ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Elders, families and forebears of the Boorwurrung and Wurundjeri tribes of the Kulin nation who were the custodians of the University land for many centuries. We acknowledge that the land on which we meet was the place of age-old ceremonies of celebration, initiation and renewal and that the Kulin Nations people’s living culture had and has a unique role in the life of this region.

VISION

TO BE A WORLD LEADING RESEARCH INSTITUTE IN SPORT, EXERCISE SCIENCE AND ACTIVE LIVING
Contents

Vision 1
Mission Statement 2

Directors’ Reports
ISEAL Director’s Report 3
ISEAL Research Director’s Report 4
Key Performance Indicators 5

Organisational Structure
Organisational Chart 6
Staff 6
Research Associates 7
Engagement Associates 9
Higher Degree by Research Students 9

2011 Budget
Profit and Loss Statement 10
Research Income 11

Active Projects 2011
ISEAL External Income Received in 2011 12
ISEAL Active Projects (Funding Not Received in 2011) 14

Research Programs
Sport Report 16
Exercise Science Report 17
Active Living Report 17

Key Partnerships and Collaborations
Victorian 19
National 19
International 19

Marketing and Communications Report 19

Major News and Events of 2011 20

Conference Attendance and Invited Lecture Highlights of 2011 22

Publications
Books 27
Book Chapters 27
Journal Articles 29
Conference Publications 35
Patents 37
General Public Outputs 37
Conference Presentations 39
Memberships, Appointments and Awards 42
Examinations, Reviews and Assessments 42
Government Reports 43
Contract and Technical Reports 43
MISSION
TO MAKE IMPORTANT CONTRIBUTIONS TO SOCIETY THROUGH INNOVATIVE RESEARCH IN SPORT, EXERCISE SCIENCE AND ACTIVE LIVING
In 2012, our third year already, we are pleased to present our second annual report (2011). As an Institute we are striving for a world-leading position as a research organisation in the areas of sport science, sport business, sport in society, exercise science and active living. In 2011 we set ourselves ambitious growth targets, both in terms of attracting new (international) staff and developing projects, and winning new research work. At the end of 2011, the ISEAL staff profile had grown to a total of two senior research fellows, 14 postdoctoral research fellows, 68 research associates and 13 engagement associates. A total of 90 Higher Degree by Research (HDR) students enrolled in schools across the University in the discipline of sport, exercise and active living. As a result, ISEAL’s critical mass of researchers – staff plus HDR students – exceeded 200 persons in 2011. An important focus of 2011 was to embed ourselves within Victoria University, which proved successful as measured through co-funded research appointments with schools across three higher education faculties.

The ISEAL leadership team of six professors and an executive officer was strengthened by the exciting addition of ex-Olympian Chris Rawlinson to head up the ISEAL marketing team. A significant rise in ISEAL generated PR and publicity, a number of signature events, and the ISEAL capability statement were examples of our increasing focus on marketing our services and results, showcasing our research capacity, facilities and activities, and further growing the ISEAL brand and profile.

With the expansion of the ISEAL team also came growth in the number of projects that we conducted through our research, developing projects, and winning new research work. In 2011, the ISEAL staff profile had grown to a total of two senior research fellows, 14 postdoctoral research fellows, 68 research associates and 13 engagement associates. A total of 90 Higher Degree by Research (HDR) students enrolled in schools across the University in the discipline of sport, exercise and active living. As a result, ISEAL’s critical mass of researchers – staff plus HDR students – exceeded 200 persons in 2011. An important focus of 2011 was to embed ourselves within Victoria University, which proved successful as measured through co-funded research appointments with schools across three higher education faculties.

The ISEAL leadership team of six professors and an executive officer was strengthened by the exciting addition of ex-Olympian Chris Rawlinson to head up the ISEAL marketing team. A significant rise in ISEAL generated PR and publicity, a number of signature events, and the ISEAL capability statement were examples of our increasing focus on marketing our services and results, showcasing our research capacity, facilities and activities, and further growing the ISEAL brand and profile.

With the expansion of the ISEAL team also came growth in the number of projects that we conducted through ISEAL – in 2010 we ran 76 projects, to which we added 82 new projects in 2011, with 63 active in 2011. We grew our total funding by almost 100% from just over $1.6 million in 2010 to $3 million in 2011.

It is quite fitting that in early 2011, the majority of ISEAL staff and associates finally moved from being dispersed across VU’s campuses to work from the new Sport and Learning Precinct at Footscray Park. During a wonderful opening ceremony, the Victorian Governor the Honourable Alex Chernov AC QC, officially declared the 29 new research and teaching labs open and ready for use by students and staff.

In April 2011, VU Vice-Chancellor Professor Peter Dawkins and Acting CEO of the Australian Sports Commission Professor Peter Fricker, signed a five-year strategic partnership between the Australian Sports Commission (ASC) / Australian Institute of Sport (AIS) and VU. This partnership is a reflection of the confidence that the peak government body in Australian sport has in VU’s ability to deliver results that will benefit Australian athletes and members of the community with opportunities to succeed in competitive sport and enhance community sport participation.

ISEAL hosted two high-profile international partnership conferences in April 2011. The 2nd International Symposium for Collaboration in Research, Teaching and Exchange was based on our unique international collaboration with the German Sport University and the University of Western Ontario, VU partners of over 22 years. The symposium was co-hosted by the School of Sport and Exercise Science (SES), with a strong focus on Australian partnerships including our links with the AIS, the Victorian Institute of Sport (VIS), Maribyrnong College Sports Academy, the Australian Centre of Olympic Studies, the Australian Olympic Committee, and with colleagues from several Australian universities. The symposium’s scientific program, which contained parallel streams in sport and exercise science, Olympic and mega sport events, active living, and sport management, attracted 250 delegates from 30 different organisations, and included more than 60 research presentations and three panel discussions over a three day period.

ISEAL also hosted “Towards 2016: Australian and Brazilian Strategies for Success” in April 2011, with support from the Department of Foreign Affairs and Trade and the Council on Australia Latin America Relations (COALAR). Attending partner organisations included the Brazilian Olympic Committee, Brazil’s Federal University of Alagoas and the University of São Paulo. The highly successful conference explored areas for research collaboration between Australia and Brazil in the leadup to the 2016 Olympic Games.

In 2012 we hope to re-sign with our strategic partners, the Western Bulldogs Football Club, and to significantly expand the collaborative work that we are developing with our strategic partners, the ASC and AIS. We anticipate that we have co-delivered on Australian success at the London Olympic Games, and we will advance our international work with partners in Brazil, China, Qatar, Germany, and Canada, just to name a few!

I thank our Marketing Manager, Chris Rawlinson, for an outstanding job developing the ISEAL brand and marketing materials, and all the members of the ISEAL administration team for their outstanding support throughout the year. I also would like to thank Professor Mike McKenna and the research leadership team for their energetic and passionate commitment to excellence.

In VU’s new Strategic Plan, ISEAL plays an integral role in moving the University towards a position of being world-renowned in sport, exercise and active living by 2016. We very much look forward to working with our existing and new partners towards this ambitious and exciting objective.

Professor Hans Westerbeek
Director
Institute of Sport, Exercise and Active Living [ISEAL]
ISEAL undertook significant development in all aspects of its operations in 2011, our second year, including staffing, marketing and profile, research income, research outputs, partnerships and collaborative activities, and major funding successes. ISEAL senior research staff also undertook significant planning work underpinning future ISEAL success, laying foundations for defining ISEAL’s strategic plan, research strategic plan and key research areas.

The highly anticipated opening of world-leading facilities at Victoria University to support research and teaching in sport, exercise science, and active living, was a highlight of the year. The $68.5m Sport and Learning Precinct on the Footscray Park campus was opened in June 2011 and features world-class sport and exercise science laboratories including Exercise Physiology, Biomechanics, Skilled Performance, Biochemistry and Molecular Biology, Motor Control and Biofeedback. As ISEAL’s Research Director I was delighted to host 41 visits to ISEAL including tours through the new sport and exercise science facility in 2011, comprising 23 separate visits from industry bodies, 14 from international universities including one tour which included 25 Chinese university presidents, 4 from Commonwealth and State Governments and 3 from Victoria University. These entities and individuals were all looking to generate future collaborations or develop ISEAL networks.

The $52m Western Centre for Health Research and Education building at Sunshine Hospital was also opened in July 2011, and directly supports ISEAL research associates undertaking clinically-focused exercise science research.

These research facilities place ISEAL in an outstanding position to undertake world-leading research and attract the world’s best research staff and students to the University.

Arguably the most important research development in 2011 was the signing of the Strategic Partnership Agreement with the ASC, incorporating the AIS. The culmination of three years of discussions, the agreement has opened up many exciting new research opportunities for ISEAL, covering the full spectrum from community sport participation including sport management, to enhancing elite sport performance. An ASC-VU steering committee was established and oversaw a new joint initiative, ASC-VU Collaborative Research Projects, with each partner investing $440,000 into a common pool. After a competitive process, a total of nine projects were funded, with ISEAL contributing additional funds to secure two jointly funded positions in sport coaching and sport participation. A total of 13 schedules were evidence of strong research development that occurred under the partnership during 2011. Further research developmental work occurred with the French Institute of Sport (INSEP), Aspire (Qatar) and the Florey Neuroscience Institute.

Twenty-seven new projects were awarded funding in ISEAL in 2011. The total research income rose to $3m in 2011, an 85% increase above funds received in 2010. Importantly, a large component of this growth was achieved through externally sourced funding of $1.79m. ISEAL income received was $0.38m in Category 1, $1.26m in Category 2, $0.14m in Category 3 research grants and $1.21m internal income. Funding sources included our strategic partner, the ASC, Category 1 grants from NH&MRC, VicHealth and ARC Linkage, and additional grants from The Mason Foundation and the Department of Sustainability and Innovation. As part of a $6.14m funding win by the university through the Australian Government Collaborative Research Network (CRN), ISEAL’s component for research in clinical exercise science and active living was $2m. The amount received in CRN funding for 2011 was $403,837 with a further co-investment from faculties of around $1m for 2012-2014.

ISEAL continued to successfully manage major funding received through the University’s Priority Research Innovation Project (PRIP) of $904,500 for sport, exercise science, and active living programs in 2011. The sport program celebrated many key achievements, which included developing new research relationships with the ASC and AIS, VIS, CSIRO, Tennis Australia, German Sports University, Aspire in Qatar, as well as strengthening relationships with Western Bulldogs and the Schools within the University. Sport science activities included data analytics in elite sport, projects in swimming, tennis, cycling and athletics, analysis of human muscle fibre characteristics with implication for muscle fatigue, smart garments in sport, genetics in sport, altitude and sport performance, and high performance sport nutrition. This sport PRIP allocation incorporated strong engagement with the Australian sport and sport science sector, with a clear focus on generating external income. Key areas of investigation in PRIP exercise science concentrated on muscle atrophy and development, gait analysis in older adults, obesity/diabetes, and recreational supplement and drug taking. These focused on co-funded positions with SES, the Faculty of Arts, Education and Human Development, and the School of Biomedical and Health Sciences. The PRIP funded ISEAL active living stream projects included the self-regulation for physical activity behaviour across the lifespan, and sport participation. Key achievements from the active living program included new projects with the ASC, and a prestigious VicHealth Fellowship to Dr Rochelle Eime (with the University of Ballarat).

The ISEAL total outputs in 2011 comprised 10 books, 56 book chapters, 135 journal articles, 42 conference publications and 2 contract/technical reports. The HERDC accepted research outputs for 2011 were less than this, comprising 23 book chapters, 79 journal articles and 8 conference publications, as University processes meant many submissions were counted to schools or faculties rather than to ISEAL; also a significant number of publications did not meet the criteria for the fundable components of HERDC. One provisional patent application was made. Research outputs from the ISEAL senior research fellows and postdoctoral research fellows appointed in 2011 have, in numerous cases, not yet flowed through to these data sets but will strengthen outputs in 2012. ISEAL played a vital role in the preparation of the University’s submission to Excellence Research Australia’s (ERA) 2010 ranking exercise. The 2010 ERA report was released in 2011 and rated research in...
I thank the ISEAL Director and all of the ISEAL leadership staff for their excellent, sustained and innovative work in growing and shaping ISEAL in 2011. I particularly thank our extremely hard-working Executive Officer Vi Kacevskia for outstanding work in managing the large number of new appointments and managing new staff in ISEAL during 2011. We look forward to continued growth and an even sharper research focus in 2012.

Professor Michael McKenna
Research Director
Institute of Sport, Exercise and Active Living (ISEAL)

Research Outputs
Strong growth in ISEAL research outputs also continued in 2011, including a 67% increase above 2010 outputs in books to 10, a 115% increase in book chapters to 56, a 35% increase in journal articles to 135, a 51% increase in conference presentations to 86. Thus total (unweighted) outputs were increased from 203 in 2010, to 287 in 2011, representing a growth of 41% in total research outputs.

Projects and Staffing
Active ISEAL research projects in 2011 continued to build upon strong growth in 2010, and staff levels nearly doubled, reflecting the increased research capacity; the number of ISEAL research associates also rose slightly in 2011 to a total of 81 persons.
RESEARCH ASSOCIATES

Faculty of Arts, Education and Human Development

**School of Education**
Dr Anthony Watt, Senior Lecturer

**School of Social Sciences and Psychology**
Professor Robert Pascoe, Dean Laureate

**School of Sport and Exercise Science**
Professor Mark Andersen
Dr Rob Aughey, Senior Lecturer
Dr Richard Baka, Lecturer
Dr Kevin Ball, Senior Lecturer
Professor Rezaul Begg
Dr Russell Best, Senior Lecturer
Dr Francois Billaut, Lecturer
Dr Erika Borkoles, Lecturer
Dr Suzanne Broadbent, Senior Lecturer
Ms Anne Browne, Lecturer
Dr Michael Burke, Senior Lecturer
Mr Greg Dingle, Lecturer
Mr Ian Fairweather, Scientific Officer
Dr Clare Hanlon, Senior Lecturer
Associate Professor Dennis Hemphill, Head of School
Dr Con Hrysomallis, Lecturer
Ms Tuire Karaharju-Huisman, Lecturer
Dr Matthew Klugman, Lecturer
Dr Itamar Levinger, Senior Lecturer
Dr Clare MacMahon, Senior Lecturer
Dr Daryl Marchant, Senior Lecturer
Dr Brent McDonald, Lecturer
Ms Gina Mendoza, Lecturer
Dr Brian Moroney, Research Fellow
Professor Tony Morris
Dr Derek Panchuk, Lecturer
Dr Aaron Petersen, Lecturer
Ms Kathy Roberts, Lecturer
Dr Harriet Speed, Senior Lecturer
Dr Nigel Stepto, Senior Lecturer
Associate Professor Bob Stewart
Dr Caroline Symons, Senior Lecturer
Dr Simon Taylor, Lecturer
Dr Carl Thomen, Lecturer
Dr John Tower, Senior Lecturer
Dr Daniel van der Westhuizen, Lecturer
Dr Janet Young, Sessional
Dr Zhu Zhang, Lecturer

DVC (Research and Knowledge Exchange)

**Office of the PVC (Research and Research Training)**
Professor Warren Payne, Pro Vice-Chancellor (Research and Research Training)

Faculty of Business and Law

**Office of the Executive Dean (Business and Law)**
Associate Professor Anne-Marie Hede, Associate Dean (Research and Research Training)

**School of International Business**
Ms Olga Junek, Lecturer
Dr Leonie Lockstone-Binney, Senior Lecturer
Dr Brianna Newland, Lecturer
Dr Leanne White, Senior Lecturer
Professor Margaret Deery

**School of Management and Information Systems**
Professor John Zeleznikow

**Victoria Law School**
Dr Matt Harvey, Senior Lecturer
Mr Brendon Stewart, Lecturer

Faculty of Health, Engineering and Science

**Office of the Executive Dean (Health, Engineering and Science)**
Dr Alan Hayes, Senior Lecturer

**School of Biomedical and Health Sciences**
Dr Swati Baindur-Hudson, Senior Lecturer
Dr Regina Belski, Lecturer
Professor Greg Blatch, Head of School
Dr Matthew Cooke, Lecturer
Dr Nicoleta Dragomir, Research Fellow
Associate Professor Gary Fryer, Discipline Leader
Dr Michael Mathai, Senior Lecturer
Dr Andrew McAinch, Senior Lecturer
Dr Patrick McLaughlin, Senior Lecturer
Dr Emma Rybalka, Lecturer
Dr Samy Sakkal, Lecturer
Dr Christos Stathis, Lecturer
Professor Lily Stojanovska
Dr Brett Vaughan, Clinical Coordinator

**School of Engineering and Science**
Dr Daniel Lai, Lecturer
Associate Professor Vincent Rouillard
Dr Thomas Yeager, Lecturer
ENGAGEMENT ASSOCIATES

Faculty of Arts, Education and Human Development
School of Sport and Exercise Science
Ms Angela Dressler, Senior Lecturer
Mr Bradley Gatt, Laboratory Manager
Ms Kim Johnson, Lecturer
Ms Sonja Kiernan, Learning in The Workplace and Community Coordinator
Ms Jessica Meilak, Laboratory Technician
Mr Robert Stokes, Senior Biomechanics Laboratory Manager

Faculty of Business and Law
School of International Business
Mr Martin Robertson, Lecturer

Faculty of Workforce Development
School of Sport and Science
Ms Sally Harrop, Education Manager
Ms Jo Van Son, Head of School

Student Services
Sport and Fitness
Ms Jessica Harrington, Sport Facilities Coordinator
Ms Rohenna Young, Sport Facilities Manager

Education
Ms Ashlee Marks, Sports Officer

VU College
Office of Associate Director Youth
Mr Kevin Skillen, Youth Strategy Manager

MAJED ALAHMAD
MUATH ALTARAVNEH
AREJ AL-BEIESAT
RABIA ASRAF
KATIE ASTELL
TANIA ATANASOVSKA
MELISSA ATTARDI
LUKE BOYD
JAMES BROATCH
TIMOTHY BUSZARD
ALEC BUTTFIELD
NANCY CAPITANIO
SAMANTHA CASSAR
MICHAEL CHIOVITTI
RYAN CHRISTIAN
WEILIANG CHUNG
DANIEL CICIONI KOLSKY
LAUREN CORNALL
EVAN COVENTRY
SAMUEL CRANE
MORAG CRISER
RODRIGO DA SILVA FERMINO DE OLIVEIRA
GREGORY DINGLE
THOMAS EATON
GEORGE ELIAS
TREVOR FARR
FATEMEH FAZEL
NICHOLAS FLYGER
TOM FORSELL
EMMA GALLAHER
TRACEY GERBER
GEORGIA GIBLIN
JOSHDIP GOMORY
RALPH GOILIB
CESARE GRANATA
LUKE GRIKEPIS
KATHERINE HAINES
CHRISTOPHER HEDGES
KAREN HILL
YET HOI HONG
MELISSA HOPWOOD
DEANNA HORVATH
DENISE JENNINGS
ALISTAIR JOHN
ZUKKBAI ABD KARIM
THARIQ KHAN AZIZUDDIN KHAN
MICHAEL KINCHINGTON
SUH-YOUN KI
GARRY KUAN

YEE CHENG (ERICA) KUEH
DEBORAH LANE
CHRISTOPHER LILICO
CHELSEA LITCHFIELD
DANIEL LOTAN
TIFTANY MANN
ALICIA MATHews
CIN McGINLEY
JAMES McINTYRE
GINA MENDOZA
FATEMEH MIREMADI
MOHD NAHAR AZMI (NAHAR) MOhammed
ELISAA MORLEY
EREZ MOSEK
QUSAI MUBAIDIN
SUSAN NABBS
HANATSU NAGANO
NATALIE NEMAZA
LARRIN O’KEEFE
LUCY PARRINGTON
BEN PERRY
DAVID RATH
KATIE ROFFEY
BRAVEENA SANHTIRANAYAGAM
MELISSA SBRAGLIA
FABIEN RUBENS SERPIELLO
ZAINAH SHARIF
SIMON SOSTARIC
COLENE STEWARD
KATHERINE SYLVESTER
SIMON TAYLOR
SONI JOHN THANIKKAL KOTTAYIL
STEPHANIE TIBBERT
NGUYEN TRAN
ADAM TREWIN
MATTHEW VARLEY
EMILY WALKER
XIAO CHEN WEN
VICTORIA WYCKELSMAN
JAMES ZOIS
GIANNI ZURZOLA

2011 ANNUAL REPORT
## 2011 BUDGET – PROFIT AND LOSS STATEMENT

### INCOME

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External:</strong></td>
<td></td>
</tr>
<tr>
<td>Category 1 – National Competitive Grants</td>
<td>384,144</td>
</tr>
<tr>
<td>Category 2 – Government Research Funding</td>
<td>1,259,602</td>
</tr>
<tr>
<td>Category 3 – Industry and Other Research</td>
<td>143,012</td>
</tr>
<tr>
<td><strong>2011 External Income:</strong></td>
<td><strong>1,786,758</strong></td>
</tr>
<tr>
<td><strong>Internal:</strong></td>
<td></td>
</tr>
<tr>
<td>Priority Research Innovation Projects (PRIP)</td>
<td>904,500</td>
</tr>
<tr>
<td>Internal Grants</td>
<td>133,796</td>
</tr>
<tr>
<td>Fund Distribution including JRE/RSF</td>
<td>127,857</td>
</tr>
<tr>
<td>Co-investment from Schools and Faculties to</td>
<td></td>
</tr>
<tr>
<td>support research staff:</td>
<td></td>
</tr>
<tr>
<td>– Contribution to Start Up Funds</td>
<td>43,200</td>
</tr>
<tr>
<td>– Contribution to Salaries ($635,408) (1)</td>
<td>–</td>
</tr>
<tr>
<td><strong>2011 Internal Income:</strong></td>
<td><strong>1,209,353</strong></td>
</tr>
<tr>
<td><strong>Total 2011 Income</strong></td>
<td><strong>2,996,112</strong></td>
</tr>
</tbody>
</table>

#### Attributable income (2):

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research income (3)</td>
<td>410,337</td>
</tr>
<tr>
<td>Other income partially attributable to ISEAL (4)</td>
<td>237,300</td>
</tr>
<tr>
<td><strong>2011 Attributable Income:</strong></td>
<td><strong>647,637</strong></td>
</tr>
</tbody>
</table>

#### 2010 carry forward balance:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2010 carry forward balance:</strong></td>
<td><strong>1,749,108</strong></td>
</tr>
</tbody>
</table>

**TOTAL INCOME INCLUDING 2010 CARRY FORWARD BALANCE:** 4,745,220

### EXPENDITURE

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant Fees</td>
<td>168,678</td>
</tr>
<tr>
<td>Marketing</td>
<td>17,097</td>
</tr>
<tr>
<td>Operations</td>
<td>375,750</td>
</tr>
<tr>
<td>Research Project Consumables</td>
<td>104,564</td>
</tr>
<tr>
<td>Salaries</td>
<td>1,950,166</td>
</tr>
<tr>
<td>Scholarships</td>
<td>74,469</td>
</tr>
<tr>
<td>Travel</td>
<td>212,580</td>
</tr>
</tbody>
</table>

**TOTAL EXPENDITURE:** 2,903,303

**OPERATING RESULT:** 1,841,917

---

(1) Co-investment from other areas of the University funded directly by each area is over $635,000 which comprises cofunding of 17 staff (4 professors, 11 postdoctoral researchers and the ISEAL marketing manager) as follows: School of Sport and Exercise Science (11 positions, $375,774); Faculty of Arts, Education and Human Development (2 positions, $46,411); School of Biomedical and Health Sciences (4 positions, $113,039); School of International Business (1 position, $26,742); Australian Community Centre for Diabetes (1 position, $7,588); Office for Research (1 position, $37,942); Marketing and Communications (1 position, $27,910).

(2) Attributable income consists of research income or other income attributed to staff or research associates of ISEAL but received and managed by other areas of the University and the value of which is therefore excluded from calculating the overall profit and/or loss for 2011. Projects include the following:

(3) Research income: (a) Collaborative Research Network – Clinical Exercise Science and Active Living Element (total project amount: $2.09m of University $6.14m), amount received by Office of the Pro Vice-Chancellor (Research and Research Training) in 2011 - $403,837; (b) Football Preparation at Altitude (total project amount: $137,379), amount received in 2011 by the School of Sport and Exercise Science - $6,500.

(4) Other income: Higher Education Skills Group– education and training partnership for ESS athlete development scholarship (total project amount: $1.73m), amount received in 2011 by Faculty of Workforce Development (Vocational Education) - $237,300.
RESEARCH INCOME

External Research Income

ISEAL research income grew substantially in 2011, with a total external income of $1,786,758, representing nearly a four-fold greater income than during our inaugural year of 2010. Importantly, our 2011 Category One research funding income of $384,144, although still relatively small, almost doubled (177%) the Category One income in 2010. This included funding from prestigious funding bodies: National Health & Medical Research Council (NH&MRC), Australian Research Council (ARC) and Diabetes Australian Research Trust (DART). The most dramatic increase in external funding in 2011 was for Category 2 funding from government sources at the Commonwealth, State and Local levels, totalling $1,259,602; this is more than 11 times higher than funds received in 2010. Our Category 3 funding, from Industry and Other sources, remained constant in 2011 at $143,012.

ISEAL was successful in receiving Collaborative Research Network (CRN) funding from the Australian Government. These funds for ISEAL research activities in Clinical Exercise Science and Active Living were $403,837 in 2011, but do not appear in the ISEAL 2011 Profit and Loss statement as they were received and administered through the Office of the Pro Vice Chancellor (Research and Research Training). This CRN funding was also matched by a substantial internal co-investment from three higher education faculties, which will support considerable teaching time release for sixteen staff, commencing in 2012. This co-funding will be directed to schools rather than to ISEAL cost centres in 2012.

Other income not attributed to ISEAL but received and managed by other schools, and therefore also not included in the 2011 Profit and Loss statement, included $273,300 project funding received by the VE School of Science and Sport in the Faculty of Workforce Development in collaboration with ISEAL, the HE School of Sport and Exercise Science and VU Sport and Health. This demonstrates the vital “value-add” of ISEAL to improving the bottom line of other VU cost centres.

Internal Research Income

ISEAL again received $904,500 in Priority Research Investment Project (PRIP) funding in 2011, to support its three research programs, sport, exercise science and active living. Much of this funding was directed towards new postdoctoral research fellow positions, including new staff that commenced in 2011, as well as new appointees due to commence in 2012. Considerable carry-over funding reflects the commitment to cover new staffing appointments. One major outcome of this PRIP funding was the unique partnership with the ASC, with many new ASC-VU collaborative projects underpinned by PRIP funding and matched by ASC/AIS investment. Another important development through PRIP was the co-funding by schools and faculties of many of these postdoctoral research fellows, reflecting both an increased “whole of university” involvement in ISEAL and an increased focus in research investment and activities. ISEAL staff and associates were also successful in receiving a number of other small internal grants.
## ACTIVE PROJECTS 2011 – ISEAL EXTERNAL INCOME RECEIVED IN 2011

### Project Funding Agencies/Industry Partners

<table>
<thead>
<tr>
<th>Project</th>
<th>Funding Agencies/Industry Partners</th>
<th>Investigators</th>
<th>Funds ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC Linkage Project (Griffith University with Australian Sports Commission, Australian Football League and others)</td>
<td>ARC Linkage Project</td>
<td>Toohey K, Funk D, Woolcock G, McMahon C, Auld C, Farrow D</td>
<td>56,854</td>
</tr>
<tr>
<td>Exercise for health in women with polycystic ovary syndrome – Total Project Amount: $405,000</td>
<td>NHMRC and Jean Hailes Foundation</td>
<td>Stepto N</td>
<td>33,700</td>
</tr>
<tr>
<td>Intelligent sensor networks in healthcare (ARC research network in biomedical engineering) – Total Project Amount: $90,725</td>
<td>The University of Melbourne</td>
<td>Begg R</td>
<td>4,800</td>
</tr>
<tr>
<td>Promoting physical activity and wellbeing of rural and regional-living girls – Total Project Amount: $434,040</td>
<td>ARC Linkage Project (University of Ballarat with VicHealth, Tennis Australia and others)</td>
<td>Payne W</td>
<td>75,000</td>
</tr>
</tbody>
</table>

| Category 1 – National Competitive Grants

<table>
<thead>
<tr>
<th>Project</th>
<th>Funding Agencies/Industry Partners</th>
<th>Investigators</th>
<th>Funds ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis and review of nutritional requirements for fire-fighters – Total Project Amount: $53,911</td>
<td>Department of Sustainability and Environment</td>
<td>McAinch A, O'Mahony B, Belski R, Payne W</td>
<td>53,911</td>
</tr>
<tr>
<td>ASC/VU collaborative projects under the strategic partnership agreement – Total Project Amount: $945,000</td>
<td>Australian Sports Commission</td>
<td>Westerbeek H, McKenna M, Farrow D</td>
<td>440,000</td>
</tr>
<tr>
<td>Health and wellbeing project for fire lookout observers review of fitness requirement – Total Project Amount: $261,555</td>
<td>Department of Sustainability and Environment</td>
<td>Petersen A, Payne W</td>
<td>26,155</td>
</tr>
<tr>
<td>Interactive sports garments: Part 1: Advancing skill acquisition through the application of interactive textiles – Total Project Amount: $92,414</td>
<td>CSIRO, Australian Institute of Sport, Australian Sports Commission</td>
<td>Farrow D</td>
<td>57,000</td>
</tr>
<tr>
<td>Participation on excellence in research Australia panel – Total Project Amount: $17,220</td>
<td>Australian Research Council</td>
<td>Bishop D</td>
<td>17,220</td>
</tr>
<tr>
<td>Self-management of type 2 diabetes mellitus in Aboriginals and Torres Strait Islander People – Total Project Amount: $105,380</td>
<td>Department of Health</td>
<td>Morris T, Crane S</td>
<td>47,242</td>
</tr>
<tr>
<td>Sport policy factors leading to international sporting success (SISS) – Total Project Amount: $159,611</td>
<td>Australian Sports Commission</td>
<td>Westerbeek H, Hemana C</td>
<td>38,876</td>
</tr>
<tr>
<td>Sport sector literature reviews and research gap analysis – Total Project Amount: $180,000</td>
<td>Australian Sports Commission</td>
<td>Westerbeek H, Polman R, Farrow D</td>
<td>180,000</td>
</tr>
<tr>
<td>The effects of B-alanine on performance in elite swimmers – Total Project Amount: $40,900</td>
<td>Australian Institute of Sport</td>
<td>Bishop D, Burke L, Saunders P</td>
<td>20,900</td>
</tr>
<tr>
<td>Towards 2016: Developing an enduring sport science education and research partnership between Australia and Brazil – Total Project Amount: $24,400</td>
<td>Council on Australia Latin America Relations (COALAR)</td>
<td>Bishop D</td>
<td>2,650</td>
</tr>
<tr>
<td>VU/AIS Professor in Sport Science – Total Project Amount: $997,007</td>
<td>Australian Institute of Sport</td>
<td>Westerbeek H, McKenna M, Hemphill D</td>
<td>124,217</td>
</tr>
</tbody>
</table>

| Category 2 – Government Research Funding (Commonwealth, State and Local) |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------|
| Analysis and review of nutritional requirements for fire-fighters – Total Project Amount: $53,911 | Department of Sustainability and Environment                                                             | McAinch A, O’Mahony B, Belski R, Payne W                                     | 53,911     |
| ASC/VU collaborative projects under the strategic partnership agreement – Total Project Amount: $945,000 | Australian Sports Commission                                                                          | Westerbeek H, McKenna M, Farrow D                                           | 440,000    |
| Health and wellbeing project for fire lookout observers review of fitness requirement – Total Project Amount: $261,555 | Department of Sustainability and Environment                                                           | Petersen A, Payne W                                                         | 26,155     |
| Interactive sports garments: Part 1: Advancing skill acquisition through the application of interactive textiles – Total Project Amount: $92,414 | CSIRO, Australian Institute of Sport, Australian Sports Commission                                      | Farrow D                                                                    | 57,000     |
| Participation on excellence in research Australia panel – Total Project Amount: $17,220 | Australian Research Council                                                                            | Bishop D                                                                    | 17,220     |
| Self-management of type 2 diabetes mellitus in Aboriginals and Torres Strait Islander People – Total Project Amount: $105,380 | Department of Health                                                                                   | Morris T, Crane S                                                            | 47,242     |
| Sport policy factors leading to international sporting success (SISS) – Total Project Amount: $159,611 | Australian Sports Commission                                                                          | Westerbeek H, Hemana C                                                      | 38,876     |
| Sport sector literature reviews and research gap analysis – Total Project Amount: $180,000 | Australian Sports Commission                                                                          | Westerbeek H, Polman R, Farrow D                                           | 180,000    |
| The effects of B-alanine on performance in elite swimmers – Total Project Amount: $40,900 | Australian Institute of Sport                                                                           | Bishop D, Burke L, Saunders P                                               | 20,900     |
| Towards 2016: Developing an enduring sport science education and research partnership between Australia and Brazil – Total Project Amount: $24,400 | Council on Australia Latin America Relations (COALAR)                                                   | Bishop D                                                                    | 2,650      |
| VU/AIS Professor in Sport Science – Total Project Amount: $997,007 | Australian Institute of Sport                                                                          | Westerbeek H, McKenna M, Hemphill D                                         | 124,217    |

**Total Category 1 – National Competitive Grants** 384,144

**Total Category 2 – Government Research Funding (Commonwealth, State and Local)** 1,259,602
### Project Funding Agencies/Industry Partners

<table>
<thead>
<tr>
<th>Project</th>
<th>Funding Agencies/Industry Partners</th>
<th>Investigators</th>
<th>Funds ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 3 – Industry and Other Research Funding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Children are not little adults! The influence of task and equipment scaling for children learning motor-skills and (2) What a coach can see and an athlete can feel – Total Project Amount: $27,000</td>
<td>Tennis Australia</td>
<td>Farrow D, Buszard T, Giblin G</td>
<td>27,000</td>
</tr>
<tr>
<td>Adaptation and tolerance to high intensity intermittent training: Is cold water immersion favourable – Total Project Amount: $10,000</td>
<td>Exercise and Sports Science Australia</td>
<td>Broatch J, Bishop D</td>
<td>10,000</td>
</tr>
<tr>
<td>ASC/VU strategic partnership workshop – Total Project Amount: $15,000</td>
<td>ASC/AIS</td>
<td>ASC/AIS and ISEAL staff</td>
<td>15,000</td>
</tr>
<tr>
<td>Austraining International - endeavour research host organisation contribution – Total Project Amount: $1,500</td>
<td>Austraining International</td>
<td>Bishop D</td>
<td>1,500</td>
</tr>
<tr>
<td>FIFA: Futsal training to improve the health of middle-aged pre-diabetic individuals – Total Project Amount: $31,539</td>
<td>FIFA</td>
<td>Serpillo F, Bishop D, McKenna M, Stepto N, Aughey R</td>
<td>24,041</td>
</tr>
<tr>
<td>Improving function in cerebral palsy through movement imagery training – Total Project Amount: $41,321</td>
<td>L.E.W. Carty Charitable Fund</td>
<td>Williams J, Reddihough D, Reid S (Royal Children's Hospital), Wilson P (RMIT University)</td>
<td>41,321</td>
</tr>
<tr>
<td>Treating obesity-related movement restrictions in clinically obese adolescents to improve their metabolic, physical, and mental health – Total Project Amount: $24,150</td>
<td>The Jack Brockhoff Foundation</td>
<td>Broadbent S, Borkoles E, Karaharju-Huisman T</td>
<td>24,150</td>
</tr>
<tr>
<td>Total Category 3 – Industry and Other Research Funding</td>
<td></td>
<td></td>
<td>143,012</td>
</tr>
<tr>
<td>VU Priority Research Innovation Projects (PRIP)</td>
<td></td>
<td></td>
<td>904,500</td>
</tr>
<tr>
<td>Internal Grants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain and behaviour assessment system – Total Project Amount: $65,000</td>
<td>VU RIBG</td>
<td>Polman R, Morris T, McKenna M, Williams J, Billaut F, Rouffet D, Addamo P, Marchant D, Panchuk D, Farrow D</td>
<td>65,000</td>
</tr>
<tr>
<td>Developing a model to measure how China and Australia use major sporting events to develop their sport tourism industries – Total Project Amount: $10,000</td>
<td>VU Seed Grant</td>
<td>Westerbeek H, Newland B</td>
<td>10,000</td>
</tr>
<tr>
<td>Motor imagery ability: A predictor of movement planning and online movement control skills? Toward an understanding of motor skill impairment – Total Project Amount: $18,796</td>
<td>VU Near Miss Grant</td>
<td>Williams J</td>
<td>18,796</td>
</tr>
<tr>
<td>Regulation of skeletal muscle glucose uptake during contraction by nitric oxide – Total Project Amount: $20,000</td>
<td>VU Near Miss Grant</td>
<td>McConnell G</td>
<td>20,000</td>
</tr>
<tr>
<td>The effects of B-alanine on performance in elite swimmers – Total Project Amount: $40,900</td>
<td>VU Out-of-Cycle Grant</td>
<td>Bishop D, Burke L, Saunders P</td>
<td>20,000</td>
</tr>
<tr>
<td>Total Internal Grants</td>
<td></td>
<td></td>
<td>133,796</td>
</tr>
<tr>
<td>Fund Distribution including JRE/RSF</td>
<td></td>
<td></td>
<td>127,857</td>
</tr>
<tr>
<td>Co-investment from Schools and Faculties to support Postdoctoral Researchers</td>
<td></td>
<td></td>
<td>43,200</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>2,996,112</td>
</tr>
</tbody>
</table>
## ISEAL ACTIVE PROJECTS (FUNDING NOT RECEIVED IN 2011)

<table>
<thead>
<tr>
<th>Project</th>
<th>Industry Partners</th>
<th>Investigators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1 - National Competitive Grants</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Activity Research Practice Fellow 2011-2014 (Dr Rochelle Eime)</td>
<td>VicHealth</td>
<td>Eime R</td>
</tr>
<tr>
<td>Total Project Amount: $600,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The influence of context on player attitudes to drugs</td>
<td>ARC Linkage Project (Australian Drug Foundation and Turning Point Drug Centre)</td>
<td>Stewart B, Smith A (College of Business at RMIT University)</td>
</tr>
<tr>
<td>Total Project Amount: $114,088</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Category 2 - Government Research Funding (Commonwealth, State and Local)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clearing hurdles: Women in elite sports leadership</td>
<td>Sport and Recreation Victoria</td>
<td>Symons C, Marchant D</td>
</tr>
<tr>
<td>Total Project Amount: $60,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women and leadership participation issues in adolescent girls' basketball</td>
<td>Sport and Recreation Victoria</td>
<td>Symons C, Marchant D</td>
</tr>
<tr>
<td>Total Project Amount: $878,555</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Category 3 - Industry and Other Research Funding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment of frictional characteristics of shoes during locomotion in healthy young adults</td>
<td>ASICS Oceania Pty Ltd</td>
<td>Begg R, Sparrow W, Nagano H</td>
</tr>
<tr>
<td>Total Project Amount: $12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could impaired mitochondrial respiration be an underlying cause of chronic fatigue syndrome?</td>
<td>The Mason Foundation</td>
<td>Bishop D, McKenna M</td>
</tr>
<tr>
<td>Total Project Amount: $87,517</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health benefits of long-term strength training in patients with chronic kidney disease</td>
<td>L.E.W. Carty Charitable Fund</td>
<td>Petersen A, McMahon L (Box Hill Hospital), Russell A (Deakin University)</td>
</tr>
<tr>
<td>Total Project Amount: $50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular and gene characteristics skeletal muscle in patients with osteoarthritis</td>
<td>L.E.W. Carty Charitable Fund</td>
<td>Levinger P, Levinger I, McKenna M, Feller J</td>
</tr>
<tr>
<td>Total Project Amount: $41,811</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein supplementation for enhanced decision making and skill performance in team sports - Phase 1</td>
<td>Nestlé (Musashi)</td>
<td>Stepto N</td>
</tr>
<tr>
<td>Total Project Amount: $20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing an evidence-based model for non-preferred kicking skill development</td>
<td>Australian Football League</td>
<td>Farrow D, Ball K</td>
</tr>
<tr>
<td>Total Project Amount: $9,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill acquisition coach education</td>
<td>Australian Sports Commission</td>
<td>Farrow D, Gorman A, Shuttleworth R</td>
</tr>
<tr>
<td>Total Project Amount: $12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study of exercise in patients with diastolic dysfunction and type 2 diabetes mellitus</td>
<td>Helen Macpherson Smith Trust</td>
<td>Levinger I, Selig S, Jenums G, Seeman E, Zebeze R, Hare D</td>
</tr>
<tr>
<td>Total Project Amount: $45,147</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermoskin thermal support research project</td>
<td>United Pacific Industries</td>
<td>Petersen A, McKenna M</td>
</tr>
<tr>
<td>Total Project Amount: $36,633</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Towards the development of a novel portable golf trainer system using new sensor technology</td>
<td>Victorian Partnership in Advanced Computing</td>
<td>Lai D, Chen X, Hetchl M</td>
</tr>
<tr>
<td>Total Project Amount: $29,387</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ASC/VU Strategic Partnership Collaborative Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A multi-modal data analytics approach to enhance decision making in high performance tennis</td>
<td>ASC/VU, Tennis Australia</td>
<td>Morgan S, Reid M, Zelaznikow J</td>
</tr>
<tr>
<td>Total Project Amount: $195,354</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Project Amount: $130,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects of beta-alanine supplementation in elite female hockey players, and potential mechanisms of action</td>
<td>ASC/VU</td>
<td>Bishop D, Burke L, Rechichi C, Chung W, Derave W, McInich A, Stathis C</td>
</tr>
<tr>
<td>Total Project Amount: $75,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Project Amount: $36,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive sports garments: Part 2 - Understanding the role of feedback technology in the daily training environment</td>
<td>ASC/VU</td>
<td>Farrow D</td>
</tr>
<tr>
<td>Total Project Amount: $186,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Research Fellow in Sport Participation</td>
<td>ASC/VU</td>
<td>Hemana C, Polman R, Westerbeek H, McKenna M</td>
</tr>
<tr>
<td>Project</td>
<td>Industry Partners</td>
<td>Investigators</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sport spatial mapping and data analysis</td>
<td>ASC/VU</td>
<td>Eime R, Polman R, Tower J, Hanlon C, Hemana C, Lu S, Harvey J, Sawyer N, Thompson H</td>
</tr>
<tr>
<td>Taking the plunge: does hydrotherapy help or hinder recovery from resistance training?</td>
<td>ASC/VU</td>
<td>Petersen A, Argus C, Polman R, Meeusen R, Billaut F</td>
</tr>
<tr>
<td><strong>Internal Grants</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catch me if you can! Ventral and dorsal stream integration in the performance of interceptive actions</td>
<td>VU RDGS</td>
<td>Panchuk D, Davids K (QUT), MacMahon M</td>
</tr>
<tr>
<td>Compression garments and recovery in elite Australian Rules Football players: From the laboratory to the field</td>
<td>ISEAL</td>
<td>Aughey R, Varley M</td>
</tr>
<tr>
<td>Development of a new system to optimise performance and reduce the risk for injuries in cycling</td>
<td>VU RDGS</td>
<td>Rouffet D, Begg R, Havinga P (Department of Computer Science / Pervasive Systems, University of Twente), Marin-Perianu S (Interia Technology B.V)</td>
</tr>
<tr>
<td>Does intermittent hypoxic training attenuate cerebral deoxygenation during strenuous exercise</td>
<td>VU RDGS</td>
<td>Billaut F, Subadhi, Gore M, Bishop D</td>
</tr>
<tr>
<td>Exploration of the neuro-mechanical factors of performance in cycling</td>
<td>VU Out-of-Cycle Grant</td>
<td>Rouffet D, Schneider S, Billaut f, Stokes R, Dwyer D, McKenna M</td>
</tr>
<tr>
<td>Is the activity level of the brain when imagining movements related to how well we can imagine and perform movement?</td>
<td>VU RDGS</td>
<td>Williams J, Holmes P, Pearce A, Morris T</td>
</tr>
<tr>
<td>Reducing functional decline through increasing physical activity in children with Cerebral Palsy</td>
<td>VU RDGS</td>
<td>Morris T</td>
</tr>
<tr>
<td>Understanding the neurocognitive basis of motor skill impairment in children</td>
<td>VU RDGS</td>
<td>Williams J, Egan G, Wilson P</td>
</tr>
</tbody>
</table>
Professor David Bishop

Research within ISEAL will expand the body of knowledge that helps an individual athlete, team or sport-related business improve their performance, while also enhancing a critical understanding of the social, cultural and ethical dimensions associated with sport. Our main goals for the sport research program in 2011 were to establish the key areas of research strength and focus, and to facilitate the establishment of research teams, grant applications and partnerships around these key areas. This is underway and will be the focus of increased efforts in 2012.

As part of our mission to be a world-leading research institute in the area of sport, we established research collaborations with a number of world-renowned institutes. Most notably, we became the only university in Australia to sign a research agreement with the ASC and the AIS. Important collaborations were also established with The University of Ghent, Victorian Racing, Aspetar and Aspire in Qatar, Sheffield Hallam University and The University of Nagoya.

In addition to many conference presentations by ISEAL associates, Dr Kevin Boll, Professor Mark Andersen, Professor Damian Farrow, Dr Bahador Ofoghi, Professor John Zeleznikow and myself gave invited talks at international conferences.

In addition, Dr Clare MacMahon spent two-and-a-half months respectively at the German Sport University in Cologne, and Wilhelm’s Westfalische University in Muenster. Dr Francois Billaut visited the laboratory of Dr Andrew Subudhi in the USA, and Professor Damian Farrow completed a six-week research exchange at the French Institute of Sport (INSEP). The number of international researchers from Brazil, Italy, China, Belgium, Wales and Hong Kong who visited the Institute further highlights the growing international reputation of ISEAL.

VU-AIS Professor of Sport Science, Damian Farrow

2011 proved to be a landmark year in the collaborative partnership between Victoria University and the ASC. Then ASC CEO Professor Peter Fricker and VU Vice Chancellor Peter Dawkins signed an official agreement in May. The partnership was energised with $880,000 in collaborative seed funding. A July workshop between VU ISEAL associates, AIS and ASC staff was used to shape discussion on strategic research directions and themes.

The joint steering committee, comprising three members from each organisation, met on two occasions in 2011 to formalise the shared strategic directions of both organisations and then later, to determine research funding allocations. Fifteen activity schedules emerged from the ensuing research funding process, which required members to formulate collaborative, multi-disciplinary projects that best reflected the unique elements of the partnership and most closely met the strategic directions of both organisations. The research areas funded represented a diversity of key themes and included: understanding the role of feedback technology in the daily training environment, a longitudinal study of sport participation pathways, spatial mapping and data analysis of sport, a multi-modal data analytics approach to enhance decision making in high performance tennis, examining competition at altitude, the role of hydrotherapy in recovery from resistance training, and an evaluation of neuromuscular power and fatigue resistance in Olympic sprint cyclists. All projects are in various stages of completion with the global aim being to significantly contribute to scientific literature and applied practice.

A number of joint positions are also evidence of the depth of collaboration between the two organisations. As Professor of Sports Science, I am responsible for the daily management of the partnership, whilst Senior Research Fellow, Dr Camilla Brockett, manages the ASC’s contribution to the internationally established Sport Policy factors Leading to International Sporting Success (SPLISS) project. Pleasingly, a number of the collaborative research proposals that were submitted also involved other organisations such as Tennis Australia, Gymnastics Australia and the CSIRO.
EXERCISE SCIENCE

Professor Glenn McConnell

The goal for ISEAL’s exercise science program in 2011 was to expand its personnel and increase impact in relation to grants and publications. We also placed a major emphasis on building, focusing and strengthening our research effort. We welcomed major Commonwealth Collaborative Research Network (CRN) grant funding to enable appointments of new postdoctoral staff, PhD student scholarships, and VU staff teaching time release, in collaboration with the University of Melbourne. Funding will support three postdoctoral research fellows in ISEAL (two in clinical exercise science), three PhD scholarships (one in clinical exercise science) and significant teaching time release for sixteen staff, through support from the Faculty of Arts, Education and Human Development, Faculty of Health Engineering and Science, School of Exercise Science (SES) and School of Biomedical and Health Science (SBHS).

We also saw the arrival of PRIP funded postdoctoral staff, co-funded by SES and SBHS, as well as a NHMRC grant (2011-2013), which enabled the appointment of a further postdoctoral fellow. These postdoctoral staff have significantly added to the strength of the research staff in exercise science to build a critical mass unsurpassed in the Southern Hemisphere.

In 2011, we marked the opening of the Western Centre for Health, Research and Education (WCHRE) including the new Australian Institute of Musculoskeletal Science (AIMSS) at Sunshine Hospital, a joint venture between Western Health, the University of Melbourne and Victoria University. ISEAL’s collaborations will be very important in building the strength, competitiveness and impact of VU’s clinical exercise science research. Many of the CRN projects fit well with AIMSS and have already been a major area of collaboration. The strategic positioning of my joint appointment with SBHS has been important in increasing participation of the School in ISEAL.

In 2012, the exercise science program aims to have its members working in key research areas of strength to produce a focused, co-ordinated effort that will increase our profile in several well-defined research areas.

ACTIVE LIVING

Professor Remco Polman

Our main aim in 2011 was to develop the key research areas for active living, get a number of projects underway, increase staffing, and develop internal and external relations with relevant stakeholders. These aims have all been achieved.

In 2011, we appointed three postdoctoral staff to the active living program: Dr Lauren Banting (CALD communities), Dr Patricia Addamo (ageing) and Dr Vivian Romero (parental role modelling). The active living team was successful in obtaining internal research funding (three grants from the Researcher Development Grant Scheme and Research Infrastructure Block Grant) to kick-start projects, as well as several external grants including Beyond Blue, Collaborative Research Network, and tenders, most notably from the ASC (evaluation of Play for Life and literature reviews). The team presented their research at a number of leading national and international conferences: Asics Conference of Science and Medicine in Sport (Perth), European College of Sport Science Congress (Liverpool), International Society for Behavioural Nutrition and Physical Activity Meeting (Melbourne) and Motor Control and Human Skill Conference (Perth).

We also developed important external links, in particular with Alzheimer Australia, NARI, Wyndham City Council, Moonee Valley City Council and Diabetes Victoria.

Our research focus in 2011 was self-regulation in the adoption and maintenance of physical activity, exercise or sport participation across the life span. Its determinants (barriers/facilitators) were also explored. In partnership with Beyond Blue, we commenced a major research project to identify the relationships between mental health, wellbeing, sport, and physical education participation in same sex attracted and gender questioning (SSAGQ) youth in Victoria. Data gathered will drive improvements in prevention and early intervention for mental health problems, with a view to change sport and physical education participation policies and practices. Two literature reviews for the Australian Sports Commission examined ‘sport and education’ and ‘sport participation’.

In 2012, our goal is to increase the number of staff and associates working within active living, procure more funding and grow our publication outputs.
ISEAL KEY PARTNERSHIPS AND COLLABORATIONS

VICTORIAN
- SportWest – major collaboration in Melbourne’s western suburbs focussed on sport research, education, elite performance and events.
- Western Bulldogs
- Centre for Health, Research and Education (CHRE) – $52m building located at Sunshine Hospital shared between VU, Western Health and University of Melbourne
- Australian Institute of Musculoskeletal Science (AIMSS) – located within CHRE shared between VU, Western Health and University of Melbourne
- Victorian Institute of Sport
- Maribyrnong Sports Academy
- VicHealth

NATIONAL
- Strategic Partnership and research with Australian Sport Commission and Australian Institute of Sport
- Research with a range of national sporting organisations including the AFL, Tennis Australia and Cycling Australia
- Diabetes Australia Research Trust (DART)
- Musashi

INTERNATIONAL
- University of Western Ontario, London, Canada
- German Sport University, Cologne, Germany
- New Zealand Institute of Sport, Auckland, Wellington & Christchurch
- Biwako Seiki Sport College
- INSEP – French Institute of Sport
- Free University of Brussels – SPLISS project
- ASPIRE Academy of Sport, Qatar
- FIFA

MARKETING AND COMMUNICATIONS REPORT

2011 was an exciting year for ISEAL from a local, national and international perspective in relation to its marketing activities. Although ISEAL did not have a marketing manager in the first half of 2011, ISEAL proactively promoted agreements, events or the unit’s capacity. ISEAL’s unique capability and capacity was distinctly communicated whilst still maintaining strong association to its parent organisation Victoria University. Throughout the second half of 2011 a lot of work was done towards creating a suite of marketing tools that were innovative, cutting edge, market driven, and market driven, whilst staying within broad University communication guidelines.

We introduced and promoted new ISEAL branding tools in the form of logos and colour palettes. This was segmented and targeted to create internal and external communication materials/identities that could be utilised throughout all marketing communications in 2011 and into 2012.

From an online perspective we focussed on addressing issues with our web content and layout, which was a challenging task, trying to position ourselves in a way that fulfilled the needs of our target audience whilst remaining within the confines of the greater Victoria University site.

With online presence being of the utmost importance, we also launched a comprehensive social media strategy targeting Facebook, Twitter and LinkedIn to promote our work. With strong growth in this area throughout 2011 we also achieved takeup by academics who started to see this as a valuable method of communication.

There was a new newsletter launched in December 2011, which was redesigned to fit with new ISEAL branding logos and colour palettes. This continued the standardised brand presence approach that we were striving for, to communicate our core values of innovation etc. This newsletter had the same look and feel as the first ISEAL annual report (2010), with brand consistency evident throughout, we received positive feedback on the design and content of the publication.

Our external promotion also needed tools to convey our message of being a commercially competitive entity avoiding negative assumptions about University research being boring or not market driven. To that end we also produced a glossy capability brochure.

We had significant media outputs during 2011 with solid relationships built with members of Victoria University’s Public Affairs department, resulting in real synergy between ISEAL marketing, academics and members of public affairs. This included outputs promoted via Channel 9, ABC TV, various ABC radio stations, The Age, The Herald Sun, The Australian and numerous online agencies. Because of this volume, it became apparent that ISEAL also needed to better collect this valuable data, leading to obtaining Media Monitor access to properly collect outputs for the 2012 annual report.

We received numerous international presenters, including Dr Craig Goodman from the University of Wisconsin-Madison (Mechanically-Induced Skeletal Muscle Hypertrophy and Protein Synthesis) and Associate Professor, Niels Ortenbald from the University of Denmark (What I am talking about, when I am talking about glycogen: The role of glycogen localization on skeletal muscle E-C coupling). With an eye to the future, ISEAL also began developing relationships with other international universities such as Loughborough University (UK) with invited presenter, Professor Stuart Biddle conducting a seminar on ‘Walking blues: Sedentary behaviour of young people’. Seminars were and are seen as a valuable tool, not only for knowledge transfer but also building relationships with other institutions.

2011 was a good foundation year where we put plans and strategies in place to sell and promote ISEAL, and in doing so, highlight the research excellence of Victoria University.

Chris Rawlinson
Marketing Manager - ISEAL
MAJOR NEWS AND EVENTS OF 2011

2nd International Symposium For Collaboration In Research, Teaching And Exchange Hosted by Victoria University – Victoria University, German Sport University and University of Western Ontario 15 April 2011
Australian Sports Commission And Victoria University Strategic Partnership Signing 20 April 2011
Towards 2016: Brazil Symposium Hosted by Victoria University– Victoria University, Brazilian Olympic Committee, University of Alagoas (Brazil) and University of Sao Paulo (Brazil) 24 June 2011
Sport and Learning Precinct Launch (ISEAL) 26-27 June 2011
ASC/AIS, VU Partnership Workshop 27 August – 4 September 2011
Dutch High Performance Delegation Visit – Nationwide tour of Australian Sport Hosted by ISEAL 29-30 August 2011
RAAFA-AIS/VU Coaching and Science Exchange

We have a Winner
John Wardle Architects won a Victoria Architecture Award, in the category of New Public Architecture, for VU’s Learning Commons & Exercise Sports Science Project, the home of ISEAL.

The award jury said, “This project provides an accomplished lesson in the quality that is achievable within contemporary building practice. As universities compete for recognition on the local and international stage, Victoria University aimed to develop this project as a world leader in the field of sports science and biomechanics. The project inspires and celebrates both athletes and researchers alike.”

JWA set out to create a significant feature in this post-industrial heartland of Melbourne; its place in the vanguard of the West’s progression has become a compelling story of this building.

Like an ancient city wall, the building walks a line along a gentle escarpment at the edge of the campus; its energetic geometry characterising the activities behind the walls. The break and shifts in the building’s envelope give pause and moments to the functions within. A vanegated zinc cladding pattern creates a colour field that changes appearance under different lighting conditions.

VU Links Arms with Country’s Peak Sporting Bodies
In April 2011 VU signed a strategic partnership with the AIS and the ASC. An important part of the long-term partnership was and is the establishment of jointly funded research positions such as the appointment of Professor Damian Farrow, funded by the AIS and VU and Senior Research Fellow Dr Camilla Brockett, who is researching international sport policy factors that lead to international sporting success.

“Joint appointments and scholarships are good examples of increased collaboration between our organisations to bring together the best of academia and the sport industry at large,” said ISEAL Director Professor Hans Westerbeek.

“At VU through ISEAL we now have in place world-class facilities for the study of high performance sport, with other strong education and research programs in exercise science, active living and sport management. Our partnership with the ASC and AIS means we can each extend our reach into a broader range of activities that will help bring greater participation in and enjoyment of sport and recreation to all Australians.”

Phil Borgeaud, Acting Director of the AIS, said the partnership would cement and extend the work already being conducted by the two organisations.

“We already have a number of joint projects up and running, and through this valuable partnership we look forward to a future of increased research collaboration and exchange, for the benefit of Australian sport and the broader community,” Mr Borgeaud said.

Collaborative research projects include:

- Causes of fatigue in cycling
- How nutritional supplements can enhance athletic performance
- How “interactive” fabrics worn as sleeves or leggings can improve kicking or goal shooting in a variety of sports (with CSIRO)
- Which pathways to elite sport best serve the needs of elite athletes

VU Sporting Stars
On 19 June 2011, VU was featured on Channel Nine’s TV show – TAC Cup Futures, demonstrating that the research conducted within ISEAL has great media interest due to its subject matter. Filming for the segment took place at ISEAL’s home at the Footscray Park Campus. VU researchers involved were: Dr Kevin Ball, Dr Rob Aughey, Professor Damian Farrow, Professor Michael McKenna, Dr Elissa Phillips and Dr Derek Panchuk.

Topics included: exercise physiology, a walk through the Altitude Hotel, biomechanics kicking project, and skilled performance AFL footy test. Also involved were six football players from the Western Jets who helped demonstrate the state-of-the-art equipment at VU.

It’s Official
The Honourable Alex Chernov, AO, QC, Governor of Victoria, officially opened Victoria University’s Sport and Learning Precinct at Footscray Park Campus on 24 June. Vice-Chancellor Professor Peter Dawkins said the new facilities exemplified the University’s commitment to providing excellence in education and research to the western region of Melbourne.

“We already have a reputation as a national leader in sport, exercise science and active living. The new labs and learning spaces will enable the university to become a world leader in these areas.”

University Librarian Ralph Kiel said the learning commons, with its open plan and wide variety of formal and informal learning spaces, placed the university at the forefront of student-centred education. On the day, Western Bulldogs players Brian Lake, Jason Tutt and Matthew Panos joined Western Jets TAC Cup players in a demonstration of heat chamber exercises. The young Jets footballers were fitted with “smart leggings” developed by the CSIRO to test their kicking skills and took part in an interactive multimedia skills development test in demonstrations of the cutting edge sports science technology available in the $68.5 million facility.

ISEAL Director, Professor Hans Westerbeek said, “Athletes are just some of those who will benefit from the world-class facilities here. Our researchers are already working on a range of projects addressing health and wellbeing, rehabilitation and fitness, as well as the science of competitive sports.”

The opening ceremony was also addressed by the Commonwealth Minister for Health and Ageing, Nicola Roxon.
## Conference Attendance and Invited Lecture Highlights of 2011

<table>
<thead>
<tr>
<th>Conference Name</th>
<th>Attendees</th>
<th>Location</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Grand Slam Coaches’ Conference</td>
<td>Prof Damian Farrow (Presented)</td>
<td>Melbourne, Australia</td>
<td>13/01/2011</td>
</tr>
<tr>
<td>AFL Level 2 Players/Coaches Course</td>
<td>Prof Damian Farrow (Presented)</td>
<td>Melbourne, Australia</td>
<td>17/01/2011</td>
</tr>
<tr>
<td>AFL National Coaching Conference</td>
<td>Dr Kevin Ball (Presented)</td>
<td>Melbourne, Australia</td>
<td>28/01/2011</td>
</tr>
<tr>
<td>Council for Australian University Tourism and Hospitality Education National Conference</td>
<td>Dr Leanne White (Presented)</td>
<td>Adelaide, Australia</td>
<td>08/02/2011</td>
</tr>
<tr>
<td>International Congress of Sport and Physical Fitness</td>
<td>Prof Mark Andersen (Presented)</td>
<td>Tehran, Iran</td>
<td>16/02/2011</td>
</tr>
<tr>
<td>Exercise and Sports Australia Victoria Research Series</td>
<td>Dr Itamar Levinger (Presented)</td>
<td>Melbourne, Australia</td>
<td>23/03/2011</td>
</tr>
<tr>
<td>International Congress on Enhancement of Physical Activity of Children and Youth</td>
<td>Prof Tony Morris (Presented)</td>
<td>Vuokatti, Finland</td>
<td>07/04/2011</td>
</tr>
<tr>
<td>FILEX Convention</td>
<td>Ms Rohenna Young (Attended)</td>
<td>Sydney, Australia</td>
<td>15/04/2011</td>
</tr>
<tr>
<td>Dr Richard Baka (Attended)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Council for Health, Physical Education and Recreation International Conference</td>
<td>Dr Janet Young (Presented)</td>
<td>Adelaide, Australia</td>
<td>18/04/2011</td>
</tr>
<tr>
<td>Ms Kathy Roberts (Attended)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australasian Podiatry Conference</td>
<td>Dr Patrick McLaughlin (Attended)</td>
<td>Melbourne, Australia</td>
<td>26/04/2011</td>
</tr>
<tr>
<td>Dr Pazit Levinger (Presented)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Track Sprint Cycling, VIS: Preparation to Junior World Championships</td>
<td>Dr David Kouffet (Tested)</td>
<td>Melbourne, Australia</td>
<td>01/05/2011</td>
</tr>
<tr>
<td>International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine Biennial Congress</td>
<td>Dr Pazit Levinger (Presented)</td>
<td>Rio De Janeiro, Brazil</td>
<td>15/05/2011</td>
</tr>
<tr>
<td>Australasian Skill Acquisition Research Group Workshop</td>
<td>Dr Derek Panchuk (Presented)</td>
<td>Hong Kong, Hong Kong</td>
<td>23/05/2011</td>
</tr>
<tr>
<td>World Congress on Science and Football</td>
<td>Dr Kevin Ball (Presented)</td>
<td>Nagoya, Japan</td>
<td>26/05/2011</td>
</tr>
<tr>
<td>Dr Derek Panchuk (Presented)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North American Society for Sports History Annual Conference</td>
<td>Assoc Prof Rab Hess (Presented)</td>
<td>Texas, USA</td>
<td>27/05/2011</td>
</tr>
<tr>
<td>Dr Matthew Klugman (Presented)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference Name</td>
<td>Attendees</td>
<td>Location</td>
<td>Start Date</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>American College of Sports Medicine Annual Meeting</td>
<td>Dr Francois Billaut (Presented)</td>
<td>Denver, USA</td>
<td>31/05/2011</td>
</tr>
<tr>
<td></td>
<td>Prof Glenn McConnell (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Matthew Cooke (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North American Society for Sport Management Conference</td>
<td>Dr Brianna Newland (Presented)</td>
<td>Ontario, Canada</td>
<td>01/06/2011</td>
</tr>
<tr>
<td></td>
<td>Dr Richar Baka (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Conference on Artificial Intelligence and Law</td>
<td>Prof John Zeleznikow (Presented)</td>
<td>Pennsylvania, USA</td>
<td>05/06/2011</td>
</tr>
<tr>
<td>World Congress on Menopause</td>
<td>Prof Lily Stojanovska (Presented)</td>
<td>Rome, Italy</td>
<td>08/06/2011</td>
</tr>
<tr>
<td>International Conference on Business Information Systems</td>
<td>Prof John Zeleznikow (Presented)</td>
<td>Poznan, Poland</td>
<td>15/06/2011</td>
</tr>
<tr>
<td>International Society for Behavioural Nutrition and Physical Activity</td>
<td>Dr Erika Borkolos (Attended)</td>
<td>Melbourne, Australia</td>
<td>15/06/2011</td>
</tr>
<tr>
<td>Annual Meeting</td>
<td>Dr Lauren Banling (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Rochelle Eime (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prof Remco Polman (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Caroline Symons (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prof Warren Payne (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac Arrest and Sudden Death Conference</td>
<td>Prof Michael McKenna (Presented)</td>
<td>Copenhagen, Denmark</td>
<td>16/06/2011</td>
</tr>
<tr>
<td>Developmental Coordination Disorder International Conference</td>
<td>Dr Jacqueline Williams (Presented)</td>
<td>Lausanne, Switzerland</td>
<td>23/06/2011</td>
</tr>
<tr>
<td>Sport Business World Summit</td>
<td>Prof Damian Farrow (Presented)</td>
<td>Sydney, Australia</td>
<td>27/06/2011</td>
</tr>
<tr>
<td></td>
<td>Ms Gina Mendoza (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prof Hans Westerbeek (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Society of Biomechanics in Sports Conference</td>
<td>Dr Kevin Ball (Presented)</td>
<td>Porto, Portugal</td>
<td>27/06/2011</td>
</tr>
<tr>
<td>Advancing the Social Science of Tourism Conference</td>
<td>Ms Olga Junek (Presented)</td>
<td>London, UK</td>
<td>28/06/2011</td>
</tr>
<tr>
<td>Japanese Studies Association of Australia Conference</td>
<td>Dr Brent McDonald (Presented)</td>
<td>Melbourne, Australia</td>
<td>04/07/2011</td>
</tr>
<tr>
<td>Conference Name</td>
<td>Attendees</td>
<td>Location</td>
<td>Start Date</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>-------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Biennial Conference of the Australian Society for Sports History</td>
<td>Dr Matthew Klugman (Presented) Dr Leanne White (Presented)</td>
<td>NSW, Australia</td>
<td>05/07/2011</td>
</tr>
<tr>
<td>European College of Sports Science Annual Congress</td>
<td>Dr Erika Borkoles (Presented) Prof David Bishop (Presented) Prof Remco Polman (Presented)</td>
<td>Liverpool, UK</td>
<td>06/07/2011</td>
</tr>
<tr>
<td>Pacific Asia Conference on Information Systems</td>
<td>Prof John Zeleznikow (Presented)</td>
<td>Brisbane, Australia</td>
<td>07/07/2011</td>
</tr>
<tr>
<td>International Sociology of Sport Association World Congress</td>
<td>Dr Brent McDonald (Presented)</td>
<td>Havana, Cuba</td>
<td>10/07/2011</td>
</tr>
<tr>
<td>European Congress of Sport Psychology</td>
<td>Prof Tony Morris (Presented)</td>
<td>Madeira, Portugal</td>
<td>12/07/2011</td>
</tr>
<tr>
<td>Biennial Conference of the Australasian Centre for Italian Studies</td>
<td>Dr Matthew Klugman (Presented)</td>
<td>Melbourne, Australia</td>
<td>13/07/2011</td>
</tr>
<tr>
<td>Australian Cycling Workshop</td>
<td>Prof Damian Farrow (Presented)</td>
<td>Adelaide, Australia</td>
<td>19/07/2011</td>
</tr>
<tr>
<td>Histories of Sexuality Conference</td>
<td>Dr Caroline Symons (Presented) Dr Matthew Klugman (Presented)</td>
<td>Newcastle, Australia</td>
<td>21/07/2011</td>
</tr>
<tr>
<td>Tennis Australia High Performance Coaches Conference</td>
<td>Prof Damian Farrow (Presented)</td>
<td>Melbourne, Australia</td>
<td>28/07/2011</td>
</tr>
<tr>
<td>Sport and the Pacific Region: Cross Cultural Currents III</td>
<td>Assoc Prof Rob Hess (Presented)</td>
<td>Noumea, New Caledonia</td>
<td>13/08/2011</td>
</tr>
<tr>
<td>World Congress of Philosophy of Law and Social Philosophy</td>
<td>Prof John Zeleznikow (Presented)</td>
<td>Frankfurt, Germany</td>
<td>15/08/2011</td>
</tr>
<tr>
<td>Cancer Research Initiative of South Africa Workshop</td>
<td>Prof Greg Blatch (Presented)</td>
<td>Cape Town, South Africa</td>
<td>16/08/2011</td>
</tr>
<tr>
<td>Can Fit Pro International Fitness Conference</td>
<td>Dr Richard Baka (Attended)</td>
<td>Toronto, Canada</td>
<td>17/08/2011</td>
</tr>
<tr>
<td>The Future of Fatigue - Defining the Problem Symposium</td>
<td>Dr Francois Billaut (Presented)</td>
<td>Bathurst, Australia</td>
<td>22/08/2011</td>
</tr>
<tr>
<td>Asia Pacific Congress on Sports Technology</td>
<td>Prof Michael McKenna (Presented)</td>
<td>Melbourne, Australia</td>
<td>28/08/2011</td>
</tr>
<tr>
<td>RAAF Skill Learning Workshop</td>
<td>Prof Damian Farrow (Presented)</td>
<td>NSW, Australia</td>
<td>29/08/2011</td>
</tr>
<tr>
<td>IEE Engineering in Medicine and Biology Society Annual International Conference</td>
<td>Prof Rezaul Begg (Presented)</td>
<td>Boston, USA</td>
<td>30/08/2011</td>
</tr>
<tr>
<td>Australian and New Zealand Orthopaedic Research Society Annual Scientific Meeting</td>
<td>Dr Pazit Levinger (Presented)</td>
<td>Brisbane, Australia</td>
<td>01/09/2011</td>
</tr>
<tr>
<td>Australian and New Zealand Bone &amp; Mineral Society Annual Scientific Meeting</td>
<td>Dr Itamar Levinger (Presented)</td>
<td>Gold Coast, Australia</td>
<td>04/09/2011</td>
</tr>
<tr>
<td>European Association for Sport Management Conference</td>
<td>Prof Hans Westerbeek (Presented) Dr Camilla Brockett (Presented)</td>
<td>Madrid, Spain</td>
<td>07/09/2011</td>
</tr>
<tr>
<td>International Scientific Conference on Kinesiology</td>
<td>Prof David Bishop (Presented)</td>
<td>Opatija, Croatia</td>
<td>08/09/2011</td>
</tr>
<tr>
<td>International Association for the Philosophy of Sport Annual Conference</td>
<td>Assoc Prof Dennis Hemphill (Presented)</td>
<td>New York, USA</td>
<td>08/09/2011</td>
</tr>
<tr>
<td>Australasian Menopause Society Congress</td>
<td>Prof Lily Stojanovska (Presented)</td>
<td>Brisbane, Australia</td>
<td>09/09/2011</td>
</tr>
<tr>
<td>American Society for Bone and Mineral Research Annual Meeting</td>
<td>Dr Itamar Levinger (Attended)</td>
<td>San Diego, USA</td>
<td>16/09/2011</td>
</tr>
<tr>
<td>Technologies in Sport: Performance, Bodies and Ethics Symposium</td>
<td>Prof Damian Farrow (Presented)</td>
<td>Dunedin, New Zealand</td>
<td>20/09/2011</td>
</tr>
<tr>
<td>Association for Applied Sport Psychology Annual Conference</td>
<td>Prof Mark Andersen (Presented)</td>
<td>Hawaii, USA</td>
<td>20/09/2011</td>
</tr>
<tr>
<td>International Association of Computer Science in Sport Symposium</td>
<td>Dr Bahadurreza Olaghi (Presented)</td>
<td>Shanghai, China</td>
<td>21/09/2011</td>
</tr>
<tr>
<td>ISEAL Postgraduate Research Student Conference</td>
<td>Prof Michael McKenna (Presented)</td>
<td>Melbourne, Australia</td>
<td>25/09/2011</td>
</tr>
<tr>
<td>Malaria in Melbourne Conference</td>
<td>Prof Greg Blatch (Attended)</td>
<td>Melbourne, Australia</td>
<td>03/10/2011</td>
</tr>
<tr>
<td>Chiropractic and Osteopathic College of Australia National Conference</td>
<td>Assoc Prof Gary Fryer (Presented)</td>
<td>Melbourne, Australia</td>
<td>08/10/2011</td>
</tr>
<tr>
<td>American Association for Sustainability in Higher Education Conference</td>
<td>Mr Greg Dingle (Attended)</td>
<td>Pittsburgh, USA</td>
<td>09/10/2011</td>
</tr>
<tr>
<td>Sports Dietitians Australia Conference</td>
<td>Dr Andrew McAinch (Attended) Prof David Bishop (Attended)</td>
<td>Melbourne, Australia</td>
<td>14/10/2011</td>
</tr>
<tr>
<td>Canadian Society for Exercise Physiology Annual General Meeting</td>
<td>Dr Francois Billaut (Presented)</td>
<td>Quebec, Canada</td>
<td>19/10/2011</td>
</tr>
<tr>
<td>Australian and New Zealand Obesity Society Annual Scientific Meeting</td>
<td>Prof Andrew McAinch (Presented) Dr Michael Mathai (Presented)</td>
<td>Adelaide, Australia</td>
<td>19/10/2011</td>
</tr>
<tr>
<td>Asics Conference of Science and Medicine in Sport</td>
<td>Dr Itamar Levinger (Presented) Dr Caroline Symons (Presented) Dr Rochelle Eime (Presented) Prof Remco Polman (Presented) Prof Warren Payne (Presented) Assoc Prof Bob Stewart (Presented)</td>
<td>Fremantle, Australia</td>
<td>19/10/2011</td>
</tr>
<tr>
<td>Decision Making and Emotion Workshop</td>
<td>Prof Damian Farrow (Presented)</td>
<td>Caen, France</td>
<td>21/10/2011</td>
</tr>
<tr>
<td>Conference Name</td>
<td>Attendees</td>
<td>Location</td>
<td>Start Date</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Victorian Association of Cardiac Rehabilitation Annual Conference</td>
<td>Dr Itamar Levinger (Presented)</td>
<td>Melbourne, Australia</td>
<td>24/10/2011</td>
</tr>
<tr>
<td>BIT’s Annual Congress of International Drug Discovery Science and Technology</td>
<td>Dr Andrew McAninch (Presented)</td>
<td>Shenzhen, China</td>
<td>03/11/2011</td>
</tr>
<tr>
<td>INSEP - Workshop</td>
<td>Prof Lily Stoianovska (Presented)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian-South Pacific Association of Sport Psychology International Congress</td>
<td>Prof Tony Morris (Presented)</td>
<td>Taipei, Taiwan</td>
<td>11/11/2011</td>
</tr>
<tr>
<td>Exercise, Muscle &amp; Metabolism Conference</td>
<td>Dr Christos Stathis (Attended)</td>
<td>Melbourne, Australia</td>
<td>16/11/2011</td>
</tr>
<tr>
<td>Seminar at Free University of Brussels</td>
<td>Prof Hans Westerbeek (Presented)</td>
<td>Brussels, Belgium</td>
<td>17/11/2011</td>
</tr>
<tr>
<td>International Tennis Federation Worldwide Coaches Conference</td>
<td>Dr Janet Young (Presented)</td>
<td>Port Ghallib, Egypt</td>
<td>20/11/2011</td>
</tr>
<tr>
<td>The Victorian Cancer Agency Research Forum</td>
<td>Prof Greg Blatch (Presented)</td>
<td>Melbourne, Australia</td>
<td>23/11/2011</td>
</tr>
<tr>
<td>Sport Management Association of Australia and New Zealand Annual Conference</td>
<td>Dr Caroline Symons (Presented)</td>
<td>Melbourne, Australia</td>
<td>23/11/2011</td>
</tr>
<tr>
<td>Australasian Biomechanics Conference</td>
<td>Prof Damian Farrow (Presented)</td>
<td>Canberra, Australia</td>
<td>28/11/2011</td>
</tr>
<tr>
<td>Motor Control and Human Skill Conference</td>
<td>Dr Daryl Marchant (Presented)</td>
<td>Mandurah, Australia</td>
<td>29/11/2011</td>
</tr>
<tr>
<td>The Ritchie Centre Colloquim</td>
<td>Dr Greg Blatch (Presented)</td>
<td>Melbourne, Australia</td>
<td>01/12/2011</td>
</tr>
<tr>
<td>Centre de Formation Professionne Annual Conference</td>
<td>Assoc Prof Gary Fryer (Presented)</td>
<td>Paris, France</td>
<td>02/12/2011</td>
</tr>
<tr>
<td>Australian Physiological Society National Symposium</td>
<td>Prof Michael McKenna (Presented)</td>
<td>Perth, Australia</td>
<td>04/12/2011</td>
</tr>
<tr>
<td>European School of Osteopathy - Workshop</td>
<td>Assoc Prof Gary Fryer (Presented)</td>
<td>Kent, UK</td>
<td>06/12/2011</td>
</tr>
<tr>
<td>Australia and New Zealand Association for Leisure Studies Biennial Conference</td>
<td>Dr Leonie Lockstone-Binney (Presented)</td>
<td>Dunedin, New Zealand</td>
<td>06/12/2011</td>
</tr>
<tr>
<td>World Research Summit for Tourism and Hospitality</td>
<td>Dr Leonie White (Presented)</td>
<td>Kowloon, Hong Kong</td>
<td>10/12/2011</td>
</tr>
<tr>
<td>Victorian Sport Psychology Conference</td>
<td>Dr Janet Young (Presented)</td>
<td>Melbourne, Australia</td>
<td>19/12/2011</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elite Camp Testing</th>
<th>Attendees</th>
<th>Location</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essendon FC Cortisol Testing</td>
<td>Dr Christos Stathis (Tested)</td>
<td>Australia</td>
<td>2011 Season</td>
</tr>
<tr>
<td>AIS AFL Academy Camp</td>
<td>Dr Kevin Ball (Tested)</td>
<td>Canberra, Australia</td>
<td>January, October, December 2011</td>
</tr>
<tr>
<td>NAB AFL Draft Combine</td>
<td>Dr Kevin Ball (Tested)</td>
<td>Melbourne, Australia</td>
<td>04/10/2011</td>
</tr>
<tr>
<td>Training Camp, Track Sprint Cycling, AIS-Cycling Australia: Preparation to Elite National Championships</td>
<td>Dr David Rouffet (Tested)</td>
<td>Adelaide, Australia</td>
<td>12/12/2011</td>
</tr>
</tbody>
</table>
BOOKS
Morris, Tony & Peter Terry* (2011) The new sport and exercise psychology companion. Fitness Information Technology, West Virginia, USA.

BOOK CHAPTERS


Hopwood, Melissa, Joe Baker, Clare MacMahon & Damian Farrow (2011) Social media as a tool for participant recruitment and knowledge translation. in Eastern Canadian Sport and Exercise Psychology Symposium. Waterloo, Canada.

Hopwood, Melissa, Damian Farrow, Clare MacMahon & Joe Baker (2011) Sporting milestones and career of male Australian junior international level team sport athletes. in Proceedings of Canadian Society for Psychomotor Learning and Sport. Manitoba, Canada.


Levinger, Itamar, Roger Zebaze, A. Ghasem-Zadeh, George Jerums, David Hare, Steve Selig & Ego Seeman (2011) Increased intracortical porosity is associated with higher serum undercarboxylated osteocalcin in middle-aged men. in Australian and New Zealand Bone & Mineral Society Annual Scientific Meeting. Gold Coast, Australia.


Polman, Remco & Erika Borkoles (2011) Exercise status, Type D personality, and physical self-description in males. in International Society for Behavioural Nutrition and Physical Activity Annual Meeting. Melbourne, Australia.


PATENTS


GENERAL PUBLIC OUTPUTS


Fryer, Gary (2011) Public Lecture, Talk or Guest Lectureship. Evidence-based medicine or evidence-informed osteopathy: What do we know and how can it help us? European School of Osteopathy · Workshop. Kent, UK.


Klugman, Matthew & Alex McDermott (2011) Online Article. The Roebuck we knew. The Drum, ABC.


Rouffet, David & Raoul Luescher* (2011) Online Article. High-end bikes for sale... but what are you really buying? The Conversation.


Westerbeek, Hans (2011) Public Lecture, Talk or Guest Lectureship. Speech at the launch of the Sport and Learning Precinct at Victoria University. Melbourne, Australia.

Westerbeek, Hans (2011) Public Lecture, Talk or Guest Lectureship. Speech at the launch of the strategic partnership between the Australian Sports Commission and Victoria University. Melbourne, Australia.


Williams, Jacqueline (2011) Public Lecture, Talk or Guest Lectureship. Motor imagery ability of children with motor skill impairment: Studies with children with spastic hemiplegic cerebral palsy (ICP), developmental coordination disorder (DCD) and attention deficit/hyperactivity disorder (ADHD). Institute for Performance Research, Manchester Metropolitan University, Crewe, England.

CONFERENCE PRESENTATIONS


Andersen, Mark. Invited Speaker (2011) The sport psychologist malgré lui: First there is a mountain; then…Association for Applied Sport Psychology Annual Conference. Hawaii, USA. 20 September 2011.


2011 ANNUAL REPORT

2011.

Studies Biennial Conference. 6 December and New Zealand Association for Leisure gym work: A qualitative analysis. Australia


2011. 

European Respiratory Society Annual Congress. Amsterdam, Netherlands. 24 September 2011.


Williams, Jacqueline, Cristina Omizzolo & Alasdair Vance*. Speakers (2011) Are motor imagery deficits evident in children with both DCD and ADHD. International Conference on Developmental Coordination Disorder. Lausanne, Switzerland. 22 June 2011.


Farrow, Damian (2011) Member. Sport Science and Medicine Advisory Panel, Surfing Australia.

McAinch, Andrew (2011) Associate Editor. Nutrition and Dietetics.

McAinch, Andrew (2011) Editorial Board Member. PPAR Research.

McAinch, Andrew (2011) Deputy Leader. Biomedical and Lifestyle Diseases (BioLED) Unit, School of Biomedical and Health Science.

McAinch, Andrew (2011) Member of Executive – Treasurer. Australian and New Zealand Obesity Society.


Begg, Rezaul (2011) Assessor of Grant Application. Australian Research Council (Discovery Projects), Australian Research Council (Linkage Projects).


GOVERNMENT REPORTS


CONTRACT AND TECHNICAL REPORTS


VISION
TO BE A WORLD LEADING RESEARCH INSTITUTE IN SPORT, EXERCISE SCIENCE AND ACTIVE LIVING

MISSION
TO MAKE IMPORTANT CONTRIBUTIONS TO SOCIETY THROUGH INNOVATIVE RESEARCH IN SPORT, EXERCISE SCIENCE AND ACTIVE LIVING
We partner and collaborate with locally and globally recognised organisations in our commitment to research and engagement in the areas of sport, exercise and active living.

Contact us for more information about the Institute of Sport, Exercise and Active Living

Visit
vu.edu.au/iseal

Email
iseal@vu.edu.au

or Call
+61 3 9919 4793