

**Faculty of Business and Law – Annual reviews for research centres**

Name of Centre	<b>Centre for Risk Research, School of Management</b>
URL of its website	<a href="http://www.southampton.ac.uk/management/research/groups/centre_for_risk_research.page">http://www.southampton.ac.uk/management/research/groups/centre_for_risk_research.page</a>
<b>For Academic Year 2012-13</b>	
Names and schools of all current members of the Centre	<p><b><i>[Professors]</i></b></p> <p>Prof. Chris Chapman, School of Management  Prof. Taufiq Choudhry, School of Management  Prof. Con Connell, School of Management  Prof. Johnnie Johnson, School of Management  Prof. Ming-Chien Sung, School of Management  Prof. Lyn Thomas, School of Management  Prof. Stephen Ward, School of Management  Prof. Richard Werner, School of Management  Prof. Simon Wolfe, School of Management</p> <p><b><i>[Other key academic staff]</i></b></p> <p>Dr Bart Baesens, School of Management  Dr Maxwell Chipulu, School of Management  Dr Ian Dawson, School of Management  Dr Ian Harwood, School of Management  Dr Jonathan Klein, School of Management  Dr Gerhard Kling, School of Management  Dr Ranadeva Jayasekera, School of Management  Dr Tiejun Ma, School of Management  Dr Alasdair Marshall, School of Management  Dr Frank McGroarty, School of Management  Dr Christophe Mues, School of Management  Dr Yue Wu, School of Management</p> <p><b><i>[Research Associates]</i></b></p> <p>Dr Peter Fraser-Mackenzie, KTP Research Associate, School of Management  Dr David McDonald, Research Fellow, School of Management  Mr. Juan Carlos Moreno Paredes, KTP Research Associate, School of Management</p> <p><b><i>[External Members]</i></b></p> <p>Prof. William Benter, Visiting Professor, School of Management  Dr Itiel Dror, Cognitive Consultants International  Dr Raquel Florez-Lopez, School of Accounting and Finance, Pablo Olavide University of Seville  Dr. Andrew Grant, Business School, University of Sydney  Mr Garry Honey, Visiting Senior Fellow, School of Management  Dr Stefan Lessmann, Dept. of Business Administration, University of</p>

	Hamburg
Names, job titles and FTE status of any staff employed exclusively on behalf of the Centre (if any)	Dr Peter Fraser-Mackenzie KTP Research Associate Dr David McDonald EPSRC Research Fellow Juan Carlos Moreno Paredes, KTP Research Associate, School of Management
New academic appointments	Dr Ian Dawson, Lecturer in Risk Behaviour
<b>Very brief</b> details of any seminars, meetings, conferences or workshops explicitly badged as Centre events	<p>The Centre for Risk Research hosted a seminar series exploring a variety of topics related to risk and decision-making, including speakers from UK and international universities, two speakers from industry, and PhD students from within the School (7 seminars).</p> <p>The Centre for Risk Research acted as Associate Sponsors of the <i>15<sup>th</sup> International Conference on Gambling and Risk Taking</i> held in Las Vegas, USA, May 2013; hosted by the Institute of Gambling and Commercial Gaming, University of Nevada, Reno: attracted 450 delegates from 26 countries.</p> <p>Members of the Centre for Risk Research were appointed to the Steering Committee (Johnnie Johnson) and the Management Committee (Ming-Chien Sung) and were involved in the official launch of the Centre for Excellence for Research in Cyber Security, University of Southampton.</p> <p>Members of the Centre for Risk Research were selected and funded (Johnnie Johnson and Ming-Chien Sung) by Center for the Economic Analysis of Risk (CEAR), Georgia State University to take part in a small international team to examine research opportunities associated with Gambling and the Economics of Risk, Atlanta, 2012.</p> <p>Members of the Centre for Risk Research (Johnnie Johnson and Ming-Chien Sung) were invited to become permanent members of the Academic Committee of the Asia Pacific Association for Gambling Studies (APAGS).</p>
International research visitors	<ul style="list-style-type: none"> <li>• Dr Stefan Lessmann, Visiting Lecturer, Dept of Business Admin, Uni of Hamburg</li> <li>• William Benter, Visiting Professor</li> <li>• Dr. Raquel Flórez López, Visiting Researcher, Department of Business Administration, University Pablo Olavide of Seville</li> <li>• Dr Andrew Grant, Visiting Scholar, Business School, University of Sydney</li> </ul>
Papers, books and other REF-able outputs accepted or published since 1 August 2012	Outputs related to risk and decision-making: 2 books, 17 book sections, 83 papers accepted or published in international refereed journals, and 59 conference papers (see attached list).
PGR students:	
a) completions	4
b) new enrolments	11
c) total numbers	42

New and continuing research grants

- 2012-2017, EPSRC/GCHQ granted one of eight UK Academic Centres of Excellence in Cyber Security Research to the University of Southampton (Professor J. Johnson, Professor Ming-Chien Sung and Dr. Tiejun Ma are two of the founding members).
- Dr. Tiejun Ma and Professor Ming-Chien Sung. £29,700 (2012-2013), University of Southampton, Faculty Strategic Research Fund, "Toward real-time investment risk forecasting using market information".
- Dr. Ming-Chien Sung and Professor Johnnie Johnson. £2,800 (Oct 2012-13) "Improving prediction accuracy in speculative markets by exploring the components of forecast error via the Lens model" Funding source: University of Southampton, Hamburg Staff Exchange Programme.
- Professor Ming-Chien Sung and Professor Johnnie Johnson. £3,250 (2012) "Predicting the long-term performance of financial market traders" Star Financial Systems Ltd.
- Professor Ming-Chien Sung, Professor Johnnie Johnson, Dr. Tiejun Ma and Dr S. Lessmann. £59,450 (2012-13) "Modelling and prediction of spread-trader and contract for difference-trader risk" Technology Strategy Board (KTP) and Star Financial Systems.
- Professor Ming-Chien Sung and Professor Johnnie Johnson. £2750 (2012-13) "Development of mathematical models for forecasting uncertainty in speculative markets", Wintermute.
- Professor Ming-Chien Sung, Professor Johnnie Johnson, Dr. Tiejun Ma and Dr S. Lessmann. £148,500 (2012-14) "Development of a real-time model of spread-trader performance" ESRC, Technology Strategy Board (KTP) and London Capital Group.
- Professor Ming-Chien Sung, Professor Johnnie Johnson and Dr. Tiejun Ma. £304,900 (2013-16) "Optimising risk management decisions through effective human-technology distributed cognition" ESRC, Technology Strategy Board (KTP) and Star Financial Systems.
- Professor Ming-Chien Sung, Professor Johnnie Johnson, Dr. Tiejun. Ma and Dr. Frank McGroarty. £214,000 (2013/15) "Modelling complex, uncertain environments" EV Analytics.
- Professor Ming-Chien Sung, Professor Johnnie Johnson, Dr. Tiejun Ma £53,659 (2013/14) "Modelling the wisdom of the crowd" EPSRC Impact Acceleration Account and Knowledge Transfer Secondments with WBX Ltd.
- Dr. Tiejun Ma £2800 (2012-13) "Research Mobility Grant linked with The State Key Laboratory for Novel Software Technology, Department of Computer Science and Technology, Nanjing University" WUN and Univ. of Southampton.
- Dr. Tiejun Ma. £17,000 (2012-13) "Social media analysis for financial market prediction" (granted \$20k+ worth Thomason Reuter's social medial data).
- Dr. Ranadeva Jayasekera. £ 90,000 (£ 30,000 recurrent over 3 years) as a member of the Santander Research Project.

	<ul style="list-style-type: none"> <li>• Dr. F. McGroarty and Dr. G. Kling. € 3,347,416. “Researching crowdsourcing to extend IoT testbed infrastructure for multidisciplinary experiments, with more end-user interactions, flexibility, scalability, cost efficiency and societal added value”. This project is funded under the EU’s Framework 7. There are 8 parties to the consortium, including one party comprised of CRR members.</li> </ul>
<p>Any consultancy and enterprise contracts not included in the attached list</p>	<ul style="list-style-type: none"> <li>• Dr. Tiejun Ma: Ferrari Ltd — Formula 1: Weather Trend Predictor (collaborative Industry funded MSc project)</li> <li>• Dr. Tiejun Ma: IT Innovation Services—BonFire Business Planning for Sustainable Future Internet Cloud Facilities (collaborative Industry funded MSc project)</li> <li>• Professor Chapman and Professor Ward: MoD assignment to develop processes for planning protection for troops from chemical and biological weapon attacks, via The Nichols Group</li> <li>• Dr Kling: High Growth Strategy: Design and Implementation for a Chinese bank, China Industrial Bank, Moeller Centre, University of Cambridge</li> <li>• Dr Klein: Private consultancy to contract with The Health Foundation on “Better Learning to better Improve Services”</li> <li>• Dr. Itiel Dror: Deutsche Bank- -- Perception of risk, risk management</li> <li>• Dr. Itiel Dror: The Netherlands National Police Improving judgment and human performance</li> <li>• Dr. Itiel Dror: NYPD, New York -- Human factors and vulnerabilities in decision making</li> <li>• Dr. Itiel Dror: The London Metropolitan Police -- Cognitive issues in making forensic decisions</li> <li>• Dr. Itiel Dror: BT -- Increasing abilities to make high quality decisions</li> <li>• Dr. Itiel Dror: Institute for Innovative Technology In Medical Education (iINTIME), USA -- Using technology to train medical staff to make better assessments and decisions</li> <li>• Dr. Itiel Dror: Colorado Bureau of Investigation (CBI), Denver, USA -- Improving investigative powers through cognitive understandings.</li> <li>• Dr. Itiel Dror: Australian New Zealand Policing Advisory Agency (ANZPAA) -- Police decision making performance</li> </ul>
<p>Short courses or other forms of CPD developed and delivered</p>	<ul style="list-style-type: none"> <li>• Dr Ian Dawson: Two ‘Risk and Security Management’ modules developed and delivered for a short cyber-security course created by Professor Vladimiro Sassone (Centre for Excellence in Research on Cyber Security) for the UK Foreign and Commonwealth Office.</li> <li>• Dr. Peter Fraser Mackenzie and Professor Johnnie Johnson: “The impact of heuristics and biases on trading behaviour and the value of risk dashboards” Star Financial Systems</li> <li>• Dr. Itiel Dror: Short course entitled ‘Cognitive factors in making forensic decisions’ delivered multiple times in a variety of countries</li> <li>• Dr. Itiel Dror: Short course entitled ‘What governs consumer</li> </ul>

	<p>decision making' delivered multiple times in a variety of countries</p> <ul style="list-style-type: none"> <li>• Dr Marshall: Module entitled "The Management of Risk and Uncertainty" developed for 2nd year undergraduates and accessible to students right across the University as part of its new curriculum innovation programme offering. This module ran successfully for its first year in February-May 2013, attracting 45 students</li> <li>• Prof. Chapman: IPMA (International Project Management Association) Advanced Training Courses, April 2013 in Copenhagen, with April 2014 in Copenhagen planned</li> <li>• Prof. Chapman: Marcus Evans, London, public courses attracting fairly senior managers from across Europe, March 2013, with November 2013 planned</li> <li>• Dr Kling: Masters Level Quantitative Skills course developed for HMRC</li> <li>• Dr Florez-Lopez: Chartered Institute of Management Accounts (CIMA) initiative entitled 'Performance Measurement and Risk Management in Intermediary Food Chain Businesses', July 2011-December 2013</li> <li>• Dr Mues: One-day workshop on "Model Risk in Retail Credit Scoring – Statistical Issues", September 2012, Imperial College London</li> </ul>

<p>A brief “business plan” outlining planned activity and any developments for the next three years</p>	<p>The Centre for Risk Research (CRR) is a multi-disciplinary team of academics who have developed an international reputation for excellence in the related fields of decision-making, risk analysis, risk management and risk-taking research. In these areas we have a track record in successful research grant applications, papers in 3* and 4* international journals and in producing leading research text books. The CRR offers the University an important competitive advantage, as there are no comparable risk-related research centres in the country embedded in Russell group universities which have been established for as long or which offer the combination of ‘hard’ and ‘soft’ risk skills for which we have an international reputation.</p> <p>We believe that a move to substantially increase our <i>research reputation</i>, by leveraging our current international standing in the risk and decision-making areas, can significantly improve our long-term aims for growth whilst reducing our strategic risks. To take this forward, we are seeking to undertake the following initiatives:</p> <p>(i) <b>New CRR Website:</b> Dr Ian Dawson has, this year, taken up the role of Co-ordinator for the Centre for Risk Research (CRR). He has constructed a new website for the CRR that will be published online in Autumn 2013. The new website has been designed to highlight and strengthen the CRR’s international reputation for excellence in risk-related research by drawing attention to the wealth of activities undertaken by the group’s members and by promoting the Centre’s consultancy services, educational programmes and growing links with external organisations and research councils. Looking forward, there is also significant potential to continually develop and improve the functionality of the new website in order to increase interest from a larger number of individuals and organisations, and to grow and promote the “CRR Brand”. The appointment of a full time co-ordinator would help us maintain this momentum.</p> <p>(ii) <b>Seminar Series:</b> We aim to expand our existing seminar series to incorporate a greater number of speakers from industries that are involved, in broad terms, in the management of risk. This action will help to build greater links between the CRR and industry and will provide opportunities to promote the CRR’s consultancy services to industry professionals involved in risk-related activities. For example, in spring 2013 Alastair Barron, Head of Group Security at the FTSE 100-listed firm Old Mutual, delivered a CRR seminar. More recently, Alastair has discussed engaging in research projects with the CRR. However, in order to expand the series in this manner we need additional funds to support speaker’s expenses, etc., and additional time allocated to CRR staff to organise and host such events.</p> <p>(iii) <b>PhD Recruitment and Scholarships:</b> In order to maintain and enhance our international reputation for research in decision-making and risk analysis, we recommend that the Faculty earmark at least two PhD scholarships per year in this area. This would send out a signal to the academic community and to the University that we see this area of research as a key strength of the School. This would also clearly help us</p>
---	---

attract the leading PhD students (providing a pipeline of future staff) and would further our research output and reputation in this area. We are currently researching a number of options to improve the number of risk-related PhD applications from individuals with outstanding credentials (e.g., excellent academic achievements, outstanding references, strong proposals, etc.). Potential approaches to achieving this goal (in addition to the provision of scholarships) include better utilisation of the website to promote the PhD programme and encourage enquiries/dialogue with potential supervisors, adapting conference presentations to draw attention to the work of current CRR PhD students, and hosting a CRR workshop for prospective PhD students.

**(iv) Enhancing Income and Reputation via Consultancy:** The Centre's reputation in the areas of decision-making and risk analysis, particularly through the CRR and CORMSIS, offers significant potential for attracting consultancy contracts. Currently, consultancy is undertaken by a few staff on an ad hoc basis. The lack of co-ordination for this activity has meant that it remains largely under-developed. Clearly, a thriving consultancy arm to the Centre could significantly increase the Faculty's income, enhance our links and reputation with industry/commerce and can help to inform and illuminate our teaching.

**(v) Extending Our Growing Reputation in Cyber-Security Education:** In 2012 CRR members were appointed to the Steering and Management Committees of the university's new Centre for Excellence for Research in Cyber Security (CERCS) and were involved in its subsequent launch. Thereafter, the CRR members have worked closely with CERCS in the development of educational programmes and courses relating to the management of cyber risks, and CRR members have also integrated the topic of cyber security management into existing modules. For example, cyber security management is now taught on the module 'MANG6068 The Management of Corporate Security'. CERCS and CRR are currently developing a new MSc programme in risk and cyber security (2014-15), and a CRR member recently designed and delivered a module on risk management for a short cyber security course developed by Professor Sassone (CERCS Director) on behalf of the UK Foreign and Commonwealth Office. Hence, there is huge potential to develop this growing expertise in cyber security and to further broaden the CRR's international reputation for delivering education across a wide range of risk domains.

**(vi) Co-ordinator for CRR:** There is the potential for the CRR to secure more industry-funded projects to further enhance our reputation. In fact, the CRR has contacts with a number of large firms who have expressed interest to developing research projects. The establishment of a large number of such projects requires co-ordination beyond that possible with existing resources. Consequently, to enhance and extend the degree to which we can leverage the distinctive strengths of the CRR we should appoint a Senior Research Fellow/Co-ordinator to foster and develop Centre for Risk Research activities. The person would be responsible to the Director of the Centre for attracting and co-ordinating large, cross-disciplinary risk-related research grants, to pro-actively create links with

industry/commerce to enhance our teaching programmes and foster links for future research funding, the stimulation of demand for risk-related CPD programmes, creating a presence and enhancing our reputation via development of the CRR website, managing a publicly attended risk seminar series (e.g., with key industry and academic experts as speakers) attracting both industry/commerce attendees and speakers, and attracting and organising extended visits by high profile staff from partner institutions etc.). Some of these tasks are currently undertaken by CRR members (e.g., Co-ordinator role taken by Ian Dawson this year), but to fully capitalise on the opportunities which the CRR offers we need a full time co-ordinator. In addition, currently there is some workload allowance given to two members of staff for developing decision and risk initiatives and international research contracts. These staff have been extremely successful in increasing the CRR 's links with business, in generating funded research contracts secured by the CRR and in developing our international research profile. Further allowances to extend these roles would be very cost effective in further developing the work of the CRR.

(vii) **Research Fellows:** To enable us to respond effectively to research funding calls and to respond positively to contacts created with industry partners (e.g., to create KTP proposals) we should appoint two Research Fellows. Their role would be to pro-actively seek out funding opportunities and to write and facilitate (with members of staff) research grant bids in the risk and decision-making areas and to co-ordinate joint bids across disciplines within the School and across Faculties within the University (this works very well with many other research-led institutions, such as University of Oxford). For example, Southampton is well-known as a port and with the launch of the Maritime Institute, the post-doctoral Research Fellows could help write and co-ordinate research bids connected with our existing research interests in modelling, simulation and risk analysis of maritime logistics. Members of staff in the decision-making and risk analysis areas have identified a range of potentially large research grant bids such as this which they would like to investigate.

(viii) **Increase links with international partner institutions:** The Centre currently has good links with, amongst others, the University of Hamburg, University of Nottingham, University of Sydney, University of Melbourne, HEC Montreal (the Business School), University of Quebec in Montreal, Technical University of Eindhoven, Norwegian University of Science and Technology and less developed links with the University of Bath, University of Kent, University of Strathclyde, National Chen-Chi University (Taiwan), Clark University (USA), the Macao Polytechnic Institute, National Taipei University of Technology. We need to further leverage these links to increase our international visibility and to stimulate more joint research funding bids. To achieve these aims and to encourage further links we should establish funded staff exchange schemes. This would enable our staff to spend periods of time at these institutions and for their staff to spend time in our School. We would, thus, have the opportunity of increasing the School's visibility by attracting international 'big hitters' to the School on short or more extended visits.



Details of any funding requested for academic year 2013-14	<ul style="list-style-type: none"><li>• Support for the Centre's seminar series (details attached) (£5k)</li><li>• Support for the CRR's infrastructure (Research Fellow/ Senior Research Fellow as full time Centre co-ordinator; two Research Fellows to co-ordinate research grant bids (see details above)</li><li>• Two earmarked PhD scholarships in the risk area</li><li>• Funding to kick-start a staff exchange scheme (£10k)</li><li>• Funding to help host the risk e-conference (£5k)</li></ul>
--	--

**Please return your completed form to Stella Tomlinson ([s.a.tomlinson@soton.ac.uk](mailto:s.a.tomlinson@soton.ac.uk)) by 31<sup>st</sup> August 2013.**