

5 > RESEARCH FOCUS

Research and Innovation Office	76	ARC Centres of Excellence	
accessUTS Pty Limited	76	ARC Centre of Excellence for Autonomous Systems	86
University research strengths	77	ARC Centre of Excellence for Ultrahigh-bandwidth Devices for Optical Systems	86
Business		ARC research networks	
Centre for Corporate Governance	77	Asia-Pacific Futures Network	87
Centre for Management and Organisation Studies	77	Australian Research Council Network for Parasitology	87
Centre for Quantum Computation and Intelligent Systems	78	Financial Integrity Research Network	87
Centre for the Study of Choice	78	Centres of Enterprise, Research and/or Community Service	
Quantitative Finance Research Centre	78	Australian Centre for Event Management	87
Creative and civil societies		Australian Centre for Independent Journalism	87
Centre for Contemporary Design Practice	79	Australian Centre for Olympic Studies	88
Centre for Research in Learning and Change	79	Australian Centre for Public Communication	88
Centre for Strengthening Indigenous Communities	79	Australian Centre for Public History	88
Cosmopolitan Civil Societies Research Centre	79	Centre for Australian Community Organisations and Management	89
Law Research Centre	79	Centre for e-Business and Knowledge Management	89
Transforming Cultures	79	Centre for Electrical Machines and Power Electronics	89
UTS China Research Centre	80	Centre for Forensic Science	90
Environmental sustainability		Centre for Health Communication	90
Centre for Built Infrastructure Research	80	Centre for Health Services Management	90
Institute for Sustainable Futures	80	Centre for Local Government	90
Institute for Water and Environmental Resource Management	80	Centre for Media Arts Innovation	91
Plant Functional Biology and Climate Change Research Cluster	81	Centre for Midwifery, Child and Family Health	91
Health		Centre for New Writing	91
Centre for Health Economics Research and Evaluation	81	Centre for Object Technology Applications and Research	91
Centre for Health Technologies	81	Complex Systems Research Centre	92
Health Services and Practice	82	Paul Woolley Centre for Capital Market Dysfunctionality	92
Institute for the Biotechnology of Infectious Diseases	82	Institutes	
Science and technology		Institute for Interactive Media and Learning	93
Centre for Forensic Science	82	Institute for Sustainable Futures	93
Centre for Human Centred Technology Design	82	Other organisations	
Centre for Intelligent Mechatronic Systems	82	Australasian Legal Information Institute	94
Centre for Real-Time Information Networks	83	Australian Technology Park Innovations Pty Ltd	94
Centre of Innovation in IT Services Applications	83	APACE Village First Electrification Group	94
Institute for Nanoscale Technology	83	UTS Training and Development Services	94
Cooperative Research Centres			
Australasian Cooperative Research Centre for Interaction Design	84		
Capital Markets Cooperative Research Centre	84		
Cooperative Research Centre for Contamination Assessment and Remediation of the Environment	85		
Cotton Catchment Communities Cooperative Research Centre	85		
Sustainable Tourism Cooperative Research Centre	85		

RESEARCH AND INNOVATION OFFICE

The Research and Innovation Office (RIO) provides support services to enable the University to develop its research potential. RIO also seeks to link researchers with funding agencies and investors.

Four teams operate under the director.

Industry engagement and commercialisation

The industry engagement and commercialisation team deals with contracts, technology development, patents, intellectual property and relationships with industry partners. Its role is to establish commercial opportunities and to build links between researchers and industry.

Research grants and tenders

The research grants and tenders team is responsible for promoting, developing and administering internal and external granting schemes, financial administration of funding, and managing data reporting requirements. Its role is to encourage and support academic staff in applying for various funding opportunities.

Planning and operations

The planning and operations team provides strategic advice to RIO and policy advice to the University, monitoring issues and trends in the national and international research policy agenda. The team manages the IT infrastructure for administering and reporting research at UTS. The team also supports the Human Research Ethics Committee, the Animal Care and Ethics Committee and the Biosafety Committee.

Contracts execution and management

The contracts execution and management team is responsible for the development, review and execution of all research funding contracts and commercialisation agreements, in association with UTS legal, contract research projects, management of intellectual property portfolio and commercialisation agreements, including licences and joint ventures. The team is also responsible for coordinating the monitoring and reporting of UTS involvement in cooperative research centres.

Inquiries

CB01.7, City campus
telephone +61 2 9514 9681
fax +61 2 9514 1244
email research.office@uts.edu.au
www.research.uts.edu.au

accessUTS PTY LIMITED

accessUTS Pty Limited is a wholly owned UTS company that manages University consulting, providing professional consulting services to business, industry and government. It offers expert opinion to the legal and insurance industries, technical consulting and testing services, professional consulting and training services. It draws on the extensive and diverse expertise of both UTS staff and external commercial entities.

accessUTS offers:

- well-considered matching of expertise to meet client requirements
- project management that ensures that client and consultant expectations are identified and agreed on, and milestones and deliverables are met
- preparation of fee proposals and assistance with tenders
- contract administration
- financial administration and professional accounting services to manage client accounts and supplier payments
- professional indemnity and public liability insurance cover.

accessUTS is committed to expanding University consulting and, to this end, promotes and markets the business and consultant expertise through a range of media and contacts with clients and potential clients to develop business opportunities.

Inquiries

CB01.14, City campus
telephone +61 2 9514 1916
fax +61 2 9514 1433
email accessuts@uts.edu.au
www.accessuts.uts.edu.au

Postal address

accessUTS Pty Limited
PO Box 123
Broadway NSW 2007

UNIVERSITY RESEARCH STRENGTHS

UTS's research strengths are centres established through a competitive, peer-assessed process in order to:

- build UTS research capacity in, and reputation for, excellent research
- attract and retain researchers
- encourage research teams and research collaborations to undertake focused and sustained investigations addressing the most challenging and significant research problems
- attract high-achieving research students and provide high-quality postgraduate training environments
- provide access to research infrastructure, equipment and research technologies
- develop relationships with major Australian and international research programs
- strengthen UTS external engagement with industry, business, government and the community.

The research strengths are in five main groups — business, creative and civil societies, environmental sustainability, health, and science and technology — ranging from traditional areas such as physical, biological and engineering sciences, to more contemporary fields including the study of choice, design, adult learning, corporate governance and nanotechnology.

The policy on research strengths is available at:

www.gsu.uts.edu.au/policies/researchstrengths.html

BUSINESS

This group includes the following strengths, each of which undertakes research that contributes to the study of the management, structures and governance of organisations, finance, commerce, marketing and business technologies.

Centre for Corporate Governance

The Centre for Corporate Governance brings together researchers from accounting, finance, management and legal backgrounds to provide a comprehensive, interdisciplinary approach to one of the most critical problems faced by organisations in both the private and public sectors. Corporate governance is the system by which corporations are directed and controlled. Corporate governance structures and processes specify the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders. The aim is to align as nearly as possible the interests of individuals, corporations and society.

The key issues examined by the centre include financial aspects of corporate governance, directors' duties and the role of the board, corporate governance and performance measurement, comparative corporate governance across countries and regions, and corporate governance and legal, regulatory and ethical accountability.

The centre is engaged in major research projects with industrial and professional partners, teaching and curriculum development, academic publications and conferences, and is also dedicated to policy development and legal reform. The centre is also involved in professional consultancy, the provision of short courses and the improvement of practice. The centre has good international links with other research bodies examining the reform of corporate governance worldwide.

Inquiries

Professor Thomas Clarke
 Director, Centre for Corporate Governance
 CM05B.4.34, City campus
 telephone +61 2 9514 3479
 fax +61 2 9514 3817
 email Thomas.Clarke@uts.edu.au
www.ccg.uts.edu.au

Centre for Management and Organisation Studies

The Centre for Management and Organisation Studies (CMOS) brings together internationally renowned social science and business researchers who investigate management and organisations in terms of their practices, performance and social significance. The centre focuses on the underlying principles of how people manage resource and power relations within organisations and the effect of those practices within organisations that operate in an increasingly globalised, uncertain and challenging world.

The centre's aims and objectives are to:

- undertake joint research with industry as well as basic research, run practitioner-relevant workshops, consult, recruit and train outstanding research students and researchers, publish and promote research in top-tier peer-reviewed journals and media, and commercialise knowledge
- be interdisciplinary, drawing on researchers from UTS's faculties of Business; Design, Architecture and Building; and Engineering and Information Technology, providing a diverse, yet focused, foundation for pioneering research
- create an excellent research environment within which both competitive and seed-funded research projects flourish and provide scholarships and mentoring for PhD, master's by research and honours students
- provide a forum for international researchers to participate in research, visit and engage with the centre and its members, to develop value-adding activities in order to leverage intellectual resources commercially and intellectually
- be a globally recognised group of experts at the forefront of research into the practice, performance and social significance of management and organisations
- be the internationally recognised centre of research excellence with members playing major roles in international academic associations and conferences
- develop collaborative relationships with overseas research bodies.

CMOS has international reach and impact and has well-developed linkages with overseas research centres as well as professional and academic associations and societies. The centre offers scholarships of various kinds and supports many visiting researchers, doctoral and postdoctoral scholars.

Inquiries

Amanda Moroney
 Manager, UTS: CMOS
 CM05C.2.53, City campus
 telephone +61 2 9514 3873
 fax +61 2 9514 3834
 email cmos@uts.edu.au

Professor Siggi Gudergan
Executive Director, UTS:CMOS
CM05C.2.07, City campus
telephone +61 2 9514 3530
email Siggi.Gudergan@uts.edu.au
www.cmos.uts.edu.au

Centre for Quantum Computation and Intelligent Systems

The vision of the Centre for Quantum Computation and Intelligent Systems (QCIS) is to develop theoretical foundations for quantum computation, theoretical foundations for intelligent systems and innovative technologies for intelligent systems. Its five major research programs cover quantum computation, knowledge discovery, decision support, innovation and infrastructure enhancement. Together, these programs develop a set of innovative and practical methodologies and techniques for intelligent information processing and system building for a broad range of businesses, including finance, marketing, security, health, government and engineering.

QCIS has five associated research laboratories.

Quantum computation laboratory

The purpose of the quantum computation laboratory is to study theoretical questions arising in this field and to further explore its power from the viewpoint of theoretical computer science and classical information theory.

Three topics of interest are:

- theoretical foundations of quantum computation
- basic information processing problems in quantum information theory
- understanding entanglement as a resource and developing a quantitative theory about entanglement.

Data sciences and knowledge discovery laboratory

The data sciences and knowledge discovery laboratory (the 'smart lab') aims to foster both theoretical and practical innovation in areas of machine learning, data mining and knowledge discovery, data sciences, behaviour informatics, and agent-mining interaction and integration.

Decision systems and e-service intelligence laboratory

E-service intelligence, an integration of intelligence technologies and e-services, is a new direction for, and a next stage of, e-services. Intelligent online services provide users with higher quality information, personalised recommendations, intelligent decision support, and more integrated and seamless link services.

Knowledge infrastructure laboratory

This laboratory focuses on using knowledge as the infrastructure to support decision making, including using agent technology to support e-markets, assisting clinicians and biologists in cancer diagnosis and treatment, and developing new languages to support pattern matching.

Innovation and enterprise research laboratory

Research topics of interest include innovation, IT and the law, business strategy, cognitive systems, decision making and risk management, global business, strategic management, knowledge management, logic-based artificial intelligence, strategic business innovation and collaboration, and innovation management.

Inquiries

Professor Chengqi Zhang, Director
email chengqi@it.uts.edu.au

Professor John Debenham, Co-director
email debenham@it.uts.edu.au

www.qcis.uts.edu.au

Centre for the Study of Choice

The Centre for the Study of Choice (CenSoC) is a cross-disciplinary initiative of the Faculty of Business and the Faculty of Science. Its overarching objective is to better understand and predict individual and group decisions and choices, including the decision and choice processes of managers, organisations and consumers.

CenSoC uses tools from econometrics, mathematics/statistics, marketing and psychology to build mathematical models of consumer and firm decision-making behaviour. These models can be used to predict how consumers or firms respond to changes in the environment they face. A prime example is prediction of market shares for new products introduced into markets and changes in market shares for existing products if their prices or other attributes are changed.

CenSoC is an academic leader in decision-making and choice behaviour study. It has a critical mass in basic research and applications of the science of choice with unique breadth and depth of expertise and experience.

CenSoC's primary research areas are:

- basic/applied choice research that leads to better consumer and managerial decisions and choices, and better methods for new product development
- theory and methods that provide new ways to study, model and improve managerial and consumer decision and choice processes
- applications that use existing/new theory and methods to solve significant practical problems.

Inquiries

Centre for the Study of Choice

telephone +61 2 9514 9745

fax +61 2 9514 9743

email censoc@uts.edu.au

www.censoc.uts.edu.au

Quantitative Finance Research Centre

The mission of the Quantitative Finance Research Centre (QFRC) is to coordinate and develop major programs of research in quantitative finance and to work collaboratively with industry to address problems in financial risk management and asset pricing. In the process, the QFRC attracts substantial competitive grant funding and enhances the international research reputation of the University, as well as its relationships with industry.

The centre has excellent international links and active seminar and visitor programs. It publishes a discussion paper series and organises the annual quantitative methods in finance conference, which is internationally recognised as one of the most important annual conferences in its field. The centre attracts high-quality doctoral students and has developed the UTS Master of Quantitative Finance, which is becoming one of the premier degrees in finance in the Australasian and Asian regions.

Members of the centre include UTS academics and research students, research associates from other Australian and international universities, and industry fellows.

Inquiries

Associate Professor Erik Schlögl
 Director, Quantitative Finance Research Centre
 CM05D.3.57, City campus
 telephone +61 2 9514 7785
 fax +61 2 9514 7722
 email qfrc@uts.edu.au
www.qfrc.uts.edu.au

CREATIVE AND CIVIL SOCIETIES

This group includes the following strengths, each of which undertakes research that contributes to the study of societies, communities and cultures and the creative practices within them.

Centre for Contemporary Design Practice

The Centre for Contemporary Design Practice (CCDP) combines several professions and academic disciplines. At a time when digital technologies are affecting every aspect of design, CCDP interrogates and re-defines design practices in the following interrelated areas: the history and theory of design and architecture, multi-modal creativity, cognition and interpretation, user-centred design, the evolution of contemporary design practices, content-design and knowledge-management for social media, and public exhibition and archiving.

Inquiries

Professor Theo van Leeuwen
 Faculty of Arts and Social Sciences
 telephone +61 2 9514 3901
 fax +61 2 9514 3933
 email Theo.vanLeeuwen@uts.edu.au

Centre for Research in Learning and Change

The Centre for Research in Learning and Change seeks to be a national and international leader in the investigation of the ways in which learning influences and is influenced by changes in educational institutions, workplaces, organisations and communities. It brings together internationally recognised researchers in the following areas of focus: workplace, organisational and adult learning; higher education, language, communication and culture; teacher education, critical pedagogy; and digital literacies and learning.

The centre's research aims to understand how learning theories and practices can influence social and economic change, how learning is changing and how learning and change are embedded within and constructed by cultural and communication practices. A particular focus of much of the current research is on health professional practice, communication and learning.

Inquiries

Professor Alison Lee
 Faculty of Arts and Social Sciences
 telephone +61 2 9514 3830
 fax +61 2 9514 3939
 email Alison.Lee@uts.edu.au

Centre for Strengthening Indigenous Communities

The Centre for Strengthening Indigenous Communities, within the Jumbunna Indigenous House of Learning, aims to achieve strategic research outcomes that are valuable, usable and accessible to policy makers, research units and, most importantly, Indigenous communities and individuals.

The centre also aims to develop highly skilled Indigenous researchers and to encourage Indigenous people to undertake undergraduate and postgraduate study at UTS.

Inquiries

Professor Larissa Behrendt
 Jumbunna Indigenous House of Learning
 telephone +61 2 9514 9655
 fax +61 2 9514 1894
 email Larissa.Behrendt@uts.edu.au
www.jumbunna.uts.edu.au

Cosmopolitan Civil Societies Research Centre

The Cosmopolitan Civil Societies Research Centre aims to develop a better understanding of social change and cultural cohesion in Australia and other cosmopolitan societies.

The centre's research is at the intersection of conflict and cohesion and in how division can be transformed into dialogue, recognition and inclusion. Its research programs focus on social action, community capacity, migration and cultural diversity, and aim to inform policy making for social and cultural sustainability.

Inquiries

Professor Andrew Jakubowicz
 Head, Social and Political Change Academic Group
 Faculty of Arts and Social Sciences
 telephone +61 2 9514 3633
 fax +61 2 9514 3602
 email Andrew.Jakubowicz@uts.edu.au

Law Research Centre

The vision of the Law Research Centre (LRC) is to foster an environment which promotes excellence in academic research serving the community and the professions, contribute to law reform and the development and maintenance of the rule of law, and assist in the creation of a just and principled society.

The LRC is the home of the Australasian Legal Information Institute (AustLII) which provides a unique legal research infrastructure for the LRC. AustLII is committed to creating, through its research and related activities, open access to legal knowledge.

The LRC has also established five research networks which are designed to support research within the Faculty of Law and to promote the faculty's research to the broader community. The networks represent key research areas of the LRC: health, family and community; intellectual property, media and communications; corporate, commercial and tax; international law, human rights and the environment; and criminal justice and criminology.

Inquiries

Professor Lesley Hitchens
 Faculty of Law
 telephone +61 2 9514 3694
 fax +61 2 9514 3400
 email Lesley.Hitchens@uts.edu.au

Transforming Cultures — Centre for Social, Cultural and Historical Studies

Transforming Cultures was established in 1996 by leading humanities and social science researchers at UTS. The centre's distinctive focus is on transnational social and cultural transformations in different media — language, film, radio, popular cultural forms — across time and across national and geographical boundaries.

The centre promotes a research paradigm in cultural, historical and social research that seeks to transform understandings in matters of concern both locally and globally. It addresses constituencies and issues where, for example, justice is seen to be overlooked and it develops new areas of study made visible via its interdisciplinary mode of inquiry.

Transforming Cultures' approach embraces the complexity of a globalising world; researchers have been involved in cross-disciplinary debates concerning the modernist and postmodernist periods to the point of effective intellectual and methodological engagement with contemporary sites of conflict, diversity and difference. The centre's scholarly responses to these realities cross political, aesthetic and historical traditions, and develop new and effective methodologies.

Activities of the centre include postgraduate seminar series, visiting international scholars, intensive postgraduate winter schools, annual public lectures, and conferences and publications (Transforming Cultures eJournal). The centre also has a space for small talks on relevant topics and can offer workspace to international scholars.

Inquiries

Professor Devleena Ghosh
Acting Director, Transforming Cultures
CB03.5.50, City campus
telephone +61 2 9514 1963
fax +61 2 9514 2778
email Devleena.Ghosh@uts.edu.au
www.tfc.uts.edu.au

UTS China Research Centre

The UTS China Research Centre is a global leader in research on social and cultural change in China.

It is distinctive in its disaggregation of China by locality, class and gender. Researchers adopt an interdisciplinary framework, informed by extensive fieldwork, aimed at understanding the significance of China's rapid transformation in domestic and international terms.

Centre staff regularly work on collective projects with researchers from other Australian and international universities.

The centre has a number of research themes currently operating:

- challenges in health and welfare reform
- environmental resource management
- governance and spatial environments
- business and enterprise reform
- media and digital communities
- gender, sexuality and social change
- provincial and local China
- China's new partnerships in Latin America and South Asia.

Inquiries

Claire Moore
Project Officer, UTS China Research Centre
Faculty of Arts and Sciences
telephone +61 2 9514 1591
fax +61 2 9514 1578
email Claire.Moore@uts.edu.au
www.china.uts.edu.au

ENVIRONMENTAL SUSTAINABILITY

This group includes the following strengths, each of which undertakes research that contributes to the study of sustainability and natural resources including water, energy, building materials and consumables.

Centre for Built Infrastructure Research

The Centre for Built Infrastructure Research (CBIR) is a multidisciplinary team of researchers from the faculties of Design, Architecture and Building; Engineering and Information Technology; and Science. CBIR's nationally and internationally renowned work focuses on finding solutions to important global problems in building structures, materials, design, management, improvement, safety and conservation.

Inquiries

Professor Bijan Samali
School of Civil and Environmental Engineering
telephone +61 2 9514 2023
email Bijan.Samali@uts.edu.au

Institute for Sustainable Futures

Information on the Institute for Sustainable Futures is available from the institutes section in this chapter.

Institute for Water and Environmental Resource Management

The Institute for Water and Environmental Resource Management (IWERM) is a trans-disciplinary institute for collaborative research and consultancy within the field of environmental resource management. Both biotic and abiotic components of the landscape, and their interactions, are encompassed.

The institute is involved in research and consultancies in the following key areas:

- groundwater, vegetation and salinity interactions
- plant and animal ecology
- groundwater modelling
- ecotoxicology
- water resource management in rural and urban landscapes
- wastewater engineering.

IWERM is involved in research aimed at improving our understanding of, and management options for, water and ecosystem resource management. In addition, IWERM provides trans-disciplinary capabilities to consultancies for industry and government agencies.

Collaborative teams underpin the institute's activities. Research teams of ecotoxicologists interact with groundwater modellers. Teams of ecologists and ecophysiologicalists pursue collaborative research projects with hydrologists. This allows the institute to tackle real-world problems in environmental science and resource management.

The University's research institutes provide a unique opportunity for the assembly of the critical mass of expertise required to tackle key research issues within environmental and resource management. IWERM is committed to contributing to the resolution of the conflict that arises between consumptive use, sustainable yield, resource mining and conservation of environmental resources in the landscape.

Inquiries

Professor Tally Palmer
 Director, Institute for Water and Environmental
 Resource Management
 CB04.5.50J, City campus
 email Tally.Palmer@uts.edu.au
 www.iwerm.uts.edu.au

Plant Functional Biology and Climate Change Research Cluster

The Plant Functional Biology and Climate Change Research Cluster (C3) brings together a core group of expert plant physiologists, ecologists, biological and physical modellers and specialist remote sensing researchers with the aim of improving and enhancing predictions about climate change.

Working on a regional scale, for example with forest, coastal and estuarine ecosystems, C3's targeted research approach builds on their internationally recognised work into areas including:

- climate change and tree physiology
- measuring and modelling water fluxes
- coral bleaching
- Antarctic sea — ice algal communities
- biodiversity
- invasive species.

Whether terrestrial, or aquatic, plants are at the beginning of the food chain and by integrating the biological feedback from plants into climate change models C3 will improve their accuracy and usefulness for future resource planning.

As well as giving decision makers greater confidence in scientists' predictions about climate change, the outcomes from this vital research also provide an opportunity for the University, and wider community, to connect on issues and solutions relating to climate change.

Inquiries

Associate Professor Peter Ralph
 Environmental Sciences
 telephone +61 2 9514 4070
 email Peter.Ralph@uts.edu.au

HEALTH

This group includes the following strengths, each of which undertakes research that contributes to the study of health, disease, health technology, health services, health management and practice.

Centre for Health Economics Research and Evaluation

The Centre for Health Economics Research and Evaluation (CHERE) is a research strength of the University with expertise in applied economics, health services research and health policy analysis. CHERE is a centre of the Faculty of Business and is also supported by the Faculty of Nursing, Midwifery and Health. It is affiliated with the Sydney South West Area Health Service.

CHERE is one of the longest established health economics research groups in Australia and internationally. Research underway encompasses the study of health care financing and incentives, the development and application of economic evaluation in health care, health outcomes measurement and evaluation, and health policy analysis and evaluation.

CHERE aims to contribute to the creation of knowledge and the development of health economics and health services research, to apply research evidence to the improvement of health policy and practice, to provide informed commentary to the community debate on the health system, and to provide health sector relevant education.

CHERE provides opportunities for postgraduate research in health economics and health services. The centre has research and education collaborations with other New South Wales universities and through the NSW Consortium for Training Economists in Health. CHERE staff are involved in a number of international health policy networks and research collaborations.

Inquiries

Professor Jane Hall
 Director, Centre for Health Economics Research and Evaluation
 CM05D.2, City campus
 telephone +61 2 9514 4720
 fax +61 2 9514 4730
 email Jane.Hall@chere.uts.edu.au
 www.chere.uts.edu.au

Centre for Health Technologies

Continued advances in health care and quality of life in the future will come from new knowledge and innovative scientific/technological breakthroughs. The Centre for Health Technologies' research team has extensive national and international reputations in the field of health technologies. The centre brings together complementary interdisciplinary research skills unique to Australia in the development of innovative medical devices and biotechnology processes for health technology applications.

Innovative medical device technologies and biotechnology/biopharmaceutical research programs within the centre are currently at the cutting edge of biomedical engineering and biotechnology science. The centre's researchers have already developed, or have been involved in the development of, several significant biomedical devices and advanced biotechnology processes; each of these has already created strong impact and presents an outstanding potential to contribute to national and international markets. Examples of these are VentriAssist blood pump, non-invasive low blood sugar monitor (HypoMon), insulin-secreting glucose-responsive liver cell lines, EEG-based control of powered wheelchairs, chimeric monoclonal antibody for the treatment of multiple myeloma, microwave ablation of atrial fibrillation and microwave imaging of breast cancer, and diagnostic test for diabetic retinopathy using nanotechnology.

The focus of the centre is on the study of health and disease processes and the development of new medical devices and advanced biotechnology applications for early detection, diagnosis, treatment and rehabilitation of lifestyle diseases such as cardiovascular disease, diabetes mellitus, neurological disorder and cancer.

Inquiries

Professor Hung Nguyen
 Director, Centre for Health Technologies
 Faculty of Engineering and Information Technology
 CB02.7.7092, City campus
 telephone +61 2 9514 2451
 fax +61 2 9514 2868
 email Hung.Nguyen@uts.edu.au

Professor Ann Simpson
Co-director, Centre for Health Technologies
Faculty of Science
CB04.6.70C, City campus
telephone +61 2 9514 4097
fax +61 2 9514 8206
email Ann.Simpson@uts.edu.au
www.eng.uts.edu.au/~htn/health.html

Health Services and Practice

The Health Services and Practice research group engages in practice-based projects in three related areas: individuals and their families throughout life and the health/illness continuum; women during pregnancy, labour and birth, the early postnatal period and children up to five years; and health service management practices. The group's research aims to improve the quality of practice and service provided by nurses, midwives and other practitioners, and to improve health care systems, guided by the following themes: promoting health and capacity building, improving quality of care and patient safety, developing clinical interventions for improved health outcomes, facilitating communication and relationship building, and translating research into practice.

The group has the largest professoriate in nursing and midwifery in Australasia, with over a dozen clinical chairs sponsored by area health services and partner organisations, enabling strong practice-based research and innovation.

Inquiries

Professor Doug Elliott
Faculty of Nursing, Midwifery and Health
telephone +61 2 9514 4832
fax +61 2 9514 4835
email Doug.Elliott@uts.edu.au

Institute for the Biotechnology of Infectious Diseases

The mission of the Institute for the Biotechnology of Infectious Diseases (IBID) is to develop new means of controlling microbial and parasitic infectious diseases of humans and livestock.

IBID consists of research groups that have proven internationally competitive records in the field of infectious diseases and in the application of their basic research to the treatment and prevention of these diseases. IBID employs its nexus of basic and applied expertise in the following areas of research that hold the key for interrupting the lifecycle of pathogens:

- pathogen diagnosis, identification and control
- pathogen transmission
- pathogen survival and development
- immunity to pathogens
- mechanisms of drug resistance in microbes.

Collaborative research is a feature of IBID; it has formed significant strategic partnerships locally, nationally and internationally with business and industry, government, professional bodies, community organisations and other universities and research institutes. Opportunities also exist in IBID for research staff and students to enhance their skills and refine their expertise in a unique and highly professional and stimulating environment.

Inquiries

John P Dalton
Director, Institute for the Biotechnology of Infectious Diseases
CB04.5.50E, City campus
telephone +61 2 9514 4200
fax +61 2 9514 4201
email John.Dalton@uts.edu.au
www.science.uts.edu.au/ibid

SCIENCE AND TECHNOLOGY

This group includes the following strengths, each of which undertakes research that contributes to the study of technological and scientific advances, including information and communication technologies, engineering and the physical sciences.

Centre for Forensic Science

Information on the Centre for Forensic Science is available from the centres of enterprise, research and /or community service section in this chapter.

Centre for Human Centred Technology Design

The Centre for Human Centred Technology Design (HCTD) brings together researchers who share an interest in information and communications technology design that is focused on those who will ultimately use the end product.

Researchers aim to bring human-centred approaches to the design of existing, new and emerging technologies for both work and leisure activities through four programs of research: software development, information systems, interaction design, and learning environments. The HCTD's research aims to avoid current design weaknesses that result from development processes driven by concerns other than the use of the technology.

Inquiries

Associate Professor Toni Robertson
Faculty of Engineering and Information Technology
telephone +61 2 9514 1966
fax +61 2 9514 4535
email Toni.Robertson@uts.edu.au

Centre for Intelligent Mechatronic Systems

Building on 15 years of strong cross-disciplinary research in electrical machines and power electronics at UTS, the Centre for Intelligent Mechatronic Systems integrates the disciplines of mechanical, electrical and electronics engineering and computer systems.

The centre's four main research directions are autonomous robots (operating in unstructured environments and for infrastructure maintenance, search and rescue, health care and road vehicles), electrical machines (new materials and topologies, system optimisation, variable speed control and compact, low temperature fuel cells), automotive systems (performance, comfort, fuel efficiency, road safety and emission control) and human factors (physiological and psychological aspects of human-machine and human-environment interaction).

Inquiries

Professor Gamini Dissanayake
Faculty of Engineering and Information Technology
telephone +61 2 9514 2683
fax +61 2 9514 2655
email Gamini.Dissanayake@uts.edu.au

Centre for Real-Time Information Networks

The Centre for Real-Time Information Networks seeks to apply real-time information and communication technologies to engineering systems that are designed to provide social benefit in Australia. The centre's areas of interest include national security, health care diagnosis and monitoring, environmental and resource monitoring and the smart use of the internet in supporting industry.

The centre's five primary research themes are real-time web engineering, networked sensor information processing, wireless communication networks, network management and architecture-based engineering.

Inquiries

Professor David Lowe
Faculty of Engineering and Information Technology
telephone +61 2 9514 2526
fax +61 2 9514 2435
email David.Lowe@uts.edu.au
www.crin.uts.edu.au

Centre of Innovation in IT Services Applications

The Centre of Innovation in IT Services Applications (iNEXT) is a world-class research environment for developing and nurturing innovation for next generation IT services and applications, with an emphasis on commercialisation. These include innovative applications with a special focus on assistive mobile health and internet-enabled business applications, high-end visualisation technologies for large and complex data, novel image processing and intelligent pattern recognition algorithms, and advanced video surveillance systems.

iNEXT's research aims to explore and develop service-enabling mechanisms for next generation computer networks, video surveillance systems of advanced conception, visual analytics, novel image processing architectures and web / grid mobile application frameworks that will allow the transformation of the current internet connectivity infrastructure into the service infrastructure of tomorrow's internet.

Over the last few years, iNEXT researchers have been establishing a sustainable multidisciplinary and high-quality research environment. Currently, iNEXT is focusing on five major research programs that are all supported by ARC Discovery, ARC Linkage and other competitive grants.

Service enabling mechanisms for next generation internet service infrastructure

This program tackles the core problems with the current internet, namely mobility, security, service on-demand, and quality of service for breakthrough, next-generation internet applications.

Assistive healthcare infrastructure and m-health applications

This program focuses on developing an infrastructure consisting of sensor networks, active databases and a collaborative wired and wireless grid for assistive healthcare. The program also aims to develop mobile health monitoring systems for older pregnant women and at-risk people.

Advanced video surveillance systems

This program has developed video surveillance systems for high-end security applications by using innovative algorithms and camera networks.

Information visualisation

This program has developed several advanced techniques and optimised algorithms for large-scale data visualisation. These techniques have been successfully applied to the areas of bioinformatics (protein sequence visualisation), visual analytics of social networks and citation network visualisation.

Intelligent image processing and computer vision

This program aims to develop intelligent algorithms and tools for visual information analysis, image retrieval, object recognition, pattern recognition and biometrics. The research is carried out in parallel based on the traditional square image structure, and on iNEXT's novel hexagonal image structure, namely spiral architecture.

Inquiries

Professor Doan Hoang
Faculty of Engineering and Information Technology
telephone +61 2 9514 7943
fax +61 2 9514 4535
email Doan.Hoang@uts.edu.au

Institute for Nanoscale Technology

The Institute for Nanoscale Technology provides an interdisciplinary research focus for nanotechnology research at UTS, building on existing capabilities and expertise. Nanotechnology is beginning to have a major impact on our society, being currently at a similar level to that of computer chips in the early 1970s.

UTS offers an excellent undergraduate course in nanotechnology and is also a popular choice for postgraduate studies in applied nanoscience and technology for both engineering and science graduates. (Contact Dr Geoff Anstis for further information).

The institute has four major research programs directed towards high-efficiency lighting, nanobiotechnology, nanostructured materials and photonic systems. Both the fundamental and the applied aspects of these topics are targeted.

Centre for Green Lighting Research

UTS research on energy-efficient, eco-friendly lighting, and on the materials that can potentially be used in such lighting, has grown from strength to strength and is now a major contributor to the research output of the University. The Centre for Green Lighting Research incorporates the theme previously known as 'light emitting nanostructures' but has a far wider, and more applied, research focus that aims to address critical scientific issues in green lighting research, particularly in the emerging field of solid stage lighting technology. Contact: Associate Professor Matthew Phillips.

Nano-biotechnology

This field, which lies at the interface between nanotechnology, physics, biology and chemistry, is producing exciting new discoveries and products around the world. Work at UTS is directed towards engineering desired functional behaviour from proteins, antibodies and peptides. For example, the therapeutic or diagnostic possibilities of metallic nanoparticles coated with proteins has been a recurrent and productive aspect of this work. Contact: Dr Stella Valenzuela.

Nanostructured materials and systems

This program is directed towards the development of advanced functional materials for use in applications such as coatings with spectral-selectivity or enhanced radiative cooling properties, for molecular electronics, and for use in industrial machinery. The theme harnesses a rich resource of prior expertise at UTS in the fields of architectural physics, optics, chemistry and materials science and combines these with the latest technologies of metallic nanoparticles, coatings, photo-active organic molecules and advanced techniques for materials characterisation. Contact: Professor Michael Cortie.

Photonic systems

Control and manipulation of photons is a key technology for the 21st century and is likely to underpin advances in both global telecommunications and computing infrastructures. The UTS team has established an international reputation for its work on the analytical and computational analytical modelling of these complex systems. The photonic systems team is strongly affiliated with the Centre for Ultrahigh-bandwidth Devices for Optical Systems, an ARC Centre of Excellence. Contact: Professor Lindsay Botten.

Inquiries

Professor Michael Cortie
Director, Institute for Nanoscale Technology
CB04.5.58, City campus
telephone +61 2 9514 2208
fax +61 2 9514 7553
email Michael.Cortie@uts.edu.au
www.nano.uts.edu.au

COOPERATIVE RESEARCH CENTRES

AUSTRALASIAN COOPERATIVE RESEARCH CENTRE FOR INTERACTION DESIGN

The Australasian Cooperative Research Centre for Interaction Design (ACID) is the leader in collaborative solutions for distributed communities — finding better ways for people to work, collaborate and create together.

ACID's trans-disciplinary design method brings together over 120 university and industry researchers in Australia and New Zealand: developers, creatives, ethnographers, computer scientists and interaction designers address specific research questions posed by partners and clients.

ACID's academic research, design consultancy expertise and living laboratories give its clients and partners a unique advantage in meeting their users' needs.

Inquiries

email info@acid.net.au
www.acid.net.au

CAPITAL MARKETS COOPERATIVE RESEARCH CENTRE

The Capital Markets CRC (CMCRC) was established in 2001 to directly assist the development of Australia's capital markets. Now in its second round of funding (2007–2014), the centre is focused on Australian and international capital markets by designing and deploying technology and services nationally and internationally to identify and minimise the economic impact on capital markets of money launderers, market manipulators, insider traders and terrorists. These parties trade across markets to take advantage of information asymmetry between markets run by different market operators. The social and economic consequence of the activities of money launderers, market manipulators and terrorists, if they are permitted to go unchecked, will result in a significant ongoing diminution of the wealth of Australian investors.

Crucial to successful deployment of the technology and sustaining financial market innovation is the CMCRC's continued focus on human-capital development programs. With an industry-focused PhD program placing students with Australian and international partners, the CMCRC builds capability around the operation of the technology being developed by CMCRC for industry partners.

Inquiries

email research@cmcrc.com
www.cmcrc.com

COOPERATIVE RESEARCH CENTRE FOR CONTAMINATION ASSESSMENT AND REMEDIATION OF THE ENVIRONMENT

The CRC for Contamination Assessment and Remediation of the Environment (CRC CARE) was established in 2005 as a joint venture with 25 university and industry partners.

Australia has a legacy of contaminated land with hundreds of thousands of sites in need of remediation. Many of these sites have high-value commercial and residential potential. Contaminated land is a liability, but remediated land is an asset. However, remediation can be very expensive.

CRC CARE aims to develop cost-effective technologies and skills, faster site characterisation, improved risk assessment and quantification of liability, with a strong focus on creating new wealth, new jobs and new business. CRC CARE combines industry needs, research capability and regulatory framework development.

Inquiries

Professor Ravi Naidu
 Managing Director, CRC CARE
 PO Box 486
 Salisbury South SA 5106
 telephone +61 8 8302 5041
 fax +61 8 8302 3124
 email admin@crccare.com
 www.crccare.com

COTTON CATCHMENT COMMUNITIES COOPERATIVE RESEARCH CENTRE

The Cotton Catchment Communities CRC brings together many universities, government research and management organisations and industry partners in a collaborative environment working on research, education and commercialisation activities for the benefit of the Australian cotton industry, regional communities and Australia.

Goals for the Cotton Catchment Communities CRC include improved economic performance beyond the \$1.2 billion that the cotton industry is currently worth and maintaining sustainable use of natural resources for regional communities.

UTS has one research group undertaking projects for the Cotton Catchment Communities CRC. Groundwater management staff, through the Faculty of Engineering and Information Technology, are providing baseline groundwater assessments of all New South Wales and Queensland catchments where cotton is grown, and are developing coupled surface water and groundwater flow models to improve the ability to estimate aquifer sustainability.

Inquiries

Associate Professor Noel Merrick
 Faculty of Engineering and Information Technology
 email Noel.Merrick@uts.edu.au

SUSTAINABLE TOURISM COOPERATIVE RESEARCH CENTRE

UTS is a partner in the national Sustainable Tourism Cooperative Research Centre (STCRC). Launched in 1997, and awarded a new seven-year term in 2003, STCRC involves 16 universities in six states and two territories and a similar number of tourism industry partners.

UTS has been involved in the following STCRC research projects:

- developing a national approach to visitor use data collection between Australian protected area agencies
- environmental accreditation — effect of green credentials on consumer demand
- establishing an urban tourism research agenda
- establishing an accessible tourism research agenda
- urban tourism visitor experiences and precinct management
- using geographic positioning systems to understand tourists movements within urban environments
- role of ethnicity within the cultural heritage of urban tourism precincts
- understanding the experiences of tourists with vision impairments
- developing a precinct approach to accessible tourism destination experiences
- business case studies for accessible tourism
- examining the relationship between 'gateway' cities and regional tourism for overseas visitors
- monitoring local community attitudes towards national parks
- demand for high-quality 'track/trail' experiences applicable to national parks and state forests
- benchmarking caravan and tourist parks' operational performance
- making national parks a tourism priority
- marketing and demarketing of tourism in national parks
- best practice interpretation research
- effectiveness of marketing practices relating to protected areas
- cultural landscapes in tourism.

The STCRC has funded or co-funded PhD scholarships involving:

- the accreditation and professionalisation of ecotour guides
- the role of urban parks in tourism (jointly sponsored by the Sydney Urban Parks Education and Research Group)
- tourism's role within the economic restructuring of regional areas (jointly sponsored by the Tourism and Transport Forum and the Australian Sport and Tourism Youth Foundation)
- major sporting events and the city (jointly sponsored by the Australian Centre for Event Management).

Inquiries

Associate Professor Simon Darcy
 Sustainable Tourism Cooperative Research Centre
 KG04.6.2, Kuring-gai campus
 telephone +61 2 9514 5100
 fax +61 2 9514 5195
 email Simon.Darcy@uts.edu.au
 www.crctourism.com.au

ARC CENTRES OF EXCELLENCE

ARC Centres of Excellence are centres of expertise through which high-quality researchers maintain and develop Australia's international standing in research areas of national priority.

UTS is a participant in the following two.

ARC CENTRE OF EXCELLENCE FOR AUTONOMOUS SYSTEMS

The Centre for Autonomous Systems (CAS) is jointly funded by the Commonwealth and state governments and is a collaboration between UTS, the University of Sydney and the University of New South Wales.

The aim of the centre is to research and explore the nature of intelligence in problems of perception learning and control, and to lay the scientific foundation for the development and application of intelligent autonomous systems. Autonomous systems represent the next step in the fusion of machines, computing, sensing and software to create intelligent systems capable of interacting with the complexities of the real world.

Autonomous systems have a broad and diverse range of applications of national importance: from field applications such as automated mining, cargo handling, construction, forestry and transport, to potentially dangerous applications including robotic bushfire fighting, search-and-rescue, and broad areas of air, land and maritime defence, to social applications in robotic health care, automotive and entertainment.

The main objective of the centre is to focus on key research challenges in this field and showcase the integrated operation of complex intelligent autonomous systems with capabilities substantially beyond any existing systems. The centre aims to play a key role in establishing a new autonomous systems industry in Australia.

Inquiries

Professor Gamini Dissanayake
Director, UTS node, Centre for Autonomous Systems
CB02.6.3, City campus
telephone +61 2 9514 2683
fax +61 2 9514 2655
email Gamini.Dissanayake@uts.edu.au
www.cas.edu.au

ARC CENTRE OF EXCELLENCE FOR ULTRAHIGH-BANDWIDTH DEVICES FOR OPTICAL SYSTEMS

The vision of the Centre for Ultrahigh-bandwidth Devices for Optical Systems (CUDOS) is to develop the experimental and theoretical expertise to design and build linear and nonlinear all-optical signal processing devices and to miniaturise these, leading to the 'photonic chip', believed to be the building block for the next generation of optical systems.

CUDOS's research focuses on a range of novel optics, including photonic crystals, microphotonic structures, microstructured optical fibres and nonlinear photonic materials, and relies on advanced fabrication techniques, new material systems and possibly entirely new principles.

CUDOS spans six universities in three cities — UTS, the University of Sydney, the Australian National University, Macquarie University, Swinburne University of Technology and RMIT University.

Its UTS node, led by Professor Lindsay Botten and based in the Department of Mathematical Sciences in the Faculty of Science, is home to the CUDOS Computational Modelling Program, which supports the work of the centre through the development of novel theoretical and semi-analytic computational models, the development and implementation of general purpose finite difference time domain codes on large scale parallel computer systems, research in the areas of photonic crystals, microstructured optical fibres and radiation dynamics, and the provision of computational support for a range of experimental programs at other nodes.

Inquiries

Professor Lindsay Botten
Director, UTS node, Centre for Ultrahigh-bandwidth
Devices for Optical Systems
CB01.15.28, City campus
telephone +61 2 9514 2247
fax +61 2 9514 2248
email Lindsay.Botten@uts.edu.au
www.cudos.org.au

ARC RESEARCH NETWORKS

ARC Research Networks are platforms for generating new knowledge in areas that span traditional disciplinary boundaries. Networks link researchers, research groups and others involved in innovation, nationally and internationally. UTS convenes three networks.

Asia-Pacific Futures Network

The ARC Asia-Pacific Futures Network is an international vehicle for building research capacity in the national research system to enhance understanding of Australia, its region and the world. The network brings experienced researchers working in identified research areas and themes into dynamic collaboration with government and industry through structured programs, with a view to stimulating new research directions, partnerships and training opportunities. In its five-year plan, the network will focus on governance and security, culture and religion, media and communications.

Australian Research Council Network for Parasitology

On an international scale, this network works with other countries to develop new technologies for the detection and eradication of parasites. This emphasis not only protects Australia's borders but assists its near neighbours and leads to the development of technologies with an economic benefit to Australia.

Financial Integrity Research Network

The integrity of the financial system is constantly under stress because of the development of ever more complex financial instruments, structures and strategies, and the associated research technologies that continue to accelerate worldwide. The Financial Integrity Research Network's vision is to harness the considerable strengths of Australia's internationally renowned finance, accounting and economics researchers into a research agenda to address issues concerning the integrity of the financial system. It enables Australian research in this area to match the scale and impact of similar research in other major international financial centres, and plays an essential role in placing Australia among the world's leaders in financial markets related research.

CENTRES OF ENTERPRISE, RESEARCH AND/OR COMMUNITY SERVICE

Broadly, the goals of the UTS Centres of Enterprise, Research and/or Community Service (CERCS) are aimed at:

- contributing to the advancement and integration of knowledge and the building of a research culture across the University
- increasing the University's visibility and credibility in a specific area of activity
- broadening and deepening corporate, government and community relationships with the University
- strengthening the University's entrepreneurial activity
- building cross-disciplinary and supporting emerging fields of academic endeavour.

The policy on the establishment and management of CERCS is available at:

www.gsu.uts.edu.au/policies/cercspolicy.html

AUSTRALIAN CENTRE FOR EVENT MANAGEMENT

The mission of the Australian Centre for Event Management (ACEM) is to develop and support industry best practice in event management and to maximise the economic, social and cultural benefits that flow to the Australian community through the conduct of events. Its core activities include curriculum development of event courses, the delivery of continuing education programs for the event industry, and research and consultancy services associated with the planning, conduct and evaluation of events.

ACEM publishes and distributes resources associated with the management of events and maintains a resource centre housing documentation and research in this area. Through its activities, ACEM seeks to position Australia as a centre of excellence in the broad area of event management.

Inquiries

Rob Harris
 Director, Australian Centre for Event Management
 KG01.6.69, Kuring-gai campus
 telephone +61 2 9514 5496
 fax +61 2 9514 5195
 email Rob.Harris@uts.edu.au
www.acem.uts.edu.au

AUSTRALIAN CENTRE FOR INDEPENDENT JOURNALISM

The Australian Centre for Independent Journalism (ACIJ) was established in 1990. Its goals are to stimulate the production of high-quality journalism, especially investigative journalism, to conduct and support research into journalism and the media, to contribute to scholarly debate and research about journalism, and to promote community discussion about the relationship of journalism to political, social and cultural democracy.

Activities of the centre include the publication of investigative journalism, academic research in journalism studies and related fields, provision of resources and reference services for journalistic and academic research, continuing education for journalists, students and others, and contributions to debate in areas of concern to journalists.

Major activities include the online magazine, *Reportage*, the annual George Munster Award for Independent Journalism, the annual Public Right to Know conference, short courses and other occasional seminars and publications.

Members of ACIJ include staff and students of UTS, working journalists and others interested in the media across Australia.

Inquiries

Tony Maniaty
Director, Australian Centre for Independent Journalism
CB03.5.5, City campus
telephone +61 2 9514 2312
fax + 61 2 9514 1890
email Tony.Maniaty@uts.edu.au

Jan McClelland
Manager, Australian Centre for Independent Journalism
CB03.5.6, City campus
telephone +61 2 9514 2295
fax +61 2 9514 1890
email Jan.McClelland@uts.edu.au

Tameera Kemp
Short Course Coordinator, Australian Centre for Independent Journalism
CB03.5.4, City campus
telephone +61 2 9514 2488
fax +61 2 9514 1890
email Tameera.Kemp@uts.edu.au
www.acij.uts.edu.au

AUSTRALIAN CENTRE FOR OLYMPIC STUDIES

The Australian Centre for Olympic Studies (ACOS) was launched in October 2005 and an Olympic studies room at Kuring-gai campus was opened at the same time.

ACOS provides a national focus for Olympic studies in Australia. It seeks to examine the Olympic phenomenon in its broadest sense: to consider issues relating to the Olympic Games, to research the Paralympic Games and other major sporting events, and to focus on 'sport for all', which is advocated by the Olympic movement. By gathering information about the organisation of the Sydney 2000 Olympic Games, and other major international sporting events, UTS has developed a research database to assist in the organisation of similar future events.

ACOS is hosted by the School of Leisure, Sport and Tourism in the Faculty of Business at Kuring-gai campus.

Inquiries

Adjunct Professor Richard Cashman
Director, Australian Centre for Olympic Studies
KG04.6.2, Kuring-gai campus
telephone +61 2 9514 5146
fax +61 2 9514 5195
email Richard.Cashman@uts.edu.au

Associate Professor Daryl Adair
Associate Director, Australian Centre for Olympic Studies
KG01.6.76, Kuring-gai campus
telephone +61 2 9514 5498
fax +61 2 9514 5195
email Daryl.Adair@uts.edu.au

Stephen Frawley
Executive Officer, Australian Centre for Olympic Studies
KG01.6.65, Kuring-gai campus
telephone +61 2 9514 5111
fax +61 2 9514 5195
email Stephen.Frawley@uts.edu.au
www.olympic.uts.edu.au

AUSTRALIAN CENTRE FOR PUBLIC COMMUNICATION

The Australian Centre for Public Communication is located within the Faculty of Arts and Social Sciences. The centre's goals are to contribute to research, engage with industry and professional practice in public communication, stimulate debate about public communication issues in Australia and internationally, and facilitate ethical practice in public communication.

The centre aims to enhance the standard of professional practice and to contribute to the creation, application and extension of knowledge about public communication for the benefit of society. It provides a reference point at UTS for expertise, consultation and opinion on issues and policy for public communication, particularly public relations and advertising.

The centre provides opportunities for productive relationships with the professions and their representatives in industry and the community, promoting excellence in research, scholarship, education and innovation.

Primary activities of the centre include contributing to the profile of UTS as a leader in the education of public communication professionals in Australia, extending links with overseas scholars and institutions in public communication and related areas, developing and delivering quality short courses in advertising, public relations and related areas, providing an identity for industry liaison and partnerships (particularly work experience, internship programs and job opportunities for students and graduates) and encouraging debate and discussion through seminars, publications and short courses.

Inquiries

Australian Centre for Public Communication
CB02.7.029, City campus
telephone +61 2 9514 2299
or +61 2 9514 2334
fax +61 2 9514 2766
email acpc@uts.edu.au
www.acpc.uts.edu.au

AUSTRALIAN CENTRE FOR PUBLIC HISTORY

The Australian Centre for Public History, established in 1998, seeks to promote the practice and understanding of public history in both the academy and the community.

The objectives of the centre are to provide a variety of bodies in educational, community and professional sectors with a gateway to public history expertise and resources at UTS, to foster international exchanges of both staff and students, to facilitate international and related endeavours, to publicly demonstrate the integral link between public history skills and knowledge at UTS and in the broader community, and to foster and undertake research in the area of public history and to carry out appropriate consultancies to support these objectives.

The centre has completed a history of the Sydney shire of Sutherland, an oral history of Sydney's northern beaches in the 1930s entitled *Cracking Awaba*, and a history of an Italian fishing community entitled *The Fishermen of Iron Cove*.

Activities of the centre include maintaining and developing national and international public history networks, public history conferences and seminars, and working with community groups. The centre also houses the refereed journal, *Public History Review*.

Inquiries

Associate Professor Paul Ashton or
Associate Professor Paula Hamilton
Co-directors, Australian Centre for Public History
CB03.5.40, City campus
telephone +61 2 9514 1944
fax +61 2 9514 2911
email Paul.Ashton@uts.edu.au
www.publichistory.uts.edu.au

CENTRE FOR AUSTRALIAN COMMUNITY ORGANISATIONS AND MANAGEMENT

The Centre for Australian Community Organisations and Management (CACOM) is the first centre in an Australian university to focus attention on community or private nonprofit organisations and their management.

Academic staff associated with the centre undertake research into community organisations, their management and the associated phenomena of philanthropy and volunteering, and community capacity building.

The centre contributes to knowledge of and about community organisations and their management by publishing the results of research through a working paper series and by organising seminars, conferences, etc.

The centre is part of the University's creative and civil societies research strength, the Cosmopolitan Civil Societies Research Centre.

Inquiries

email cacom@uts.edu.au
www.business.uts.edu.au/cacom

CENTRE FOR E-BUSINESS AND KNOWLEDGE MANAGEMENT

The Centre for e-Business and Knowledge Management (eK Centre) is a state-of-the-art information and e-business demonstration laboratory. It provides a high-tech environment for studying and simulating e-business scenarios and real-time information management in the digital age.

Launched in 2000 by the Faculty of Business and cooperative partners IBM, Reuters and SAP, the eK Centre is equipped with leading-edge computer hardware and modern e-business software applications from SAP including a number of data warehouse applications and business intelligence software with strategic links to real-time international information services and financial markets information.

Within the Faculty of Business, the eK Centre draws on experienced researchers in accounting, business information systems, finance, management and marketing.

The centre focuses on providing high-quality research, short courses, community engagement, trans-disciplinary relationships, consulting and training in e-business, knowledge management, ERP systems, business intelligence systems, information integration and real-time information management.

Inquiries

Robert Lal
Director, eK Centre
CM05D.1.20, City campus, Haymarket
telephone +61 2 9514 3532
fax +61 2 9514 3682
email Robert.Lal@uts.edu.au
www.business.uts.edu.au/ekcentre

CENTRE FOR ELECTRICAL MACHINES AND POWER ELECTRONICS

The mission of the Centre for Electrical Machines and Power Electronics is to benefit society through the application of electrical machines, power electronics and related expertise in high-quality research and significant industrial projects.

The centre comprises a team of highly qualified experts with international and local experience. It has strong links with Australian government research organisations such as CSIRO, and works in all areas of product development, from research and design to prototype construction and testing. The centre provides expertise in electromagnetics, magnetic materials, power electronics, control electronics, electrical engineering, fluid dynamics, vibration and mechanical engineering. It combines industrially sponsored contract research and long-term postgraduate strategic research supported by research grants.

Projects include:

- development of low-cost, high-performance motor drives for electrical appliances using new soft magnetic composite materials — ARC Linkage and F&P Ltd
- design and control of sensorless, brushless, linear permanent magnet motors for fluid pumping — ARC Linkage and SES Ltd
- high-efficiency, low-cost, low-noise, variable-speed compressor drive for refrigeration and airconditioning systems — ARC Linkage and Heatcraft Ltd
- 250kW twin stator doubly fed induction generator — Varispeed Ltd
- PM motor for marine drive systems — Solar Sailor Holdings Ltd
- rotatory blood pump — Ventracor Ltd.

Inquiries

Professor Jianguo Zhu
Director, Centre for Electrical Machines and Power Electronics
CB02.6.30, City campus
telephone +61 2 9514 2318
fax +61 2 9514 2702
email Jianguo.Zhu@uts.edu.au
http://services.eng.uts.edu.au/cempe

CENTRE FOR FORENSIC SCIENCE

The Centre for Forensic Science (CFS) incorporates high-calibre research and research training in practical solutions for the prevention and solving of crime and terrorism. It brings together world-class academics, with a range of expertise, in the service of local and national law enforcement, security agencies and the wider community. The focus of the CFS is not only to develop new investigative techniques, but to demonstrate their legal significance and explain them to juries and the public so that their impact on actual cases can be fully realised.

Inquiries

Professor Claude Roux
Director, Centre for Forensic Science
CB04.4.52C, City campus
telephone +61 2 9514 1718
fax +61 2 9514 1460
email Claude.Roux@uts.edu.au
www.forensics.edu.au

CENTRE FOR HEALTH COMMUNICATION

The Centre for Health Communication was established in 2007. The centre focuses on communication that structures and supports health care services. The centre's research, training and consultative focus encompasses how clinicians, patients, administrative and other non-clinical personnel communicate with one another, how health technologies and spatial designs enable and constrain human communication, and how researchers can intervene in these processes.

The centre forges innovative partnerships on two fronts: among health care services, consumer organisations, policy making bodies and academia, and among academic researchers in social science, nursing / midwifery, education and management. Its intent to make these interdisciplinary and cross-field connections renders the centre incomparable to endeavours elsewhere, in Sydney as well as in the rest of Australia.

The centre is currently engaged in projects on open disclosure (a national evaluation of the open disclosure pilot, funded by Queensland Health), clinical handover (funded by the Australian Commission for Safety and Quality in Health Care) and clinical service complexity (funded by the Australian Research Council).

Inquiries

Professor Rick Iedema
Co-director, Centre for Health Communication
CB03.2M.04, City campus
telephone +61 2 9514 2709
fax +61 2 9514 2711
email Rick.Iedema@uts.edu.au

CENTRE FOR HEALTH SERVICES MANAGEMENT

The Centre for Health Services Management is a joint initiative between the faculties of Nursing, Midwifery and Health, and Business, and operates in close association with the health industry nationally and internationally.

The centre provides research expertise, consultation and education in the areas of nursing and health services management, research and information management.

The centre's teaching and research activities focus on:

- services provided by the health sector and the ways in which institutions provide these services (e.g. health service strategies, performance and monitoring)
- workforce and labour trends (e.g. Occupational Health and Safety, cultural diversity, skill mix, role changes in the health workforce)
- the context in which health services are delivered (structural and funding frameworks and the capacity to translate policy into effective strategies)
- the outcomes of service provision (including the translation of corporate policy and models of care into measurable outcomes through the use of benchmarking and performance management)
- development and analysis of health care regulation and policy.

Inquiries

Professor Christine Duffield
Director, Centre for Health Services Management
CB10.7.212, City campus
telephone +61 2 9514 4831
fax +61 2 9514 4835
email Christine.Duffield@uts.edu.au

Richard Baldwin
Deputy Director
CB10.7.217, City campus
telephone +61 2 9514 4807
fax +61 2 9514 4835
email Richard.Baldwin@uts.edu.au
www.chsm.uts.edu.au

CENTRE FOR LOCAL GOVERNMENT

The objective of the Centre for Local Government is to support the advancement of local government through continuing professional education and training, research and specialist consulting services. In Australia, and internationally, the centre works collaboratively with local government associations, professional institutes and state and Commonwealth government departments.

The centre is a major provider of continuing professional education for local government in New South Wales. Education and training programs are offered throughout the state and have a strong emphasis on workplace learning and high-quality, up-to-date content. In addition, the centre regularly undertakes applied research, training programs and consultancies for all spheres of government, individual councils and regional groups of councils, across a wide range of activities.

Significant contributions are made to the international development of local government through research, professional education courses and programs with partner organisations in the Asia-Pacific region and globally.

The centre offers a Graduate Diploma in Local Government Management and a Graduate Certificate in Development Assessment.

Inquiries

Associate Professor Graham Sansom
Director, Centre for Local Government
CB10.11.9, City campus
telephone +61 2 9514 1659
fax +61 2 9514 2274
email clg@uts.edu.au
www.clg.uts.edu.au

CENTRE FOR MEDIA ARTS INNOVATION

The Centre for Media Arts Innovation (CMAI), established in 2007, focuses on the past, present and future of the media arts. Connecting historical and prospective approaches, CMAI produces and analyses the established forms of cinema, radio/sound, television/video and installation at the same time as it concentrates on the interactive and locative media that are now emerging because of digital technology. Dedicated to innovative research and community activities in the media arts, among other objectives, the centre promotes the University's partnerships with all sectors of the media arts industries.

Inquiries

Associate Professor Norie Neumark, Director
Creative Practices Group
Faculty of Arts and Social Sciences

Contact

Neibi Hines
Administrative Officer
telephone +61 2 9514 9940
fax +61 2 9514 2711
email cmai@uts.edu.au
www.communication.uts.edu.au/centres/cmai

CENTRE FOR MIDWIFERY, CHILD AND FAMILY HEALTH

The formerly-named Centre for Family Health and Midwifery at UTS was established in July 2000 as a result of collaboration between the Faculty of Nursing, Midwifery and Health and the health industry.

The goal of the Centre for Midwifery, Child and Family Health (CMCFH) is to improve the health of Australian families through leadership in midwifery, child and family health research, education, practice development and consultancy. The centre's focus is on childbearing women and their families with children up to five years of age.

The CMCFH conducts research that improves the quality of practice and services provided by practitioners, particularly midwives and child and family health nurses. The centre also undertakes research to improve the systems responsible for the delivery of that care. The activities inform education, practice and policy development, service delivery and consultancy.

Underpinning the work of the centre is a focus on a broad definition of health incorporating physical, mental, social, emotional and spiritual wellbeing. The CMCFH believes that the sharing of professional knowledge, research evidence and experience through partnerships of clinicians, university faculties, other health professionals and community members enhances and improves services. The centre is committed to improving health care through education and research, and works with others to integrate this into practice and policy.

Inquiries

Professor Caroline Homer
Director, Centre for Midwifery, Child and Family Health
CB10.7, City campus
telephone +61 2 9514 4834
fax +61 2 9514 4835
email cmcfh@uts.edu.au
www.nmh.uts.edu.au/cmcfh

CENTRE FOR NEW WRITING

The Centre for New Writing, officially launched in 2005, develops and promotes research in the areas of new writing and Australia's literary culture. It acts as an incubator of ideas for creative writing practice and research, raising the University's profile in these areas.

The centre runs literary seminars, writer 'in conversations', quality short courses and advisory services. It participates in contemporary debates and discourse about writing and cultural practices, and links with writers and researchers, corporate, government and community organisations nationally and internationally in the areas of writing, editing and publishing. The centre hosts events, seminars, sessions at writers' festivals and other community events, and research projects relating to new writing, as well as working with Sydney's diverse cultural community.

The centre's Management Committee and Advisory Board, on which writers, staff and industry professionals are represented, continues to develop extensive local and international links to build a culture that draws researchers, writers and research degree students to the centre.

In 2008, the centre hosted the Australian Association of Writing Programs' international conference on writing, teaching and creativity, 'Creativity and Uncertainty', whose focus was on the examination of international developments in writing, teaching and creativity in the academy and the wider community.

In 2009, the centre will continue to engage with the creative industries and develop partnerships with arts and community organisations such as the NSW Writers Centre and co-host the Contemporary Australian Fiction Festival. The centre will also host the national CAL Writer-in-Residency to promote the study, recognition and appreciation of Australian literature. In 2009, a prominent Australian writer will be selected as CAL Writer-in-Residence. Through this initiative, the Centre for New Writing and CAL will directly connect prominent writers with the academy.

Annual membership of the Centre for New Writing is available to people interested in creative writing, research and publishing.

Inquiries

Associate Professor John Dale
Director, Centre for New Writing
CB03.4.45, City campus
telephone +61 2 9514 1951
fax +61 2 9514 2778
email newwriting@uts.edu.au
www.newwriting.uts.edu.au

CENTRE FOR OBJECT TECHNOLOGY APPLICATIONS AND RESEARCH

Established in 1994, the Centre for Object Technology Applications and Research (COTAR) provides a focal point for the software industry using, or considering using, the software development techniques of object and agent technology. COTAR promotes and conducts research in object-oriented and agent-oriented software engineering and information systems. It provides not only a focus for such research and collaborative work with industry, but also high-quality professional development education.

Inquiries

Professor Brian Henderson-Sellers
Director, Centre for Object Technology Applications
and Research
CB10.4.570, City campus
telephone +61 2 9514 1687
fax +61 2 9514 4535
email Brian.Henderson-Sellers@uts.edu.au
www.cotar.uts.edu.au

COMPLEX SYSTEMS RESEARCH CENTRE

The Complex Systems Research Centre (CSRC) at the School of Marketing in the Faculty of Business explores the emergent properties of markets and marketing. Emergence refers to the evolution in complex adaptive systems as a result of interactions between events and participants. This stems from an ability for marketing executives to increasingly recognise that marketing is characterised by a network dominance and a drive to understand the patterns driven by micro-level perturbations leading to the emergent macro-level properties.

The activities of the centre include research, education, training and consulting. These activities allow industry partners to gain first-hand knowledge of methods and tools to understand and potentially harness the non-linear emergent behaviour of markets and marketing.

A key competency of the centre is the analysis of structured and unstructured information using visualisation techniques, advanced text analysis software and various forms of network analysis. Emerging areas of interest include empirical cross-referencing using combinations of these competencies in conjunction with simulation techniques, in particular agent-based modelling.

Inquiries

email csrc@uts.edu.au
www.business.uts.edu.au/csrc

PAUL WOOLLEY CENTRE FOR CAPITAL MARKET DYSFUNCTIONALITY

The Paul Woolley Centre for Capital Market Dysfunctionality is one of three such centres established (the others being at the London School of Economics and Toulouse University) to encourage research that provides insight into whether society at large is being served well by its capital markets and financial institutions.

Almost all economic research is undertaken with the premise that capital markets are efficient even though there is a vast body of empirical evidence to suggest otherwise. In these circumstances, it is not surprising that there is little research conducted into the economic and social costs associated with mispricing in capital markets nor the efficiency and effectiveness of financial institutions that operate in these markets. This is an important deficiency in our research activities given the allocative role that capital markets play in ensuring that maximum economic growth is realised within the constraints of available resources.

The centre builds its research agenda around dysfunctional capital markets which in broad terms are defined as being markets that fail to perform the functions that are normally ascribed to them by economists. The centre focuses on the contribution to wealth creation of capital markets and financial institutions, and also on the effectiveness of the services provided by these institutions. The centre has three defined research groups — financial services, heterogeneous agent models, and macroeconomic modelling: expectations in financial markets.

The centre provides opportunities for productive relationships with the professions, entities associated with the financial services industry and the community, promoting excellence in research, scholarship, education and innovation.

Inquiries

Professor Ron Bird
Director, Paul Woolley Centre for Capital Market
Dysfunctionality
CM05D.3.22B, City campus
telephone +61 2 9514 7716
fax +61 2 9514 7722
email Ron.Bird@uts.edu.au
www.pwc.uts.edu.au

INSTITUTES

INSTITUTE FOR INTERACTIVE MEDIA AND LEARNING

The Institute for Interactive Media and Learning (IML) works in three major areas: enhancing teaching and learning through work with the Teaching and Learning Committee, faculties and individual academic staff; managing course and curriculum data and accreditation processes; and teaching postgraduate courses in interactive multimedia.

IML's work in teaching and learning focuses on improving students' learning experiences through working with faculties and groups on curriculum design and practices, the design of learning and assessment experiences for students and faculty teaching and learning priorities, including major learning and teaching development and curriculum renewal projects.

IML has continued to lead developments in e-learning across the University and offers the Graduate Certificate in Higher Education Teaching and Learning as well as a program for new academic staff. Academic staff of IML undertake research and service in areas which support the work of the institute and the University.

Inquiries

Associate Professor Jo McKenzie
 Director, Institute for Interactive Media and Learning
 CB01.27.12, City campus
 telephone +61 2 9514 1669
 fax +61 2 9514 1666
 email Jo.McKenzie@uts.edu.au
 www.iml.uts.edu.au

INSTITUTE FOR SUSTAINABLE FUTURES

The Institute for Sustainable Futures was established as a flagship, trans-disciplinary, research institute in late 1996. The institute creates change towards sustainable futures through independent, practical research and consulting based on knowledge leadership. The institute's project-based research helps people and organisations move towards a preferred future. In particular, the institute:

- helps governments to develop policy that supports sustainable development
- works with industry to create and implement sustainable strategies and operations
- assists community groups to articulate and support views on sustainability issues.

The institute conducts research projects that analyse, design and recommend effective solutions to clients ranging from small NGOs, commercial firms and local government, to large utilities and government agencies in Australia and internationally. The institute brings a range of user-friendly, forward-thinking tools and skills to organisations to help them plan and implement sustainability goals. Such tools and skills include backcasting, evaluation, innovative community engagement mechanisms (such as citizen juries), economic assessment and the use of market-based instruments, sustainability assessment frameworks and indicator development.

The institute's researchers are frequently invited to national and international conferences, publish widely, are quoted by the media as independent and credible sources, and conduct workshops, training sessions and forums within Australia and overseas.

The institute was the first institution in the world to award a PhD in sustainable futures. The institute's postgraduate program uses dynamic and reflective strategies to help students develop critical thinking skills and to promote the cross-fertilisation of knowledge, processes and ideas across diverse fields. The institute's master's and doctoral research degree programs are open to both local and international students.

Inquiries

Professor Stuart White
 Director, Institute for Sustainable Futures
 CB10.11, City campus
 telephone +61 2 9514 4950
 fax +61 2 9514 4941
 email isf@uts.edu.au
 www.isf.uts.edu.au

OTHER ORGANISATIONS

AUSTRALASIAN LEGAL INFORMATION INSTITUTE

The Australasian Legal Information Institute (AustLII), a joint facility of the UTS and University of New South Wales law faculties, maintained its position in 2008 as Australia's leading online legal research facility and the leader in the global 'free access to law' movement.

AustLII provides more than 270 Australasian legal databases, covering legislation, case law, law journals and other content from every jurisdiction. AustLII also operates the World Legal Information Institute (WorldLII), in which 10 university-based legal information institutes around the world combine to provide free access from one point to more than 890 legal databases from 123 countries.

In addition, with funding assistance from AusAID and the Australian Attorney-General's Department, and using data from the free access to law network, AustLII maintains the Commonwealth Legal Information Institute (CommonLII), which provides access to over 570 databases from 59 Commonwealth and common law countries and territories; and the Asian Legal Information Institute (AsianLII), which provides access to over 180 databases from 28 Asian countries and territories.

AustLII's current funding contributors include universities and academic institutions, government agencies, courts and tribunals, organisations from business and industry, organisations and individuals from the legal profession, community and non-profit organisations, and many other small contributors.

Inquiries

Philip Chung
Executive Director, AustLII
CB10.12, City campus
telephone +61 2 9514 4921
fax +61 2 9514 4908
www.austlii.edu.au

AUSTRALIAN TECHNOLOGY PARK INNOVATIONS PTY LTD

Australian Technology Park Innovations (ATPi) is a vibrant, world-class technology commercialisation hub that supports emerging businesses in the life sciences, internet, ICT and electronics sectors.

ATPi's shareholders are UTS, the University of Sydney, the University of New South Wales and the Australian National University.

ATPi has a strong strategic focus on working with its shareholders to drive commercialisation of intellectual property created in their institutions. ATPi also supports start-up ventures emanating from the private sector.

Inquiries

Australian Technology Park Innovations Pty Ltd
Suite 145, Level 1, National Innovation Centre
Eveleigh NSW 1430
telephone +61 2 9209 4444
fax +61 2 9319 3874
www.atp-innovations.com.au

APACE VILLAGE FIRST ELECTRIFICATION GROUP

APACE Village First Electrification Group (VFEG) is a group of UTS, community and indigenous professionals. In its earlier incarnation as the fully accredited development assistance NGO, known as Appropriate Technology for Community and Environment Inc. or APACE, it researched, designed, managed and field-assisted rural communities in the Asia-Pacific region to implement and maintain low-impact, environmentally responsible technology. APACE's micro hydroelectric village power systems remain as longstanding examples of rural renewable energy development, particularly in the Solomon Islands.

Working from Sydney, the Solomon Islands, Vanuatu, Papua New Guinea and Bougainville, the group now provides knowledge and minor resources to selected indigenous communities that have been partners on long-term projects with the previous APACE. The group also mentors PhD and undergraduate research work on development practice and research concerned with environmentally sustainable technology transfer, particularly with respect to micro hydroelectricity for developing rural communities within Australia's neighbours. These projects are designed to enable villagers to control their own futures; emphasis is placed on information, training and awareness as core components.

The group acts to promote consultation and cooperation between statutory and other bodies in all matters affecting energy poverty, as well as to develop informed public opinion of these matters.

APACE VFEG is incorporated through the nonprofit Earth Trust and receives donations through its Earth Fund.

Inquiries

Dr Paul Bryce
Director, APACE Village First Electrification Group
CB02.2.207, City campus
telephone +61 2 9514 2547
fax +61 2 9514 2611
email apace@uts.edu.au
www.apace.uts.edu.au

UTS TRAINING AND DEVELOPMENT SERVICES

UTS Training and Development Services is recognised as one of Australia's leading providers of training and consultancy services in the fields of human resource development and vocational education and training. These services relate to a range of qualifications within nationally endorsed training packages.

The centre's focus is on the provision of learning and assessment services aimed at recognising professional practice, and generally contributing to the creation, application and extension of knowledge for the benefit of individuals and their organisations.

UTS Training and Development Services enhances client learning and assessment from a diversity of backgrounds by delivering exemplary training and developing flexible learning programs.

The centre offers the following qualifications.

Certificate IV in Training and Assessment TAA40104 courses include:

- the vocational education and training context
- designing learning
- facilitating groups
- train the trainer
- workplace assessing.

Diploma of Management BSB51107 — courses include:

- time and resource management
- team management
- operational planning
- performance management
- risk management
- continuous improvement
- project management
- financial management.

The centre offers all the above courses on a year-round public course calendar. Alternatively, all courses can be customised to meet specific organisation or individual needs. Where appropriate, articulation arrangements exist between these qualifications and undergraduate courses within the Faculty of Arts and Social Sciences.

The centre is also a market leader in specialised vocational education and training consultancy services. Areas of expertise include:

- development of competency standards
- training needs analysis
- preparation of learner resources, including manuals, handbooks and videos
- development of training modules
- training evaluations
- assessment tool development
- auditing of assessment systems.

Inquiries

Anne Hallard

Director, UTS Training and Development Services

CB10.5.130, City campus

telephone +61 2 9514 3888

fax +61 2 9514 3811

email Anne.Hallard@uts.edu.au

www.tds.uts.edu.au

