

Institution: University of Brighton
Unit of Assessment: C26 Sport & Exercise Science, Leisure & Tourism
a. Overview

Through a distinctive mix of robust science and critical scholarship the School of Sport and Service Management (SaSM) has strengthened its position as a vibrant and purposeful location for sport, tourism and leisure research. We produce applied, multi-disciplinary research and challenge orthodoxies in order to benefit global and national decision makers, grassroots organisations, elite sport specialists, Paralympic athletes and citizens in many countries.

To accelerate the delivery of our research strategy, we have restructured the environment into two multidisciplinary groups: *Sport and Exercise Science* (SES: 7.7 FTE); and *Sport, Tourism and Leisure Studies* (STLS: 13.71 FTE). The work of each group has been advanced further through the university's strategic appointment of new Professorial leadership (NAURIGHT from George Mason University, USA and PITSILADIS from the University of Glasgow) alongside University investment of £8.8m in research sabbaticals, doctoral studentships, a doctoral college, early career researcher (ECR) support schemes and innovation grants. Together these appointments and initiatives deepen the School's long-standing international reputation for developing and leading research agendas.

b. Research strategy

After RAE2008, a strategic decision was taken to strengthen systematically research across sport, tourism and leisure at the University of Brighton (UoB). Through a merger of the Chelsea School and the School of Service Management in 2011, a single research infrastructure was established in the new School of Sport and Service Management (SaSM).

Research strategy: Consistently, over the last twenty years, our critical scholarship and diverse research environment has been built upon a primary mission that, (i) the people who benefit from research are as important as the people who produce research, and (ii) intellectual innovation is as important as its systematic translation. The establishment of a single-school SaSM was preceded by a review through which we reaffirmed this primary mission and adopted revised objectives for 2011-14:

- integrate and support sport, tourism and leisure research and strengthen leadership capacity to enhance our reputation for quality research in applied science, social science and the humanities
- support proactively the development of ECRs and mid-career researchers to ensure their research achieves international levels of excellence
- develop a next generation of researchers by building a strong postgraduate research (PGR) environment, increasing PGR FTEs and conferrals
- improve income generation capacity and invest in advanced research facilities and equipment.

Advancing the research environment since 2008: We have advanced the above objectives through initiatives to develop the scholarly and organisational infrastructure.

Scholarly infrastructure: Each of our two new multidisciplinary research groups *Sport and Exercise Science* and *Sport, Tourism and Leisure Studies* provides peer support, mentoring and expert leadership to raise the quality of research outputs and support innovative research that has impact. The enhancement and future-proofing of leadership is assured by the appointment of two professors (NAURIGHT and PITSILADIS), ensuring each research group has a professorial leader overseeing and developing research capacity. Researchers in both groups have delivered high-quality research outputs and produce impact that has changed policy. Examples of the successes are as follows:

Sport and Exercise Science: Scientists from a range of disciplines have created new knowledge on the environmental factors affecting elite athletic performance that has changed the competition strategies of national Olympic and Paralympic Committees in the UK and USA (REF3b [2]). In 2011, WEBBORN received the Sir Robert Atkins Award from the Institute of Sport and Exercise Medicine for consistent and valuable medical service to a national sporting

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organisation. He was also appointed as Chief Medical Officer to the London 2012 Paralympic Games, a reflection of the impact of his research and standing in the field. Multi-disciplinary research by PITSILADIS, supported by the World Anti-Doping Agency (WADA), has resulted in the development and validation of a new molecular signature test for blood doping and the research group is already benefiting from access to new research expertise in the application of 'polyomics' (ie genomics, transcriptomics, proteomics and metabolomics).

Sport, Tourism and Leisure Studies: The integration of internationally recognised scholars and emerging researchers from a wide variety of social science and humanities disciplines has produced high-quality outputs on lifestyle sports, tourism policy and development, the cultural politics of sport, leisure and tourism practices and sporting histories and identities. CARTER's ground-breaking book on Cuban baseball was named 'Outstanding Book of the Year' in 2009 by The North American Society for the Sociology of Sport. This group's research engages with diverse forms of social activism to challenge inequalities and highlight new ways that tourism, sport and leisure can contribute to social justice by transforming lives and livelihoods. The impacts of our research have shaped the policies of tourism and grassroots sporting organisations in Africa and the Middle East (REF3b [3]). Multi-disciplinary research by RAVENSCROFT involved collaboration with natural scientists on leisure and cultural ecosystem services in the ground-breaking Defra-led UK National Ecosystem Assessment 2011, the world's first such assessment by a national government.

Organisational infrastructure: The SaSM Research and Graduate Centre (RGC) was established to manage research strategy, set targets and monitor progress. The progress of the research groups is systematically overseen by the RGC, which has two dedicated administrators. The RGC reports to the university's Research Strategy Committee using the university's newly established common research information system (CRIS) and Annual Research Monitoring (ARM). This has brought greater consistency and rigour to the continuing process of evaluating key performance indicators to inform the RGC's identification of future priorities.

The RGC has a 15-member management committee to ensure that all researchers are involved in setting priorities, and includes representation from ECRs, each research group in the school, research fellows, research administrators, the professoriate and research staff. Additionally, the RGC is also responsible for the local delivery of the Research Concordat Action Plan in support of researcher career development [see section c], and the university's *Code of Good Practice in Research Guidance* and the *Guide to Good Practice in Research Ethics and Governance*. The RGC is a critical conduit for the local implementation of the university's research infrastructure which, since 2008, has seen an overall investment of £8.8m, including a Research Sabbatical scheme, Research Challenges scheme and networking grants, specifically for ECRs, there are Rising-Stars grants, an Ambassador scheme and the annual Future's Bright conference.

Future strategic goals: Building on our achievements since 2008, and reflecting the expansion and consolidation of both our research base and the impact of our research, our strategic aims for 2014–20 are to further advance the quality of our excellent research by:

- investing in both our research groups and their well-established multidisciplinary research base across the applied sciences, social sciences and humanities
- optimising internal structures to deliver the university's Research Concordat Action Plan for career development
- continuing to develop the next generation of researchers by enhancing opportunities and support for Doctoral research students
- strengthening the purposefulness of our research and the framework for delivering impact through collaborations with a range of non-academic partners and users
- increasing research income from international agencies, UK research councils, foundations and charities.

Future plans: In order to deliver these strategic goals, each research group has prioritised the following key research challenges rooted in their existing multi-disciplinary research excellence:

Sport, Tourism and Leisure Studies: This group will develop new critical histories of, and ethnographic approaches to, researching the relationships between individuals, communities and societies, with a focus on: bodies, lifestyles and well-being; sport, tourism, politics and

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international relations; people-environment relationships; sport and tourism as vehicles for sustainable development, and; football and its communities.

Sport and Exercise Science: Future research will develop a new paradigm for drug detection in sport using ‘polyomics’; the use of ‘polyomics’ to individualise exercise training in health (eg sporting performance) and disease (eg personalised medicine), and; improved understandings of the aetiology of childhood obesity. Our researchers will also continue to research the optimisation of sports performance by counteracting fatigue and enhancing the mechanisms of heat tolerance for athletes, that were adopted during the London 2012 Olympic and Paralympic Games and will influence international team competitive strategies in the 2016 Olympic and Paralympic Games.

The RGC and the above research groups have planned a series of initiatives to deliver the strategic goals for 2014–20. Each research group will host networking events and international conferences to advance new fields of enquiry and to allow the next generation of researchers to interact with scholars engaged with our distinct forms of critical scholarship. Support for ECRs will be accelerated by enhanced mentoring provided by experienced mid-career researchers and the range of university initiatives outlined in the staffing section below. These will be supported further by the delivery of priorities in our Research Concordat Action Plan (see section c).

The link between the production of academic research and its impact upon policy and practice will be developed further by researchers deepening their collaboration with the Fédération Internationale de Football Association (FIFA), the International Olympic Committee (IOC), the International Sports Medicine Federation (FIMS), the Sport for Development and Peace global network, the UN World Tourism Organisation (UNWTO), the World Anti Doping Agency (WADA) and the World Bank Group. Several sports scientists, formerly from the University of Brighton, will strengthen the research base at the English Institute of Sport (EIS) by continuing current research collaborations with our researchers.

c. People, including: I. Staffing strategy and staff development

Staffing strategy: We prioritise the intellectual and creative capital of our research community as a primary asset, and have set out to ensure its sustained support and development. We value the contributions of all colleagues by strategically:

- attracting and retaining excellent researchers and strengthening research leadership
- investing in researcher development for all staff in accordance with Concordat implementation
- ensuring research opportunities are available in line with equality and diversity policy

Recruitment and retention: SaSM and the university have successfully enhanced recruitment to attract and retain excellent scholars at all career stages who can deliver excellent research. All of the university’s research recruitment material has been redesigned to ensure that job descriptions and the criteria for selection are both transparent and clear. Recently appointed Research Professors of international standing maintain SaSM’s breadth of scholarship in science (PITSILADIS) and social science and humanities (NAURIGHT). The development of mid-career researchers contributes to the balance of the staff profile and further enhances leadership through promotions of NOVELLI to Reader and WHEATON to Principal Research Fellow.

SaSM has also succeeded in maintaining a balanced staff profile by the targeted recruitment and support of current and former ECRs whose high status in their fields is indicated by the award of competitive fellowships and research positions. These include ECR CHAWANSKY, holder of a Women Win fellowship in 2011 and who is now seconded to the UoB post of ECR Ambassador; ROSS now has a joint part-time appointment with UoB and the EIS as Head of Physiology; ECR DOIDGE was awarded funding (€9k) from the Union of European Football Associations (UEFA) research grant programme for a study of fan anti-racism activism, one of only five projects selected for funding across Europe in 2013–14.

Researcher development and concordat implementation: The achievement of our 2011–14 research objective to support proactively the development of ECRs and mid-career researchers to produce excellent outputs is evidenced by the outputs of ECRs shaping their research fields (CHAWANSKY and DOIDGE), and influential books produced after targeted sabbaticals by mid-career researchers who have a major influence on their research fields, including: WHEATON, *The cultural politics of lifestyle sports*, BURDSEY, ed., *Race, ethnicity and football issues*, and;

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BENSON, ed., *Volunteer tourism: theory framework to practical applications*. Career development for all researchers has been strengthened by a series of new SaSM and University schemes instigated in the census period to produce high quality research. The ethos and values of SaSM's commitment to researcher development is guided by the university's Concordat Action Plan which gained the European HR Excellence in Research Award in 2012. Since 2011, a major strategic university investment of £7.2m has focused on initiatives for researcher development in order to deliver the action plan. In particular, staff in SaSM, particularly mid-career researchers, have benefited from a university Research Sabbatical Scheme that has, to date, made 120 awards. SaSM has received funding of £335k from the scheme to support 21 periods of sabbatical leave; it has matched this with a further £100k investment made through the RGC in four school-based sabbaticals. Outputs from the sabbaticals include 32 journal articles, a documentary film for the 'Justin' anti-homophobia in football campaign, four edited collections, and six monographs.

Initiatives developed in SaSM have also contributed to researcher development. A school 'Climbing the Summit' Research Excellence Fund allocated £250k during the census period, targeted on early and mid-career researchers. These funds supported research leading to BENSON's journal outputs on volunteer tourism and MAXWELL's research on heat shock. SaSM also enhances researcher development by providing support for visiting researchers, who collaborate with staff, including Boykoff Pacific University, USA, and Thorpe, a Leverhulme Visiting Fellow from Waikato New Zealand. An indication of the success of researcher development linked to these various schemes and the roll-out of the Concordat Action Plan in the university is provided by the 2013 Careers in Research Online Survey (CROS) showing that 91% of researchers indicate they are integrated into the research community compared to 78% nationally and 64% of researchers engage with policy-makers and end-users compared to 30% nationally.

Diversity and equality: The university's Equalities and Diversity policy aims to promote fairness and consistency in the recruitment and progression of research staff and, in 2013, the university was awarded the Athena SWAN Bronze Award. The University policy is augmented by researchers who are experienced in equality and diversity issues in sport and tourism (eg BURDSEY, CAUDWELL, NOVELLI and WHEATON). The combination of research interests and organisational practices in SaSM has underpinned training for all staff on equality and diversity through online and face-to-face provisions. Of the 24 headcount staff submitted to REF2014, 23 of them hold permanent contracts. SaSM and the university have instigated new schemes to ensure equality of researcher development for ECRs. ROSS on a part-time contract and ECR CHAWANSKY were each awarded £10k research funds under the university's Rising Stars incentive scheme that is specifically for ECRs and the university also organises an annual *Future's Bright* conference for ECRs.

c. II. Research students

The Brighton Doctoral College (BDC): The university has taken steps to enhance the experience of research students, which underpins the delivery of our 2011–14 research objective of developing the next generation of researchers. All PGRs are now based within the BDC, which was established in 2011 under the leadership of a new Dean who is responsible for postgraduate research. A recent QAA report (March, 2013) noted of the BDC '*since its establishment the trajectory of almost all success indicators has been upward.*' Its core work is to:

- oversee the application-to-graduation process for all PhD students
- arrange compulsory formal training for all new students via the university's Vitae Researcher Development Framework (RDF)
- provide a training-needs-analysis to establish each student's skills profile that is then mapped against the RDF

In addition, attendance at the BDC's annual PGR conference is a requirement for SaSM students. All supervisors undergo dedicated training, including equalities and diversity training, prior to joining the approved register and this must be refreshed every five years. Supervision is complemented by a series of checkpoints following the BDC procedures, ensuring that satisfactory progress is taking place and the supervisory team is fulfilling its responsibilities.

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Checkpoints include initial research plan approval, a series of annual progression reviews and a thesis completion plan. A Director of Postgraduate Studies and an administrator oversee BDC procedures for all PhD students on the university’s Eastbourne campus where SaSM is based.

The SaSM PGR environment: SaSM has built a stable PGR community underpinned by support from RGC and BDC initiatives.

Doctoral registrations over the census period in FTE:

2008/9 17.06	2009/10 20.33	2010/11 20.24	2011/12 24.04	2012-13 25.02
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As the above table indicates, enrolled PGR registrations related to SaSM were 25.02 in 2012–13, an increase of nearly 50% compared to 2008. Numbers of PGR awards over the census period were 22.5 compared to 21 in the longer RAE2008 period. The achievements of PGRs have been recognised by an award from the Endocrine Society prize (2011) to a PGR student for their research, and a PGR student being selected to join the Caudwell Everest extreme, as research physiologist (2008). In 2012, a competitive allocation process for University PGR studentships recognised the increase in the quality of students in SaSM and invested £256k in four full-time doctoral studentships for excellent candidates recruited through a high-profile campaign. Up to £1,200 is available to all PGRs over the period of study from a new ring-fenced PGR Conference Support Fund established in 2012 with matched funding from the BDC and SaSM.

Three competitive full-time studentships/scholarships have been obtained from the EIS, ESRC and the Savoy Trust, all of which have impact goals highlighting routes to impact amongst PGRs. Laboratory based research students are inducted into specialist teams within the scientific environment, and research collaborations in sport science with University College London, the University of Nottingham and of Bedfordshire have allowed PGRs to engage with other university laboratories and access specialist equipment. These collaborations have successfully led to peer-reviewed publications. RGC-hosted research seminars and masterclasses integrate PGR and staff development and since 2008, over 90 seminars have included contributions from leading scholars from the UK and abroad. A distinctive aspect of the RGC’s activities has been the £1,700 pa funding for masterclasses, in which world-leading specialists have engaged with selected researchers and students. Masterclass visiting scholars have included Gumbrecht, ‘Cultural Presence’ (2011); Ritzer, ‘McDonaldization’ (2012), and; Wegner Community of Practice as ‘Social Learning’ (2013).

d. Income, infrastructure and facilities

Research funding strategic support: The development of the University’s research infrastructure over the census period has included strategic initiatives to advance high-quality research by systematically improving the quality control of grant applications. The university’s expanded central Research Office administers the new Grant Support Panel (comprising RCUK grant panel members providing feedback to ensure the quality of applications), enhanced University research grants and an expanded post-grant support team. SaSM has a dedicated business development manager (BDM), part of the university’s Economic and Social Engagement (EASE) team, who works with researchers to support knowledge exchange. These strategic support initiatives have underpinned SaSM’s achievement of our 2011–14 strategic objective to improve our performance in winning research income, which grew to circa. £1m accompanied by an additional £1.5m non-R income from economic and social engagement activities with industry and NGOs.

Research funding strategy: In keeping with the SaSM research mission, funding bids have targeted sources that facilitate deep engagement with partners and user communities to produce research that has impact on policy and practice. Three AHRC Connected Communities programme grants have led to a five-year process of interactions by RAVENSCROFT and GILCHRIST with community partners for research into leisure inequalities linked to disability, ethnicity and sexuality. Funding to undertake research linked to user constituencies has also been gained from: public national bodies (the Environment Agency and the Gambia Ministry of Tourism and Culture); charities (the Ramblers’ Association and the Football Foundation), and; international bodies (EU, UNESCO, UNWTO), the Commonwealth Secretariat and the World Bank). Six Knowledge Transfer Partnerships (KTPs) funded by the Technology Strategy Board

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(TSB) and ESRC in the census period which involve both industrial and third sector partners, all received the highest 'A' grade on completion, reflecting the strength of their collaborative research.

To support the production of multidisciplinary research within each of the two research groups, the income strategy has targeted funding through involvement in international multidisciplinary consortia led by other partners. These included €490k from the EU in partnership with the British Council and the German Sports University, to support the Football4Peace project (REF3b [1]). RAVENSCROFT has linked his research in leisure and water pollution to the work of microbiologists in the university and acts as the social science lead on the EU Interreg IVA programme projects Aquamanche (€2.9m) and Riskmanche (€4.5m), both led by the university to deliver new knowledge to improve water quality and related policies. PITSILADIS is involved in funded research that cuts across science and social science, and is a founding member of a European network resulting from the €15m EU FP6 project IDEFICS (Identification and prevention of Dietary - and lifestyle - induced health Effects In Children and infantS).

Infrastructure and equipment: Our 2011–14 research objective to invest in advanced research facilities and equipment has been achieved to the benefit of researchers in all areas of activity. The research environment in the new school has been enhanced by £90k investment in creating a new purpose-designed and dedicated space for the RGC that provides study space for PGRs, researchers and administrators. Social science research has received a focused investment of £40k in a new digital research and presentation suite to support qualitative data collection through visual methods.

The excellence of sport science research has been strengthened by continued investment in well-equipped specialist laboratories, accredited by the British Association of Sport and Exercise Science (BASES). These include the rare combination of purpose-built environmental and hypoxic chambers, based on an investment of £139k, that simulate extreme thermal and altitude conditions and are each large enough to accommodate multiple ergometers and several people at one time. The laboratories have received £750k of university investment for a new well-being and performance centre used to deliver and evaluate the efficacy of exercise training and weight-loss programmes. The laboratories and performance centre are used by the school's Sport and Exercise Science Consultancy Unit for research to inform research-led consultancy for national governing bodies and EIS preparing athletes for the Olympic and Paralympic Games. The advanced nature of the equipment has enabled SaSM researchers (CARTER) to establish a spin-off company, PBScience, which undertakes consultancy linked to the laboratories. Capital equipment investment to the laboratories has been over £500k in the last five years, which includes analytical equipment to enable the analysis of blood gases and ion concentrations (£110k). Sport and exercise science research has been advanced by the investment in peripheral nerve and transcranial magnetic stimulation, Con-Trex multi-joint and linear leg press isokinetic dynamometry, swim bench for laboratory based assessment of swimming research, Doppler Ultrasound for cerebral and tissue regional blood flow and ultrasound with elastography capability for non-invasive measures of tissue repair and damage. In collaboration with the EIS, the laboratories use the latest 'optimised CO-rebreathing method' for the measurement of haemoglobin mass amongst endurance athletes and to evaluate the effects of hypoxic exposure. The quality of the laboratories will be enhanced further by the recently commissioned setting up of a £145k purpose-built state-of-the-art WADA 'polyomics' laboratory (including DNA/RNA Biobank), to be managed by PITSILADIS. In addition, WATT and PITSILADIS are lead researchers in the Brighton Centre for Regenerative Medicine established in 2013 in collaboration with the Brighton and Sussex Medical School. The centre, including the SaSM laboratories, has received £350k of funding from the University for capital equipment and two studentships each year in 2013 and 2014. One of the first studentships is based in SaSM supervised by WATT.

e. Collaboration and contribution to the discipline or research base

Leadership and contribution to the research base: The continued delivery of SaSM's research mission has involved researchers at all career levels contributing to the research base through academic leadership roles, including being advisors on professional and expert bodies, editors of leading journals, visiting professors and keynote speakers at conferences. These scholarly roles enrich the research base and also strengthen the research in SaSM by enabling

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the development of new ideas, and partnerships that inform decision making by the RGC such as investment in equipment (eg the WADA laboratory) and conference support (eg agenda-shaping events held at Brighton; see below). Leadership roles during the census period include:

Advisors in professional and expert bodies:

- non-executive board member and chair of the Technical Advisory Group for the EIS (DOUST); member of Department of Culture, Media and Sport Science Research Advisory Committee (DOUST); expert advisor to The World Bank, Africa Region (NOVELLI)
- expert advisor to the Cold War Museum, Washington, DC (NAURIGHT)
- member of Scientific Commission of FIMS and member of WADA List Expert Group (PITSILADIS); expert advisor to National Institute for Health Research (RAVENSROFT)
- expert advisor to the International Paralympic Committee and Arthritis UK Centre for Sport and Exercise (WEBBORN).

Leadership during early career: Founding Co-convenor, Political Studies Association Sport and Politics Study Group (GILCHRIST); ECR Convenor, British Sociological Association (DOIDGE).

Journal editorships: *Tourism and Hospitality Research* (ed. NOVELLI 2013–); *Leisure Studies* (ed. RAVENSROFT (2007–2010), CAUDWELL (2012–)); *Journal of Policy Research in Tourism Leisure and Events* (ed. RAVENSROFT 2008–); *International Review for the Sociology of Sport* (ed. SUGDEN 2006–2012); *Tourism and Hospitality Planning and Development* (Africa regional ed. NOVELLI 2012–); *Amino Acids* (asst.ed. WATT 2008–2011), *the Journal of Amino Acids* (asst.ed. WATT 2010–); *Physiology Journal* (asst.ed. WATT 2012–); *British Journal of Sports Medicine* (asst.ed. WEBBORN).

Keynote and invited lectures: SaSM researchers have delivered over 70 such lectures in the census period, including: Africa Travel Association Annual Conference (NOVELLI); Annual Meeting of American College of Sports Medicine (PITSILADIS, WEBBORN, WATT); European Association of Sport Management (NAURIGHT); European College of Sport Science Annual Congress (PITSILADIS); International Sport and Peace Forum, Sochi, Russia (SUGDEN); French National Institute of Sport (MAXWELL); Japan Foundation/Tokyo 2020 Bid Committee International Seminar on the Olympics (TOMLINSON); Leisure Studies Association – Annual Conference (RAVENSROFT, WHEATON).

Visiting and honorary professorships: Researchers hold visiting honorary professorships at the Universities of: Aarhus, Denmark; Addis Ababa, Ethiopia; George Mason, USA; George Washington, USA; Glasgow (College of Medicine), UK; Moi Eldoret, Kenya; New York, USA; UTECH Kingston, Jamaica; West Indies, Barbados.

Contributions to disciplinary and interdisciplinary research: Support is provided for researchers at all career stages to contribute to the vitality and development of their fields. The two SaSM research groups are based on a strong multidisciplinary ethos that is strengthened through publishing and networking activities outside the university. For example, PITSILADIS's co-authors on high-quality journal publications are from a range of disciplines, including sports coaching and a multi-disciplinary paper won a 2012 European Athletics Innovation Award. Involvement in multidisciplinary AHRC-funded networks includes: TOMLINSON with historians from Cambridge in the *Sport in Modern Europe* network, and; WHEATON with arts and humanities scholars in the network on *Culture to Peak Performance in Sport, Arts and Work*. NAURIGHT works with humanities researchers as part of the Woodrow Wilson International Centre Project on the Cold War and Sport.

In sport science, PITSILADIS is a principal investigator in the GAMES International Consortium Project (Genomic Variants Associated with Elite Endurance Athlete Status), which includes a network of leading international sport and exercise scientists such as Bouchard (USA), North (Australia) and Lucia (Spain). DEKERLE's research is enhanced by being invited to collaborate with swimming federations in France and Brazil.

We have encouraged researchers to contribute their knowledge and expertise to prestigious peer-review processes, and grant awarding panels. Researchers are members of grant-awarding panels for AHRC, BBSRC, ESRC, the Board of Science for Global Development; Hungarian Scientific Research Fund, and; Sports Council Wales. The quality of research at UoB is also enhanced by the knowledge and experience researchers gained from being members of over 20

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editorial boards, mainly for interdisciplinary journals. UoB researchers make contributions to learned societies and conference organisation as follows.

Learned societies: Association for Tourism and Leisure Education, Founding Chair, Volunteer Tourism Research Group (BENSON); Leisure Studies Publications Officer (CAUDWELL); Chair of BASES (DOUST); Fellow of the American College of Sports Medicine (PITSILADIS, WEBBORN); Academician of the Academy of Social Sciences (UK) (TOMLINSON).

Conference organisation led by UoB:

- 2011: The International Sociology of Sport Association Conference, *The winds of change*, Havana, Cuba. (T. CARTER – UoB organised jointly with the Cuban authorities).
- 2012: The Pre-Olympic Conference, International Council of Sport Science and Physical Education Annual International Convention on Science, Education and Medicine in Sport, Glasgow, four science and social science specialist main-programme sessions (two funded by BASES), organised by UoB researchers (SUGDEN, ROSS, MAXWELL, SMEETON).
- 2012: Centro Nazionale delle Ricerche (CNR-Italian National Research Council) *Competition and Innovation in Tourism: New Challenges in an Uncertain Environment*, Naples, (NOVELLI).
- 2012: *Sport and the Global South II*, held at George Mason University, USA (NAURIGHT).
- 2013: *Sport Leisure and Social Justice*, Conference hosted at the University of Brighton, in collaboration with the British Sociological Association and Political Studies Association.

RGC funding supported: with the University of Kent, staging the British Sociological Association Postgraduate Forum in 2011; hosting the British Sociological Association Sport Study Group postgraduate event in 2009, and; holding BASES-affiliated postgraduate workshops.

Collaboration and networks: Involvement in national and international collaborations is central to the SaSM mission as this allows researchers to address societal challenges and engage with key user communities. Networks where UoB researchers play leadership roles that have been fundamental to linking research to social justice include: Women Win, The Justin Campaign, PeacePlayers International-Cyprus (BURDSEY, CAUDWELL, CHAWANSKY, WHEATON). WATT has been recruited to the International Institute for Collaborative Cell Biology and Biochemistry network, supporting research in developing countries. PITSILADIS is a founding member of the 'International Centre for East African Running Science' (ICEARS), a virtual multidisciplinary research centre investigating the success of east African distance runners, that maintains the largest-known DNA biobank from world-class athletes from a variety of countries. Collaborative research involving a focus on social justice has been funded by £200k of ESRC and TSB KTPs to collaborate with the Pestalozzi International Village Trust and hospice charities.

Collaborations allow researchers to benefit from gaining international PhD supervision and there are currently PhD supervisors to students based in Barbados, Estonia, Ethiopia, Kenya, Jamaica and the Netherlands. Collaborations with industry and professional service providers involving the School's Sport and Exercise Science Consultancy Unit and PB Science provide research informed services to athletes, coaches and industry, especially in relation to environmental physiology. Partly as a result of successful projects linked to the Unit, MAXWELL and ROSS are both part of the EIS 'Rio 2016 think tank'. Links to end users through the Unit have informed SaSM's approach to developing employability opportunities and collaborative arrangements for PhD students as clients provide work experience.

Our collaborative, networked, approach has delivered insights that challenge orthodoxies on racism and sexism in sport and society (NAURIGHT, BURDSEY, WHEATON), inequalities in tourism and sport, in diverse locations, including Africa and Latin America (CARTER, MERKEL, NAURIGHT, NOVELLI) and unprecedented access to material on the role of the state in sport in North Korea (MERKEL).