

Institution: The University of Wolverhampton

Unit of Assessment: UOA 26: Sports-Related Studies

a. Overview

The University has strategically concentrated research funding into areas of importance to its course portfolio, and areas of demonstrable strength in research activity. The delivery of this strategy has been facilitated by the formation of a limited number of Research Institutes and Centres across the University. The purpose of these are to provide a platform for the promotion of high quality research in a supportive, stimulating and research-driven atmosphere that maximises the opportunities for multidisciplinary collaboration. The Research Centre for Sport, Exercise and Performance (RCSEP) is located within the School of Sport, Performing Arts and Leisure. There are two research clusters within RCSEP, a Physiology, Performance and Health (led by Professor Nevill) and a Social Science research cluster (led by Professor Lane) both being aligned to research strengths and local, national and international engagement.

The two research clusters contain staff from two Departments in the School (Department of Sport and Physical Activity; and Department of Leisure). Within each cluster, there are six broad areas of investigation, three within the Social Science Cluster (SSC); a) Applied Psychology and Coaching, b) Leisure Industries, and c) Sport Culture and Physical Education, and three within the Physiology Performance and Health Research Cluster (PPH); a) Dance Medicine and Science, b) Exercise and Health, and c) Sport Performance.

RCSEP has three sub-groups that meet monthly i) the Research Committee and Student Management Board that monitor progress towards goals outlined in the School Research Strategy and reports to the University Research Committee ii) the Research Ethics Committee that reports to the University Ethics Committee and iii) the Readers/Professors group that discuss strategic research issues and future policy.

b. Research strategy

The aims of the School Research Strategy 2009-2013 were grouped into two main foci:

- i) Research Depth:
 - To optimise the percentage of staff submitting to the REF (RAE 2008, 5 staff were submitted).
 - To produce research outputs commensurate with submission to the REF which consider potential end-user impact.
 - To increase research income.
 - To pursue strategic collaborative alliances with reputable institutions external to the University.
- ii) Research Breadth:
 - To encourage staff towards PhD completion (including PhD by publication).
 - To provide a buoyant environment for research students and staff alike.
 - To articulate clearly the School research base through the effective formation and re-shaping of its research clusters.
 - Enhance a culture of research activity which underpins and informs teaching.

RCSEP strategy outcomes since RAE (2008)

Research Depth

- There has been an 80% increase in staff submission to the REF (from 5 to 9 staff)
- There has been an increased number and enhanced quality of REF returnable outputs as evidenced in section 2. There has also been a demonstrable increase in the achievement of end user impact (see section 3).
- Research income has more than doubled over that accrued in the years preceding 2008. RCSEP have been successful in securing Research Council Funding and EU grants (E.g. ESRC, MRC, FP7, Marie-Curie International Research Staff Exchange Scheme).
- There has been an increase in collaborations with International partners including academic (e.g., University of Porto, Institute of Arts, Netherlands), and non-academic Institutions

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(e.g., BBC Lab UK, MoD, PGMOL).

- Consultancy opportunities have increased, for example, this has led to postgraduate opportunities and bursary funded internships with Walsall Football Club (£7K) and knowledge exchange and enterprise networks with Action Heart and the NHS (£11k).
- RCSEP have obtained a great deal of support in-kind since 2008 in collaboration with organisations, end users and colleagues external to the university. For example, the equivalent advertising value of media engagement was over one million pounds in 2012 alone (Olympic year).
- The identity of RCSEP and its associated clusters and sub-clusters has been strengthened inwardly via formal meetings and focussed collaborations, and outwardly by the redevelopment of a website that reflects the RCSEP structure and research foci.
- We have extensive collaborations with Universities renowned for sporting expertise including Loughborough, Birmingham and Liverpool John Moores. We have sought to strengthen collaborations by appointing Visiting Professors including Marie Murphy, Ken Green and Tom Baum.

Research Breadth

- Sixty-six percent of staff are currently completing/and or studying for a PhD (23 staff).
- Research facilities have benefitted from significant investment. Developments include the provision of dedicated research space for PhD students, new research facilities (e.g., Biomechanics lab, DXA machine) and the appointment of new Senior Research Staff (Readers (2), Professors (1) and Visiting Professors (3)).
- Research opportunities that have stemmed from the grants mentioned above have helped support staff, post-doctoral research fellows, and PhD students. In 2012, a PhD student attended the World Lacrosse Championships to collect data on emotion regulation among officials. This project was facilitated by the Federation of International Lacrosse officiating section. In 2008, 3 PhD students collected data on the Ride Across America project, a project funded through collaborations with Liverpool John Moores University. Such examples offer instances where support in-kind from organisations and end users enabled impactful research to take place.

Five year plan for research objectives, activities and monitoring

Our current strategy seeks to build on prior achievements and will continue to promote behavioural changes that improve health and well-being in a range of target populations. Our strategic priorities are to:

1. Develop new 'areas of research excellence' and build 'cross disciplinary research'.

The establishment of a new Faculty of Education, Health and Well-being offers new opportunities for cross discipline research across the full range of research areas described in the clusters above. The University has committed to a £6 million research investment strategy. Reflecting national and international trends for growing areas of research, this investment will fund a new RCSEP professorial post in Genomics and Physical Activity. The post will allow new research opportunities in these areas. Furthermore, in building upon the purchase of DXA facilities and associated investments in biomechanics equipment, RCSEP have been successful in securing internal funds to enable the appointment of a Radiographer to support new research opportunities. Further developments include the establishment of a new Institute of Sport and a [British Judo Centre of Excellence](#) both now being based at the Walsall Campus. These now provide new valuable opportunities for research.

2. Increase RCSEP's European collaborations. The intention is to increase the number of successful bids to funding bodies that have an industrial focus, such as Marie Curie. This will be facilitated by the recent opening of a research office based in Brussels, and the appointment of a European and Research Development Manager within the University. These new developments have provided an opportunity for RCSEP to develop, in consultation with the University Project Support Office, a new University wide research leadership programme intended to increase successful EU grant applications. RCSEP has started to make some progress towards this priority through the successful achievement of a number of awards due to commence in 2014, which includes two FP7 International Research Staff Exchange Schemes (U-GENE €114,000; FUEGO

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€134,000) and a Marie Curie post-doc fellowship (FFMASI €300,000).

3. *Support and grow the research student community.* RCSEP aims to increase its postgraduate research community to 25 by 2017 and provide a vibrant research environment with the support of facilities such as the purpose built postgraduate room in the new 12 million pound Performance Hub building. This will be achieved in part through the provision of PhD bursaries through initiatives outlined in section cii.

4. *To promote equality and diversity in research.* A key research performance indicator achieved in September 2013 was the Athena Swan Bronze Institutional Award. RCSEP plans to use this as a foundation to gain a Silver Department award in sport science. RCSEP is committed to equality of research opportunities, working towards and attaining a department award would provide external and objective recognition of this research objective.

5. *To continue to develop staff at all levels to increase depth and breadth of research.* RCSEP will continue to work towards its target to support staff in the studying and completion of a doctoral qualification, detailed in our staffing strategy below.

In summary, RCSEP will continue to undertake high quality research with end-user applicability at a national and international level. This aim will be facilitated by continued engagement with policy makers and specific focus groups, and by developing multidisciplinary collaborations with external organisations. Our impact strategy will be based on raising awareness of research findings from peer reviewed studies and exploring ways in which these findings can transfer to practice with end-users.

The monitoring of these research objectives and activities will occur via a combination of means that include mass media exposure (monitored by the University's Marketing and Communications department); staff research career progressions, including PhD completions; and end-user feedback. The pursuit of end user feedback will enable RCSEP to monitor and further strengthen existing relationships with key stakeholders in addition to forging new partnerships.

c. People, including:

i. Staffing strategy and staff development

In May 2012 the University received the European Commission HR Excellence in Research Award that incorporates the Concordat to Support the Career Development of Researchers acknowledging alignment with the principles of the European Charter for Researchers and Code of Conduct for their Recruitment. The University has developed a new strategic research plan that runs from 2012 to 2017. This plan emphasises the central role research plays in underpinning the academic and business engagement activities of the university. Given the value placed upon research by the University, supporting research careers amongst staff is a fundamental and on-going objective.

The University research strategy presents open and transparent opportunities to promote research-focussed staff. There is an annual call for internal Readership and Professorial promotions. This has resulted in one successful professorial appointment and two successful Readership promotions for RCSEP during the REF assessment period. The University research strategy also presents opportunities for early career researchers to be funded through an award scheme which is open to any staff member who has recently completed their PhD. Recipients of the Early Researcher Award Scheme (ERAS) receive financial support for research pursuits and guidance from a mentor. Two members of staff entered within unit of assessment 26 have received an ERAS award. In addition to these opportunities, the School Reader/Professorial group promote an 'Aspiring Reader' programme to encourage research active staff to apply for promotion.

RCSEP set a target of having 75% of staff holding or studying at doctorate level by 2017 in order to build research capacity. At present, we have achieved 66% towards this target with 13 RCSEP academic staff members holding doctorates, and 8 members of staff studying at doctorate level. Staff are also encouraged to consider a PhD by publication and are supported in a similar way to a conventional PhD student. Within the REF assessment period, 4 members of staff completed

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PhDs, 2 conventional PhDs and 2 by publication. Two further staff are enrolled on the PhD by publication route.

Irrespective of the stage of research career, RCSEP supports staff in attending conferences and Continuing Professional Development (CPD) events. Normally, a member of staff will be presenting a paper and produce a journal article from the work presented. During the REF assessment period staff have been funded to attend and present at a range of national and international conferences (e.g., IADMS, British Academy Management, BASES, ACSM and the ECSS). Staff have also taken up roles on conference organising committees, for example the International Convention on Science, Education and Medicine in Sport (ICSEMIS) pre-Olympic Conference (2012) and the International Association for Dance Medicine and Science Annual Conference (2010). Staff are also on the respective organising committees of other following conferences: e.g. International Association of Sport Kinetics (2013) and International Symposium of Performance Science (2013).

RCSEP organises a number of internal research CPD events, e.g., research seminars, an annual research conference, quarterly cluster meetings, and monthly sub-cluster meetings. At these events, staff present work, propose new research ideas including exploring potential collaborations with end-users, professional organisations, and other academics. Esteemed researchers have presented guest lectures at these events. Past presenters include Dr David Stensel (Loughborough University) and Professor Marie Murphy (Ulster University).

Further developmental opportunities have been provided by collaborations with academics, professional bodies and end users. For example, staff attended research seminars at the Universities of Oxford, Manchester and Sheffield. Professor Nevill also presented the Bradford Hill research seminar at the Institute of Public Health in Cambridge in the June 2011. In addition to research development and dissemination events, we endeavour to provide opportunities for the practical application and public uptake of key research findings. For example, a runners workshop (legacy funded) was organised in which 8 staff and 10 students attended. Other end-user events include work undertaken with sporting organisations (British Cycling, Sports Officials UK, & England Netball), dance organisations (Royal Ballet, Birmingham Royal Ballet, English National Ballet, New York City Ballet Company) and presentations at NHS conferences.

The University and RCSEP are committed to equality of research opportunity. As part of this commitment RCSEP plans to attain a Silver Athena Swan Department award in sport science in order to support the progression and achievement of female research staff.

ii. Research students

RCSEP currently has 15 PhD students. RCSEP aims to increase the number of PhD students to 25 by 2017. It aims to achieve this by the following means:

- The introduction (in 2011) of an MRes portfolio provides a pool of potential PhD candidates.
- Competitive Intern bursaries in collaboration with Walsall, Wolverhampton, Aston Villa, Stoke and West Bromwich football clubs.
- Continue to secure funds from the University to support PhD bursaries. This will include the pursuit of an Athena Swan bursary to assist in the objective of attaining a Silver Athena Swan Department award.
- To support staff to complete a PhD.
- Continue to seek funding from external agencies to support PhD bursaries such as the European Marie Curie Initial Training Network grant scheme application which will help grow our postgraduate research capacity
- To pilot a research satellite centre in the USA to offer opportunities to study for a PhD in Dance Science research following the successful recruitment of a number of research students from North America.

PhD students are key members of the research environment and form part of the existing research clusters and sub-clusters. PhD students are located in the purpose built postgraduate room in the new Performance Hub building. In addition, a new "Research Hub", has recently been opened on

the City Campus of the university. This new facility provides meeting rooms for student / supervisor meetings, business / researcher meetings, for visitor / researcher meetings, and for research students to discuss research.

The progress of PhD students is monitored monthly at RCSEP meetings. RCSEP receives a written report on progress from the supervisory team (each student has 3 supervisors). The supervisory process is quality assured on an annual basis. In addition new staff undergo a programme of research supervisor training, and established supervisors are required to undergo periodic “brush up” sessions, provided by the University Research Hub. The provision of three supervisors within a supervisory team provides opportunities for less experienced members of staff to develop and hone their supervisory skills. Each supervisory team conducts a skills audit during the induction of the PhD student culminating in the production of a research plan of action. As would be expected, the plan of action is revised in light of new findings, but monitoring of progress and developing strategies to deliver these plans is central to the supervisory process. PhD students have access to a post-graduate tutor who is a source of additional support, particularly if a student has supervisory issues or issues that he or she would not wish to discuss with their supervisory team. One postgraduate research student representatives sits on the monthly RCSEP Committee. Further opportunities for feedback include regular meetings between postgraduate research students and the Associate Dean for Research. The Associate Dean for Research is a member of the University Concordat Group which is proactive in supporting the career development of researchers. Key issues are taken to the University Concordat committee.

PhD students are encouraged to publish work as they proceed through their studies. PhD students have equal access to staff development opportunities (described earlier). However, additional employability opportunities are provided for the postgraduate community. For example, we support students to attend research conferences and encourage them to attend the Vitae student researcher events. More recently, PhD students have had the opportunity to pilot the Vitae Researcher Development Framework. For those wishing to pursue a career in Higher Education, students take up the opportunity to undertake visiting lecturer work. PhD students also have access to research student skills workshops that are organised through the Research Hub within the University. Such events not only present opportunities to develop research skills, but also afford feedback resulting from academic discourse and collaborations. Since 2008, 51 journal articles, 71 conferences presentations, 10 professional papers, and 5 book chapters have been published with students being contributing authors.

In conjunction with academic support, PhD students are also supported in terms of professional development. For example, since 2008 financial support has been offered to students working towards BASES accreditation.

d. Income, infrastructure and facilities

The majority of RCSEP'S external research income has been derived from Research Council funding. As mentioned earlier, the research centre has seen a two fold increase in income during the REF assessment period, amounting to nearly £800,000. Funding has been competitively won from research councils including: Economic and Social Research Council (ESRC: £400k), the Arts and Humanities Research Council (AHRC: £91k 2004-2009) and the Medical Research Council (MRC: £28k). The procurement of funding helps to facilitate our widespread collaborative networks and emphasise our growing international ambitions.

In May 2013 the University opened the “Research Hub” on the City Campus. This facility is intended to support a sustainable research environment across the University. It has brought together the University Research Policy Unit (RPU) and the Project Support Office (PSO) thereby helping to co-ordinate activities that provide training and support for RCSEP staff, postgraduate research students and Research Librarians. The Research Hub is designed to maximise contact and interaction between research students, staff researchers and support services to facilitate the undertaking of research, and research funding initiatives within the University. It provides support for established researchers who expect high standards of support for research, and also provides an environment to mentor and support young researchers trying to establish a research career and secure research funding.

The RPU develops, implements and monitors the University's research strategy. It also has responsibility for research ethics, research governance and reporting of research-related management information, and the production and dissemination of institutional research publications and other communications. The PSO provides expertise and support for the development and submission of research grants with an emphasis on European funding. It also provides support for post-contract management of projects including the University Finance Division around grant costing, financial monitoring and management of research awards. The PSO continues to work towards providing enhanced opportunities to increase its presence in Europe and opened an office in Brussels in May 2013 to facilitate this.

The University recognises the need to support the research endeavours of staff and the postgraduate community. The recently opened Performance Hub building, an £18 million investment, is home to the School of Sport, Performing Arts and Leisure. There has also been a substantial investment in scientific equipment to aid research across the clusters. RCSEP spent £100,000 of REF capital funds to build a social science laboratory. The School has also invested £400,000 to develop a Health Scan suite that includes a bone density scanner (DXA) to support research within the Physiology, Performance and Health cluster. Facilities such as these provide a contemporary research environment for RCSEP staff and postgraduate students.

e. Collaboration and contribution to the discipline or research base

RCSEP has developed and nurtured an extensive network of collaborators. Our objective is to build upon these successes by continuing strategic collaborations that have resulted from funding opportunities and support in-kind. For instance, RCSEP have undertaken collaborations with the National Institute of Dance Medicine and Science, Birmingham Royal Ballet, Royal National Orthopaedic Hospital (RNOH), and Dudley Group of Hospitals. Grant collaborations resulting from such partnerships include the recent MRC strategic grant involving Birmingham University and Action Heart working on a National Prevention Research Initiative, the Marie Curie IRSES, which is supporting the development of a network of excellence for research on genetic predisposition to cardio-metabolic disorders and a Marie Curie ITN application involving 9 institutions across Europe. RCSEP have received a great deal of funding in-kind to support research initiatives. This includes the BBC Lab UK project "can you compete under pressure" fronted by Michael Johnson.

Professor Lane was the lead academic in this online experiment designed to examine the influence of brief interventions on performance whilst under pressure. Other publicly funded organisations that we undertake collaborative research with include **Dr Metsios'** work with the Dudley and Derby Groups of Hospitals, Sheffield Hospital, and the Royal National Orthopaedic Hospital (London University).

RCSEP have collaborated on a number of projects in order to broaden the skills base of its membership. This has involved engaging with colleagues from a number of different universities, professional organisations, and commercial organisations. Examples of collaborations with Universities include Birmingham; Brunel; George Mason, USA; Oxford; Liverpool John Moores; Loughborough; Ulster; Laurentian, Canada; Milwaukee, USA; Massey, New Zealand; University of London; Portsmouth; Porto, Portugal; Radboud, Netherlands; Sheffield; Staffordshire; Tartu, Estonia; Southern Queensland, Australia, and University of Thessaly, Greece.

RCSEP continue to seek collaborations with a number of end users. For example, **Professor Nevill** is the consultant statistician to the Surgeon General's Armed Forces Feeding Project. This research programme, led by the Institute of Naval Medicine (Alverstoke, UK), is addressing the Ministry of Defence's (MoD) tri-Service (Army, Royal Air Force, and Royal Navy) nutrition and feeding policy. This includes nutrition and feeding within military training establishments, UK-based units (in barracks), and on UK overseas operations. The statistical support of **Professor Nevill** assists in confirming the validity and reliability of the energy expenditure measurement approach, which is vital in ensuring that policy guidance is accurate and evidence-based. Further, the project team – including **Professor Nevill** – is taking existing technologies for monitoring human movement, and combining the data output of these technologies in novel ways to establish new measurement approaches for determining the energy expenditure of personnel in field settings.

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Staff act as reviewers or hold editorial positions in a range of journals. For example, **Professor Nevill** is the Editor in Chief of the Journal of Sports Sciences and also on the editorial boards of Paediatric Exercise Science and the International Journal of Performance Analysis. **Professor Lane** is Associate editor in chief and subject editor for psychology on the Journal of Sports Science & Medicine and appointed as editor for Psychology, Journal of Sports Sciences. He is also on editorial boards for Personality and Individual Differences and the Journal of Hospitality, Leisure, Sport, and Tourism Education. **Dr Biscomb** is a reviewer for the Journal of Sport Sciences and the European Physical Education Review.

Staff also sit on the editorial board of the Sport and Exercise Scientist. This is the professional journal for the British Association of Sport and Exercise Sciences (BASES). **Professor Lane**, Dr Sellars and **Dr Devonport** have served on the editorial committee, with **Professor Lane** acting as editor for 4 years.

Staff are actively involved with a number of professional, statutory and regulatory organisations associated with sport and exercise science. Dr Sellars is currently Chair of the task group appointed by BASES to nominate end-users for the REF Panel. He is also a member of a task group identifying masters equivalency for the Chartered Scientist Grandparenting Process. **Dr Devonport**, **Professor Lane**, and Dr Sellars are Health Professional Council Registered Psychologists, Chartered Psychologists by the British Psychological Society, and Accredited by BASES for scientific support. **Professor Lane** is a BPS Qualified Level 2 Assessor in the Sport and Exercise Psychology Division. **Dr Griggs** is a member of the British Educational Research Association (BERA) Special Interest Group for Physical Education. **Professor Nevill** is an established fellow of The Royal Statistical Society.

Staff has made a significant contribution to the dance science research field. **Professors Koutedakis** and **Wyon** are on the editorial board for the Journal of Dance Medicine and Science and have been on the Board of the International Association for Dance Medicine and Science (IADMS) from 2004 until now. Presently **Professor Wyon** is the Vice President/President-Elect of the Associations and Chair of its Research Committee. They also sit on the Medical Advisory Committee for Dance UK which provides direction and information to the dance profession on injury management, prevention and intervention strategies. This has led to the University of Wolverhampton being a founding partner of the National Institute of Dance Medicine and Science (NIDMS), in collaboration with the Universities of London and Birmingham.

RCSEP research has informed the work of applied sports scientists including the English Institute of Sport, GB Rowing, Department of Sports Medicine, ASPETAR; Qatar, National Sports Institute of Malaysia; Malaysia. We have provided scientific support to individuals and teams in a range of different sports and activities. Examples of organisations we have worked with include the Birmingham Royal Ballet, Centre for Health and Human Performance, 76 Harley Street, British Judo Association, England Netball, England Volleyball, English National Ballet, Rambert Dance Company, Random Dance Company, Birmingham Royal Ballet, Imperial Society for the Teachers of Dance and Royal Academy of Dance.

RCSEP members have also worked in coach-education (England Basketball Coaches Association) and with sports officials (Sports Officials UK). RCSEP has comprehensive links with a number of health and fitness organisations including the Wolverhampton Healthy Lifestyle Team.

We have research and consultancy links with a range of soccer clubs which **Cloak**, Lab Director, co-ordinates data collection opportunities. The range of clubs includes; Aston Villa, Birmingham City Ladies, Chelsea, Lincoln Ladies, Malmö, Shrewsbury Town, Swindon Town, Walsall, West Bromwich Albion and Wolverhampton Wanderer. We have also worked with soccer referees at the FA centre, Burton. We are currently working on a project campaigning against racism and homophobia in football.