2009 ARC LINKAGE, DISCOVERY & NHMRC PROJECTS SUCCESS

We would like to advise you of the exciting news of our researchers success in the ARC Linkage (round 1) and Discovery Project Funding for 2009. We submitted eight Linkage Project applications, with three approved (37.5% vs the 49.4% national average) and 13 Discovery Project applications, with two approved (15.4% vs the 20.4% national average). The Linkage Project success builds on our 75% success rate of 2008, round 2 with the Discovery Project success an excellent improvement on last year 0% return.

Congratulations to all the research teams and support staff involved in the submissions. We would also wish to acknowledge those who applied and were not successful on this occasion. Putting an ARC application together takes a lot of effort and we look forward to working with you to obtain success in future rounds.

ARc LINKAGE PROJECTS

LP0989407 Prof JD Orbell (Engineering and Science); Prof SW Bigger (FHES); Dr LN Ngeh (Engineering and Science); Mr PM Dann
Project Title: The rational development of improved pre-conditioning agents for the removal of oil contamination from wildlife and rocky foreshore.
2009: $26,140
2010: $26,140
2011: $26,140
APA(I) Award(s): 1
Collaborating/Partner Organisation(s)
Phillip Island Nature Park

LP0989339 Prof J Tran Van Hoa (CSES); Prof PJ Sheehan (CSES); Dr N Van Lich
Project Title: China’s Exports and Growth and Major East Asia Summit Economies - Exploring Regional Impact and Policy Responses.
2009: $100,000
2010: $100,000
2011: $100,000
Collaborating/Partner Organisation(s)
Ministry of Trade
TradeData International Pty Ltd

OFFICE FOR RESEARCH BULLETIN TEAM:
Dr Gayle Morris
Director
E: Gayle.Morris@vu.edu.au
T: (03) 9919 4708

Ms Zana Stefanovski
Grants Administration Officer
E: Zana.Stefanovski@vu.edu.au
T: (03) 9919 4710

IN THIS ISSUE
2009 ARC Linkage, Discovery & NHMRC Projects Success
New Additions to Division of Research & Region
Clive & Vera Ramaciotti Foundation Grant Success
2008 National Rotary Mental Health Research Grant Award
New Book: From Factory Fodder to Multicultural Mediators
Research in the Media
Exercise Scientists Putting Their Brains before Braun
New VU Chemistry Lab at Werribee Campus and New Equipment for Local Schools
Human Research Ethics: Call for Expressions of Interest
News from the Faculty of Arts, Education & Human Development
Grant Opportunity: Ian Potter Foundation
ARC DISCOVERY PROJECTS

DP0986192  A/Prof MC Duke (ISI); A/Prof LY Zou; Dr AJ Hill; Prof JY Lin

Project Title: Designing the surface and structural properties of MFI zeolite membranes for low energy ion-selective desalination.

2009: $110,000
2010: $85,000
2011: $90,000

DP0988411  Dr X Yi (Engineering and Science); Prof E Okamoto

Project Title: Private Data Warehouse Query

2009: $80,000
2010: $80,000
2011: $30,000

Funding outcomes available at:

NEW ADDITIONS TO DIVISION OF RESEARCH & REGION

TINA RANKOVIC
DIRECTOR OF INNOVATION AND COMMERCIAL DEVELOPMENT

Tina Rankovic is a senior executive with a strong entrepreneurial business and technical background, with extensive expertise in sales and marketing management, business development, product management, contract management, strategic planning, project and programme management and technology commercialisation in a range of business-to-business and service organisations. She is currently consulting to several organisations.

In 2006, Tina was the inaugural Chief Executive Officer and an Executive Director of the Australian Nano Business Forum (ANBF). The ANBF is the peak national body representing and promoting Australian industries and companies involved in nanotechnology. The ANBF provides a collective voice for member organisations engaged in this emerging technology, as well as facilitating links between other key stakeholders such as government, funding, regulatory and research entities.

Tina was appointed Director, Commercialisation - Life and Physical Sciences for Monash Commercial, the commercialisation vehicle for Monash University, in February 2005. The scope of this role encompassed responsibility for the commercialisation and technology transfer of intellectual property arising from the Faculties of Medicine, Nursing and Health Science (Clayton campus), Science, Engineering and nanotechnology at Monash University. Before joining Monash Commercial, Tina was the inaugural Head of Commercialisation at the Baker Heart Research Institute from 2002 to 2005.

Prior to her entry into the research sector, Tina was the National Business Development Manager – Orthopaedics for Mayne Group Ltd, a public company listed on the Australian Stock Exchange (ASX), with responsibility for an AUD$250 million portfolio. This followed an eight year career with the Zimmer division of Bristol-Myers Squibb Australia, where she was employed in a number of positions with the last role being that of Marketing and Business Development Director – Australasia.

Tina’s undergraduate qualifications are in applied science. Additionally, she holds a Graduate Diploma Management from the Royal Melbourne Institute of Technology and a Master of Business degree, majoring in innovation and marketing management, from the Australian Graduate School of Entrepreneurship at Swinburne University of Technology. Tina is a member of the Australian Institute of Company Directors (AICD) and has completed the AICD Company Directors course.

Tina Rankovic

ROBINA BAMFORTH
RESEARCH GRANTS MANAGER

As the newly appointed Research Grants Manager, Robina is looking forward to working with staff at VU to submit successful research grant applications.

Robina’s experience in management in the higher education sector and TAFE spans some 20 years during which time she has worked at most of the Universities in Victoria, although she also spent a short time at the University of South Australia and at the Royal Australian College of General Practitioners. For five years, she worked in research into higher education in the Faculty of Education and the Higher Education Research Advisory Unit (HEARU) at Monash University and the Centre for the Study of Higher Education (CSHE) at the University of Melbourne.

The management roles were many and varied but focussed mainly on program and resource management at the School or Faculty level. Her qualifications in Prehistory/Anthropology and Environmental Science were augmented by graduation from the wonderful MBA program at VU that supported her career progression through these roles.

Most recently, her role as Manager, Research Services at the Australian Catholic University, although based in Melbourne, provided support for Research Higher Degree Candidature, Research Grants and Human Research Ethics Committee...
activities for all the interstate University campuses. In this respect, Robina has experience in supporting research not only from a diverse discipline base but dispersed geographic locations.

On a more personal note, Robina’s interests lie with the creative arts – mainly film, dance and theatre. From time spent in Aerospace Engineering (at RMIT), she enjoys “spotting” the planes at Essendon Airport from her back veranda. Sadly, she has to admit to supporting the Demons.

Please feel free to contact Robina via email, on Ext 4705 or drop in to see Robina or any of the Grants Officers – Palmina, Sandy and Zana – in C303 at Footscray Park.

SANDY SUPERINA
SENIOR GRANTS OFFICER

And welcome to Sandy Superina, our new Senior Grants Officer who has a wealth of experience in writing and coordinating grants, including for the National Heart Foundation and the International Diabetes Institute. In the past Sandy has been fortunate to work with highly skilled researchers whose ideas about improving public health have been inspiring, and in her short time at VU, Sandy has been impressed by several of the research applications she has reviewed. Sandy has also worked in the TAFE sector, teaching a range of subjects including Communications, Literacy and Project Management, and previously worked in the disability and advocacy fields. Sandy was a student at VU where she completed her Masters of Arts (Communications). Sandy’s duties at VU include coordinating research contracts, reviewing external grant applications for researchers, and seeking new research grant opportunities. She is located in the Office for Research, in Building C303, at Footscray Park and can be reached at sandy.superina@vu.edu.au or 9919 4936.

CLIVE AND VERA RAMACIOTTI FOUNDATION (PERPETUAL TRUSTEES) GRANT SUCCESS

Dr Andrew McAinch, Lecturer in Nutrition, from the School of Biomedical and Health Sciences has successfully received an Establishment grant from the Clive and Vera Ramaciotti Foundation (Perpetual Trustees) for his research project - The establishment of human primary skeletal muscle cells cultures to investigate the role of the cannabinoid system in peripheral adiponectin resistance.

Dr McAinch completed his undergraduate (B.App.Sci – Phys Ed) and Honours (in the Exercise Metabolism Unit) in 1996 at Victoria University, before completing his Master in Nutrition and Dietetics and PhD at Deakin University. He returned to Victoria University at the start of this year after three years in the Dept of Medicine, Royal Adelaide Hospital, University of Adelaide as a Postdoctoral Fellow and Clinical Research Dietitian. Dr McAinch also has 10 years clinical experience as a Dietitian and Exercise Physiologist and is an Affiliate Lecturer in the School of Medicine, University of Adelaide.

During his PhD, Dr McAinch developed a bank of human primary skeletal muscle myotubes from subjects who were obese or both obese and Type II Diabetic, people who had lost weight, and lean individuals. Studies using cultures of these myotubes formed the basis of his PhD, postdoctoral work, and a number of collaborations concerning defects in leptin, endocannabinoid, adiponectin and fatty acid metabolism in obesity and diabetes.

This grant from the Clive and Vera Ramaciotti Foundation (Perpetual Trustees) will help establish new experimental cultures and a tissue bank at VU for the investigation of the role of skeletal muscle in the obesity and diabetes. Skeletal muscle has a major role in dictating total body energy expenditure, with defects in skeletal muscle function related to the aetiology of obesity and Type II Diabetes Mellitus. Adiponectin (an adipose tissue derived adipokine) increases fatty acid transport and beta-oxidation in skeletal muscle. Unlike adiponectin however, overactivity of the endocannabinoid system promotes the obese phenotype. Cannabinoid receptor 1 (CB1) is the main signalling receptor of the endocannabinoid system found in skeletal muscle.

This research will involve collaboration with Monash University’s Centre for Obesity Research and Education, St Vincent’s Institute and Deakin University. It will utilise primary skeletal muscle cell cultures established from surgical patients, and siRNA techniques to knockdown CB1 in the presence or absence of globular adiponectin. Cells will then undergo analysis for mRNA and protein expression of key metabolic pathways. This series of experiments will therefore determine the relationship of endocannabinoid mediated pathways to adiponectin resistance in obesity and diabetes. Adiponectin resistance and abnormalities in the endocannabinoid system in skeletal muscle loom as key targets to assist in the understanding of obese and obese diabetic skeletal muscle. This research will provide novel evidence that treatments targeting CB1 will assist in improving adiponectin-mediated signalling in skeletal muscle.

Dr McAinch has extensive experience in the utilisation of human primary skeletal muscle cell lines. These cell lines enable the investigation of many abnormalities that exist in vivo, while eliminating confounding environmental influences on the muscle (such as circulating hormones). The development of these cell lines at Victoria University, coupled with state of the art experimental techniques will assist in establishing Dr McAinch in his new position.

Thank you to the Clive and Vera Ramaciotti Foundation (Perpetual Trustees) for this generous grant. If you have any questions regarding this research Dr McAinch can be contacted on Andrew.mcainch@vu.edu.au
2008 NATIONAL ROTARY MENTAL HEALTH RESEARCH GRANT AWARD

Professor Terence McCann has been successful in securing a grant for $56,000 for one year, however Rotary is currently considering an application to fund the study for a second year. The team is conducting a randomised controlled trial of problem-solving based bibliotherapy for primary caregivers of family members with first-episode psychosis.

Thank you to Rotary for supporting this vital project.

Pictured in the photo (L to R): Associate Professor Dan Lubman, Department of Psychiatry, University of Melbourne & ORYGEN Research Centre; Kingsley Crisp, Family Therapist, ORYGEN Youth Health; Terry Grant, Rotary; Associate Professor John Gleeson, Department of Psychology, University of Melbourne; Professor Terence McCann (Receiving plaque), School of Nursing and Midwifery, Victoria University; Dr Sai Lu, School of Nursing and Midwifery, Victoria University.

NEW BOOK: FROM FACTORY FODDER TO MULTICULTURAL MEDIATORS

A new book by VU academic Santina Bertone has been published by VDM Verlag, a German publisher, and is being distributed via Amazon.com in Europe, Australia and the USA. From Factory Fodder to Multicultural Mediators: a new typology of immigrant work patterns in Australia, is based on Santina’s doctoral thesis. It analyses the impact of industry restructuring, workplace change and changes in immigration policy on the working lives of immigrants in Australia. Immigrants make up 24% of the Australian population, with recent intakes of permanent and temporary migration exceeding a quarter of a million per year. Immigration has transformed Australia’s society and economy, adding an extra 11 million people to our population in the past half century. At the same time, immigrants have experienced major shifts in their employment conditions and experiences as we have restructured towards a knowledge-based economy. The book looks at the wide range of occupations undertaken by immigrants, and classifies them into four broad levels, characterised by skill and degree of employment regulation. Using a combination of Australian Bureau of Statistics data, industry surveys, interviews and focus groups, the study proposes 16 major work patterns and closely examines seven of these, some of them virtually exclusive to immigrant workers. These include work patterns at the lower end of the labour market (factory fodder, suburban sweatshop and up-skilled manual work) and high skill patterns such as advanced clerical/service work and a new pattern she terms ‘multicultural mediation’. This range of work patterns is vastly greater and more complex that the typical work patterns available to immigrants in the immediate post-war years until the late 1980s. However, the choices available at the beginning of the 21st century – both in type of work and degree of union coverage, individual or collective agreements – can be challenging.

Immigrant workers in level 1 work patterns face issues of exploitation, very short or conversely, long, working hours and the need for multiple jobs, due to low external job regulation. Some of the more externally regulated and satisfying production work in level 2 is found to advantage younger, more educated and English proficient immigrants (often overqualified for their jobs), while less regulated work in this level such as semi-skilled service work, may entail considerable job instability, inadequate income and/or insufficient work hours. Immigrants in level 3 may also have unrecognised qualifications but high job satisfaction, while at the top of the hierarchy, more subtle issues may occur, such as ethnic stereotyping and blocked career paths. Santina’s book argues that in many ways, immigrant work patterns in Australia, through the shift to skilled immigration, are converging with those of Australian-born workers. However, they are not the same, and immigrant women in particular are concentrated at both the lower and higher ends of the job spectrum. The major contribution of the book is to conceptualise and construct a framework for understanding the kind of work done by non-English speaking background immigrants in particular, the impacts of globalisation and workplace change, and importantly, to investigate the way that immigrants view their own work experience and situation within the labour market. This publication is the ninth book authored or co-authored by Santina since beginning her research into immigrants and work in 1991. Santina is currently Associate Dean (Research & Research Training) in the Faculty of Business and Law.

RESEARCH IN THE MEDIA

A snapshot of VU’s research media coverage in October.

University Research Fellow Dr Corinne Manning was featured in the Progress Leader (circulation 68,212). The story focussed on her research and publication, ‘Bye Bye Charlie’, about former residents, families, staff and volunteers associated with Kew Cottages.

Dr Lily Stojanovska had a glowing review of her book ‘Menopause for Dummies’, co-written with Marcia L Jones and Teresa Eichenwald, published in the October edition of Australian Family Physician (circ. 37,168).

Pieter Nagel talked up his logistics research and strategies for a logistics city in a full-page feature in the Australian (circ. 136,000).

PhD candidate, Ludovic Dumee was interviewed by journalist Sue Goss for an in-depth story about his water research, which ran in the Saturday Age (circ. 301,500).

Dr Michael Mathai’s investigations into the effects of angiotensin blocking enzymes continued to gain coverage with features in the Age - Education (circ. 208,000) and online in the Science Scene section of University World News.

ICEPA’s Pacific Research and Development Officer, Moses Waqa, gave expert opinion on the Federal Government’s guest worker program to the Country News (circ. 37,833).

Dr Iwona Miliszewska’s study on student attitudes to fully online transnational course programs was profiled by journalist Andrew Trounson in the Australian Higher.
And finally, Prof Dorothy Bruck’s research on the brain that controls voluntary movement can activate the motor cortex, which is the area of the brain that controls voluntary movement.

ICEPA researchers Prof Hurriyet Babacan and Associate Prof Danny Ben-Moshe were quoted in a Herald Sun article (circ. 530,000) about their discussion paper on youth integration prepared for the Victorian Multicultural Commission.

Following ‘Talk About Meltdown’ - our call for media hungry economics experts - in last month’s Research Matters, researcher Andy Schmulow worked with the Media unit to develop a press release, which resulted in Andy being interviewed on Radio National, ABC Canberra, and quoted in the Sydney Morning Herald (circ. 358, 224).

And finally, Prof Dorothy Bruck’s research on the effectiveness of smoke alarms was noted in issue 2678 of New Scientist. The findings will soon be published in Journal of Sleep Research.

EXERCISE SCIENTISTS PUTTING THEIR BRAINS BEFORE BRAUN

A more common sight in the Exercise Physiology Laboratory in recent times has been research into the adaptability of the brain and spinal cord to exercise.

Exercise neuroscientists Dr Alan Pearce from CARES (VU) and Mr Dawson Kidgell from Deakin University (and CARES Associate), together with their team of post-graduate and honours students from both Universities, have been collaborating since 2007 using a technique known as transcranial magnetic stimulation or TMS.

TMS is a non-invasive and painless method to access the human brain using electro-magnetic pulses that can activate the motor cortex, which is the area of the brain that controls voluntary movement.

“TMS has been used in clinical neurology since 1985” says Dr Pearce who leads the research in CARES in the area of exercise neuroscience. “Sport and exercise science has realised the potential of TMS to answer questions on the neuromuscular system that has previously eluded exercise physiologists”.

Mr Dawson Kidgell, who is currently completing his PhD in neural changes associated with strength training, is enthusiastic about TMS and the research he is producing to answer the questions on how we get strong quickly when starting a strength training program. “TMS has allowed me to answer the questions on the central nervous system’s rapid strength development without the associated muscle bulk, that has eluded sport scientists for over 30 years” Mr Kidgell said, “it also gives us evidence to further investigate the role of strength training as a form of exercise therapy, particularly in those with neurological conditions such as Parkinson’s Disease and those who have suffered Stroke.”

Other research undertaken by Dr Pearce and Mr Kidgell’s research students include neural excitability changes with improved control of hand movements, neurological fatigue following repetitive exhaustive exercise and the effect of cold water immersion and contrast water therapy (typically used by elite athletes and professional teams) on the central nervous system, neural adaptations associated with children undertaking strength training, effect of compression garments on visuo-motor control, vibration training on central nervous system excitability, and spinal reflex excitability with warm-up and stretching.

As Dr Pearce says, “We enjoy having exercise on the brain”.

NEW VU CHEMISTRY LAB AT WERRIBEE CAMPUS AND NEW EQUIPMENT FOR LOCAL SCHOOLS

27 October 2008

A $1 million laboratory for research and teaching equipped with the latest in advanced analytical instruments from Shimadzu Scientific Instruments will open at Victoria University’s Werribee Campus on Wednesday 29 October.

AT THE SAME EVENT: The names of 12 local secondary schools in Melbourne’s west, who Shimadzu Scientific Instruments have donated new high tech scientific equipment to, will be announced.

Professor Ian Rouse, Executive Dean of VU’s Faculty of Health, Engineering and Science, and Mr Osamu Ando, Director and General Manager, Analytical and Measuring Instruments Division, Shimadzu Corporation Japan, will jointly open the Shimadzu Analytical Laboratory.

The state-of-the-art lab will be used by VU students, teachers and researchers for applications in a range of areas, including: environmental science, water research, and chemical analysis.

It will also be used to promote hands-on science to secondary school chemistry students in projects such as VU’s ‘be a chemist for a day’ program, aimed at Year 9 and 10 students, or for Year 11 and 12 students to study areas such as the Chemical Analysis topic within the VCE chemistry curriculum.

Dr Domenico Cardi of VU’s School of Engineering and Science said the lab would give the University modern chemical analysis tools to help involve the community, industry, teachers, researchers and students in science.

He said: “Both the University and industry partners will benefit by producing future science professionals with unique skills that will carry science forward into the future and produce solutions for the benefit of human kind.”

Shimadzu Scientific Instruments is also donating new high tech scientific equipment to 12 local secondary schools, for use in their school science labs.
The equipment is 12 UV-visible spectrophotometers and printers. The spectrophotometer has applications in every branch of science, such as to study plant pigments in biology, light absorption in chemistry, or light transmission in physics. VU will assist the schools to design experiments that use the spectrophotometer.

For Further Information contact: Dr Domenico Caridi, School of Engineering and Science, Victoria University, Ph: (03) 9919 8077.

Media Contact: Ann Marie Angebrandt, Media Officer, Marketing & Communications Department, Ph: (03) 9919 5487; mobile: 0403 556 001.

L to R: Brian King, Stephen Gray, Toshiyuki Takii (Shimadzu), Domenico Caridi, Gayle Morris, Osamu Ando (Shimadzu), Ian Rouse, and John Hewetson (Shimadzu).

HUMAN RESEARCH ETHICS
CALL FOR EXPRESSIONS OF INTEREST

Chair Faculty of Health, Engineering and Science Human Research Ethics Subcommittee.

Staff members from the Faculty of Health, Engineering and Science are invited to apply for the position of Chair, Faculty of Health, Engineering and Science Human Research Ethics Subcommittee (HES HREC).

The successful candidate will commence in the position of Chair on 5th January 2009.

Appointments are for three (3) years and may be extended for an additional term of three years. The University recognises the contributions of Faculty HREC Chairs by providing reasonable time allocation to assist them in their activities on the HREC.

Expressions of Interest must address the Selection Criteria detailed in the Chair’s Duty Statement available at: http://research.vu.edu.au/hrec.php

NEWS FROM THE FACULTY OF ARTS, EDUCATION AND HUMAN DEVELOPMENT

Tony Kruger, Marcelle Cacciattolo and Jo Williams of the School of Education have been funded for a second year of the ‘Standpoint Project’, a collaborative research project with Good Shepherd Youth and Family Services and eight schools in Melbourne’s Western Region. They have received $80,000 from the Victorian Department of Education and Early Childhood Development for the continuation of this project.

Michele Grossman (School of Communication and the Arts) presented preliminary research findings from the 12-month collaborative research project with Victoria Police, ‘Don’t Go There: Young People’s Perspectives on Community Safety and Youth Policing’, on 3 October to approximately 50 community stakeholders from federal and state government agencies, service providers and local communities at a seminar convened by VU’s Institute for Ethnicity, Community and Policy Alternatives (ICEPA). The seminar presentation explored findings from the Sudanese and Pacific Islander communities of young people in Melbourne’s West and focused in particular on issues of racism and culturally diverse perspectives on relationships between young people and the police in the Western suburbs region of Brimbank. The project now moves into its second phase, a web-based interactive survey of 500 young people in this locality.

GRANT OPPORTUNITY

THE IAN POTTER FOUNDATION
APPLICATION CLOSING DATES 2009

The Ian Potter Foundation will have three funding rounds in 2009. The Travel and Conference program areas will be most significantly affected by this change, with applications for these program areas considered in the second and third funding rounds only. Health and Medical Research will be considered in the first round; Science and Environment & Conservation will be considered in the second funding round.

All applications from universities must be submitted by the Research or Grants Office. Direct applications from individuals will not be considered.

To be eligible for consideration, applications, including all supporting documentation and meeting all requirements, must be received by 5:00pm on the application closing date. Late or incomplete applications will not be considered.

Further information regarding application procedures for The Ian Potter Foundation can be found on their website: www.ianpotter.org.au

THANK YOU to all who contributed to the content of the Research Matters bulletin. 😊