

Institution: Leeds Metropolitan University (Leeds Met)

Unit of Assessment: Unit 26 – Sport and Exercise Sciences, Leisure and Tourism

a. Overview: This submission covers research undertaken within the Institute for Sport, Physical Activity and Leisure (ISPAL), led by Professor Carlton Cooke. Prior to ISPAL our research related to Unit 26 was led and coordinated through the Carnegie Research Institute. ISPAL was established in July 2012 in recognition of our quality and critical mass of researchers and comprises five designated Centres: Active Lifestyles (AL) led by Professor Jim McKenna, Diversity, Equity and Inclusion (DEI) led by Professor Anne Flintoff, Sport Coaching and Physical Education (SCOPE) led by Professor Pat Duffy, International Centre for Research in Events, Tourism and Hospitality (ICRETH) led by Professor Rhodri Thomas, and Sports Performance (SP) led by Professor Carlton Cooke. The association of staff and their submitted outputs across the Centres of ISPAL is shown in the table below, illustrating that some individuals contribute to more than one Centre, and some themes, like equity and inclusion, feature in the work of more than one Centre.

Centre	Staff (name only means all outputs in that Centre, name and number specifies outputs linked to Centre)
AL	Carless (3,4), Clements, Cooke, Duckworth, Garrard (1,2), Gately, Hind, King (1,3), Long (2), McKenna (1,2,4), Pringle, Quarmby, Sparkes (2).
DEI	Carless (2), Carrington, Coalter, Dart, Dashper, Douglas (1,4), Fitzgerald (1,3), Fletcher, Flintoff (2,3,4), Gardiner, Holland, Hylton, Lashua, Long, Norman (2,3), Ratna, Sparkes (1,3,4), Spracklen (2,3,4), Stride, Wagg, Watson.
ICRETH	Abram, Font, Hannam, Kenyon, Li, Spracklen (1), Thomas, Ziakas.
SCOPE	Abraham, Duffy, Fitzgerald (2,4), Flintoff (1), Manley, Morley, Norman (1,4), North, Piggott, Till (2,3).
SP	Backhouse, Bissas, Breen, Carless(1), Didymus, Douglas (2,3), Garrard (3,4), King (2,4), McKenna (3), Morley, O'Hara, Stanger, Till (1,4), Tucker.

AL, DEI and SP Centres were returned in RAE 2008. Feedback from RAE and the strategic plan of the University led to an expansion and enhancement of our existing structure in the current REF cycle. In forming ISPAL, the two previously separate groups for tourism located in different faculties were combined, together with groups in events and hospitality to form ICRETH, located within the Carnegie Faculty. SCOPE replaced the previous Centre for Physical Education and Sport Pedagogy, to merge our continued focus on Physical Education with the strategic development of Sport Coaching. The academic home of ISPAL is the Carnegie Faculty, but we work across the University, collaborating with researchers in all Faculties. The Institute reports directly to the Deputy Vice-Chancellor for Research and Enterprise. Centre heads report to the Head of the Institute. All the Centres are aligned to two of the three Schools within the Carnegie faculty - ICRETH is aligned to the School of Events, Tourism and Hospitality and the other Centres are aligned to the Carnegie School of Sport.

b. Research strategy

(i) Strategy Summary: ISPAL represents the strong on-going commitment of Leeds Met to high quality research and evidence-based practice across sport, physical activity and health, physical education, coaching, leisure, tourism, hospitality and events. ISPAL's strategy is to work closely and effectively with our participants, partners, collaborators, funders and clients. With them we co-produce (i) relevant research questions, agendas and research processes and (ii) meaningful outcomes and impact that are disseminated to stakeholders for societal benefit. Our Centres are permeated by the themes of physical, social and emotional health and well-being, equity and diversity and the dynamics of identity, experience and embodiment over time and in different contexts. Reflecting our concern to deliver meaningful research, ISPAL intentionally connects researchers from different disciplines and backgrounds to focus on real-world issues, from the cellular level in laboratory science through to the lived experiences of individuals and groups in their natural settings in society.

The overarching strategy of our Research Institute and its Centres aligns with theme 3 of our University Strategic Plan 2010 – 2015, namely: To be a catalyst for social and economic progress in and for our region, nationally and internationally, through research and enterprise.

(ii) Evaluation of strategies for RAE 2008 and subsequent changes. In our last RAE submission we outlined our five-year strategy to maintain Leeds Met's position as a major provider of research expertise in sports related policy, practice and performance. As planned, AL has developed a multi-dimensional model of health research to inform professionals using various

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theoretical frameworks to evaluate active living and physical activity interventions (**McKenna 1,2,4**), **case study 3 (CS3)**. In line with new directions in Public Health, our work has focused on recruiting hard-to-engage groups through innovative settings for the delivery of physical activity promotion. In collaboration with colleagues in our Health faculty, we have been researching successful interventions with men through Premier League football clubs (**Pringle 1,3**). We continue to lead in research on the treatment of obesity (**Gately 1-4, CS6**).

As planned, DEI has strengthened its multi- and inter-disciplinary work as evidenced by outputs (e.g., **Spracklen (2, history/philosophy)**; **Wagg (3, history/politics)**); and through the recruitment of new staff (e.g., Coalter, policy; Lashua, cultural studies; Sparkes, qualitative research, autobiographical and narrative studies). We have developed our theoretical analysis on inequality beyond gender, race and class to encompass sexuality (**Dashper 2; Norman 3**), disability (**Fitzgerald 1-4; Dashper 1, Sparkes 4**) and age (**Holland 4; Lashua 3**). We have also extended our conceptual frameworks to include critical theories of race (**Carrington 1,3; Hylton 1-4**), intersectionality (**Flintoff 2; Ratna 3; Watson 4**), whiteness (**Spracklen 4; Long 1**) and narrative studies of embodiment (**Sparkes 1,4**).

In Tourism our strategy was to build on our international reputation for research on cultural change and our research on business behaviour, notably in relation to responsible tourism. Changes to research leadership (Robinson to Birmingham) and a new professorial appointment (Hannam) led to a re-evaluation of direction. With the establishment of ICRETH our research agenda was extended to incorporate events and hospitality and the new tourism mobilities agenda. Our strategy has been informed by notions of 'engaged scholarship' via our strong links with professional associations, designed to offer theoretical advancement with practical impact. Our engagement with professional networks is manifest in (i) our Advisory Board, (ii) unique collaborative relationships such as an 'Institute for Travel and Tourism (ITT) Professor' (Thomas) and (iii) the number of projects supported by professional associations and others. Although we continue to offer critical perspectives on such relationships (**Thomas 2,4**) and foster lines of enquiry that illuminate highly theoretical aspects of tourism as a phenomenon (**Abram 1-4, Hannam 1-4**), our studies also offer insights that inform professional practice (**Font 1-4, Kenyon 2, and Li 1,2**).

Just after RAE 2008 Leeds Met was designated as the UK Centre of Coaching Excellence (UKCCE). This realised our strategic aim to unite our complementary strengths in elite, community and student sport. Since the announcement of the UKCCE SCOPE has capitalised on increased opportunities to contribute to policy and practice relating to national priorities. This has included work with Sports Coach UK and National Governing Bodies (NGBs), such as the British Canoe Union, the Football Association and international developments in South Africa and The Philippines. Also the International Council for Coaching Excellence, with the Global Coaching Office is now located at Leeds Met. This extensive engagement in national and international networks has led to a range of research outputs (**Abraham, Duffy, Norman, North**) and significant impact (**CS5**).

SP planned to establish new ways to use the group's facilities, equipment, methodological and theoretical advances, building on existing and establishing new academic collaborations. These developments underpin our contributions to national and international developments to benefit high performance sport. This has been achieved through our continued development of work related to carbohydrate metabolism, training, performance and supplementation, all augmented by collaborations. Access to MRI scanning has been through Professor Mike Trenell, Director of Move Lab and Professor Roy Taylor, Director of Newcastle Magnetic Resonance Centre, both at Newcastle University (e.g. **King 4**). Our collaborative work using 13-C mass isotope analysis of labelled carbohydrates has been with Professor Tom Preston, Director of the Stable Isotope Biochemistry Laboratory at the Scottish Universities Environmental Research Centre in East Kilbride (e.g. **O'Hara 3**). Our relationship with the World Anti-doping Agency (WADA) and international scholars has continued to develop, supporting the increasing impact of our work in this area during this audit period (**Backhouse 1-4, Whitaker, CS6**).

As planned in both our 2001 and 2007 RAE submissions, we have (i) increased external income, from an average of £260k per annum for RAE 2008 to £1.6million in 2012/13, (ii) expanded our vibrant research student community and (iii) improved the quantity and quality of research outputs. We intentionally increased numbers of full-time student researchers, evidenced by more PhD completions (from 22 in RAE 2008 to 47 for REF). Our extensive research activity

underpins delivery of the University strategy to increase Masters degree provision. With ISPAL as one of only three University Research Institutes and through careful succession planning regarding replacement of senior researchers, section c (i), greater numbers of staff are submitted for this audit (from 39 in RAE 2008 to 53 for REF).

Each of our Centres has strengthened existing partnerships with world leading research-intensive universities, while also cultivating new ones, e.g., Imperial College London in the UK and the University of Queensland in Australia. This has included supporting staff sabbaticals to visit institutions with appropriate expertise (e.g., Li [Early Career] extended her work on Computable General Equilibrium analysis by working with Professor Haiyen Song at Hong Kong Polytechnic University; Thomas was a visiting scholar at the Universities of Florida, Central Florida and South Carolina; Hannam has continued work with Professor John Urry at Lancaster University, UK and Professor Chris Rogerson at the University of Johannesburg, South Africa; Dashper [Early Career] collaborated with Professor Helgadóttir conducting a comparative study exploring the Landsmót in Iceland and the Icelandic Horse World Championships in Austria; **Hylton (1)** worked with the Centre for Ethnic and Racial Studies, University of Leeds, in his development of Critical Race Theory and its application to sport; **Pringle (4)** continued his work with Gilson, University of Queensland, on the International Universities Walking Project). We also brought leading international researchers to Leeds Met; for example, Davide Sterchele from University of Padua, Italy, came on a Leverhulme Fellowship secured by ISPAL, (February 2013 to 2014), investigating 'Liminality, communitas, and festivity in 'Sport for All' events'.

Other key components of our strategy were to: maintain a vibrant research culture and intellectual exchange through programmes of seminars (ISPAL runs weekly seminars supplemented by extra Centre events); conferences (e.g. hosted BASES 2009; Leisure Studies Association 2010; Council for Hospitality Management Education Annual Research 2011 conferences) and one-day events (e.g. British Educational Research Association PE and Sport Pedagogy Early Career, 2011 and four ESRC Festival of Social Science events since 2008). More public lectures and a stronger web presence are now in place, contributing to the wide dissemination of knowledge through innovative means such as sporting partnerships with NGBs, like the Rugby Football League, (RFL; **O'Hara 4, Till 1-4**), the Rugby Football Union (RFU), individual clubs (e.g. Leeds Rugby) and with publishers (e.g. Human Kinetics). Through **Backhouse's (1-4, CS6)** work on anti-doping, organisations such as WADA and the RFU (£68k) are now investing in post-doctoral fellowships to create opportunities for early career researchers, and support career pathways.

We continue to fund bursaries through links with charitable organisations and our growing network of industrial and commercial partners. An example of this success is provided by our evaluation of work using inclusive Adventure Training and Sport as vehicles for personal development and recovery with the military Wounded, Injured and Sick (WIS). Commissioned by The Royal British Legion through a 4-year £3.9 million contract beginning July 2013, this funding supports two PhD bursaries as part of £640k allocated to research. Other external match-funded PhD bursaries (£10k per year for three years) have been established with The Rugby Football League studying match officials (**O'Hara 4**), More Life to study obesity (**CS2**), the YHA to evaluate their client experiences and the British Heart Foundation to evaluate their healthy lives intervention programme. To match increased research degree activity we have trained 38 new supervisors and enrolled 19 more staff on PhDs or EdDs. Part-time fees for staff doctorates are funded through the Faculty and up to 300 hours/annum is routinely provided through work allocation to support progress with research studies.

(iii) Our main objectives and activities in research for five years following submission

Applying our strategy, we will continue to strongly focus on the co-creation and application of research to enhance the practice of sport, physical activity, leisure and tourism in an integrated way, informed by a process of engagement and empowerment with our partners. We will build on our success in attracting Research Council, EU and other prestigious funding during the next audit period (see section d (i)), including securing competitive research council funded bursaries and scholarships (see section c (ii)). By identifying themes that will dominate future agendas, we shall shape research that confirms our distinctive approach to theory, policy and practice. We aim to build our research profile around ISPAL and its Centres; we will continue to strengthen our emerging research areas, including that in sport coaching. 'Engaged scholarship' (i.e. on-going discussions with various stakeholders) will continue to underpin ISPAL's approach to developing

new research agendas and undertaking inter-disciplinary studies with international resonance and impact.

AL will continue to address two main areas of high relevance to contemporary Public Health: (i) processes of physical activity promotion and (ii) responses to physically (in)active lifestyles. Staff of the Centre will investigate unstructured lifestyle activity, formal exercise and participation in structured recreational sport to explore the processes that lead to benefit, or harm, and how these can be managed within specialist and community provision.

DEI will continue to (i) develop our multidisciplinary work including across centres, e.g., submitting joint research bids from DEI/SCOPE; (ii) further explore the experiences of marginalised groups, e.g., new migrants, looked after children and disabled people; (iii) extend our work on in/exclusion in sport and leisure spaces, e.g., racialised spaces, music and dance in urban spaces, and (iv) continue to develop theoretical and methodological contributions to the field, e.g., new feminisms; masculinities and narrative inquiry.

ICRETH will continue to focus on contemporary challenges facing businesses and policy-makers. This will encompass research to enhance the effectiveness of public policy in events, tourism and hospitality as well as critical studies of tourism mobilities and business practices. Our precise focus will be informed by continued engagement and co-creation of research with senior actors in these sectors.

SCOPE will critically examine provision and practice in sport coaching and physical education through the adoption of a life cycle approach. The Centre will: (i) produce research outputs and solutions to reflect participant need and stage of development; (ii) seek to innovate in the areas of practice, policy development and domain transfer, to inform and enhance programmes delivered at local, regional, national and international level.

SP will: (i) focus on the common intellectual, scientific, policy and practice themes which apply across sports and that unite our research interests, whether they are mono-, multi- or inter-disciplinary in nature; (ii) continue to apply our strengths in sports science disciplines across biochemistry, biomechanics, exercise physiology, sports nutrition and sports psychology, researching in either the laboratory or field as appropriate to the research focus.

The drivers and methods of monitoring attainment are common across ISPAL and its Centres. This monitoring includes the active maintenance of a vibrant supportive culture and environment. In this, research staff and Postgraduate Research (PGR) students can flourish, by: setting realistic targets for external income generation; achieving postgraduate research student completions; producing high quality research outputs and outcomes, and conducting development activities related to research and enterprise. Our targets are based on proportional contributions to annual Faculty and University targets and link to the KPIs set out in the Strategic Plan. Annually these are reviewed, revised and reported to the Faculty and to the Deputy Vice-Chancellor for Research and Enterprise, supported by six-monthly updates.

(iv) New and developing initiatives: Our commission from The Royal British Legion (TRBL) to evaluate the psychological health and well-being of military WIS attending one-week residential courses of personal development and recovery is of particular strategic importance. We are beginning to produce peer reviewed publications (**Carless 4**) from this work and have delivered several conference presentations in the UK and overseas. With more formal research evaluation of this work only beginning in 2013, peer reviewed outputs are yet to accumulate. More importantly, the impact of this work has been to assist the Ministry of Defence (MoD) and TRBL to develop and refine their bespoke courses delivered at the Battle Back Centre. Our work has focused on the production of significant improvements in positive psychological health and well-being. A substantial and persuasive evidence-base has resulted from deploying a pre-post quantitative design, supported by a qualitative narrative approach in the development phase. The results have been so compelling that the MoD have designated the course as compulsory for all British military WIS.

We have also established a stronger collaboration with the Defence Medical Services High Altitude and Hypoxia group of military medical doctors specializing in adaptations to altitude (**O'Hara 1**). This complements our work on acclimation to simulated altitude and acclimatization to terrestrial altitude in country - the focus of two research expeditions undertaken by staff and PhD students of the University to Nepal since 2009. This is a strategically important collaboration because it gives us access to a hypobaric hypoxic chamber, enabling comparison of effects achieved in our hypoxic chamber and those resulting from terrestrial altitude, which is a

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contemporary research area. Pooling resources (volunteers, equipment, transport and costs) and expertise facilitates altitude research, which would be difficult based solely on in-house resources.

(v) Identification of priority development areas: Sport Coaching is an emerging and priority development area; other Centres have a greater critical mass of experienced research staff and are more established in producing high quality peer reviewed publications and delivering research award completions. Given that our focus on sport coaching is relatively new, SCOPE needs time to establish itself at the same level as the other Centres. The work of several researchers **(Fitzgerald, Flintoff, Quarmby, Norman)** provides good examples of research that cut across DEI and SCOPE. Staff in SCOPE regularly attract external funding for evaluating and developing policy and practice in coaching and physical education. Indeed, several of these projects are leading the professional development in coaching in the UK and internationally **(Duffy, Abraham, North)**. Some SCOPE staff are currently undertaking their own PhDs, with fees paid by the Faculty; more experienced academics are supervising these staff and other PhD students. Appointing Professor Duffy, December 2009, has helped plan and implement a strategy to match the excellence in professional development with more research and evaluation contracts and outputs. The recent re-appointment of Professor Lyle (0.2 FTE) is also helping with research supervision. Alongside two further research fellows (Norman, North), a number of other staff have emerging research profiles; this should see the group well established for the next audit.

c. People, including:

(i) Staffing strategy and staff development: The University staffing policy has been reviewed during the audit period. Two changes should impact favourably on recruiting research-active colleagues. In 2010 the default became that all new academic appointments must hold a doctorate and we are returning 16 staff who were appointed under this change. In 2013 a second change was to only appoint academics as senior lecturers or above, while also retaining the default requirement for a doctoral qualification. It is too early to comment on how this will affect our research profile, but it should mean we will attract more research active staff.

As part of ISPAL's staffing strategy, and in recognition of retirements or promotions to other universities at professorial (5, with two retained as Emeritus, Scraton remaining) or reader (2) level, the University supported a recruitment drive for professors and readers. As a result we appointed the following to professor in 2012 (Coalter (external 0.2 FTE), Gately (external, re-appointed 0.2 FTE), Hannam (external), Hylton (internal), Lyle (external re-appointed, 0.2 FTE), Sparkes (external), Spracklen (internal)), in addition to Duffy (external, 2009). We also appointed four internal staff to reader in 2012 (Carless, Fitzgerald, O'Hara, Pringle). Carrington (0.2 FTE) was re-appointed and Douglas appointed (0.2 FTE) as research fellows. We are currently recruiting two more full-time research fellows associated with our work in obesity, to include contributions to a three year British Heart Foundation grant (BHF) secured in October 2013 (£200k). ISPAL, and the University remain committed to succession planning for research leadership. All staff, bar research fellows and assistants, hold permanent contracts. Fellows hold three-year fixed-term appointments, while assistants are appointed to specific research projects. A number of promotions to senior fellow (e.g., Hind), to reader (e.g., Carless) and reader to professor (2 above) have also been realised during this audit period.

In addition, we have appointed 11 early career researchers (Breen, Dashper, Didymus, Fletcher, Hargreaves, Li, Quarmby, Stride, Till, Tucker, Whitaker). Four of these staff completed their PhDs with us, and all have been supported to secure peer-reviewed outputs of at least national standing, with some of international standing. All academics can apply for funding to support their research activity, while early career researchers can apply for new researcher funding (£3k) to facilitate their development as independent researchers. Their application and project must be supported by a mentor (from our Carnegie Academic Research Mentoring (CARM) Scheme, which comprises all professors, readers and other senior research active staff). CARM is now being rolled out as good practice across the University.

There are many lines of evidence showing that equality of opportunity is being effectively promoted and delivered in arrangements for developing the research careers of full-time and part-time staff. First, all research funding within ISPAL, the Faculty and University is open to all staff, whether full-time or part-time, although some have inclusion criteria to focus funding on certain groups, e.g., new researchers. Funding is offered for (i) staff development to support research activity as appropriate to individual circumstances (e.g., part-time doctorate fees, workshop/conference attendance etc.); (ii) conference attendance (for conferences where a

separate research output will be submitted appropriate to the research experience and expertise of the individual); (iii) seeding grants (£40k per year supports new researchers (inclusion criteria apply), (iv) external bid preparation and research development (£1k limit to bid) and (v) infrastructure (£20k per year for revenue and small capital expenditure to facilitate research, e.g., specialist software licenses, facilitation of new forms of data capture). All panels considering applications and support are balanced for gender and subject area and adhere to the University's equality and diversity policy.

Second, all full-time and part-time academic and research staff undertake an annual Performance Development Review with their line manager to identify and agree individual staff development needs. This includes all research-related development, as well as use and timing of research and scholarship time (150 hours). Staff new to the University or returning to HE undergo induction at School and University level. This incorporates a review of individual research and enterprise development needs. These reviews are supported through staff development funding available from the school, Faculty, Institute and Centres. A University-wide programme of staff development workshops, which includes research-related events and courses, is open to all staff and postgraduate research award students. The research-related programme is coordinated through the University Research Office (URO). URO annually reviews feedback and accepts suggestions for new courses and workshops. Human Resources, the URO and representatives of the Research community, coordinate our implementation of the Concordat to map our support activities for the career development of researchers at all stages of their research journey from postgraduate researchers to professors.

During the audit period (2011/12) the University reviewed and modified its policy and processes for gaining ethical approval for all research from undergraduate final year research projects to staff projects. New policy and procedures were introduced in September 2012; approval processes are now initiated and managed on-line with three levels of approval; (i) local, provided by research ethics coordinators and/or research supervisors; (ii) faculty research ethics sub-committees and (iii) a University Research Ethics Sub-committee. This whole review and updating process was led by Professor Cooke, who chaired the University committee until September 2012, supported by Professor Spracklen, who chairs the Carnegie Faculty Research Ethics Sub-committee.

(ii) Research students: The Carnegie Faculty offer annually between four and six full-time research bursaries covering a tax-free stipend in line with that agreed by the funding councils and payment of full-time UK/EU fees for a period of three years. More than 75% of our bursaries are taken up by students studying within ISPAL. This has been our practice since the centenary PhD initiative in 2006/7 where our university appointed 100 PhD students as part of the celebration of one hundred years of HE at our Headingley campus (25 of which studied within our five research Centres). Currently, match-funded PhD bursaries are offered by the office of the Deputy Vice-Chancellor for Research and Enterprise, with five secured by ISPAL in 2012/13. Funding was matched by the RFL, YHA, More Life and TRBL (2). Four have been agreed for 2013/14 with the BHF and Leeds Rugby (3) and our aim is to attract fully funded research council studentships in the next audit period. In addition, the University supports the appointment of Graduate Teaching Assistants (GTAs), who are contracted to complete a doctorate in four years alongside a part-time teaching responsibility. Ten GTAs were recruited for 2013/14 to teach on our most buoyant undergraduate courses of Sport Coaching, Sport & Exercise Science and Physical Education, which further boosts our full-time PG research talent. These bursaries are advertised externally and competition is fierce with an average of 100 applications for the 4 to 6 bursaries.

Throughout this audit period ISPAL has appointed 22 bursary students, through a combination of faculty and external match-funded bursaries. All full-time bursary students work within our Centres, interacting with staff, masters and undergraduate students, contributing daily to a vibrant research culture and environment. They are actively encouraged to publish as they progress their research, working closely with their supervisory teams, but with a clear recognition that they retain the right to exploit the IP of their work with the University and are first authors on such publications.

All full-time students are allocated a work station, with access to a computer (lap top or PC) with print facilities, the University IT network and the internet, including our on-line library and the university repository. The repository provides electronic access to pre-print reports and peer-reviewed publications that relate to the work of ISPAL. Part-time students enjoy this same access, differing only by having access to work stations using a hot desk system. When visiting campus, students studying abroad also use the hot desk facilities and the library facilities, which are

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available 24/7 to all PGR students who work outside of 9am to 9pm. Full-time and part-time students are located in hubs of shared work stations close to their supervisory teams and specialist facilities. This facilitates good informal interactions between students and staff, and supports holding regular formally recorded supervision meetings (monthly for full time and bi-monthly for part-time students). All PGR students receive support to attend up to three external workshops/seminars/courses/conferences throughout their period of study, which is normally sufficient to cover all costs for national events. Students can augment these funds to attend at least one international conference to present their work during their period of study with us.

Our PGR culture is positive, strong and integrated as evidenced by the increased recruitment and completion rates of our PGR students during the audit period. Our staff recognise this too; 19 are currently studying for either PhDs or an EdD within the Carnegie faculty. PGR students contribute to ISPAL and Centre events by showcasing their work, and contributing to our regular seminar series and research Centre seminars, symposia or meetings.

All PGR students are required to undertake our Research Training Programme (RTP), based on the Joint Skills Statement (JSS) issued in 2001. This ensures that all students and their supervisory teams engage with appropriate individualised development, covering not only the requirements for their programme of research, but also their broader career and employability needs. They are given an overview of RTP at their compulsory induction programme, after which they work with their supervisors to complete a training needs analysis (TNA). A training and development plan, identifying their individual requirements and the evidence they will provide through a portfolio to demonstrate completion of their RTP, is then constructed, agreed with their supervisory team and signed off on completion of the portfolio of evidence. In addition to the workshop series for research development previously mentioned students can also gain access to masters' level modules, as appropriate to training needs. In addition, external courses and workshops in specialist areas of work (e.g., advanced statistical modelling techniques), as well as Vitae courses and events with Sheffield Hallam University, or professional body meetings, ensure a breadth as well as depth of research training. We also run a series of twilight sessions to meet the specific needs of PGR students in the Carnegie Faculty. This is annually reviewed and updated with our students. All these sessions are open to EdD, PhD, MPhil and MRes students from across the University. Other faculties are now following this model. For overseas students who travel to the University for induction in October we now deliver a one-week block of RTP during their induction visit. All students can access the Virtual Learning Environment module for RTP remotely via the internet, which contains support materials for our RTP programme. The University runs an annual PGR conference, which is well supported by ISPAL students. There is also a PGR student society, PORES0, supported by the student's union and the University.

Of the staff returned here, 23 supervise research awards, acting as (i) Directors of Study, who are more experienced supervisors familiar with the policies and processes related to PGR award students, or as (ii) research supervisors with specialist research expertise pertinent to the programme of study, or as (iii) advisors where a shorter-term specialist contribution may be required. PGR students are typically supervised by two staff, but by exception this could extend to three, either by recruiting extra specialisms or incorporating an external supervisor. Staff new to research award supervision engage with our University PGR supervision training, which was initiated by Professor Cooke as Director of Graduate Students, subsequently coordinated throughout this audit period by Dr Beccy Watson. This programme comprises a series of workshops open to aspirant and existing supervisors held at least once per academic session. Staff also join established research supervision teams as an extra supervisor and work with a research award supervision mentor who is an experienced supervisor, but not on the same supervision team. The training is completed with submission of a reflective summary of the supervisory process.

d. Income, infrastructure and facilities.

(i) Income: Here we provide examples of research funds from prestigious organisations secured on a competitive basis, linked to outputs and case studies.

(1) Examples of prestigious grant awards secured from research councils:

Gately and Cooke (2013-2016) Hearty Lives Evaluation, British Heart Foundation, £200,000.

Thomas (2012-13) The Impact of ESRC's Economics Centres: ESRC, PS130080, £65,347.

Gately (co-applicant) Qatari National Research Fund – Exceptional Proposals: NPRP X-036-3-013, "Adapted Cognitive Behavioural Approach to Addressing Overweight among Qatari Youth",

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\$988,892, year 1, (4 more to be agreed), with Qatar University and Imperial College (CS2).

(2) Examples of grant awards from prestigious organisations within industry: Font et al. (2011-2013) Research Study on Corporate Social Responsibility (CSR) in the Meetings and Hospitality Industry, Meeting Professional International (MPI), £79,865. This is part of a suite of projects for this organisation amounting to some £450,000.

(3) Sports Coaching: funding from the EU and prestigious sports NGBs (Duffy 4; North 4, CS5): Duffy et al. (2012-2013) The Further Development of a Coordinated Network for Sport Coaching in Europe (Coachnet) EU Programme, total €193,000.

Duffy et al. (2012) Comparison and Evaluation of Selected Aspects of the FA Coaching System in Relation to Other Sports Football Systems in other European Countries and Industry, FA, £15k.

(4) Research evaluations commissioned by large charities:

Cooke et al. (2013-2017) Evaluation of the Battle Back Centre Programme for Military Wounded, Injured and Sick, The Royal British Legion, £640k (Carless 4).

(5) NGBs for Sport are now recognising our expertise in anti-doping research (open tender):

Backhouse et al. (2013-2016) Dietary supplementation and doping in adolescent rugby players, Rugby Football Union, £69,552 (Backhouse 1-4, Whitaker, CS6).

(6) The Youth Sport Trust continue to recognise our expertise in evaluation (open tender):

Morley et al. (2013-2015) Evaluation of BUPA 'Start to Move' Higher Education Institute Project, Youth Sport Trust, £54,000.

Morley et al. (2013-2015) Evaluation of BUPA 'Start to Move' Primary Schools Programme, Youth Sport Trust, £60,000.

(ii) Strategies for generating grant income include:

- University Research Office Grant Academy support research bids, including dedicated full time staff and consultants with established track records of securing EU funding;
- Bid preparation grants to support the development of research bids (£20k per annum);
- CARM programme, support from staff successful with grant applications;
- Collaborating or partnering with other Universities or Organisations;
- Targeting research calls where we have a particular track record of success;
- Acting on feedback from referees to improve applications that are re-submitted elsewhere.

(iii) Infrastructure and facilities: There is a well-established infrastructure supporting research at Leeds Met, led by the Deputy Vice-Chancellor for Research & Enterprise, who line manages and supports ISPAL. Our recruitment policy and staff development policy recognise and value the need for all academic staff to engage wherever possible in research activity at a level appropriate to their expertise and experience. Funding is available at University (£100k per annum), Faculty (£180k per annum) and Institute level (£40k per annum) to support research activity and development both for staff and PGR students (total over £300k per annum). All faculties have targets and key performance indicators that relate directly to research, which are proportionally divided to set school and Centre targets and lines of reporting on progress against targets. Professorial leadership of research is a major part of our successful infrastructure, with 15 Professors working in ISPAL, providing strategy, guidance and support for research within the Centres of the Institute.

Of particular importance to AL and SP are the specialist sport and exercise science laboratories dedicated to research, containing state of the art equipment for both laboratory and field based data collection across biochemistry, biomechanics, exercise physiology, sport and exercise nutrition and sport and exercise psychology. Specialist technical learning support is also available in these facilities for science disciplines which facilitates our research activity and provides a professional support infrastructure to staff and PGR students working in both Centres. Our award winning 24/7 library facilities and services, re-accredited with their customer service excellence award in 2011, provide staff, campus and overseas PGR students with direct access, to an extensive literature base through learned journals in areas of work that underpin ISPAL. Our network and VLE also provide remote support for our staff and PGR students, as well as effective communication systems for collaboration with those outside the University.

(iv) Investment: University investment in ISPAL is reviewed annually and is currently set at £100k per annum, with opportunities to secure further financial support for development activities by application. Such opportunities currently include: matched funding for sponsorship of PhD bursaries from external organisations; early career researcher awards (£5k); research leadership awards (up to £30k where staff with an established research track record can kick start a major

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programme of research with collaborators or through gaining external funding with a view to becoming recognised as leaders in their field both internally and externally to the University). O'Hara (Reader) is currently using a research leadership award of £29,998 for the project 'Physiological and Psychological changes at altitude: understanding the science and supporting safer practice', working in collaboration with the Defence Medical Services High Altitude and Hypoxia study group and the Stable Isotope Biochemistry Laboratory within the Scottish Universities Environmental Research Centre). Such funding helps develop our expertise to support major bids to external funding bodies (e.g. EU, ESRC, BHF, Diabetes UK). We anticipate that our success in these kinds of bids over the next five years will continue to improve.

The University has also supported Promising Researcher Fellowships and Research Excellence Sabbaticals, with ISPAL staff being successful in securing many of these. Examples include:

Promising Researcher Fellowship: (i) Dashper: £4,248 for work on her collaboration with Professor Helgadóttir on a comparative study exploring the Landsmót in Iceland and the Icelandic Horse World Championships in Austria.

(ii) Duckworth: £4,522 to develop her research, which included a visit to laboratories at Northumbria University to learn how to measure key hormone concentrations.

(iii) Holland: £5,000 to collaborate with Professor Stephen Muecke, University of Technology.

(iv) Lashua: received £4,858 to support collaboration with two partners (Liverpool University and Urbeatz) on a youth-led music-making project.

(v) O'Hara: received £4,986 to develop his research portfolio working with collaborators (Stable Isotope Biochemistry Laboratory (SUREC), East Kilbride and Newcastle University Magnetic Resonance Centre).

(vi) Pringle: received £3,750 to continue his work with Gilson, University of Queensland, on the International Universities Walking Project.

Research Excellence Sabbaticals: (i) Fitzgerald: £4,200 to develop a number of writing projects, start initial exploratory discussions concerning the development of an ESRC grant, continue individual exposure at key international conferences and reinforce the on-going reputation of the university in relation to sports equity research (**Fitzgerald 3**).

(ii) Watson: £2,250 for 'Researching contested leisure spaces: a critical examination of diversity and inclusion for African-Caribbean diasporas in Leeds'. This included a scholarly visit to the University of Texas at Austin, hosted by the Department of Sociology and Professor Carrington.

Professors (£1k), Readers (£750) and Research Fellows (£500) receive modest support on an annual basis as a contribution to research development activities, as do the research Centres of ISPAL (£1k).

e. Collaboration or contribution to the discipline or research base

(i) Interdisciplinary Research: Based on our focus on real world research questions, ISPAL attracts and supports interdisciplinary research by staff and PGR students. Examples include **Spracklen (2)**, who draws on philosophy, sociology and history, and is an executive board member of *Inter-disciplinary.net*, global scholars advancing inter and multidisciplinary research across a range of topics. He is currently Project Leader for an international conference on interdisciplinary studies of sport. **Wagg (3)** combines history and politics. **Sparkes** works across disciplinary boundaries. **Cooke (1-3)** adopts an interdisciplinary approach to studying load carriage, applying biomechanics, physiology and psychology. Similarly, **Gately (CS2)** and colleagues adopt both an interdisciplinary and multidisciplinary approach to our obesity research. In our work with TRBL McKenna, Carless and Cooke adopt an interdisciplinary approach to the evaluation of contributions to recovery using adapted Adventure Training and Sport, by drawing heavily on psychology, with important contributions from biomechanics, physiology and sociology. **O'Hara** draws on biochemistry, physiology and psychology in the study of altitude.

(ii) Collaborations with industry and users of research: Hylton has been heavily involved in community sport development and work concerning fairness and race equality. A founder member of the Black sports forum (BEMSport) in Yorkshire, Hylton has worked with a number of governing bodies on issues of equality such as the Badminton Association of England, ILAM and Sport England. Long is a member of the Accreditation Panel for the Equality Standard for Professional Football Clubs. Coalter is a member of the Scientific Advisory Board of the Swiss Academy for Development, a Monitoring and Evaluation consultant to Magic Bus (India) and has also been an expert advisor to the Office of the Deputy Prime Minister.

The strength of our collaborative networks in ICRETH is illustrated by commercial

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organisations, NGOs and senior policy makers that sit on our Advisory Board (e.g., Hargreaves, Chairman of the Travel Group) and support research-led initiatives. For example, the Institute of Travel and Tourism (ITT) co-funded an ESRC Business Placement Fellowship and Meeting Professionals International (MPI) have provided £450,000 in project funds. Our contributions are valued in the industry as demonstrated by our invitations to disseminate our work via keynote presentations at prestigious international events (e.g., Font for the United Nations World Tourism Organisation, UNWTO; Thomas for the Organisation for Economic Cooperation and Development, OECD; Font for the Association of Independent Tour Operators, AITO; and Thomas for the ITT).

Leeds Met was one of three institutional authors of the recently published International Sport Coaching Framework, which drew heavily on research and collaborative engagement on a global basis through an international community of practice in sport coaching (**CS5**). This framework will be used throughout the world of coaching to guide best practice nationally and internationally.

(iii) National and International academic collaborations: Numerous researchers in ISPAL work with national and international clusters of academics to further work in their field. **Gately (CS2)** has global networks in obesity, having collaborated with obesity experts for the World Health Organisation (WHO), and is currently working with Darzi and colleagues at Imperial College, London in Qatar on the first year of a large five-year intervention study in Qatari children. **McKenna (2)** and **Pringle (O4)** continue their work with the International Universities Walking project, which began at Leeds Met and is now a global collaboration of universities aiming to integrate walking into employee work practices which is led by ex-Leeds Met colleague Gilson (University of Queensland).

We also collaborate through editorship and development of key collections and Handbooks for international publishers (e.g., Wagg *The Palgrave Handbook of Olympic Studies*; Carrington *The Companion to Sport*, Wiley Blackwell; Fitzgerald, *Disability and Youth Sport*, Routledge; Flintoff and Fitzgerald (with Dowling), *Equity and Difference in PE, Youth Sport and Health*, Routledge); Long and Spracklen, *Sport and Challenges to Racism*, Palgrave MacMillan. Reciprocal research collaborations are also a feature of ISPAL (e.g., Carrington, University of Texas, appointment as 0.2 Research Fellow, resulting in reciprocal visits/seminars/funding applications, with Watson). ICRETH also welcomes visiting scholars (e.g., colleagues from the Universities of Otago, New Zealand, Queensland, Australia, and Las Palmas de Gran Canaria, Spain), and colleagues visit elsewhere in similar capacities (e.g., Hannam in Johannesburg, and Thomas in Florida and South Carolina). ICRETH have also created a novel partnership with Yunnan Normal University, China, in the form of a Sino-UK Centre for Research in Events, Tourism and Hospitality (SUCRET). This arrangement provides opportunities for staff exchanges, PhD recruitment and projects in China that would not be possible without such a strong collaboration.

Coalter (1-4, CS3) is a leading international scholar in Sport-for-Development and has undertaken extensive research collaborations on sport-for-development in Uganda, Tanzania, Malawi, Senegal, South Africa, Brazil and India.

King and O'Hara collaborate with Newcastle University and the Scottish Universities Environmental Research Centre, to access magnetic resonance imaging (MRI) and stable mass isotope biochemistry (see section b (ii)).

(iv) Contributions to journals, seminar series, conferences and research CPD:

ISPAL staff contribute significantly to their disciplines through work as editors for 27 peer reviewed journals, as board members for 46 and as reviewers for over 180. Particular examples include Long and Scraton who have made longstanding contributions to *Leisure Studies*: Long was a founder member of the Editorial Board; both have been Managing Editors, and Scraton continues on the Advisory Board. Watson is the current Editor of the *Leisure Studies Journal*, and together with Long and other staff, supported Ratna as Chair to organise the 2011 *Leisure Studies Association Conference* at Leeds Met. Long is currently leading the development of an open access journal (free to contribute and to read), working in collaboration with other leading Universities that complement the work of ISPAL. Hylton was Associate Board member for the *British Sociological Association Journal Sociology* (2010-2013) and is now on the editorial board of the *International Review for the Sociology of Sport*. Flintoff and Fitzgerald are long standing members of the Advisory Board of the *Physical Education and Sport Pedagogy* journal; Fitzgerald is a member of the Editorial Board of *Adapted Physical Activity Quarterly*. Sparkes is currently: editor of the annual *British Sociological Association Auto/Biography Yearbook*; on the international advisory boards of *Sport, Education and Society* (with Scraton, only 2 out of 5 members) and

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Qualitative Research in Sport, Exercise and Health; and on the editorial boards of 10 journals. His book (with Smith) entitled '*Qualitative Research Methods in Sport, Exercise and Health: From Process to Product*', published by Routledge, 2013, provides support for methodological development in multi-disciplinary qualitative enquiry, as do his invited contributions to key texts (e.g. the '*Handbook of Autoethnography*' (2013)). His methodological work is highly cited (e.g. '*Ethnography and the senses: challenges and possibilities*', is the most cited publication in Qualitative Research in Sport, Exercise & Health and the 2010 'Narrative analysis in aging studies: a typology for consideration' is the 2nd most cited publication in the Journal of Aging Studies), all of which is evidence of his expert contribution to the development of qualitative enquiry.

ICRETH has hosted and organised more than ten international conferences, often in collaboration with scholarly associations (e.g., The Regional Studies Association, EuroCHRIE, AEME, CHME), research councils (e.g., two ESRC Festival of Social Science events) and other universities internationally (e.g., University of Queensland, Australia, and Sun Yat-sen University, China), attracting hundreds of delegates from all continents to ICRETH. These associations invite colleagues to make keynote presentations, e.g., Hannam to ATHE and ATLAS, Thomas to AEME, and Centre members have editorial roles or sit on the Editorial Boards of most leading journals within the subject field. This exemplifies ICRETH's contributions to journals and conferences.

Abraham and colleagues organised a successful BASES conference at Leeds Met in 2009. Since 2008 ISPAL staff have hosted and been on organising committees for 54 conferences.

(v) Contributions to professional associations, learned societies and developmental initiatives: Spracklen has held senior positions within the Leisure Studies Association, and is currently its Chair (2009-13). He is also the Secretary of the International Society for Metal Music Studies and a key organiser of the British Sociological Association's Alcohol Study Group. Fitzgerald is currently Chair of the United Kingdom Disability Sport Coaching, Learning and Leadership Group. Flintoff and Fitzgerald were the Convenor and Co-convenor respectively of the national Physical Education and Sport Pedagogy (PESP) Special Interest Group within the British Educational Research Association (2010-2013). Hylton was an Associate of the Higher Education Academy where he received the Director's Recognition Award in 2011 for his contribution to the 'Race' Special Interest Group (2006-2011). Most recently, he has become a member of the foremost think tank on 'Race', the Runnymede Trust Academic Forum. Hannam has been Vice-Chair of ATLAS (Association for Tourism and Leisure Education and Research). Through these important professional association and learned society offices, ISPAL staff are making significant contributions to their disciplines and the governance of research.

Backhouse (1, CS6) and colleagues are collaborating with WADA and leading scholars in the UK, Australia, Greece and the USA to develop a number of projects spanning the social sciences of doping in sport. Gately has sat on advisory committees for the World Health Organisation, contributed to a position statement on obesity for BASES and currently works with the BHF on their committee for selection and funding of intervention programmes. Cooke was recognised for his long standing contributions to Sport and Exercise Science with a fellowship of BASES in 2010 and an honorary doctorate from the University of Abertay, Dundee in 2012. Duffy and colleagues established CoachNet, a European network of leading practitioners and researchers with common interests in sport coaching. Leeds Met is also home to the International Centre for Coaching Excellence (ICCE) which is the leading body for the promotion of coach education and development around the globe. Duffy is the Vice-President (Strategy and Development) for ICCE.

(vi) Co-operation and collaboration on PGR training: As the University wide Research Award Supervision Development coordinator from 2007-2012, Watson has contributed to national postgraduate development programmes (Sheffield Hallam 2009) and Yorkshire and Humber North East Hub (Vitae and UKGrad) postgrad development seminars. We continue to jointly convene and deliver PGR training with Sheffield Hallam. The total number of doctorates examined by ISPAL staff since 2008 is 87, 21 of which were international.

f. Summary: ISPAL provides a vibrant, supportive, collaborative and well-resourced research environment to facilitate staff and research students to flourish. Our structures encourage cross-centre and interdisciplinary study focussed on real world research agendas co-created with our clients, collaborators and commissioners. We have continued to build on the strengths of our research environment recognised in RAE 2008, and are now well placed strategically and operationally to continue our upward trajectory in the production of high quality research with real world impact alongside the professional development of our staff and students.