made a number of appointments including professorships in community medicine, pathology (conjoint), psychiatry, medicine, surgery, obstetrics and gynaecology and intensive care. The first UNSW Chair in General Practice was established in an academic unit at Fairfield Hospital. This was followed by appointments of senior lecturers in medicine and surgery and conjoint appointments at senior academic levels in all the disciplines.

The initial organisational steps involved joint planning and management committees with the Area Health Service and within the Clinical School and establishment of a Clinical School Committee, a committee for teaching, a Board of Medical Studies and a Research Advisory Committee. The Board of Medical Studies was responsible for oversight of undergraduate and postgraduate education and the Overseas Doctors Training Program.

In the early period, Clinical School meetings were held on different hospital campuses of the Area Health Service so that the whole of the health service in the south west of Sydney could be part of the new academic enterprise.

The transition from purely clinical services to an environment of teaching, research and clinical endeavour was achieved harmoniously. The leadership and collaboration of senior clinicians was outstanding as they welcomed the new academics and specialists to this part of Sydney.
One of the most important early tasks was to promote resources to support research development. This was achieved through collaboration of academics with the Area Health Service in founding the Health Research Foundation Sydney South West and the Ingham Institute. There were other research initiatives in medicine, cancer, trauma, epidemiology, general practice, health services research and psychiatry.

The Area Board of Directors were enthusiastic about research and sponsored many community events to raise funds for research. Also there were joint arrangements with the University of Western Sydney to share teaching areas and to support research. The teaching efforts were supported by the establishment of an excellent medical library, a Clinical Skills Centre and audiovisual resources.

The University continues to work with the South Western Sydney Local Health District to further develop academic medicine in south western Sydney including large infrastructure investments in the Ingham Institute, clinical skills and simulation and videoconferencing equipment to connect the campuses across Kensington and south western Sydney.
Our People

Senior UNSW appointments have been made across a range of disciplines in the south west of Sydney. Here are a few of their stories and a complete list is available on page 85.

Associate Professor Meera Agar

Meera Agar leads a collaborative research team with significant expertise in developing clinical research in challenging and under-studied clinical areas of palliative care, with outcomes easily translatable into palliative care practice. The team has strong collaborations with national and international groups within palliative care, oncology, aged care psychiatry, geriatrics, dementia care, cell biology (neuronal apoptosis), clinical pharmacology and nursing research. Her key areas of research include projects in cognitive impairment and delirium in advanced cancer and palliative care, pharmacological clinical trials for symptom management in palliative care, health service intervention evaluation in palliative care, and end of life care in advanced dementia. Meera is also the Clinical Director of the Braeside Hospital Palliative Care Service, the Clinical Trials Director of the Ingham Institute for Applied Medical Research and coordinates palliative care teaching for Phase 2 UNSW students in south western Sydney.

Meera’s team has received 15 peer reviewed competitive grants totaling more than $6.5m since 2008. Funding sources have included NHMRC, Department of Health and Ageing, Cancer Councils of NSW and Queensland, and Cancer Institute NSW. In 2011 the South West Sydney Palliative Care Clinical Trials Unit that she leads won the Premier’s Cancer Research Award for Innovations in Clinical Trials. Meera also won the Palliative Care New South Wales Award for Significance in Palliative Care Research. The Palliative Care for People at Home project for which she was the chief investigator also won the Palliative Care NSW Innovation in Palliative Care Award.

Meera is the chief investigator and Chair for ImPACCT: Improving Palliative Care Through Clinical Trials - the NSW Palliative Care Clinical Trials Collaborative Group. She is a member of the Palliative Care Clinical Studies Collaborative (PaCSCC, a national trials group in palliative care) - Trials Management Committee, Scientific Committee and Management Advisory Board and is the lead chief investigator for one of the national clinical sites. She is the Chair of the Palliative Care Group, and member of Council, Clinical Oncological Society of Australia; Deputy Chair of the Cancer Institute NSW Human Research Ethics Committee; Board Member of the European Delirium Association and a member of the Scientific Advisory Committee for the Cooperative Trials Group – Neurooncology (COGNO).
Minoti Apte is the Director of the Pancreatic Research Group which has received continuous research support from the National Health and Medical Research Council (NHMRC)/Department of Veterans Affairs (DVA) since 1987. The Group has also received funding from the Australian Research Council (ARC) and the NSW Cancer Council.

Minoti is internationally acknowledged as a leading researcher in the field of alcohol-induced pancreatic injury and pancreatic fibrogenesis and was the first in the world to isolate pancreatic stellate cells, the key effect on cells in pancreatic fibrosis. The international recognition of her work is reflected in the more than 2100 citations of her papers, in the invitations that she has received to speak at meetings worldwide and in the travel and research awards that she has received.

Minoti is Editor-in-Chief of the journal Pancreatology and a member of the Editorial Boards of several eminent journals in the digestive diseases field including Gastroenterology (as International Consultant), American Journal of Physiology, Journal of Gastroenterology and Hepatology and World Journal of Gastroenterology. She was recently invited to the Editorial Board of Gut. She is a founding member and immediate Past President of the Australasian Pancreatic Club (established in 2002 to provide a forum for clinicians and scientists with research interests in pancreatic pathobiology), a founding member of the Asian Oceanic Pancreatic Association (an organisation committed to fostering research and education in the pancreas in the Asia-Oceanic region), a member of the Biological Subcommittee of the Australian Gastrointestinal Trials Group (AGITG) and the Research Committee of the Gastroenterological Society of Australia.

In 2011, she was invited as the Comfort Visiting Professor at the Mayo Clinic, Rochester USA. She was made a Fellow of the American Gastroenterology Association in February 2011, in recognition of her leading contribution to pancreatic research.

Bryanne Barnett AM is a conjoint Professor in the School of Psychiatry at UNSW, where she previously held the Chair of Perinatal and Infant Psychiatry. She is currently Clinical Director of the perinatal psychiatry service at Karitane Early Parenting Services and the perinatal and infant
mental health service at St John of God Health Care in Blacktown.

Her key interest in mental health is early intervention to enhance the well-being of infants, children and their parents. To that end, she has established various collaborative programs and services aiming to identify problems and promote resilience in primary care and to provide relevant secondary specialised services to support such initiatives.

Bryanne was for many years a Director and then Chair of the Board at Karitane. She is a foundation member and Past President of the Australian Association for Infant Mental Health, the Australian Society for Psychosocial Obstetrics and Gynaecology and the Australian Branch of the Marcé Society. She has also been President of the International Marcé Society. She established the Department of Infant, Child and Adolescent Psychiatry in Sydney’s south west.

In 2007, Bryanne was awarded Membership of the Order of Australia in recognition of her services to women, families and the profession.

Professor Michael Barton

Michael Barton OAM is Professor of Radiation Oncology at UNSW, and Research Director of the Collaboration for Cancer Outcomes (CCORE) at Liverpool Hospital. He is the Research Director of the Ingham Institute of Applied Medical Research which is constructing a new five-storey research building, clinical skills and simulation centre and research linear accelerator at Liverpool.

Professor Barton has been involved in state, national and international strategic planning projects for cancer services. These involvements have included the Victorian Cancer Services Framework Report, the Papua New Guinea Cancer Services Report and feasibility studies for radiotherapy services in Darwin and in Burnie Tasmania. He currently chairs the National Brain Tumour Guidelines Committee of the Australian Cancer Network which published the first Australian guidelines for professionals in 2009 and a patient and carer version in 2011.

Michael has a strong track record in undergraduate and postgraduate education. In 2000, he received a Professional Excellence Award from the New South Wales Cancer Council, Australia, for his work in professional education. During 2007, he was appointed as the Rohan Williams Traveling Professor by the Royal College of Radiologists, London, completing a month long lecture tour of the United Kingdom in September of that year. He has developed a distance learning course in the Applied Sciences of Oncology for the International Atomic Energy Agency that has been downloaded over 2000 times.

Associate Professor Roy Beran

Roy Beran is a consultant neurologist with over 15 years of experience in clinical trials run from private practice. His research interests include epilepsy, multiple sclerosis, stroke, headache, sleep medicine, legal medicine and Parkinson’s disease.

Roy has published approximately 250 peer-reviewed journal articles, review articles, letters and book chapters; presented more than 300 papers at national and international meetings; published 15 books on the subject of epilepsy, law, neurology and 8 book reviews in peer-reviewed journals.

Professor Michael Barton

Michael Barton OAM is Professor of Radiation Oncology at UNSW, and Research Director of the Collaboration for Cancer Outcomes.
His memberships include the Australasian Academy of Forensic Sciences, Australasian Stroke Society, Australasian Sleep Association, Epilepsy Society of Australia and International League Against Epilepsy. Roy is also a member of the editorial board of Journal of Forensic and Legal Medicine and Epilepsy and Behavior. He has been President of the Australasian College of Legal Medicine (2002-2011) and has been Secretary General of the World Association for Medical Law since 2008.

**Associate Professor Christophe Berney**

Christophe Berney is General Surgeon with a wide expertise in minimally invasive surgery, especially in hernia repair. Since his appointment as a Visiting Medical Officer at Bankstown-Lidcombe Hospital in 2002, Christophe has continued to develop and implement new techniques in the field of advanced laparoscopic surgery and has been at the forefront of practice in a number of areas including the laparoscopic repair of congenital diaphragmatic hernia, laparoscopic distal pancreatectomy, laparoscopic excision of mid-thoracic diverticulum, laparoscopic mesh repair of complex paraoesophageal hernia and single-port cholecystectomy.

Christophe has one of the world’s largest series on laparoscopic repair of inguinal hernia using exclusively fibrin glue for mesh fixation, with over 650 cases successfully completed. As a Supervisor of Surgical Education and Training for General Surgery, and Committee Member of the New South Wales Regional Board in General Surgery, he has a strong interest and commitment to the teaching of laparoscopic skills to surgical trainees.

Since being awarded a PhD from UNSW in 1999 for fundamental research into predictors of liver metastasis in sporadic colorectal cancer, Christophe has maintained strong links with the academic world of surgery. He still offers his services to UNSW through his role as Coordinator of Undergraduate Surgical Teaching at Bankstown-Lidcombe Hospital, and also with his ongoing contribution to publications in peer reviewed journals and national and international surgical conferences. He is an associate member of the Australian and New Zealand Endocrine Surgeons, member of the General Surgeons Australia, member of the European Hernia Society, member of the European...
Association for Transluminal Surgery and member of the Obesity Surgery Society of Australia and New Zealand.

**Professor Daniel Chan**

Daniel Chan is the Director of Aged Care and Rehabilitation at Bankstown-Lidcombe Hospital and a conjoint Professor of Geriatrics with the School of Public Health and Community Medicine. Daniel has multiple qualifications which support his current roles – as a manager, a staff specialist and an enthusiastic medical researcher.

He has broad research interests ranging from basic science to health care service related topics. One of Daniel’s main interests is finding the genetic and environmental risk factors for a number of neurodegenerative diseases such as Parkinson’s disease and vascular dementia. National and international collaborations have been established for studies of the genetic associations within Australia, mainland China, Hong Kong, Singapore and Japan. In addition, he has been involved with large-scale epidemiological studies, surveying over 7000 households for prevalence of Parkinson’s disease and interviewing identified Parkinson’s patients in metropolitan Sydney.

Daniel has also been involved with stroke service related research and stroke epidemiological research projects. He and his team won the Baxter Finalist Award from NSW Health for an innovative approach to stroke care in 2002. In 2007, Daniel was awarded NHMRC funding for a comprehensive stroke care model trial. Daniel has over 50 publications in peer-reviewed journals in the past five years. He has also been successful in securing in excess of $2 million from various competitive granting bodies including the NHMRC, Hong Kong Research Council, NSW Health, the Australian Council for Safety and Quality in Health (ACSQHC) and the Royal Australasian College of Physicians (RACP). He has published one textbook on Geriatrics (Chan’s Practical Geriatrics, in second edition) which has been translated and published in Chinese by Peking University Medical College Press.
**Professor David Davies**

David Davies is the Joint Area Director of Pathology for SSWAHS and has been a conjoint Professor of Pathology at UNSW since 1995. Having studied medicine at the University of Liverpool in the United Kingdom (UK), David has held a number of academic and clinical appointments in the UK, Victoria and NSW.

David is a member of the Panel of Advisers for the Health Care Complaints Commission (HCCC) of NSW and a councillor on the Australian Council on Healthcare Standards (ACHS). He has also made a significant contribution to the development of the pathology elements of Phase 3 in the New Medicine Program at UNSW.

David has a number of research interests including the pathogenesis of renal medullary necrosis and its relationship to the cortical lesion of chronic interstitial nephritis; mechanisms of proteinuria with particular reference to protein overload proteinuria; and immunopathology, particularly that of necrotising glomerulonephritis and small vessel vasculitis. In 1981, David was the first to recognise cytoplasmic antineutrophil cytoplasmic antibody (cANCA) in microscopic polyarteritis nodosa. This has now become a test in general use internationally for diagnosis of small vessel vasculitis. Currently he is Chair of the national quality assurance program in Anatomical Pathology provided by RCPA Quality Assurance Programs Pty Ltd.

In recognition of his efforts, David was awarded the Centenary Medal in 2003 for services to Australian society and medicine. In 2011, the UNSW Faculty of Medicine named David the Overall Conjoint Tutor of the Year in recognition of his commitment to training medical students, junior doctors and senior staff.

**Professor Geoff Delaney**

Geoff Delaney is the Director of Cancer Services for the South West Sydney Local Health District, and conjoint Professor of Radiation Oncology at UNSW. Geoff has also been a member or Chair of many committees involved with radiotherapy service delivery at a national and international level.

Geoff also chairs the NSW Cancer Institute Area Cancer Registry Steering Committee. His main clinical and research interests include breast and lung cancer, effective models in radiotherapy treatment service delivery, patterns of care and the role of information technology in radiation oncology.

**Professor Hugh Dickson**

Hugh Dickson is Director of Ambulatory Care (PIXI) at Liverpool Hospital, a service supporting outpatient and domiciliary medical procedures, investigations and infusions. He has a particular interest in neuropathic foot disease and lower limb ulceration.

He is a collaborating researcher with the Braeside Rehabilitation Research Group which focuses on basic measurement in rehabilitation and the psychometric properties of measurement scales. He is currently assisting in a project with the WHO to develop a core set for amputees using the International Classification of Functioning, Disability and Health.

He has served two terms as President of the Australian Faculty of Rehabilitation Medicine and as a member of the Board of Directors of the Royal Australasian College of Physicians. He has been Chairman of the Human Research Ethics Committee of the South Western Sydney Local Health District, as well as being a member of Hospital and District administrative committees.

**Associate Professor Rebecca Dignan**

Rebecca Dignan is a senior staff specialist in Cardiothoracic Surgery and Supervisor of Training with an active practice at Liverpool Hospital. She has supervised medical students during their cardiothoracic surgery rotation since 2004, including supervision of a student independent learning project into pain and chronic pain after cardiothoracic surgery. This project is now in the pilot phase of a large, multicentre clinical trial.
Rebecca has been the principal investigator of a recently completed large, multicentre controlled trial into patient home testing and self management of warfarin in collaboration with the University of Sydney, National Health and Medical Research Council Clinical Trials Centre and Baird Institute. This trial was supported by industry and a grant from the Australian and New Zealand Society of Cardiothoracic Surgery. The data have been presented internationally and are being prepared for publication.

Rebecca has also actively contributed to the University by lecturing on cardiac surgery and as an examiner. She has also supervised honours students whose work has been the basis for presentations and manuscripts.

Professor Valsamma Eapen

Valsamma Eapen is Professor & Chair of Infant, Child and Adolescent Psychiatry at the University of New South Wales (UNSW) and Head of the Academic Unit of Child Psychiatry, South West Sydney (AUCS) based at Liverpool.

Valsa is a member of the Executive Committee of the International Neuropsychiatric Association (INA); founding member of the Australasian Autism Research Collaboration (AARC) and the interim committee of the newly formed Australasian Society for Autism Research (ASFAR); member of the bi-national committee of the Australia New Zealand Society of Social psychiatry; Scientific Advisor to Rett Syndrome Association, India; Professional Expert for the Tourette Syndrome Association Australia; Reviewer for the Positive Partnership: Australian Autism Education and Training Consortium (AAETC); member of the Editorial Board of the Journal Autism Research and Treatment; and Sentinel Reader for the McMaster Online Rating of Evidence.

As a child psychiatrist with special expertise in neurodevelopmental disorders, her research interests include Tourette Syndrome, Autism, and ADHD. Other areas of research interest include neurobiological underpinnings of attachment and separation anxiety disorder as well as metabolic syndrome in adolescents. She is a collaborator on the Obsessive Compulsive Foundation Genetics Collaborative, USA and the Autism Homozygosity Mapping Collaborative USA. Prof. Eapen holds both Australian Research Council (ARC) and National Health & Medical Research Council (NHMRC) grants. She has published four books, 15 book chapters and over 125 peer-reviewed papers.

Professor John French

John French is Director of Cardiovascular Research at Liverpool Hospital and is a conjoint Professor at UNSW. After basic physician training, he undertook a PhD at the University of Adelaide, further cardiology training at Green Lane Hospital New Zealand and a Wellcome Trust Postdoctoral Fellowship at University College London, UK. Prior to his current position, John was appointed to Green Lane Hospital and the University of Auckland from 1992-2003.
John has been an investigator and co-investigator in numerous randomised controlled trials and was on the steering committees of the SHOCK, OAT, HERO-2 and CRISP-AMI trials. Professor French has served on the clinical endpoints committees (CECs) of several major trials, and chaired the ACROSS (Australian Coronary Research OutcomeS Scientific) Group 2007-11. He has co-authored more than 150 peer-reviewed publications and over 200 short communications (abstracts and letters). Dr French’s current major research interests include the acute coronary syndromes especially ST elevation MI, and cardiac biomarkers especially high sensitivity troponins.

**Professor Afaf Girgis**

Afaf Girgis is Executive Director of the Translational Cancer Research Unit at the Ingham Institute for Applied Medical Research, South Western Sydney Clinical School, UNSW. She also holds the positions of Research Associate in the BC Cancer Agency Socio-behavioural Research Centre; Honorary Professor in the School of Medicine at the University of Queensland and Adjunct Professor in the School of Psychology at Griffith University.

Afaf is an internationally renowned behavioural scientist, with over 22 years of experience in cancer control and psycho-oncology research. She has an H-index of 21, with more than 120 publications, more than $27 million in collaborative research funding and numerous invitations to speak at national and international meetings. She has extensively researched and published in areas related to the prevention and early detection of cancer; development and psychometric testing of measures to assess cancer patients’, caregivers’ and health care professionals’ unmet needs; strategies for improving psychosocial outcomes in clinical practice using rigorous research designs; and communication skills training for the oncology workforce. Afaf has a demonstrated track record of effective engagement with service providers, end-users of research and the community (eg health professionals, cancer treatment centres, palliative care services, DOHA, Cancer Councils, Cancer Voices, Breast Cancer Network Australia) to ensure the relevance and acceptability of interventions aimed at improving cancer care and outcomes.

Afaf's national and international standing in behavioural science and psycho-oncology is demonstrated by appointments to undertake independent scientific reviews of cancer control programs and behavioural research centres in Australia and New Zealand; and invitations to serve on key committees in behavioural and psychosocial research, professional training, cancer control and public health.

Afaf also has a strong commitment to teaching, student supervision and mentoring junior researchers; and has supervised 9 PhD and 5 Masters students to completion, taught communication skills in the Bachelor of Medicine program at the University of Newcastle for many years and mentored a number of early to mid-career researchers who now hold Post-Doctoral Fellowships and senior research appointments.

**Professor Bruce Hall**

Bruce Hall was appointed by UNSW as the Foundation Professor of Medicine at Liverpool Hospital in 1991. He trained in internal medicine and renal medicine at Royal Prince Alfred (RPA) Hospital and completed his PhD in transplant immunology related to the mechanisms of rejection at the University of Sydney. Prior to coming to UNSW and Liverpool Hospital he held a number of senior appointments in Canada, the United States and Australia. At Liverpool Hospital he established undergraduate and graduate teaching programs in Medicine, and developed the Division of Medicine, with a full array of clinical services.

Bruce’s research interests include the study of the immune mechanisms of organ allograft rejection and immune tolerance to allografts. He has an interest in clinical research in renal transplantation and in glomerulonephritis. In autoimmune diseases, he is interested in the mechanisms of acquired immune tolerance and studies models of renal disease. He collaborates with Dr Suzanne Hodgkinson in research into the mechanisms of injury and tolerance in neurological autoimmune diseases.
Bruce has an international reputation for his research. He was the first to describe that CD4+ T cells mediate immune tolerance, and that the cells expressing CD25 are required to mediate this tolerance. This was the first description of the main T regulatory cell, the CD4+CD25+ T cells. His ongoing research is into how these regulatory cells induce antigen specific tolerance. Other major contributions include establishing the role of T cells in allograft rejection, that memory T cells do not recirculate from blood to lymphoid organs and that grafts express MHC molecules during rejection. His research laboratory has also contributed to the understanding of how T cells and complement mediate glomerulonephritis. Current research focuses on antigen specific T regulatory cells, the role of cytokines in inducing these cells and maintaining tolerance, and the efficacy of new immunosuppressive therapies in transplantation and renal diseases. He holds several patents, has written 16 book chapters and over 150 peer reviewed scientific papers. He frequently reviews articles for international journals.

He is an active clinician and has an interest in clinical based teaching. He established many of the tertiary clinical services at Liverpool Hospital, especially the renal service.

**Professor Ian Harris**

Ian Harris is a Clinical Academic based at Liverpool Hospital and the South Western Sydney Clinical School of UNSW. He is the Professor of Orthopaedic Surgery, the Director of Orthopaedic Surgery at Liverpool Hospital and holds other area-wide research and clinical positions.

Professor Harris’ research activities are based at Liverpool Hospital and involve clinical research in the field of surgery and clinical epidemiology including multicentre randomised trials, systematic reviews and patient outcome surveys.

**Professor Ken Hillman**

Ken Hillman is Professor of Intensive Care at the South Western Sydney Clinical School, UNSW and Director of the Simpson Centre for Health Services Research. Ken remains an actively practicing Intensive Care clinician which complements his main research interest which is health services research – developing and
evaluating new and innovative ways of practising health care.

Ken has active research interests in areas such as recognising and responding to seriously ill hospitalised patients in a timely fashion and improving the end-of-life care in acute hospitals. He has published over 120 peer reviewed papers, written 56 chapters, co-written and co-edited two textbooks, written a book – *Vital Signs: Stories from Intensive Care* and has received over $8 million in peer-reviewed grants.

**Professor Bin Jalaludin**

Bin Jalaludin holds a medical degree and a doctorate in air pollution epidemiology, both from the University of Sydney and is currently the Director of the Centre for Research, Evidence Management and Surveillance (REMS). He has a conjoint Professorial appointment in the School of Public Health and Community Medicine at UNSW and is an Honorary Senior Research Fellow at the Woolcock Institute of Medical Research, University of Sydney.

He is on the board and the scientific committee of the Australian Paediatric Surveillance Unit, a member of the SWSLHD Human Research Ethics Committee, a member of the Scientific Advisory Committee of the Ingham Institute of Applied Medical Research and on the Editorial Board of Environmental Health.

Bin’s research interests are in air pollution and environmental epidemiology, use of linked administrative datasets, spatial epidemiology, neighbourhoods and social determinants of health, as well as in translating research into policy. He has published over 130 papers in the peer reviewed scientific literature and has been successful in attracting competitive funding for significant research projects from the ARC, NHMRC, Ingham Institute of Applied Medical Research, Environment Protection and Heritage Council, Department of Environment and Heritage, NSW Department of Health, NSW Department of Environment and Conservation and NSW Department of Education and Training.

**Associate Professor Craig Juergens**

Craig Juergens is an Interventional Cardiologist at Liverpool Hospital where he is Director of the Cardiac Catheterisation Laboratories and is a conjoint Associate Professor with UNSW.

After basic cardiology training at Royal Prince Alfred Hospital in Sydney, he completed an Interventional Fellowship at Stanford University, California and returned to Australia in 1997 to establish the coronary interventional service at Liverpool Hospital. This service has subsequently become a centre of training for interventional cardiologists with numerous Australian Fellows and doctors from China, England, Singapore, Malaysia and Myanmar learning coronary interventional techniques under the supervision of Craig and his colleagues. In addition Craig has demonstrated PCI techniques in centres in Taiwan, China, Myanmar and Vietnam.

Apart from his interest in Interventional Cardiology, Craig has a major interest in acute coronary syndromes and has been involved in a
large number of multicentre, multinational clinical trials. He has been invited to speak at a number of local and international meetings.

He has been author of over 40 peer reviewed papers in local and international Journals and he continues to be an active clinician in the Department of Cardiology at Liverpool Hospital, in addition to providing support for the interventional cardiology program at Orange Base Hospital.

**Associate Professor Murray Killingsworth**

Murray Killingsworth is principal hospital scientist of the Electron Microscopy Laboratory, Sydney South West Pathology Service. He completed his PhD in 1990 in UNSW’s School of Pathology (now School of Medical Sciences) and his research interests are in the cell biology of chronic inflammation in macular degeneration of the retina, renal disease and cancer.

Murray’s research tools include electron microscopy, immunocytochemistry and computer-based image analysis. He contributes morphological and ultrastructural data to research groups from the University and has more than 1350 citations for his papers. In 2011, he was awarded a Foundation Fellowship of the Faculty of Science from The Royal College of Pathologists of Australasia (RCPA).

**Associate Professor Friedbert Kohler**

Friedbert Kohler is Chair of the Braeside Liverpool Fairfield Rehabilitation Research Group which continues to be one of the leading groups of researchers studying outcomes of rehabilitation.

He has an international reputation for innovative work in the clinical use of the International Classification of Functioning, Disability and Health, (ICF), with regular invitations for
presentations on the developments of clinical applications of the ICF in rehabilitation medicine.

Friedbert is a member of the editorial board of Rehabilitation as well as Prosthetics and Orthotics International. He is the current President of ISPO ANMS (Australian National Member Society of International Society of Prosthetics and Orthotics), Co-chair of the ICF subcommittee of the WHO liaison committee of the International Society for Physical and Rehabilitation Medicine and chair of the ICF Special Interest Group of the Australasian Faculty of Rehabilitation Medicine.

Health facility appointments include Clinical Director of Aged Care and Rehabilitation for South Western Sydney Local Health District, Director of Rehabilitation Medicine at Liverpool, Fairfield and Braeside hospitals as well as Director of Medical Services at Braeside Hospital.

Associate Professor Rupert Leong

Rupert Leong is a consultant gastroenterologist and conjoint Associate Professor at UNSW and Macquarie University, Sydney, Australia. His expertise includes interventional endoscopy (upper GI and colonoscopy), endoscopic ultrasound, confocal endomicroscopy and management of inflammatory bowel diseases.

Rupert has published widely in these fields and has received awards and research grants from national and international bodies including the NHMRC and the Gastroenterology Society of Australia.

After completing his gastroenterology and clinical immunology training in Western Australia, he completed a further two years of advanced interventional endoscopy and IBD research fellowships as the prestigious Amy and Athelstan Overseas fellow and Visiting Scholar of the Prince of Wales Hospital in Hong Kong.

Rupert is the current Director of Endoscopy at Concord Hospital, a member of the Australian IBD Association and the Asia Pacific Inflammatory Bowel Diseases Working Group of the Asia Pacific Association of Gastroenterology, a Section Editor of the Journal of Gastroenterology and Hepatology, and former Director of Gastroenterology at Bankstown Hospital.

Rupert is committed to individualised, high-quality patient management, promoting high standards in gastroenterology training and practice, fostering novel research and serving to educate professional colleagues and the public on gastroenterology-related issues.

Professor Dominic Leung

Dominic Leung is a Senior Staff Specialist in Cardiology and Director of Echocardiography at the Liverpool Hospital. Dominic is a Fellow of the Royal Australasian College of Physicians, the Royal College of Physicians (Edinburgh), European Society of Cardiology, American College of Cardiology, Hong Kong College of Physicians and The Cardiac Society of Australia and New Zealand.

He is an internationally acknowledged expert in echocardiography and cardiac imaging and has published more than 100 papers in peer-reviewed journals, book chapters, editorials, reviews and invited articles in major journals and more than 200 abstracts. The international recognition of his work is reflected in the more than 1600 citations of his papers and frequent invitations to speak at major national and international meetings including scientific meetings of the American College of Cardiology, American Heart Association, European Society of Cardiology, World Congress of Cardiology and the Cardiac Society of Australia and New Zealand.

Dominic’s current research interests include valvular heart disease, heart failure, exercise physiology, exercise echo, diabetic heart disease, microvascular dysfunction, acute coronary syndrome and interventional cardiology. In addition to his busy clinical service as a staff cardiologist, Dominic is also actively involved in undergraduate and postgraduate medical education and supervises a number of BSc (Hons), Masters and PhD students.

Dominic has also been able to attract research funding from the National Health and Medical Research Council, National Heart Foundation and other funding bodies.

Professor Siaw-Teng Liaw

Siaw-Teng Liaw is Professor of General Practice and Director of the Academic General Practice Unit based at Fairfield Hospital. His research program “Information-enhanced integrated care of chronic disease” revolves around primary and integrated care informatics and information quality and clinical decision support, focusing on chronic disease management and quality use of medicines in mainstream and Aboriginal communities. He is nationally and internationally acknowledged as a leading general practice and health informatics researcher.

Teng sits on the NSW Health Acute Care Taskforce and is currently involved with
promoting and standardising activities on clinical handover between general practice, community-based and hospital-based facilities. He also sits on the Research and Teaching Subcommittee and a number of service-related committees to do with chronic disease management in the South Western Sydney Local Health District.

He is a member of the editorial boards of a number of family/general practice and health informatics journals, a number of peer-review panels for national and international competitive grants and scientific conferences, the American Medical Informatics Association (AMIA) International Affairs Committee and the International Medical Informatics Association (IMIA) Academy Task Group. He is a Foundation Fellow of the Australian College of Health Informatics and was President from 2005-2007.

Teng is a Professorial Fellow of the University of Melbourne. He sits on the Royal Australian College of General Practitioners National Research Committee and is the current chair of the RACGP National Research, Evaluation and Ethics Committee.

**Professor Patrick McNeil**

Patrick McNeil is Professor of Rheumatology at SWSCS based at Liverpool Hospital. He heads a research group exploring the biology of mast cells and their role in non-IgE-mediated inflammatory rheumatic conditions, as well as novel inflammatory pathways in rheumatoid arthritis and autoimmune connective tissue diseases. He is an author on more than 85 scientific publications in biomedical science,
clinical medicine and medical education which have been cited more than 4,500 times to date, with 17 papers cited more than 50 times including seven papers with over 100 citations.

From 2001-2005, Patrick served as the Faculty of Medicine’s Associate Dean (Education) at UNSW, where he was the central architect of a new and highly innovative outcomes-based medical education program which began in 2004, from which a number of research publications have arisen. He currently chairs the Faculty’s Program Evaluation and Improvement Committee.

Patrick is recognised as a national leader in academic rheumatology in Australia and is currently the President of Arthritis Australia, the peak national body for consumers with arthritis. He has been a long-standing member of Scientific Assessment Committees for Arthritis Australia, the Australian Rheumatology Association Research Trust, and NHMRC Grant Review Panels.

**Professor Guy Marks**

Guy Marks is a respiratory physician at Liverpool Hospital and a respiratory epidemiologist, based at the Woolcock Institute of Medical Research. His research interests include obstructive lung disease (asthma and COPD), health effects of air pollution and tuberculosis as well as epidemiological research methods. He is the Director of the Australian Centre for Asthma Monitoring, a collaborating unit of the Australian Institute of Health and Welfare (AIHW) responsible for collating, reporting and interpreting national data on asthma trends and outcomes.

Guy is the chief investigator on the Childhood Asthma Prevention Study (CAPS), a long-term
study investigating risk factors for asthma in children born in south western and western Sydney. His interest in tuberculosis has included policy-related epidemiological studies of tuberculosis in NSW and international collaborations, particularly involving Vietnam. He is Principal Investigator of a study investigating the effectiveness of active case finding in household contacts of patients with TB in Vietnam.

He has undertaken a number of studies investigating health effects of various air pollution sources including road traffic and unflued gas heaters. From 1994 to 2007, he was head of the Department of Respiratory Medicine at Liverpool Hospital and he continues his role as an active clinician within that department. He is Chair of the NSW TB Advisory Committee and of the NSW Chief Health Officer’s Expert Advisory Committee on Air Pollution.

**Associate Professor Catherine O’Connor**

Catherine O’Connor is Director of Sexual Health Services for South West Sydney Local Health District and Sydney Local Health District. Her major research interest are HIV and STI clinical management & epidemiology.

Key achievements include participation in the Australian HIV Observational Database and the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS) project both run through the Kirby Institute at UNSW. She also actively contributes her services to the University through clinical teaching of medical students.

**Associate Professor Bin Ong**

Bin Ong is Director of the Ambulatory Care Unit and Medical Assessment Unit in Bankstown Hospital. He is also practising as a staff specialist in Geriatric and General Medicine. He is actively involved in the medical undergraduate programs linked with general medicine, Society and Health and geriatric medicine in Bankstown-Lidcombe Hospital.

Bin’s main research interests are in acute geriatric medicine, thromboembolic disease and models of care including hospital in the home, ambulatory care and medical assessment units. He has published in national and international peer reviewed journals on these topics. He is a member of the Australia and New Zealand Society of Geriatric Medicine, Hospital in the Home Australia and American Academy of Home Care Physicians. Bin is also actively involved in the NSW Health Alternatives to Acute Hospital Admission Program working group and the Therapeutics Advisory Group.

**Associate Professor Michael Parr**

Michael Parr is Director of Intensive Care at Liverpool Hospital and trained in Anaesthesia and Intensive Care in the UK, New Zealand, USA and Australia. Michael is author of two books, numerous book chapters and scientific papers, and maintains Liverpool Hospital Intensive Care Unit as a lead research unit within the Australian and New Zealand Intensive Care Society Clinical Trials Group.

Michael is an Editor of the journal Resuscitation, an executive member of the Australian Resuscitation Council, a member of the International Liaison Committee on Resuscitation (ILCOR) Advanced Life Support committee and Past president of International Trauma Care.

**Associate Professor Chris Pokorny**

Christopher Pokorny is a practicing gastroenterologist and Visiting Medical Officer at Liverpool and Sydney Hospitals. He also holds a conjoint appointment as Associate Professor at UNSW. His clinical and research interests include inflammatory bowel disease, coeliac disease and iron deficiency anaemia.

Chris is also actively involved in both undergraduate and postgraduate education and currently is a member of the senior examining panel of the Royal Australasian College of Physicians, the Joint Divisional Continuing Professional Development Committee (RACP)
Associate Professor John Quin

John Quin is the Director of Immunology in Liverpool Hospital and consultant Immunologist for South Western Sydney Local Health District. He is the current Chairperson for the Antiretroviral Study Group in the National HIV Research Association and has been a member since 1990.

John’s current research interests are in therapies for HIV infection and chronic hepatitis B and C as well as autoimmune disease and allergy. The unit has two clinical trials in progress and has completed 28 clinical trials in the last 15 years. He has more than 60 peer reviewed publications.

Professor Derrick Silove

Derrick Silove was appointed to the Foundation Chair in Psychiatry in 1990 soon after the establishment of the UNSW Clinical School in the SWSAHS. For a time, he was also the Area Director of Mental Health. He established the Psychiatry Research and Teaching Unit and later the Centre for Population Mental Health Research.

Derrick has had a longstanding interest in the mental health and psychosocial well-being of refugees, asylum seekers and other populations exposed to mass violence and human rights violations. His focus has extended to the development of mental health services in low-income countries recovering from conflict such as Cambodia, Vietnam, and Timor Leste where he led an AusAID funded national program in mental health for five years.

His team is also involved in projects with other marginalised and disadvantaged groups, with a large collaborative NHMRC study being initiated in the Broken Hill area amongst indigenous communities. The team also has a general interest in stress and anxiety, making a world first breakthrough in the description of an adult form of separation anxiety disorder.

Derrick has attracted numerous NHMRC grants including two Program Grants (2004-2008; 2010 -2014) in collaboration with a team of leading trauma researchers in Australia. More recently, he has been awarded ARC grants for research in Timor Leste and with Professor Valsa Eapen, involving women attending the antenatal clinic. Key collaborating centres are the Harvard Program in Refugee Trauma, the Karolinska Institute where he is a Visiting Professor, Public Health at UNSW with Professor Anthony Zwi and Sydney University with Professor Adrian Bauman, and Psychology, UNSW with Richard Bryant.

Derrick has published over 350 journal articles, books, book chapters and major reports. Several of his publications have appeared in the world’s leading peer review journals such as the Lancet, the Journal of the American Medical Association, the British Medical Journal, the Archives of General Psychiatry, the American Journal of Psychiatry, the British Journal of Psychiatry and Social Science and Medicine. Key articles in recent years include a meta-analysis of the entire field of refugee and post-conflict mental health led by Unit Deputy Director, Dr Zachary Steel, and an analysis of national mental health data focusing on gender based violence led by Dr Susan Rees, ARC Queen Elizabeth II Fellow, both published in JAMA. He is also a co-author on a review of research in humanitarian emergencies to be published in the prestigious second round of the Global Mental Health Series in the Lancet.

He received the Dean’s Award for Lifetime Achievement in 2010.

Associate Professor John Smoleniec

John Smoleniec is Director of the Feto-Maternal Medicine Unit at Liverpool Hospital. His clinical research interests are in fetal therapy and the outcomes in the early years. He is a member of the Early Years Research Group which were awarded a seeding Ingham Institute grant in 2010. He has a particular research interest in
monochorionic twin pregnancy with respect to antenatal care, management of complications and placental anastomosis.

John is a founding member of the NSW fetal surgery team for the intrauterine treatment of twin to twin syndrome. He has represented this team internationally by delivering papers at the annual Eurofetus Fetal Surgery meeting on a regular basis. He is involved in RANZCOG and NSW Ministry of Health activities involving maternal fetal medicine and obstetrics via membership of a number of committees including the NSW Maternal and Perinatal Committee and as a maternal fetal medicine subspecialty examiner.

John is actively involved in teaching, curriculum development and mentoring of UNSW medical students. He is supportive of the ILP research project component of the curriculum.

Associate Professor Shalini Vinod

Shalini Vinod is a radiation oncologist at the Liverpool Cancer Therapy Centre. Her clinical interests are in lung and gynaecological cancers. She has developed the Lung Cancer Multidisciplinary Team at Liverpool and Macarthur Cancer Therapy Centres. This group has local protocols for management of lung cancer, collects prospective data which have been used for research and organises education sessions for GPs.

She has a strong commitment to education and is an examiner for the final exams in radiation oncology. She is an advocate for evidence-based medicine and has written guidelines for treatment of gynaecological malignancies for the Agency for Clinical Innovation, NSW. She is currently involved in updating the Australian NHMRC guidelines for lung cancer and is also chair of the radiation oncology committee for eviQ (NSW Cancer Institute) which writes evidence-based protocols for radiotherapy.
Shalini is active in research and has published on many topics including lung cancer, gynaecological cancers, the use of PET scans in radiotherapy and multidisciplinary care. She is currently supervising research undertaken by medical students, radiation oncology registrars and a PhD student. She is developing an international profile in lung cancer and was part of the International Scientific Committee which organised the World Lung Cancer Conference in 2011.

**Associate Professor Philip Ward**

Philip Ward is Director of the Schizophrenia Research Unit in the Division of Mental Health, and has received continuous research support from the National Health and Medical Research Council (NHMRC)/Australian Research Council since 1984. Philip has also received competitive funding from the Australian Rotary Health Research Foundation and the Michael J Fox Foundation.

Philip is internationally recognised as a leading researcher in the field of neurocognitive deficits in schizophrenia and in the use of neuroimaging to investigate a range of neuropsychiatric syndromes. The international recognition of this work is reflected in the more than 2200 citations of his papers.

Philip is a member of the Scientific Advisory Board of the Australian Brain Donor Program, and serves as the Postgraduate Research Coordinator for the School of Psychiatry, University of New South Wales. He was a founding member of the Australasian Society for Biological Psychiatry, and served as president from 1998-2005. He also served as Scientific Director of the Neuroscience Institute of Schizophrenia and Allied Disorders (now the Schizophrenia Research Institute) from 1998-2004.

**Professor Jeremy Wilson**

Jeremy Wilson founded the Pancreatic Research Group and has been involved in pancreatic research for over 20 years. He has more than 120 publications and over 138 abstracts predominately on the subject of the pathogenesis of pancreatitis.

Jeremy has been the recipient of continuous NHMRC/DVA Project Grant support since 1987. He has also received research support from the National Institutes of Health (USA), the Ramaciotti Foundations, the Australian Brewers Foundation and the RACP as well as internal grant support from Prince Henry and Prince of Wales Hospitals and UNSW. He has supervised or co-supervised a number of candidates for doctoral degrees (MD or PhD).

Jeremy is recognised as an international authority on the pathogenesis of alcoholic pancreatitis and pancreatic stellate cells. He is a member of Council and the Honorary Secretary of the International Association of Pancreatology and is also a member of the Editorial Board of the journal Pancreatology. His work has received more than 3000 citations attesting to his international recognition in the field. In 2001, he was awarded a Fellowship by the Royal College of Physicians, UK on the basis of his distinguished achievements in pancreatology. In 2007, Jeremy was made a Fellow of the American Gastroenterological Association (AGA) and was one of the first non-American researchers to be awarded this honour.

As Clinical Associate Dean of SWSCS and Professor and Director of Medicine at Liverpool Hospital, Jeremy has major responsibilities in the area of administration, clinical service, teaching (undergraduate and postgraduate) and research at SWSLHD and UNSW.

In 2004, he led the development of ‘The Way Forward’, the strategic plan for the development of clinical services for the south west of Sydney.

He is currently involved in a range of strategic projects for SWSLHD and NSW Health including as a member of the Clinical Council of the Clinical Excellence Commission and as Co-chair of the Acute Care Taskforce of NSW Health which has responsibility for advising the Department on matters relating to best practice and efficient care of acute medical patients in the NSW Health system.
Associate Professor
John Worthington

John Worthington is a lead investigator on two current NHMRC research projects as well as projects funded by the BUPA Foundation and the Clinical Excellence Commission. His research work spans randomised control trials to improve stroke prevention in atrial fibrillation, neuroepidemiology and data linkage studies of stroke and TIA outcomes. He is a member of the Stroke Services NSW Co-ordinating Committee and several of its sub-committees, such as the Strategic Working Party and Thrombolysis Committee. He has been a neurologist at Liverpool for over 15 years, advises the National Prescribing Service (NPS) on antithrombotics and is the author of post-graduate education materials for both the NPS and National Stroke Foundation.

John’s particular interests include acute stroke and sub-arachnoid haemorrhage management, management of atrial fibrillation and of neuro-respiratory failure. John has specialist training in both neurology and thoracic/sleep medicine.

Current projects include DESPATCH (NHMRC), OASIS (NHMRC), PRISM (CEC), STOP-STROKE (BUPA) and SWS –TIA. These projects are being carried out in an established collaboration with cardiologists, neurosurgeons, biostatisticians, academic nurses, epidemiologists and public health specialists. Most of these projects are under the auspices of the Ingham Institute and South Western Sydney Clinical School. John established the research group with Melina Gattellari to investigate atrial fibrillation and stroke (DESPATCH and STOP-STROKE), and the group’s research has successfully expanded to include funded studies of stroke and TIA (PRISM), including sub-arachnoid haemorrhage (OASIS) and epidemiology studies of rare neurological disorders such as Myasthenia Gravis.

John has presented his research internationally and has been a co-author of two recent Stoke journal editorials. He is a reviewer for several academic journals including Stroke, Cerebrovascular Diseases, BMJ and the Journal of Clinical Neurosciences. He has a strong commitment to post-graduate education and the translation of research into clinical practice. In addition to conference scientific session presentations, John has, in the last few years, given more than 40 invited talks on evidence-based use of antithrombotics, dementia and management of stroke and TIA.
Teaching

UNSW in the south west of Sydney provides learning opportunities across all Phases to more than a quarter of all UNSW medical students. Students undertake placements at Liverpool, Bankstown-Lidcombe, Fairfield, Braeside, Bowral, Campbelltown and the 1st Health Support Battalion hospitals and at a range of primary care and population health centres.

In addition a number of south west Sydney based UNSW academics and conjoint appointees contribute to teaching on the Kensington campus in Phase 1 Scenario Facilitation, Phase 2 case method tutorials and the Year 4 biomedical science program.

Medicine and Surgery

At any given time, Medicine and Surgery have approximately 80 Phase 2 and 100 Phase 3 students allocated across the Liverpool, Bankstown and Fairfield campuses.
Phase 3 teaching consists of student integration into the clinical team, weekly therapeutic and technique lectures, professorial viva tutorials, specialist viva tutorials, bedside tutorials, presentation at Grand Rounds and attendance at team meetings. Phase 3 students also undertake a variety of skills sessions during their medical and surgical terms.

All final year students also undertake PRINT (Preparation for Internship) which allows students to integrate into a team of their chosen discipline and operate at a sub-intern level. During the PRINT term, various case method tutorials are facilitated and these are aimed at providing students with experiences they can expect to encounter as an intern. Case method tutorials include topics such as postoperative conditions, medication charts, communication with nursing and senior medical staff and dealing with unexpected deaths.

Phase 2 sees students undertaking various medical and surgical activities during their adult medicine terms. Weekly themes include exercise and health, respiratory medicine, cardiology, nephrology, gastroenterology and trauma. Students gain broad exposure to medicine and surgery during these structured weeks.

Aged care and oncology terms also give students exposure to the broad spectrum of medicine, oncology, rehabilitation medicine, palliative care, allied health and general surgery. The Adult Medicine component of the course also incorporates several skills sessions for students.

The number of Phase 1 students placed in the south west of Sydney has increased from 84 in 2005 to more than 140 in 2010 and will continue to grow. These students, as part of their introduction to the clinical environment, undertake fortnightly tutorials as part of placements at Liverpool, Bankstown-Lidcombe and Fairfield hospitals.

Critical Care

The Critical Care term encompasses emergency medicine, intensive care and anaesthetics with students allocated across the hospitals of south western Sydney. Each year approximately 46 Phase 3 students undertake four weeks in the Emergency Department, one week of intensive care and one week of anaesthetics. Students are expected to integrate into the team and perform at sub-intern level. Teaching within the term includes a weekly tutorial timetable and several skills sessions. Emergency and anaesthetics exams are held at the end of the term. This level of integration ensures that SWSCS critical care terms are highly sought after by students.

Obstetrics and Gynaecology

The Discipline of Obstetrics and Gynaecology facilitates teaching for students across all Phases. In 2010, more than 50 Phase 3 students undertook an eight week term in south western Sydney. These terms included clinical attachments, attendance at antenatal clinics, clinical skills sessions, attendance at the birthing unit and an end of term objective structured clinical examination (OSCE).

Approximately 60 Phase 2 students also undertook a two and a half week term within SWSLHD in 2010.

Paediatrics

Since 2005, the number of students allocated to south western Sydney for Phase 3 paediatrics attachments has increased from 72 to 79. With the implementation of Phase 2, there are also 12
students per term allocated to SWSLHD hospitals. During this term, students spend one week at the Neonatal Intensive Care Unit (NICU), a general paediatrics ward, Fairfield Hospital and a community health setting.

Pathology

Pathology and therapeutics teaching continues to occur at the south western Sydney hospital sites, facilitated mainly by conjoint staff. Alongside weekly tutorials delivered to the hospital sites via videoconference from Liverpool Hospital, students also attend diagnostic laboratories, dissection of surgical specimens and autopsies in the Department of Anatomical Pathology, as well as scheduled visits to the NSW Institute of Forensic Pathology.

Primary Care

Since the introduction of Phase 2, students undertaking primary care terms through Society and Health have been allocated to Braeside Hospital, 1HSB at Holsworthy, community health and general practices across the south west of Sydney for community clinical attachments and course tutor sessions. The GP Unit at Fairfield Hospital also makes a very significant contribution to teaching of Phase 1 Clinical and Communication groups allocated to the Hospital.

Psychiatry

The School of Psychiatry allocates approximately 50 Phase 3 students per year for an eight week psychiatry term in the south western Sydney hospitals. During these eight weeks, students undertake a full time clinical attachment, receive weekly tutorials and perform supervised patient interviews. Viva and written examinations are held at the end of the term.

Examinations

Liverpool Hospital continues to host a range of student examinations throughout the year including the Phase 1 Integrated Clinical Examination (ICE), Phase 2 ICE and the Phase 3 Clinical, Viva and Portfolio examinations.

The staff at the SWSCS wish to thank the academics and conjoint appointees who have contributed to these examinations by acting as examiners and supervisors and by helping to recruit patients.

The School is also grateful to the students who have acted as surrogates and the patients who have given their time to assist in the execution of exams in the south west.
The Stephen Deane Clinical Skills Centre at Liverpool Hospital provides a unique learning facility for a variety of health professionals to learn techniques and clinical skills using medical simulators and models. This contributes to better safety and outcomes for patients.

The Stephen Dean Clinical Skills Centre, currently in temporary accommodation as a result of the Liverpool Hospital redevelopment, is a multidisciplinary training facility hosting skills training for UNSW medical students as well as a variety of SWSLHD programs including nursing and medical orientation, Medical Emergency Team (MET) training and other educational programs.

Centre utilisation is shared almost equally between medical students and Health District staff with an average of 3500 student hours of training conducted annually. In addition to these programs in the Skills Centre, staff have also been involved in the coordination and/or delivery of a range of special education days.

UNSW has invested more than $2m into staffing and equipping the Centre with low fidelity simulation equipment suitable for undergraduate training. Most recently the South Western Sydney Clinical School added a range of equipment to the Centre including MegaCode Kelly, VitalSim, Stat Baby, airway management trainers, tracheostomy tube observation models, injection trainers, eye examination simulators and ear examination simulators.

Ingham Institute Skills and Simulation Centre

In 2009, the South Western Sydney Clinical School was successful in gaining $4.6m in funding for the development of the new Ingham Institute Skills and Simulation Centre as part of a submission to the Health and Hospitals Fund by the Institute. These funds will be utilised to construct a new two-storey 900 sqm facility alongside the existing education facilities at Liverpool Hospital. Once completed in August 2012, the Centre will include a simulated operating theatre, simulated outpatient clinic rooms, anaesthetic and scrub bays, clinical skills laboratories and didactic teaching rooms.

The Centre will be a partnership between the Ingham Institute, the Local Health District, UNSW and UWS and will be governed by a steering committee consisting of the partners and reporting to the Ingham Institute Board. The Centre will continue to be managed by UNSW as a resource for all the partners in health professional training in south western Sydney and available as a bookable resource for partners to bring in their own training staff supported by the Centre staff.
Academic Infrastructure

The South Western Sydney Clinical School has commenced an ambitious program to improve the educational infrastructure in the south western Sydney hospitals with funding of more than $10.8m for capital works and major research equipment.

AARNet

In 2010, the South Western Sydney Clinical School was successful in gaining funding from the Department of Education, Employment and Workforce Relations (DEEWR) to expand the UNSW videoconferencing and data network to hospitals across south western Sydney using the Australian Academic and Research Network (AARNet).

This $3.66m project will include the installation of high-speed broadband links to Liverpool, Bankstown-Lidcombe, Fairfield and Braeside Hospitals and the establishment of a network of videoconferencing facilities using this network. A total of seventeen new videoconference units will be installed on the network in the south western Sydney hospitals along with the campuses of UNSW at Kensington and UWS at Campbelltown.

In addition to the videoconferencing network, UNSW will install wireless access points for the UNSW network in a range of educational facilities at each of the south western Sydney hospitals.

Teaching Hospital Grant

Each year UNSW contributes approximately $120,000 to the development of teaching facilities in the south western Sydney hospitals. In recent years these funds have been directed to the enhancement of library resources, purchasing new equipment for student accommodation at Bankstown-Lidcombe.
Hospital and audiovisual equipment for teaching departments across the south western Sydney campuses.

In addition to this annual grant, UNSW also contributed more than $530,000 for the renovation of the Liverpool Hospital auditorium and the purchase of new furniture and audiovisual equipment for the Thomas and Rachel Moore Education Centre at Liverpool.

Research Infrastructure

UNSW has been active in developing the research infrastructure in south western Sydney in a number of ways.

This has included support for the employment of a number of research support positions including the recruitment of a Research Coordinator for the Ingham Institute of Applied Medical Research. This position, with responsibility for supporting the Institute in the development of systems such as those required for occupational health and safety has been crucial to establishment of processes for the Institute.

UNSW was instrumental in the development of the Health and Hospitals Fund application for the Ingham Institute and committed $2m to the project. UNSW has also made a number of strategic purchases of major research equipment during the report period. These include key pieces of equipment for luminescent image analysis, flow cytometry and real-time PCR.

UNSW continues to work with the Ingham Institute to develop grant applications for additional funds in order to develop research infrastructure for the researchers of south western Sydney.

Infrastructure Grants

**Department of Education, Employment and Workforce Relations**

South Western Sydney Clinical School, UNSW Medical and Nursing Education Network for South Western Sydney

$3.66 million

**Health and Hospitals Fund**

South Western Sydney Clinical School, UNSW and Ingham Institute for Applied Medical Research

Ingham Health Research Institute: Clinical Skills and Simulation Centre

$4.2 million

**UNSW Capital Grants**

South Western Sydney Clinical School, UNSW

Contribution to construction of Ingham Institute building

$2 million

South Western Sydney Clinical School, UNSW

Redevelopment of Liverpool Auditorium and Thomas and Rachel Moore Education Centre

$534,991

**UNSW MREII**

Pancreatic Research Group

LAS-400 luminescent image analyser

$86,700

Arthritis Research Unit

Guava easyCyte 8HT Flow Cytometry System

$95,250

Pancreatic Research Group

Ingham Health Research Institute Research Coordinator

$99,500

**UNSW NHMRC Equipment Funds**

Pancreatic Research Group

Applied Biosystems ViiA7 Real-Time PCR System

$115,000
Prizes and Awards

Between 2008-2010 a number of prizes and awards have been distributed to UNSW staff and students.

Ian Webster Medal

This medal, named in honour of the inaugural SWSCS Clinical Associate Dean, Professor Ian Webster, was instituted in 2007 as a means of recognising outstanding performance by a student studying medicine, surgery and critical care terms in south western Sydney.

Each year this medal is presented to the student who achieves the highest grades in the final year barrier examinations. Recipients of the award in the period of this report were:

2008 Timothy Eviston
2009 James Lee
2010 Catherine Tang

Tom Gibian Prize

The Tom Gibian Prize, named in honour of the foundation warden of the Bankstown campus of South Western Sydney Clinical School recognises student leadership amongst final year students. Recipients of this prize during this period were:

2008 Ken Liu
2009 Shreerupa Basu
2010 Deshan Sebaratnam

Tutor of the Year

Each year students are asked to vote to reward tutors whom they believe have taken innovative and exciting approaches to enhance their tutorials. During this period, teaching awards were presented to:

2008 Zinta Harrington, Tim Spicer, Arvin Damodoran
2009 Shahir Kaithal, Arvin Damodoran, David Rutherford, Robert Rae
2010 John Bui, David Rutherford, Susan Connor, Triet Bui, Tim Spicer, Jens Killian, Navin Niles
Best Overall Conjoint Teacher
Professor David Davies

Each year the Faculty of Medicine awards three major prizes to conjoint
teachers at UNSW. In 2011, the recipient of the Best Overall Conjoint Teacher
Prize is Professor David Davies.

Professor Davies is an extremely well respected and familiar face around the Faculty of Medicine, with
contribution over many years in SOMS and SWSCS, as well as a number of Faculty-wide committees.
David has constantly sought to integrate research and innovation within his teaching, always ensuring
relevance to, and engagement of students. He has been instrumental in using videoconferencing to
facilitate teaching of pathology and laboratory sciences to students at smaller campuses, all the while
maintaining his excellence as a clinician, researcher and role model for many students, junior doctors
and senior staff.

The Faculty is proud to count Professor Davies amongst its conjoint staff and recognises his long term
collection with this award.
A number of UNSW affiliated research groups are based in the south west of Sydney with research interests as diverse as basic science, clinical trials and health systems research. Here are a few of them.

**Aged Care - Bankstown**

The Aged Care Department of Bankstown-Lidcombe Hospital, led by Professor Daniel Chan, has been actively involved in a range of research related to Parkinson’s disease and vascular diseases including stroke. The main focus of the Department’s Parkinson’s disease research has been in the genetic and environmental epidemiology of the disease, particularly in relation to risk factors amongst Chinese populations.

The Department has conducted a number of geriatric research projects including investigations into the prevalence of Parkinson’s disease in Sydney; the genetic and...
environmental risk factors for Parkinson’s disease including studies on a number of PARK2 and PARK8 polymorphisms; stroke risk factors and outcomes in the elderly; compliance with a newly designed hip protector in elderly in-hospital patients; and medical compliance and safety in the elderly.

In 2007, Professor Chan was successful in obtaining NHMRC funding for a clinical trial to investigate stroke care models, with the project commencing in 2008.

Recent research also examines lifestyle factors and genetic factors in healthy ageing, falls and dementia.

**Members:** Dr Nady Braidy, Professor Daniel Chan, Ms Mandy Ding, Ms Anita Ko, Dr Fintan O’Rourke, Dr Van Nguyen, Ms Qing Shen and Dr Christina Xu

### Aged Care Research - Liverpool

The Aged Care Research Unit (ACRU) at Liverpool Hospital was established in September 2007 to consolidate and build on the research program that had been undertaken by the Department of Geriatric Medicine at Liverpool Hospital since 1996. Research undertaken by the Unit has focused on multidisciplinary, clinically based research into management of geriatric syndromes such as falls prevention and management and cognitive assessments, in particular multicultural cognitive assessment. Other areas of interest include management of the older person in the Emergency Department and inpatient settings, and long-term outcomes of service provision.

Research highlights during the current period of reporting include:

- A large NHMRC-funded project on dementia care-giving in four culturally and linguistically diverse (CALD) communities in south western Sydney
- Funding from the Clinical Excellence Commission to support an ongoing data linkage project looking at patient outcomes following hospitalisation

- Publication of several important papers establishing the validity of the Rowland Universal Dementia Assessment Scale (developed at the ACRU)
- Publication of a quantitative report “Comprehensive assessment and outcome data, Aged Care Unit, Liverpool Hospital. 2001-2005” by Dr David Basic. This report analysed the patient characteristics, functional measures, inpatient care and discharge destination for over 3,000 hospital admissions under Aged Care and is being followed up with a longer-term outcome study of this cohort.
- Participation in the Koori Growing Old Study, investigating dementia in the Aboriginal community

**Members:** Dr David Basic, Dr Desiree Boughtwood, Dr David Conforti, Dr Tabitha Hartwell, Dr Angela Khoo, Ms Margaret Morris and Dr Chris Shanley

### Arthritis Research Unit

The Arthritis Research Unit within the Rheumatology Department at Liverpool Hospital has three active research programs: inflammation basic science; clinical and health services research relevant to rheumatic diseases and medical education and evaluation research.

The Unit’s research focus is centred on common types of arthritis and related autoimmune diseases, including rheumatoid arthritis (RA), gout, and systemic lupus erythematosus (SLE). It seeks to explore underlying mechanisms operating in these diseases and how they are managed, with the aim of developing new or improved treatments. The Unit has collaborations with basic science researchers in
the Inflammation and Infection Research Centre (IIRC) at UNSW, and with health services researchers at University of Sydney.

Currently, the following research activities are underway:

- Basic science programs studying the role of mast cell tryptases in inflammatory arthritis, in particular how tryptases mediate cartilage breakdown; structure/function studies of a mast cell tryptase splice variant; the role of S100 calgranulin proteins in RA and SLE; the role of leukocyte immunoglobulin-like receptors (LILRs) in RA and SLE; and the significance of autoantibodies to lipoproteins in SLE.

- Health services research studying the impact of electronic medical records on rheumatology outpatient work practices.

- Clinical research, currently examining the in-hospital management of gout; the place of vertebroplasty as a new treatment for osteoporotic crush fractures; and the evidence base underpinning clinical rheumatological practice.

Members of the Unit are also involved in educational research stemming from design and evaluation of UNSW's innovative MBBS program.

The Unit’s basic science research program is currently housed in the IIRC within the School of Medical Sciences at UNSW’s Kensington campus.

Members: Dr Katherine Bryant, A/Professor Kathy Gibson, Dr Geraldine Hassett, Professor Patrick McNeil, Ms Natalia Margarinos and Dr Sean O’Neill

Centre for Health Equity Training, Research and Evaluation (CHETRE)

The Centre for Health Equity Training Research and Evaluation (CHETRE), was established in 1998 in collaboration with the Division of Population Health of SWSAHS, through a Research and Development Infrastructure Grant from NSW Health. CHETRE’s mission is to provide leadership and focus in training, research and evaluation in the area of health equity, with a particular emphasis on the development and evaluation of interventions to reduce health inequities.

CHETRE’s work focuses on the description and measurement of health inequalities and health equity, development and evaluation of policies, programs and other actions that aim to achieve health equity, and developing the capacity of the health system to more effectively address health equity through policy and program development. CHETRE’s work includes projects in the areas of community and primary health care service development, disadvantaged communities and populations, early childhood, Aboriginal health, unemployment, and Health Impact Assessment (HIA) and health public policy.

Members: Mrs Monica Aburto, Ms Cheryl Anderson, Ms Henna Aslam, Ms Fiona Byrne, Dr Elizabeth Comino, Ms Rebekah Grace, Mr Stephen Green, Ms Liz Harris, Mr Patrick Harris, Mr Ben Harris-Roxas, Dr Lynn Kemp, Ms Mary Knopp, Ms Anna Jones, Mrs Catherine Kaplun, Dr Jennifer Knight, Ms Karen Larsen, Dr Jane Lloyd, Ms Fakhra Maan, Ms Sharon Nicholson, Ms Vanessa Rose, Ms Heidi Sainsbury, Ms Sheryl Sharkie, Ms Joan Silk, A/Professor Marilyn Wise, Ms Vana Webster, Ms Cheryl Woodall and Ms Siggi Zapart
Centre for Research, Evidence Management and Surveillance (REMS)

Health outcomes of a community can be maximised through effective and efficient population health programs, interventions and services. The Centre for Research, Evidence Management and Surveillance (REMS) was established in 2004 and has a team of epidemiologists and biostatisticians to conduct research, evaluation and surveillance in population health, promote an evidence-based approach to population health programs, and support graduate and postgraduate learning in population health and epidemiology.

REMS has a strong track record of collaborating with units within Population Health as well as with other research centres and services within the Health District. Current research areas are in environmental health and air pollution epidemiology, social epidemiology, neighbourhoods and health, health services utilisation, and in the use of spatial methods and linked data for epidemiological research.

Collaboration for Cancer Outcomes Research and Evaluation (CCORE)

The Collaboration for Cancer Outcomes Research and Evaluation (CCORE), established in 1999, is affiliated with the Cancer Therapy Centre, Liverpool Hospital and the Ingham Institute. The Liverpool Hospital Cancer Therapy Centre is a tertiary referral centre for the treatment of cancer patients in south western Sydney.

CCORE aims to improve cancer outcomes through research and the implementation of best practice measures into routine clinical practice in the treatment of cancer. The CCORE unit has particular expertise in radiotherapy but also has broad interests in all areas of cancer management. Staff members include radiation oncologists, a medical oncologist,

Members: Dr Roy Byun, Dr Shanley Chong, Professor Bin Jalaludin and Ms Elizabeth Lobb
CCORE has a wide range of activities that extend from the individual cancer patient to the organisation of cancer services at state, national and international levels. Our research covers the broad spectrum of clinical cancer including surgery, medical and radiation oncology, and is achieving these aims through the following strategies:

- establishment, implementation and evaluation of best practice guidelines and evidence summaries;
- exploration of methods by which best practice guidelines may be implemented locally;
- cancer clinical outcomes research;
- refining of methodologies of clinical research including quality of life, economic and qualitative programs; and
- establishment of partnerships and linkages between clinicians, universities and other clinical research groups locally and internationally.

Many members of CCORE hold conjoint appointments at UNSW and four staff are currently enrolled in PhDs under the supervision of Professor Michael Barton OAM. Three PhDs have been awarded in the last year.

The CCORE unit has been very productive with many peer-reviewed publications, contributions to National Tumour Guidelines and commissioned reports. Following the publication of a report on the optimal utilisation of radiotherapy as a series of papers in Cancer the benchmark developed is currently being used and acknowledged worldwide. Led by Professor Barton, a number of large collaborative studies that have had a major impact on policy and practice in relation to state, national and international strategic planning projects for cancer services have been completed, including:

- Victorian Cancer Services Framework Report
- Applied Sciences of Oncology Course
- Papua New Guinea Cancer Services Report
- New South Wales Cancer Council’s Radiotherapy Summit and Working Party
- Overview of Cancer Treatment Services in Western Australia
- Optimum radiotherapy utilisation
- A feasibility study of radiotherapy in the Northern Territory
- Radiotherapy in low and middle income countries
- Southern NSW Radiation Oncology Training Network for Registrars
- Optimal chemotherapy utilisation in cancer
- Adult Glioma guidelines

Members: Mr Stuart Allen, Professor Michael Barton, Professor Geoff Delaney, Dr Gabriel Gabriel, Dr Timothy Hanna, Dr Susanna Jacob, Dr Eng-Siew Koh, Dr Weng Ng, Dr Jesmin Shafiq and Dr Karen Wong

Community Paediatrics and Child Health

The Departments of Community Paediatrics and Child Health have been active participants and leaders in state-wide, metropolitan, Area and local initiatives for children, young people and their families. This has included a range of population needs assessments, research and evaluation projects as well as the training of the next batch of medical students and paediatrics trainees.

Key areas of focus include work with vulnerable populations, including the local Aboriginal and refugee populations, children in out-of-home care or situations similar, youth populations and in child protection. Recently, projects have included a collaboration with general practice to investigate the diagnosis and management of childhood obesity in South Western Sydney; risk factors for not breastfeeding; contribution to the Cochrane reviews into the prevention of domestic lead exposure in children; prevalence of iron deficiency in developmentally delayed and/or autistic children; developing headline indicators for measuring the status of the community in which the children of our region...
are living; needs assessments of the children in geographically vulnerable populations and school-based education programs for the prevention of child sexual abuse.

In 2010, under the leadership of Associate Professor John Eastwood, a multi-disciplinary Early Years Research Group was formed which brings together a number of perinatal, paediatric and child health researchers in south western Sydney. The focus of this research group is to improve the prognosis and outcomes of children, particularly those residing in south western Sydney, and to deliver improved health services to these children and their families. Recently, Dr Eastwood has been extensively involved in realistic theory building for social epidemiology and several of his papers in this area are under review for publication.

In 2011, Community Paediatrics in conjunction with South West Sydney Families NSW planned the “Hubs” project designed to meet the needs of vulnerable families focussing on those with children 0-8 years. This initiative aims to improve uptake, access and co-ordination of services by those in most need and often least likely to engage with services. The hub-like projects aim to operate multiple services from a central location that is easily accessible to the local community and will provide a continuum of services.

The Department of Community Paediatrics is also involved with several other projects including new directions childhood obesity research; TB exposure investigation; strong fathers strong families; hearing promotion; Injury Prevention and assisting with statistical advice for projects and teaching interagency committee members how to use Australian Early Developmental Index reports effectively etc. Staff at Campbelltown are also involved in the Gudaga project in collaboration with CHETRE. Several other programs that meet the needs of local communities addressing vulnerabilities identified and building on strengths are in development.

Members: Dr Sunil Adusumilli, Dr Roger Blackmore, Dr Margaret Brown, A/Professor John Eastwood, Dr Kate Fisher, Dr Romy Hurwitz, Dr Alaric Koh, Dr Jenny McDonald, Dr Ross McLeod, Dr Tania May, Dr Jacky Pollack, Ms Tracey Popham, Dr Shanti Raman, Dr Douglas Thenuwara, Dr Suky Yim and Dr Terence Yoong

Electron Microscopy Laboratory (SSWPS)

The Electron Microscopy Laboratory (EML) is primarily responsible for diagnostic examination of surgical specimens in Anatomical Pathology. Research activities include nanoparticle-cell interactions, ultrastructural changes in renal disease and quantification of angiogenesis in prostate cancer. Dr Yuri Bobryshev from the Department of Anatomy, UNSW is appointed as Honorary Visiting Senior Research Officer in the laboratory.

Members: Dr Yuri Bobryshev, Professor David Davies, A/Professor Murray Killingsworth and Professor Jim Yong
Gastroenterology and Liver Services - Bankstown

Gastroenterology and Liver Services at Bankstown-Lidcombe Hospital have a strong track record in the areas of radiofrequency ablation of Barrett’s oesophagus, endoscopic ultrasound, enteroscopy, confocal endomicroscopy, colorectal and pancreatic cancer and inflammatory bowel diseases management and research.

Established projects include the identification and use of protein biomarkers in IBD, genetic markers in pancreatic cancer, endoscopic ultrasound and fine needle biopsy, confocal endomicroscopy and functional imaging of the gastrointestinal tract, optical biopsies of dysplasia and clinical drug trials for inflammatory bowel diseases in NSW.

Recent achievements include Dr David Chang’s receipt of the Premier’s Scholar of the Year Award as well as the Pfizer Oncology International Scholarship for breakthrough research on pancreatic cancer biomarkers (Bankstown Hospital and the Garvan Institute).

Genomic sequencing of pancreatic cancer is in progress and conducted by PhD student and Gastroenterology VMO Dr Jeremy Humphris under the leadership of Professor Andrew Biankin. Dr Sam Al-Sohaily continues his PhD research at the Garvan Institute on colorectal cancer biomarkers and was a Young Investigator of the Year finalist at Australian Gastroenterology Week. Associate Professor Rupert Leong was one of five Australians to be awarded an NHMRC clinical level 2 Career Development Fellowship for research on confocal endomicroscopy in Crohn’s disease. He is also the recipient of several research grants from the Gastroenterological Society of Australia.

Dr Payal Saxena was awarded the poster prize at the 13th Annual Australasian GI Trials Group meeting on outcomes research of HALO radiofrequency ablation of Barrett’s oesophagus dysplasia (supervised by Dr Darren Pavey). Dr Ken Koo continues his PhD research on colorectal cancer epidemiology in southwestern Sydney and his expertise in the field has resulted in membership of the Asia-Pacific Colorectal Cancer Working Party.

In 2010, Professor Shan Rajendra joined the Gastroenterology Department as the Professor of Medicine at Bankstown-Lidcombe Hospital. Professor Rajendra’s research on the role of infective agents in the cause of Barrett’s oesophagus has received much media attention.

Members: Dr Ahmad Alrubaie, Dr Sam Al-Sohaily, Professor Andrew Biankin, Dr David
General Practice Unit

The academic General Practice Unit is a teaching practice of the UNSW School of Public Health and Community Medicine (SPHCM) and Centre for Primary Health Care and Equity (CPHCE) as well as the Division of Complex Primary Care and General Practice in South West Sydney Local Health District (SWSLHD).

Our research and evaluation activities are focused on systematic and integrated care of high prevalence chronic illness, prevention and management of chronic disease risk factors, health services research and health systems with a focus on information systems. Examples include chronic disease management with a focus on diabetes, CVD and asthma/COPD; multidisciplinary primary care with a focus on the practice nurse; multidisciplinary integrated care with a focus on the interface between primary and acute care; Aboriginal health with a focus on culturally and clinically appropriate care in general practice and the interface with Aboriginal Community Controlled Organisations and Health Services; and the quality and use of routinely collected electronic data in general practice and community-based specialist services for research and evaluation.

The GP Unit also hosts the UNSW Primary Health Care Research Network (PHReNet), established with funding from the Primary Care Research Capacity Building Program. The network has a membership of more than 50 GPs (PHReNet-GP) and approximately 200 other health researchers from community and allied health and staff of Divisions of General Practice (PHReNet).

The electronic Practice Based Research Network (ePBRN) project was established to take this network infrastructure to the next level.

* Passed away May 2011
Siaw-Teng Liaw, Ms Jane Taggart and Dr Sanjyot Vagholkar

**Hepatitis Research Group**

The busy clinical hepatitis service at Liverpool Hospital has formed the platform for significant clinical hepatitis research and the establishment of the Hepatitis Research Group (HRG) under the leadership of Dr Miriam Levy.

Research has included investigation of hepatitis B Virus (HBV) infection in pregnancy. The HRG has defined, for the first time in Australia, the rate of HBV perinatal transmission despite passive/active immunoprophylaxis and identified that high maternal load is the most significant risk for transmission. The Group has demonstrated that the use of antiviral therapy in the last trimester can reduce the transmission of HBV infection. The safety and efficacy of different agents is under examination in collaboration with the national virological reference laboratory, VIDRL.

The impact of pregnancy, and the post partum period, because of its unique immunological and hormonal milieu, on HBV replication is under examination. The HRG has examined the rate and character of post partum flares of hepatitis, to understand their impact on the natural history of HBV infection in pregnancy which is suspected to be different from that described in standard liver clinic cohorts, which are dominated by males.

The Group is also taking a leadership role in the NSW Cancer Council funded pilot study of coordinated liver cancer surveillance in patients with HBV infection.

The Group has been responsible for the purchase of one of only three Fibroscan machines available in Australia and this cutting edge technology will be used to non-invasively identify liver fibrosis, which is a significant risk factor for cirrhosis. We are using this tool to further characterise our viral hepatitis B cohort and determine its role in algorithms of chronic HBV.

The HRG is also participating in a number of clinical trials using new agents for chronic HBV and HCV infection. This reflects the rapid changes in therapeutics in this field and will allow patients to access new therapies. Investigator-led research in viral hepatitis will include examination of the role of vitamin D in HCV therapy outcomes and a sub-study by A/Professor John Quin examining the role of immune stimulation in inducing HBV treatment responses.

**Members:** Dr Scott Davison, Ms Anne Glass, Dr Joe Lawler, Dr Miriam Levy, Ms Louise Smith and Dr Elke Wiseman

**Liverpool Renal Clinical Research Centre**

The Liverpool Renal Clinical Research Centre (LRCRC) was established in 1998 under the leadership of Associate Professors Michael Suranyi and Josephine Chow and continues to support an active clinical research program within Renal Services. The selected studies are supported by all the accredited nephrologists of South Western Sydney Local Health District. The Centre actively participates in a number of clinical trials, unit based research initiatives and projects, quality management projects and educational initiatives.
Clinical research studies currently being undertaken range from management of renal disease, hypertension, diabetes, hyperlipidemia, anaemia, iron therapy, dialysis (haemodialysis and peritoneal dialysis), hypertension in pregnancy and psychological aspects of dialysis. Many of the studies are internationally conducted multi-centre, randomised, double blind, placebo-controlled studies. In addition to externally funded studies, there has been a continuous increase in in-house research studies in the disciplines of nursing, medicine and allied health.

At completion, the results from research projects are disseminated to all stakeholders. As part of the research activities, patients who participate in any of the research studies receive additional visits by the research coordinators. This produces additional benefit for the patients' welfare. Their clinical parameters such as physical status, pathological data and quality of life status are monitored in a more regular way than usual practice, by both the research coordinators and the study doctors. In most cases, existing and potential problems that may adversely affect the participants' health status are identified in a timely fashion and subsequent referral and intervention attended.

Members: Dr Ananthakrishnapuram Aravindan, Ms Veronica Britos, A/Professor Josephine Chow, Dr Bruce Cleland, Ms Margaret Gilbert, Professor Bruce Hall, Dr Ken Howlin, Dr Andrew Jefferys, Ms Gaksoo Lee, Dr Angela Makris, Ms Dawn Purdue, Ms Glenda Rayment, Ms Noella Sheerin, Dr Tim Spicer, A/Professor Michael Suranyi, Dr Govindarajan Suryanarayanan, Dr Jeff Wong, Ms Mary Wong and Ms Rose Wong

Neurology

Staff working in Neurology at Liverpool and Bankstown-Lidcombe Hospitals have been active in a number of research projects in recent years.

These have included collaborative research with the GP Unit and REMS on the Bupa and NHMRC funded STOP-STROKE and DESPATCH projects to reduce stroke risk in atrial fibrillation and the Program of Research Informing Stroke Management (PRISM) using data linkage to assess care and outcomes in ischaemic stroke, intracerebral haemorrhage, subarachnoid haemorrhage and transient ischaemic attack. In collaboration with members of the Neurosurgery Department at Liverpool the group is involved in a state-wide study of subarachnoid haemorrhage - patterns of care and outcomes for subarachnoid haemorrhage: a data linkage study (OASIS) with funding from the NHMRC.

The Departments have also worked with the Department of Aged Care at Bankstown-Lidcombe Hospital on a number of projects addressing stroke risk factors and outcomes in the elderly; the South-West Sydney TIA study (SWS-TIA), anticoagulation usage for stroke prevention amongst general practitioners; and the quality of life measures for older people living in the community with essential tremor.

Members: A/Professor Dennis Cordato, Dr Melina Gattellari, Mr Chris Goumas, A/Professor Matthias Jaeger, Professor Bin Jalaludin, Professor Dominic Leung, Dr Mohammed Mohsin, A/Professor Mark Sheridan, A/Professor James van Gelder, A/Professor John Worthington and Professor Nick Zwar

Orthopaedics

Research activities are conducted through the Whitlam Orthopaedic Research Centre (WORC) (located at Liverpool Hospital) and the Whitlam Joint Replacement Centre (WJRC) (located at Fairfield Hospital), both of which are entities within the Combined Liverpool-Fairfield Orthopaedic Departments. The Group comprises personnel supported by the SWSLHD, South Western Sydney Clinical School or both.

The Orthopaedic Research Group has research expertise in multi-centre randomised controlled trials, in particular, investigating rehabilitation options after knee replacement and orthopaedic surgical interventions following trauma-related injury. Other research activities include epidemiological studies such as surveys and systematic reviews. The Group has very active post-graduate and undergraduate elements. It
has several PhD students and many undergraduate medical students have completed their ILP (Independent Learning Project) year with the Group.

Although most of the Group's research activities relate to musculoskeletal conditions, the WORC is involved in research in other areas.

Members: Dr Sam Adie, Ms Shirley Cross, Professor Ian Harris, A/Professor John Ireland, Ms Vicky Ko, Dr Rajat Mittal, Ms Darnell Murgatroyd and Dr Justine Naylor

Palliative Care

The research team for SWSLHD Palliative Care Services spans projects based in acute care, community based care and palliative care inpatient services. In the period of 2008-2010, expansion of research activity and funding has occurred across clinical sites and disciplines. The team has received over $5 million in competitive research funding.

Projects have been undertaken under the umbrella of ImPaCCT (Improving Palliative Care through Clinical Trials), a newly formed NSW collaborative trials group of which A/Professor Meera Agar is Chair. Projects conducted within SWSLHD during this period have included:

- A phase II randomised controlled trial (RCT) of Palliative Extended Approach to Care at Home (PEACH), a rapid-response community-based intervention aimed at enabling patients to be cared for and die at home.
- A pilot study developing and testing feasibility and acceptability of a case conferencing approach and accompanying education aimed at promoting person-centred palliative care for people with advanced dementia living in residential aged care (RAC) was completed in collaboration with six RAC facilities. The team is seeking funding for a definitive cluster randomised trial to evaluate the efficacy of the intervention.
- A qualitative study aimed at understanding the decision processes undertaken by Medical Emergency Teams (MET) when attending medical emergencies in patients with life limiting illness was conducted in collaboration with Professor Ken Hillman.
- A prospective study of predictors of delirium in advanced cancer.
- Examining organisational complexity to improve hospital patients’ safety-healing environments.
- Efficacy of elastic compression stockings in treatment of chronic oedema in palliative care patients.

The team has continued to be a lead site for the Palliative Care Clinical Trials Collaborative (PaCCSC) on six randomised control clinical trials in the areas of ketamine for cancer pain, octreotide for bowel obstruction, risperidone for delirium, sertraline for dyspnoea, morphine and oxycodone for dyspnoea, and megestrol acetate for appetite. The ketamine trial has been completed and a report is underway.

Other investigator-led collaborative clinical trials to which the Unit is recruiting include: methylphenidate for fatigue and pilocarpine for dry mouth, both studies utilising unique n of 1 methodology; levomepromazine versus ondansetron for refractory nausea in palliative care; an NHMRC funded cluster randomised controlled trial comparing the severity of constipation symptoms experienced by palliative care patients receiving usual care compared to those diagnosed and managed according to the underlying pathophysiology; helping family caregivers of palliative care patients manage their role: evaluation of a hospital based group education intervention; randomised controlled trial of the timing of dosing of dexamethasone and effect on sleep; and an NHMRC funded randomised controlled trial of guideline driven treatment for nausea versus single agent haloperidol.

Priorities for the future include the development of further capacity for research across the clinical team, mentoring junior researchers and continuing to build on track record to achieve further competitive funding in palliative and supportive care research. Collaborative bids for funding are underway with the Psycho-oncology Co-operative Research Group (PoCoG), the Cooperative Trials Group for Neuro-Oncology.
(COGNO) and the newly funded South West Sydney Translational Cancer Research Unit.

**Members:** A/Professor Meera Agar, Dr Megan Best, Mr Mark Buhagiar, Ms Aileen Collier, Dr Elspeth Correy, Dr Louise Elliott, Dr Jackie Kerfoot, Dr Lynne Kuwahata, Ms Jane Hunt, Dr Tim Luckett, Ms Nichole Petrie, Dr Fiona Stafford-Bell, Dr Rebecca Strutt, Ms Edite Tang, Dr Amanda Walker, Ms Julie Wilcock and Dr Jennifer Wiltshire

**Pancreatic Research Group**

The major research interests of the Pancreatic Research Group include alcohol-induced pancreatic injury, pancreatic stellate cell biology, pancreatic fibrosis and tumour-stromal interactions in pancreatic cancer. The Pancreatic Research Group has received continuous research support from the NHMRC/DVA since 1987 and is internationally acknowledged as the leading research group in the field of alcoholic pancreatitis and pancreatic fibrogenesis.

This group was the first in the world to develop a method to isolate and culture pancreatic stellate cells (PSCs), now established as key effector cells in pancreatic fibrosis. This technique provided a much needed in vitro model for research into the pathogenesis of pancreatic fibrosis, a topic that has become the focus of pancreatologists worldwide.

The international recognition of the Group’s work is reflected in the over 2300 citations of its papers and in the invitations that the Group’s members have received to speak at international meetings worldwide. The impact of the Group’s research is also reflected in the visits to the PRG laboratory by overseas scientists for training and in the collaborations established with renowned researchers in Australia as well as in the United States, UK and Germany.

**Members:** Professor Minoti Apte, Professor Andrew Blankin, Ms Eva Fiala-Beer, Professor David Goldstein, Ms Jie Liu, Dr Phoebe Phillips, A/Professor Ron Pirola, Professor Jeremy Wilson, Mr Zhihong Xu, Ms Susan Yang and Ms Janet Youkhana
Psychiatry Research and Teaching Unit

The Psychiatry Research and Teaching Unit (PRTU) was established in 1991, following the appointment of the Foundation Chair in Psychiatry, UNSW and SSWAHS, in 1990. The unit currently consists of 5.8 FTE staff with competitive funding supporting a number of additional positions. Since its establishment, the PRTU has attracted over 50 collaborative research and project grants exceeding $10m and has published over 350 papers, many in high-ranking journals such as the Lancet and Journal of the American Medical Association (JAMA).

With the Centre for Population Mental Health Research, PRTU is a partner in an ongoing NHMRC Program Grant, involving all the leading researchers in the country, in traumatic stress. The PTRU is the leading research unit in the field of refugee and post-conflict mental health as indicated by publications in high-ranking peer reviewed journals and citations. Collaborative work continues in countries across the Asia Pacific including East Timor, Vietnam, Aceh and other sites. The Centre is regarded nationally and internationally as a leading research and training centre in the interrelated fields of transcultural, refugee, post-conflict, post-traumatic and disaster mental health and the mental health of developing countries.

Aboriginal mental health, the impact of gender-based violence on mental health and perinatal aspects of separation anxiety are more recent areas of study.

Members: Ms Tien Chey, Dr Lorraine Ivancic, Ms Ana Ladesic, Ms Sebia Losurdo, Ms Claire Marnane, Ms Thuy Phan, Dr Susan Rees, Professor Derrick Silove, Dr Zachary Steel, Mr Alvin Tay and Ms Qing Xia

Rehabilitation

Braeside Liverpool Fairfield Rehabilitation Research Group (BLF RRG) has been very productive in outcome based rehabilitation research over the last three years, averaging 20 to 25 conference presentations and several published articles per year.

The research of the BLF RRG concentrates on clinical applications of the International Classification of Functioning, Disability and Health (ICF), comparisons of models of care, the use of outcome measurements including short and long-term outcomes of rehabilitation patients. Projects have involved:

- Development of ICF based activity of daily living assessment tool.
- Development of ICF based mobility assessment tool.
- Development of an ICF Core set for patients following a lower limb amputation.
- Sensitivity of the brief ICF Stroke Core set in a day hospital setting.
- Interrater reliability of the functional independence measure in various settings.
- Intrarater reliability of the functional independence measure.
Usefulness and predictive value of rehabilitation patient classifications and other variables.

Comparison of rehabilitation outcomes in different rehabilitation settings/models of care.

Incidence of amputations in Australia.

Activities of patients in a rehabilitation ward.

Effects of time of transfer to rehabilitation ward on outcomes for patients who have had a stroke.

Use of outcome measures in group settings in the rehabilitation day hospital.

The BLF RRG is also collaborating with a number of others groups: ISPRM (International Society for Physical and Rehabilitation Medicine); ISPO (International Society for Prosthetics and Orthotics); ICF Research Branch, Nottwil, Switzerland; an international consortium of rehabilitation specialists; Aged Care at Bankstown-Lidcombe Hospital; and the Whitlam Joint Replacement Centre/Department of Orthopaedics at Liverpool/Fairfield Hospitals. These collaborations involve a variety of projects.

Members: Dr Carol Connolly, Professor Hugh Dickson, Associate Professor Friedbert Kohler, Dr Helen Redmond and Dr Roger Renton

Respiratory Medicine

Researchers within the Department of Respiratory Medicine at Liverpool Hospital are working on a wide-range of problems in respiratory and sleep medicine and science including asthma, COPD, sleep disorders and tuberculosis. Research on tuberculosis has examined the outcomes of treatment for tuberculosis in NSW, the risk for tuberculosis among people with diabetes and with renal failure in Australia and the effectiveness of contact tracing in people exposed to patients with tuberculosis in south-western and western Sydney.

The Childhood Asthma Prevention Study, a long-term clinical trial of preventive interventions for asthma implemented in a high-risk birth cohort, continues as a cohort study and is now investigating changes in respiratory, allergic and cardiovascular characteristics during puberty.

A number of clinical trials are underway including investigations of new treatments to prevent exacerbations of chronic obstructive pulmonary disease, for severe asthma and for bronchiectasis. In sleep medicine, our researchers are engaged in studies on new approaches to early diagnosis of obstructive sleep apnoea. Researchers will also be examining methods for early detection of mesothelioma.

Members: Dr Melissa Baraket, Dr Peter Buchanan, Dr Hamish Crawford, Dr Peter Collett, Dr Claudia Dobler, Ms Karen For, Dr Zinta Harrington, Dr Anthony Johnson, Ms Christina Madzirina, Professor Guy Marks, Dr Stephen Parsons, Dr Graham Radford, Dr Hima Vedam, Mr Craig Wainwright and Dr Jonathon Williamson

Simpson Centre for Health Services Research

The Simpson Centre was one of the first centres to be established in Australia to conduct research around health services or systems. This type of research involves reorganising the way we deliver health services. The Simpson Centre developed the concept of day-of-surgery admission and the perioperative ward which has changed the way elective surgery is conducted by preparing patients for surgery in the community rather than as a hospital inpatient and admitting them on the day of surgery, even for major surgery requiring several days or weeks of hospital admission.

The Centre also developed and evaluated the first rapid response system for seriously ill at-risk patients – MET system. The Centre has published over 140 peer-reviewed articles, been successful in achieving over $8 million in peer-reviewed grants and has supervised many postgraduate students.

Members: A/Professor Jack Chen, Dr Roberto Forero, Professor Ken Hillman, Dr Hadis Nosrati and Dr Lixin Ou
The Ingham Institute for Applied Medical Research has not been short of milestones over the past three years, with many important events taking place that have helped shape the Institute into the rapidly growing organisation it is today.

Located at Liverpool Hospital, the Ingham Institute is a charitable organisation that conducts and supports medical research on a range of disease areas affecting south West Sydney, with this research also having applications nationally and on the world stage.

Initiated by its founding benefactor Bob Ingham AO, the Institute is a unique collaboration between the South Western Sydney Local Health District, Sydney Local Health District, the University of New South Wales (UNSW) and the University of Western Sydney (UWS). This collaboration brings together some of Australia’s finest research talent to conduct medical research focused on core research areas including:

- Translational Cancer Research
- Injury
- Early Years
- Population Health
- Brain Science and Mental Health

Over the past three years, the Ingham Institute has actively supported the growth of medical research in the south west by contributing $800,000 to help build research capacity in the areas of population health, cardiology, allied health and in early years research relating to infants and children. With these funds, the Institute injected more than $600,000 into clinical and health research through Ingham Institute infrastructure support grants. These grants were used by research groups to build research capacity and to stimulate and coordinate clinical research amongst a range of
clinical and non-clinical groups including a number associated with the University of New South Wales.

To help raise the profile of the high-quality research talent in the south west, the Ingham Institute has continued to host the annual South Western Sydney Research Showcase. The Showcase Organising Committee, chaired by the Institute Research Director Professor Michael Barton, has put great efforts into making the Showcase a success, resulting in a double digit growth in the number of submitted research presentations over the past three years.

In 2009, the Federal Government announced that the Institute’s $46.9 million application to fund its new premises had been successful – making the vision of a state of the art research precinct for the Institute a reality. This was a result of considerable efforts by the Ingham Institute Board, chaired by Mr Terry Goldacre, and by SSWAHS Director of Clinical Operations Dr Teresa Anderson as well as considerable input by staff from UNSW. 2009 also saw Bob Ingham AO commit to further generous funding of $3 million and Lady Mary Fairfax to $450,000 over a three year period.

Another significant development was the allocation of Level 4 of the Health Services Building on the grounds of Liverpool Hospital for the Institute’s initial office and laboratory space.

This enabled the Institute to commence biomedical research on the Liverpool Hospital campus. Laboratories were commissioned in 2010. The Ingham Institute Board committed $640,000 towards the acquisition of research equipment for this facility, which houses UNSW’s Pancreatic Research Group and Arthritis Research Unit along with groups from UWS. This laboratory floor will link to the Institute’s adjacent new building (due for completion in 2012) with the result being 2000m² of continuous laboratory space.

When completed, the Ingham research campus will comprise Level 4 of the Health Services Building, Liverpool Hospital; an adjacent five storey Ingham Research Building; a research MRI-Linac bunker facility and a Clinical Skills and Simulation Centre.

The MRI-Linac facility will be the first of its kind in Australia and one of only three in the world. It will enable research into the development of more accurate radiotherapy for cancer patients, with better outcomes.

The Clinical Skills and Simulation Centre will enhance procedural training for medical, nursing and allied health students, postgraduate students and all hospital clinical staff.
1996 – 2008

22 January 96
The Ingham Institute’s Founding Benefactors, Jack and Bob Ingham of Inghams Enterprises send a letter of commitment to establish and support the Ingham Institute. This marked the beginning of their continuous generous support year after year.

9 July 96
The State Government makes a commitment to match the founding funds donated by Jack and Bob Ingham dollar for dollar.

18 February 97
The Institute is incorporated under the control of the South Western Sydney Area Health Service (SWSAHS).

1 August 03
Funds from the Sydney Southwest Bowel Cancer Foundation, which started in 1998, are merged with the Ingham Institute’s corpus.

14 February 08
The Institute appoints its Board Members including Terry Goldacre (Chairman), Glenda Cleaver, David Hazlett, John Hexton, Amanda Larkin, Professor Peter Smith, Arnold Vitocco, Mike Wallace and Professor Neville Yeomans.

11 December 08
The Institute changes it Constitution to become an independent legal entity.

2009

13 January
Dr Teresa Anderson and UNSW Clinical Dean SWSCS Professor Jeremy Wilson drive to Canberra to submit an application to the Federal Government’s Health and Hospital Fund for $46.9M to build a new research precinct linking the Institute with Liverpool Hospital.

13 March
A key turning point. It is announced that the Ingham Institute has been successful in its application for $46.9M from the Federal Government.

16 April
The Institute appoints additional Board Members including Tim Bryan, Debbie Killian, Jim Marsden, and Tony Perich.

24 April
A Project Manager (Capital Insight) is appointed for the construction of the Institute’s new research building.

1 August
Bob Ingham commits to further funding of $3M over three years, while Lady Mary Fairfax commits $450K over three years.

2 November
Architects (McConnel Smith & Johnson) appointed.
2010

15 January
The Minister for Health Nicola Roxon formally signs the Commonwealth Funding Agreement for the Institute.

1 February
Liverpool Hospital’s Health Services Building is refurbished with state of the art laboratories, laying the foundation to begin to house Ingham Institute researchers.

13 April
A billboard is erected to mark the construction site of the new building. Deputy Prime Minister Julia Gillard and Premier of NSW Kristina Keneally turn the first sod at the site, officially opening it.

14 April
The Institute submits its first milestone report to the Federal Government.

26 May
An Expression of Interest is issued to building contractors.

17 June
Preferred contractors are shortlisted.

17 August
Tenders close for contractors.

1 September
Ingham Institute researchers start to move into new laboratory space in the Health Services Building.

23 September
Building contract awarded to Richard Crookes Construction.

1 October
Demolition and site clearance commences.

2011

5 January
Construction of the Institute’s new main building begins.

14 April
The Institute’s new identity is launched: The Ingham Institute for Applied Medical Research.

19 July
The Institute’s South West Sydney Translational Cancer Research Unit (SWSTCRU) wins a prestigious $1.8 million grant from the Cancer Institute NSW.

24 August
The Ingham Institute’s documentary ‘The Journey’ premieres.

2012

June
Planned completion of the new Ingham Institute building including the completion of the Clinical Skills and Simulation Centre and Research Radiation Oncology Bunker.

July
Research groups begin moving into the new building.

October
Official opening planned to launch the new building.

November
Completion of the installation of the MRI coupled linear accelerator.
Postgraduate Students

SWSCS offers a number of degrees by research including MSc, BSc (Honours), MD and PhD. In 2010, SWSCS had a total of nineteen enrolled postgraduate research students.

The following projects have recently been completed:

**Doctor of Philosophy (PhD)**

**Chin Tse Arnold NG**
Left ventricular myocardial mechanics and synchrony in patients with coronary artery disease
Supervisors: Dominic Leung and Liza Thomas
Project sought to define and determine the utility of myocardial mechanisms, define normality and determine the utility of left ventricular synchrony in patients with coronary artery disease.

**Stephen THOMPSON**
Estimating the optimal utilisation of brachytherapy for the treatment of cancer from a review of evidence-based clinical guidelines and comparison with patterns of care
Supervisors: Michael Barton and Geoff Delaney
Sought to determine the optimal brachytherapy utilisation rate for malignancy, assess the actual brachytherapy utilisation rate for malignancy, compare the optimal and actual rates of utilisation and investigate the reasons for these differences.

**Lixin OU**
Assessment of disparities in health status and health services utilisation among Indigenous and ethnic Australian children
Supervisors: Jack Chen and Ken Hillman
This study aimed to provide a comprehensive understanding of the epidemiology and aetiology of disparities in health services utilisation and the health status between Indigenous and different ethnic groups in the national representative sample of the Longitudinal Study of Australian Children (LSAC).

**Masters (Research)**

**Christine ALLMAN**
Doxorubicin induced changes in left ventricular function
Supervisors: Dominic Leung and Michael Harvey
This research focussed on using echocardiographic techniques to assess cardiac function in a group of adult patients undergoing treatment with doxorubicin for haematological malignancies.

**Reema HADI**
Developing assays to detect biofilm removal in biomedical devices
Supervisors: Anand Deva, Karen Vickery and Tim Charlton
Crystal violet staining and protein assay were investigated as reliable correlates for the detection of biofilm. Acidic agents, alkaline agents, oxidising agents, surfactants and enzymatic agents were then tested for efficacy of biofilm removal. Results were confirmed with confocal microscopy.

**Independent Learning Projects**

The Independent Learning Project, undertaken by all Phase 2 students, aims to enable students to gain some insight into how medical knowledge is acquired through the completion of a research-related project.
In 2010, south western Sydney based academics and conjoints hosted twenty three ILP projects, as follows:

- The cost-benefit of using a new endoscope (Confocal endoscope) in replacing the need to do forceps biopsies
- Autistic symptoms in tic disorders and tic symptoms in autism spectrum disorders
- Phenotypic characterisation and quality of life in Tourette Syndrome
- Community safety research project
- Anti-serum amyloid α antibodies in patients with systemic lupus erythematosus.
- Outcomes after spine surgery for low back pain in a workers compensation population
- Trends in arthroscopic surgery in Australia
- A systematic review of physical examination tests in orthopaedics
- Evidence levels in surgical procedures in Australia
- Association between metal allergy and chronic pain after ankle fracture fixation
- Complications of hip and knee arthroplasty: a systematic review and meta-analysis
- Patient preferences in orthopaedic trauma
- Operative versus non-operative treatment of type B ankle fractures: a retrospective study and prospective multicentre cohort study
- Revision spine surgery rates in Australia
- High flow versus CPAP non-acute respiratory support from 30 weeks corrected gestation
- The detection of unexpected pre-malignancy/second malignancy on staging FDG PET-CT scans in patients with lung, head and neck and oesophageal cancers
- How much radiation exposure are inflammatory bowel disease patients receiving from medical imaging procedures: are we contributing to malignancy?
- Does the presence of liver disease increase the risk of adverse effects of inhaled steroids
- Emergency department re-presentations
- Cryotherapy following total knee replacement: A Cochrane systematic review
- Oseltamivir and zanamivir for influenza A treatment
- Effectiveness of vaccines for preventing influenza in pregnant women
- The epidemiology of inflammatory bowel disease

Between 2006 and 2010, more than 64 papers have been authored by ILP students, the following represents a small sample of the papers produced by SWSCS students:

**Improved management of acute gout during hospitalization following introduction of a protocol**


**Aim:** To determine whether implementation of a protocol to manage in-hospital acute gout has improved the care of patients by non-rheumatologists.

**Long-term outcomes of vertebroplasty for osteoporotic compress fractures**


**Introduction:** This study aimed to determine outcomes of percutaneous vertebroplasty for osteoporotic vertebral compression fractures (VCFs).

**Acute gout management during hospitalization: a need for a protocol**


**Aim:** To review systematically the management of acute gout during hospitalization.

**Evaluation**

In 2009-2010, 118 ILP students completed an online questionnaire about their experience of undertaking an ILP. The key messages about students’ experience of the ILP are:

- 65% of students had a good ILP experience
- the key factors associated with having a good experience were feeling that the project was valued by the research team and being interested in the project
- students in allocated projects had similar ILP experiences
- students that had a supportive supervisor were more likely to have a good ILP experience
Grants
Projects with participation by south western Sydney conjoints and academics that operated during 2008-10

NHMRC

Cancer Australia Grants

Collaboration for Cancer Outcomes Research and Evaluation

Modelling multiple radiotherapy treatment episodes for benchmarking and service planning
$503,415

Collaboration for Cancer Outcomes Research and Evaluation

Referral pathways in colorectal cancer: general practitioners' patterns of referral and factors that influence referral
$658,625

Career Development Award

Gastroenterology and Liver Services - Bankstown

Proteomics and confocal endomicroscopy in the evaluation of inflammatory bowel disease
$424,900

Health Professional Research Training Fellowship

Bankstown Surgery

Genetics of adrenocortical tumorigenesis
$139,500

Preventive Healthcare Grants

Centre for Research, Evidence Management and Surveillance (REMS)

Understanding the impact of social, economic and geographic disadvantage on the health of Australians in mid to later life: Where are the opportunities for prevention?
$1.8 million

Postgraduate Research Scholarships

Cardiology

Cardiovascular risk in CKD
$80,938

Cardiology

Left ventricular contractile reserve and microvascular disease in diabetic cardiomyopathy
$107,750

Whitlam Orthopaedic Research Centre

The association between quality and effect estimation in surgical research
$80,938

Project Grants

Aged Care - Bankstown

Health services research: a randomised controlled trial to evaluate a model of comprehensive stroke care
$476,000

Arthritis Research Unit

Inflammation-associated S100 proteins - links between arthritis and atherosclerosis
$454,692

Arthritis Research Unit

Expression and functions of leucocyte immunoglobulin-like LIR-6 and LIR-4 in inflammatory arthritis
$290,366

Arthritis Research Unit

Alternative splicing of tryptase genes regulates their specificity.
$289,142

Cardiology and Palliative Care

Oxygen to relieve dyspnoea in non-hypoxaemic patients with end-stage heart failure
$206,350

Centre for Health Equity Training Research and Evaluation

Health and development of Aboriginal infants in an urban environment (Caduga II)
$1.3 million

Centre for Health Equity Training Research and Evaluation

Early childhood sustained home visiting for families of Aboriginal infants
$2.1 million

Centre for Health Equity Training Research and Evaluation

Investigating best practice primary carer for older Australians with diabetes using record linkage
$524,750

Neurology

Patterns of care and outcomes for subarachnoid haemorrhage: a data linkage study
$122,904

Neurology, Cardiology and Centre for Research Evidence Management and Surveillance

DESPATCH: Delivering stroke prevention for atrial fibrillation: assisting evidence-based choice in primary care
$561,447

Palliative Care

Randomised control trial of oral risperidone, oral haloperidol, and oral placebo with rescue subcutaneous midazolam in the management of delirium in palliative care inpatients
$50,000

Palliative Care

Providing the evidence to improve the care of patients with refractory dyspnoea at the end-of-life through systematic research
$245,586

Palliative Care

Longitudinal cohort study of gut transit correlated with constipation in people with advanced cancer
$506,900

Palliative Care

Longitudinal cohort study of gut transit correlated with constipation in people with advanced cancer
$1.14 million

Palliative Care

A double-blind randomised controlled multi-state study of sertraline compared with placebo in people with refractory breathlessness
$585,000

Palliative Care

n-of-1 trials of pilocarpine vs placebo from dry mouth in palliative care patient
$298,675

Palliative Care and Simpson Centre

Prospective study of Medical Emergency Team calls to define issues of end of life decision-making, symptoms and transition in goals of care
$48,700

Pancratic Research Group

Epithelial - stromal interactions in pancreatic cancer: role of pancreatic stellate cells
$419,750

Pancratic Research Group

Alcoholic pancreatitis: role of alcohol, ethanol and pancreatic stellate cells
$482,000

Pancreatic Research Group

Alcoholic chronic pancreatitis: induction, progression and reversal
$609,500

Psychiatry Research and Teaching Unit

Community safety
$1.65 million

Psychiatry Research and Teaching Unit

The role of trauma related anger and the cycle of violence in post conflict countries: a follow up study in Timor Leste
$540,125

Psychiatry Research and Teaching Unit

Building resilience in Aceh
$690,000

Schizophrenia Research Unit

Neurocognitive correlates of transition from ultra-high risk mental state to schizophrenia
$1.5 million

Schizophrenia Research Unit

The effect of oxytocin on social cognition in schizophrenia
$182,500

Simpson Centre

The impact of introducing medical emergency team on the reduction of hospital mortality and other adverse events in NSW: 3 years;
$581,827

ARC

Discovery Grants

Centre for Health Equity Training Research and Evaluation

Early childhood sustained home visiting outcomes at 4 years and the transition to school (MESCH II)
$452,900

Centre for Health Equity Training Research and Evaluation

The effectiveness of health impact assessments conducted in Australia and New Zealand
$190,000

Pancreatic Research Group

Do pancreatic stellate cells play a role in exocrine pancreatic secretion?
$263,000

Psychiatry Research and Teaching Unit

Psychosocial and mental health policy in countries emerging from conflict and natural disaster
$390,000
Psychiatry Research and Teaching Unit
Understanding anger and its consequences amongst women in conflict-affected Timor Leste: implications for enhancing sustainable development
$634,220

Psychiatry Research and Teaching Unit
Enhancing mental health in Aboriginal children
$999,000

Schizophrenia Research Unit
Cognitive neuropsychiatry: understanding delusional belief and delusional hallucination from a cognitive neuropsychological perspective
$410,825

**Linkage Grants**

Centre for Research Evidence Management and Surveillance
Planning and building healthy communities: a multidisciplinary longitudinal study of the relationship between the built environment and human health
$354,897

Infant, Child and Adolescent Mental Health
Separation anxiety in pregnancy: associations with oxytocin releases, attachment styles and mother-infant interactions
$232,767

**Cancer Institute NSW**

**Early Career Development Fellowships**

Pancreatic Research Group
Role of heat shock proteins in tumour-stromal interactions in pancreatic cancer
$598,507

**Equipment Grants**

Bankstown Surgery
In-vivo multispectral imaging PX-system: small animal imaging for multi-modal molecular signal localisation in live animals
$250,000

Collaboration for Cancer Outcomes Research and Evaluation
Making radiotherapy safer and more accurate: Developing detector technology for the next generation in treatment verification systems
$198,000

**Infrastructure Grants**

Palliative Care
Palliative Care Clinical Trials Collaborative Research Group
$528,507

**Project Grants**

Collaboration for Cancer Outcomes Research and Evaluation
Development of cancer-specific multi-attribute health states from the QLQ-C30 for use in economic evaluation
$47,814

Collaboration for Cancer Outcomes Research and Evaluation
Radiotherapy training network
$80,000

Collaboration for Cancer Outcomes Research and Evaluation
Medicare Benefit Scheme (MBS) revenues for radiation oncology services data extraction project
$44,000

Collaboration for Cancer Outcomes Research and Evaluation
Development and implementation of an integrated electronic Patient Reported Outcomes (PRO) measurement tool
$80,000

Collaboration for Cancer Outcomes Research and Evaluation
Chemotherapy in Cancer Care: estimating the optimum utilisation from a review of evidence based guidelines
$247,500

Collaboration for Cancer Outcomes Research and Evaluation
Linking radiation oncology databases to NSW inpatient statistics collections
$201,695

Palliative Care
Randomised control trial of oral risperidone, oral haloperidol, and oral placebo with rescue subcutaneous midazolam in the management of delirium in palliative care inpatients
$50,000

Palliative Care
Palliative Care Service Clinical Trials Unit
$173,448

**Research Innovation Grants**

Pancreatic Research Group
Do stromal pancreatic stellate cells contribute to chemoresistance of pancreatic cancer cells via alteration of multidrug resistant proteins
$60,000

**Translational Health Service Research Grants**

Psycho-oncology

Feasibility study of an oncology nurse practitioner model of care in a rural cancer setting
$557,634

**UNSW**

**Data Linkage Grant**

Neurology and Centre for Research Evidence, Management and Surveillance
Benefits and morbidity: carotid endarterectomy and carotid stenting: combined: A data-linkage project.
$2,290

Neurology and Centre for Research Evidence, Management and Surveillance
The PRISM study: a program of research informing stroke management using linked hospital and death data.
$18,300

**Goldstar Awards**

Arthritis Research Unit
Mast cell proteases in inflammatory arthritis.
$40,000

Centre for Health Equity Training Research and Evaluation, Centre for Research Evidence Management and Surveillance, and Diabetes and Endocrinology
Investigating best practice primary care for older Australians with diabetes using data linkage
$30,000

Emergency Medicine Research Unit
Sound and silence in the emergency department: an exploration of noise in relation to patient stress responses
$8,663

Immune Tolerance Group
Adaptive T regulatory cells in neurological autoimmune diseases
$40,000

Neurology
The PRISM study: a program of research informing stroke management using linked hospital and death data.
$60,000

Pancreatic Research Group
Desmoplasia in pancreatic cancer: role of pancreatic stellate cells in cancer progression
$40,000

Simpson Centre
The impact of introducing medical emergency team on the inpatient safety of care outcomes in NSW hospitals
$40,000

**Learning and Teaching**

Arthritis Research Unit
Piloting the use of student generated low fidelity virtual patients in the undergraduate medicine program
$177,600

**Medicine Research Grants**

Neurology
Pilot analyses for the Australiain Epidemiological Study Of Parkinson’s Disease (AESOP).
$3,500

Neurology and General Practice Unit
The identification and management of symptomatic and asymptomatic non-valvular atrial fibrillation (NVAF): examining the evidence-practice gap amongst general practitioners.
$20,000

**NewSouth Innovations**

Immune Tolerance Group
Proposal to develop a test for inducing tolerance and testing tolerance to autoimmune antigens
$196,300

**Ingham**

**Infrastructure Grant**

Community Paediatrics; Centre for Research Evidence Management and Surveillance; Neonatology; Psychiatry
Early Years Research Group: measuring the outcomes and prognosis of children in South West Sydney through linking clinical care, research and service delivery.
$200,000

**OSMR Research Support**

Psychiatry Research and Teaching Unit
OSMR Medical Research Support Program
$124,154

Psychiatry Research and Teaching Unit
OSMR Medical Research Support Program
$24,577

Psychiatry Research and Teaching Unit
OSMR Medical Research Support Program
$17,025

**Other Research**

Abbott Australia
Gastroenterology and Liver Services - Bankstown
Proteomics in fistulising Crohn’s disease
$75,000
The STOP-STROKE trial: Supporting Treatment decisions to Optimise the Prevention of Stroke $97,209

Cabrarama Community Centre
Centre for Health Equity Training Research and Evaluation
Development of mental health training DVD for unemployed people $17,000

Canberra Hospital Private
Infant, Child and Adolescent Mental Health
Experiences of mothers with 2 year old infants: an investigation of their emotional health, perceived stressors and access to treatment and support $6,750

Cancer Australia
Bankstown Surgery
The role of microRNAs in the progression of DCIS to invasive cancer $90,000

Pancreatic Research Group
Role of heat shock proteins in the stromal reaction of pancreatic cancer $74,000

Clinical Excellence Commission
Neurology and Centre for Research Evidence Management and Surveillance
Transient ischaemic attack and the risk of stroke: evaluating the effects of health service characteristics on patient death, disability and re-admission $19,500

Clive and Vera Ramaciotti Foundation
Pancreatic Research Group
Role of heat shock proteins in tumour-stromal interactions in pancreatic cancer $30,000

Department of Education, Science and Training
Gastroenterology and Liver Services - Bankstown Endoavour Executive Award $25,000

Department of Health and Ageing
Palliative Care
An integrated care pathway for advanced dementia $496,309

Palliative Care
Improving the welfare and end of life experience for residents families and staff: A case conferencing approach for older people living with advanced dementia or mental illness $509,465

Dust Disease Board
Palliative Care
The efficacy of sustained release low dose morphine in the subjective sensation of dyspnoea from mesothelioma, asbestosis or other interstitial lung diseases $342,880

FaHCSIA
Infant, Child and Adolescent Mental Health
Child and family strategy evaluation $225,000

Fairfield Hospital Grant
Whitlam Orthopaedic Research Centre
RCT – “Investigating rehabilitation strategies following TKR” $5,000

Gastroenterological Society of Australia
Pancreatic Research Group
Do pancreatic stellate cells play a role in exocrine secretion? $205,500

GE Medical
Cardiology
Unrestricted educational grant $10,000

Genzyme Australasia
Immune Tolerance Group
A phase 3, randomised, rater- and dose-blinded study comparing two annual cycles of intravenous low- and high-dose Alemtuzumab to three-times weekly subcutaneous interferon beta-1a (Rebif) in patients with relapsing-remitting multiple sclerosis who have relapsed on therapy $131,355

GESA AstraZeneca Career Development Award
Gastroenterology and Liver Services - Bankstown Endoscopic and proteomic biomarkers in Crohns Disease $255,000

Greater Southern Area Health Service
Centre for Health Equity Training Research and Evaluation
HIA assessment and health equity project $83,993

Human Capital Alliance
Centre for Health Equity Training Research and Evaluation
Audit of current preventative health workforce in Australia $9,409

Hunter New England Area Health Service
Centre for Health Equity Training Research and Evaluation
Study on the use of EFHIA for health service planning $26,425

International Atomic Energy Agency
Collaboration for Cancer Outcomes Research and Evaluation
Developing national oncology services $1,693

Juvenile Diabetes Foundation International
Pancreatic Research Group
Alcoholic pancreatitis: mechanisms of perpetuation and reversal of pancreatic injury $25,000

Liverpool City Council
Centre for Health Equity Training Research and Evaluation
Evaluation of Community 2168 Community Regeneration Interventions $81,750

Michael J Fox Foundation for Parkinson’s Research
Schizophrenia Research Unit
Determining the neural correlates of freezing of gait in Parkinson’s disease using functional magnetic resonance imaging $327,820 [USD]

Multiple Sclerosis Research Australia
Immune Tolerance Group
Cytokine promotion of induction of regulatory T cells in immune-mediated demyelinating disease $110,000

National Heart Foundation
Cardiology
Right ventricular size, dynamics and function: its relevance in health and disease $95,503

Centre for Health Equity Training Research and Evaluation
Healthy by design case study $30,000

Centre for Research Evidence Management and Surveillance Planning and building healthy communities: a multidisciplinary longitudinal study of the relationship between the built environment and human health $180,000
Papers

Publications by south western Sydney based UNSW academics and conjoints between 2008-2010

Medical Sciences


Psychiatry

25. Carragher N, Mills K, Slade T, Teesson M, Silove D. Factor


Highly Cited


Antenatal risk factors for postnatal depression: a large prospective study.


926-31.


78. O'Donnell ML, Creamer M, Holmes AC, Ellen S, McFarlane AC, Judson R, Silove D, Bryant RA.


Steel Z, Chey T, Silove D, Marmane C, Bryant RA, van Ommeren M. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and...


159. Liaw ST, Peterson G. Doctor and pharmacist - back to the apothecary! Aust Health Rev. 2009 May;33(2):268-78.


COPD exacerbations and this can lead to biased estimates of treatment effects. Future Clinical trials have used widely different methods to define and analyse COPD exacerbations with adjustments for between-subject variation in COPD trials should strive to include blinded adjudication and assessment of the exacerbations and care. COPD patients: a focus on treatment-induced psychopathology, Curr Opin Oncol. 2008 Jul;20(4):360-6.


237. Almqvist C, Garden F, Kemp AS, Li Q, Cristaffuli D, Tovey ER, Xuan W, Marks GB. CAPS investigators. Effects of early cat or dog ownership on sensitisation and asthma in a high-risk cohort without disease-related modification of exposure. Paediatr Perinat Epidemiol. 2010 Mar;24(2): 171-8.


286. The Blood Observational Study Investigators on behalf of the ANZICS-Clinical Trials Group including Parr M. Transfusion practice and guidelines in Australian and New Zealand intensive care units. Intensive Care Medicine 2010


308. Chan DK. Glucose-6-phosphate dehydrogenase deficiency: correlation between the genotype, biochemistry and phenotype. Ann


HIGHLY CITED

The relationship between early emergency team calls and serious adverse events.

Chen J, Bellomo R, Flabouris A, Hillman K, Finfer S. MERIT Study Investigators for the Simpson Centre; ANZICS Clinical Trials Group. As the proportion of early emergency team calls increases, the rate of cardiac arrests and unexpected deaths decreases. This inverse relationship provides support for the notion that early review of acutely ill ward patients by an emergency team is desirable.


381. Dobler CC, Marks GB. Medical decision making at the individual patient level. Arch Intern Med. 2010 Jul 26;170(14):1275.


should fibrinolytic-treated patients go to the "cath lab"? Heart. 2009 Mar;93(3):358-61.


Circumferential ablation of Barrett’s esophagus that contains high-grade dysplasia: a U.S. Multicenter Registry.


HIGLY CITED


Circumferential ablation of Barrett’s esophagus that contains high-grade dysplasia: a U.S. Multicenter Registry.


The management strategies for Barrett’s esophagus (BE) that contains high-grade dysplasia (HGD) include intensive endoscopic surveillance, photodynamic therapy, thermal ablation, EMR, and esophagectomy.


503. Jameson MG, Holloway LC, Vial PJ, Vinod SK, Metafore PE. A


564. Lee AJ, McCluskey P. Fixed combination of topical bromidine 0.2% and timolol 0.5% for glaucoma and uncontrolled intraocular pressure. Clin Ophthalmol. 2008 Sep;2(3): 545-55.


HIGHLY CITED

Am Heart J. 2008 Dec;156(6):1056-64.

Echocardiographic evaluation of left atrial size and function: current understanding, pathophysiologic correlates, and prognostic implications.

Leung DY, Boyd A, Ng AA, Chi C, Thomas L.

Left atrial (LA) volume has recently been identified as a potential biomarker for cardiac and cerebrovascular disease. However, evidence regarding the prognostic implications of LA volume still remains unclear. Evaluation of LA size and function using traditional and more recent echocardiographic parameters is potentially feasible in the routine clinical setting. This review article discusses the conventional and newer echocardiographic parameters used to evaluate LA size and function. Conventional parameters include the assessment of phasic atrial activity using atrial volume measurements, transmural Doppler peak A velocity, atrial fraction, and the atrial ejection force. Newer parameters include Doppler tissue imaging (DTI) including segmental atrial function assessment using color DTI, strain, and strain rate. In addition, an overview of the implications and clinical relevance of the findings of an enlarged left atrium, from currently available literature, is presented.


74


the conclusions. More studies are required to strengthen the evidence base and to
setting. The studies included in this review were of variable quality and did not use
, Cregan P , Hewett PJ, Maddern GJ.

279. Sugrue M, Caldwell E, Sturm LP , Windsor JA, Cosman PH

280. Sunderland N, Hennessy A, Makris A. Animal models of pre-


282. Sutter VP, Blankin AV, Chin WK, Chow C, Blankin SA, Merrett ND.


805. Tovey ER, Almqvist C, Li O, Crisafulli D, Marks GB. Nonlinear relationship of mite allergen exposure to mite sensitization and asthma in a birth cohort. J Allergy Clin Immunol. 2008 Jul;121(1):114-8, 118.e1-5.


819. Vinod SK, Kumar S, Holloway LC, Shafig J. Dosimetric implications of the addition of 18 fluorodeoxyglucose-positron emission tomography in CT-based


Women's and Children's Health


870. Wong FW. Where is end expiration? Measuring PAPW when the patient is on pressure support ventilation. Dynamos. 2010 Spring;21(1):11-6.


2010 Papers of the Year

In 2010 the South Western Sydney Clinical School inaugurated a Paper of the Year Award with prizes awarded in two categories.

Biomedical / Clinical Research

BACKGROUND & AIMS: Accurate histopathology of endoscopic duodenal biopsy specimens is critical in the diagnosis of celiac disease (CD) but sampling error and poor quality specimens may generate a false-negative result. Confocal endomicroscopy (CEM) is a novel technology allowing real-time in vivo microscopy of the mucosa that may diagnose CD and evaluate its severity and response to treatment more accurately than histopathology.

METHODS: Subjects with CD and controls prospectively underwent CEM. Features of villous atrophy and crypt hypertrophy were defined. A CEM score measuring CD severity was devised and validated against the diagnosis of CD and blinded histopathology. Receiver operator characteristics, sensitivity to change after treatment, and reliability of findings were assessed.

RESULTS: From 31 patients (6 untreated CD, 11 treated CD, and 14 controls), 7019 CEM images paired with 326 biopsy specimens were obtained. The accuracy of CEM in diagnosing CD was excellent (receiver operator characteristics area under the curve, 0.946; sensitivity, 94%; specificity, 92%) and correlated well with the Marsh grading (R-squared, 0.756). CEM differentiated CD from controls (P < .0001) and was sensitive to change after treatment with gluten-free diet (1787 optical biopsies; P = .012). The intraclass correlation of reliability was high (0.759-0.916). Of the 17 cases with diagnosed CD, 16 (94%) were diagnosed correctly using CEM but only 13 (76%) had detectable histopathology changes. The procedure was safe and well-tolerated.

CONCLUSIONS: CEM effectively diagnoses and evaluates CD severity in vivo. This promising technique has the potential to improve endoscopy efficiency.

Non-Biomedical / Health Services Research

OBJECTIVE: To examine the relationship between early emergency team calls and the incidence of serious adverse events--cardiac arrests, deaths, and unplanned admissions to an intensive care unit--in a cluster randomized controlled trial of medical emergency team implementation (the MERIT study).

DESIGN: Post hoc analysis of data from cluster randomized controlled trial.

SETTING AND PARTICIPANTS: Twenty-three public hospitals in Australia and 741,744 patients admitted during the conduct of the study.

INTERVENTIONS: Attendance by a rapid response system team or cardiac arrest team.

MAIN OUTCOME MEASURES: The relationship between the proportion of rapid response system team calls that were early emergency team calls (defined as calls not associated with cardiac arrest or death) and the rate (events/1000 admissions) of the adverse events.

RESULTS: We analyzed 11,242 serious adverse events and 3700 emergency team calls. For every 10% of increase in the proportion of early emergency team calls there was a 2.0 reduction per 10,000 admissions in unexpected cardiac arrests (95% confidence interval [CI] -2.6 to -1.4), a 2.2 reduction in overall cardiac arrests (95% CI -2.9 to -1.6), and a 0.94 reduction in unexpected deaths (95% CI -1.4 to -0.5). We found no such relationship for unplanned intensive care unit admissions or for the aggregate of unexpected cardiac arrests, unplanned intensive care unit admissions, and unexpected deaths.

CONCLUSIONS: As the proportion of early emergency team calls increases, the rate of cardiac arrests and unexpected deaths decreases. This inverse relationship provides support for the notion that early review of acutely ill ward patients by an emergency team is desirable.
Staff List

UNSW appointees in south western Sydney in 2011

Academic

Professor
Minoti Apte
Michael Barton
Valsa Eapen
Afaf Girgis
Ken Hillman
Bruce Hall
Ian Harris
Teng Law
Patrick McNeil
Shan Rajendra
Bruce Hall
Ian Harris
Teng Law
Patrick McNeil
Shan Rajendra
Bruce Hall
Ian Harris
Teng Law
Patrick McNeil
Shan Rajendra

Associate Professor
Jack Chen
Elizabeth Comino
Elizabeth Harris
Lynn Kemp
Stephen Matthey
Philip Ward
Marilyn Wise

Senior Lecturer/Senior Research Fellow
Katherine Bryant
Rudi Cnec
Sarah Dennis
Suzanne Hodkinson
Roberto Ferero
Jennifer Knight
Jude Ng
Sean O’Neill
Phoebe Phillips
Patsy Soon
Tim Spencer
Zachary Steele
Tania Trapolini

Lecturer/Research Fellow
Mona Asghani-Fard
Fiona Haigh
Ben Harris-Roxas
Patrick Harris
Vanessa Rose

Associate Lecturer
Gihan Kamalasena
Rajat Mittal

Emeritus

Professor
Ian Webster

Conjoint

Professor
Bryanne Barnett
Andrew Blankin
Daniel Chan
Geoffrey Delaney
Hugh Dickson
John French
Bin Jalaludin
Dominic Leung
Guy Marks

Associate Professor
Meera Agar
Anders Aneman
Roy Beran
Martin Berry
Dennis Cordato
Anand Deva
Jeffrey Flack
Kathryn Gibson
Ian Gosbell
Graham Gumley
Raj Gyaneshwar
Anna Holdgate
John Ireland
Matthias Jaeger
Craig Juergens
Grigori Kaplan
Jens Kilian
Murray Killingsworth
Friedbert Kohler
Rupert Leong
Andrew McDonald
Neil Merrett
Catherine O’Connor
Christopher Pokorny
John Quin
Michael Parr
David Richards
Anthony Schembi
Mark Sheridan

John Smoleniec
Michael Suranyi
Liza Thomas
James van Gelder
Shalini Vinod
Rob Wilson
Cyril Wong
John Worthington

Senior Lecturer
Alan Adno
Christophe Berney
Justin Browne
Robert Brooks
Peter Buchanan
Tram Bui
Cecilia Cappelen-Smith
David Chang
Peter Collett
Alison Colley
David Conforti
Susan Connor
Anvin Damodaran
Scott D’Amours
Jennifer Davidson
Barbara Depczynski
Lindsay Dunlop
John Eastwood
Philip Emder
Louise Evans
Antonio Fernandes
Frank Formby
Amanda Goldrick
Zinta Harrington
Michael Harvey
Geraldine Hassett
Ivan Ho Shon
Seyed Imam
Susannah Jacob
Rajeev Jairam
Anthony Kaplan
Eng-Siew Koh
Marc Lokos
Kien Seng Lee
Miriam Levy
Peter Lin
Denise Lonergan
Christine Loo
Ian McCrossin
Alan McDougall
Roderick McKay
Angela Makris
Michelle Maxwell
Dan Mildor
Daniel Moses
Penelope Motum
Christian Mussap
Justine Naylor
Karim Obrecht
Bin Ong
James Parker
Darren Pavey
Mukesh Prabhuswamy
Kanaka Rachakonda
Farhad Rahimpanah
Rohan Rajaratnam
Shanti Raman
Kent Robinson
David Rosenfeld
Glen Schlapnoff
Christopher Shanley
Mark Sithom
Jing Yu Song
Hui Tie
Alla Waldman
Janindra Warusavitame
Desmond Wilson
Richard Wittal
Vincent Wong
Helen Woodhead
Lisa Young

Lecturer
Mahmood Alam
Ishrat Ali
Olataga Afolyave-Doorbinnia
Evan Alexandrou
Ahmad Alrubale
Christopher An
Craig Andrews
Seymour Atlas
Amjad Aziz
Felicity Bagnall
Luke Baker
Deepak Bhonagiri
Roger Blackmore
David Blomberg
Kathleen Brennan
Chuong Bui
Triet Bui
Jeremy Bunker
Brian Burns
Ross Calcroft
Ian Gallander
Christopher Carmody
Felix Chan
Que Li Louise Chiam
Raymond Chin
Carolyn Cooper
Peter Cosman
Richard Cracknell
Linda Dann
Bolotom Darwin
Jayker Dave
Stephen Della-Fiorentina
Eric Chi Ving Dlu
Hugh Dixon
Claudia Dobson
Pravin Dullur
Peter Edwards
Sharif Gabr
Robert Guaran
Elgatlian Ferguson
Npuna Fernando
Gary Flynn
Dixon Forster
Anthony Frankel
David Freiberg
Steven Frost
Stephen Fulham
Alan Giles
Naeshika Govender
Neil Griffith
Andrew Haig
Tushar Halder
Andrew Hartshorn
Sonja Herrera
Quang-Phu Ho
Andrew Hopkins
Susan Iraczi
Arthur Jarrett
Helene Johansen
Charlotte Johnstone
Kevin Johnstone
Mariam Joseph
Frank Khai
Chee Khoi
Ashley Kingston
George Kirsh
Zoe Knight
James Kokkinos
Jenn Hian
Kenneth Koo
Tania Leung
Gregory Leslie
Michael Lin
Jennifer McDonald
Susheel Manambrakat
David Massasso
Suni Mathew
Sharon May
Ahmed Mayat
Anthony McGuinness
Ian Meakin
Gregory Melbourne
Blair Munford
Anas Nattaji
Weng Ng
Vincent Nguan
Huong Van Nguyen
Phong T D Nguyen
Robert Nguyen
Navindran Niles
Marwan Obaid
Aden O’Loughlin
Willam O’Regan
Fintan O’Rourke
Isidor Papapetros
Hary Patapanian
Astrid Przedziecki
Graham Raford
Helen Redmond
Roger Renton
Napoleon Reppas
Sharon Reynolds
Hamish Russell
Sharon Rutledge
Jeffrey Sacks
Stuart Saker
David Saxton
Jesmin Shalifq
Albert Shafiransky
Aashit Shah
Qing Shen
Milan Simic
Brendon Smith
Matthew J Smith
Timothy Spencer
Sujays Simgeri
Jacqueline Stack
Antony Stewart
Patricia Symons
Richard Thode
Steven Thou
Rod Tolbiasky
Fleur Trezise
Sankar Vadali
Sanjot Vaghokar
Hima Vedam
Tai-Tak Wan
Stuart Watkins
Penelope Weir
David Williams
Bruce Wilson
Karen Wong
Lisa Worgan
Peter Wylie
Shu Ching Yang
Simon Yarow
Terence Yoong

Associate Lecturer
Sam Adie
Shakil Ahmed
Sam Al-Sohal
Mustafa Altahir
Frank Arena
Tamer Nagab
Bingu Abaduri
Jarrett Barker-Whittle
Milan Bawaan
Kavita Bhola
John Bui
Neil Campbell
Louis Cheung
Venessa Chin
Ritu Datta
Andrew Fong
Darshan Gha
Saurabh Gupta
Roger Haddad
Shihab Harneed
Eric Hau
Allan Hsu
Mohammad Hussain
Ashish Jwane
Paul Joshua
Krishna Kadappu
Ahmed Kakkat
Barry Kane
Deme Karkios
Alaric Koh
John Kok
Trevor Kwok
Melissa Leung
Danforn Lim
Aninda Lim
Arvind Madras
Sara Maher
Ram Malhotra
Antonia Miler
Fazlur Nadri
Adnan Nagrial
Arnold Ng
Natalie Ong
Riona Paus
Alexia Pape
Nalini Pate
Archana Rao
Christopher Reitz

Other

Research Staff
Jane Anderson
Alex Apler
Rochelle Boyd
Fiona Byrne
Eva Fias-Beer
Emma Friesen
Rebekah Grace
Gabriel Gabriel
Iqbal Hasan
Oshana Hermiz
Deborah Johnston
Catherine Kaplun
Harrison Ng Chok
Kate Promall
Catherine Robinson
Sheryl Sharkie
Joan Silk
Vana Webster
Jane Taggart
Giang Tran
Zhigong Xu
Vana Webster
Susan Yang
Sogg Zaptar

Professional Staff
Claudia Caliero
Kyle French
Maribel Helene
Robyn Hittman
Mary Knopp
Carla LeCordier
Fakhra Main
Lorinda Masri
Charmaine Rodricks
Shalini Saverimuthu

Adjunct
Craig Smith
Catherine Dillon

† Passed away May 2011

86
Becoming a Conjoint

Conjoint appointees are individuals who generally hold a relevant position external to UNSW who have contributed to the research and/or teaching effort of the Faculty of Medicine. Conjoint appointments are unpaid positions.

There are a number of benefits of obtaining a conjoint appointment including:

- public recognition of academic standing through use of a conjoint title;
- access to over 2.7 million items through the UNSW library;
- access to Sirius - the electronic gateway to the UNSW e-journal collection of 23000 titles;
- provision of zMail as a separate @unsw.edu.au email address;
- access to the UNSW Uniwide network when on campus, in the south western Sydney hospital education facilities and on other university campuses through EduRoam;
- eligibility for academic pricing on a range of products including computer software and hardware purchased for non-commercial purposes;
- discounts on a range of other products and services using UNSW negotiated rates including restaurants, airline lounge programs, gift vouchers and travel; and
- access to research workshops through the Grants Management Office and to research clinics provided by Outreach Library services.

For more information on becoming a conjoint, contact the South Western Sydney Clinical School on +61 2 9828 3844 or download an application form from:

www.med.unsw.edu.au/medweb.nsf/pages/Conjoints
879 publications
$44.7m in research funding
$23.6m in NHMRC and ARC projects
$10.8m in infrastructure funding
396 staff and conjoints
325 students annually

swscs.med.unsw.edu.au