General overview
The SSES staff have been active in research and knowledge transfer activities. Most contributions to research have come in the form of disseminating information at conferences. There have been two books completed and several refereed research articles. Staff need to continue to strive to complete further research outputs. In the now Institute of Sport and Exercise Science, there will continue to be a focus on supporting staff in completing their research.

For the 2007/8 year, the School went through a validation process. The extensive process may have contributed to the reduction some individual activity.

The Staff developed several action plans to meet the strategic direction of SSES research. The agreed actions are recorded in the Research Advisory Group’s minutes. Many of the actions have or are in the process of being implemented.

A process of revisiting the Ethics procedures for the School has developed a rigorous procedure in obtaining ethical approval for all research and will extend to knowledge transfer activities from next year.

Some initiatives resurrected included a UW/University of Birmingham Research Day, PhD student get togethers and PhD supervisors get togethers to discuss student and supervisor processes.

Record of staff doing active research and knowledge transfer
Most staff are actively involved in Research and/or Knowledge Transfer activities. For a complete list, please see Appendix 1.

31 staff are actively involved in research, 19 staff are activity involved in Knowledge Transfer Outputs.

Record of publications
The complete list of publications can be seen in appendix 2.

32 publications consisting of 2 books, 7 book chapters, 10 refereed articles, 4 journal articles in press, and one peer refereed conference proceedings article, were produced within the School.

Our visiting professor had the most research outputs. One of the issues I believe that are fewer publications is that there continues to be a diverse range of roles and responsibilities that staff are required to undertake in relation to the work of the SSES and the University. These can make it challenging for staff to secure clear periods for research and scholarly activity. I believe we should look at this issue in an attempt to free staff to have more time for research like activities. In the new vision for the Institute, the issue will be addressed.

Details of knowledge transfer output and dissemination
For a detailed list of Knowledge Transfer Activities, see appendix 3.

Staff are active in consultancy activities. A large number of staff contribute to both the Brazil Football School and the SSES Summer School. The Learning through Sport initiative has several staff members involved, while the Sport Performance and Coaching Centre is quite active in its involvement with various consultations with athletes, referees and coaches. Quite a number of staff are involved with school consultancy and a couple are involved with physical activity initiatives. The Worcester Wolves Basketball club also draws on a number of staff.
There has been quite a few staff working with consultancy in relation to the MARRC centre.

- **Details of conference presentations**
  The complete list of conference presentations can be seen in appendix 4.

  9 invited speaker/keynote/session chair roles were performed by 4 staff from the School. 26 further presentations were delivered at national/international conferences with 15 staff as authors.

- **Details of income received for research and consultancy projects**
  **£54,000** over 3 years (March 2008), University of Worcester fully funded PhD studentship in the School of Sport & Exercise Science: Can pedometer strategies improve the effectiveness of the MEND Programme for obese children and their parents in the Worcestershire Primary Care Trust? Dr DM Peters and Dr M Edwards (University of Birmingham).

  The Sport Performance and Coaching Centre has generated **£6000** for PALS mentoring, and **£8,500** for sport psychology consultancy and potential research opportunities.

  In addition, **£4000** has been gained for MARRC work.

  The TOP Link Festival gained a profit of **£ 2,290**

  **£400k** project application to Access to Nature from Dr Cheryl Jones (ASGA) & Dr Derek M Peters regarding a nature, health and education programme with health walks around, between and beyond both UW campuses. Successful at stage 1 with stage 2 application anticipated in early 2009.

- **Unsuccessful:**
  **£2.45 million**- July (2008) - Bid was submitted to the Department of Health ‘Healthy Communities Challenge Fund’ (HCCF) by Haydn Jarrett in Collaboration with Worcestershire Primary Care Trust and Worcestershire County Council. The bid, centred on the forthcoming Wellness Centre was for **£2.45 million**, using the Wellness Centre building and revenue from the PCT as match funding and aimed at supporting and developing current and future projects in the area of Physical Activity, exercise, health and well-being,

  **£193,032** – May 2008 – *The effect of participation in Pilates on biomechanical variables associated with falls*. Application to the Help the Aged project grants scheme – Dr DM Peters & MARRC collaboration with Rachel Wright. Principle application to investigate the acute and chronic benefits of Pilates participation on biomechanical variables associated with falls. Application to create a full-time post doctoral position for Rachel Wright with MARRC.

  **£54,000**, March 2008 – *A multi-national, mixed method investigation of student and qualified physical education teachers/ implicit attitudes to fatness, and perceptions of and behaviours towards obese children in physical education settings*. University of Worcester fully funded PhD studentship application form Dr DM Peters and Professor K Hardman.

- **Postgraduate research programme activity**

  **Completed PhD students:**

  **Full-time SSES postgraduate research students:**
  Richard Medcalf:  MPhil/PhD, 3rd year - started in July 2006 - *The experiences of the child with Social Emotional and Behavioural Difficulties in Physical Education*. DoS: Dr Joe Marshall. Team: Prof K Hardman (Advisers Dr John Visser (UoB)).

  Adam Stevenson: MPhil/PhD, started May 2008 –Psychology/Physiology, DoS, Dr Paul Castle, Team: Andrew Renfree.
Rachel Wright: PhD, 4th Year - *The impact of physical activity and exercise on balance, gait and stability in older persons: implications for the identification of, susceptibility to, prevention of and rehabilitation following falls.* DoS: Dr Derek Peters. Team: Prof Paul Robinson & Dr Mark Hollands (University of Birmingham).

**Part-time postgraduate research students:**

Adam Benkwitz: MPhil/PhD, 1st year, not yet to RDB1 – Case studies of football hooliganism – Aston Villa and Birmingham City. DoS: Dr John Kelly. Team: Dr Lynn Kidman, Prof Jim Riordan.

John Behan: MPhil/PhD, 3rd year, not yet to RDB1 – *An investigation into implicit and explicit measures of cross-modal interactions of odours and visual stimuli in emotional processing and memory.* DoS: Dr Paul Castle.

Scott Buckler: PhD, 3rd year - *Psychological and physiological investigations of flow state in Wing Chun.* DoS: Dr Paul Castle. Team: Dr Derek Peters & Prof Paul Robinson.


Andrew Harper: MPhil, 3rd year, - *Physiological and skill demands in elite youth basketball*: a tri-nation comparative study. DoS: Dr Derek Peters. Team: Mick Donovan, Dr Clare Rhoden & Dr Nic James (UWIC).


Lucy Holmes: MPhil/PhD, 5th year - *Position specific physiological profiles of elite female hockey players*. DoS: Dr Derek Peters. Team: Prof Paul Robinson.

Gareth Jones: MPhil/PhD, 5th year, not yet to RDB1 - *Collective Efficacy and it’s antecedents in relation to social loafing in sports teams.* DoS: Dr Derek Peters. Team: Prof Paul Robinson & Dr Rune Hoigaard (University of Agder).

Ruan Jones: MPhil/PhD, started in June 2008 – *Teaching Games for Understanding, a existentialist perspective.* DoS: Dr Lynn Kidman.

Carla Solvason: PhD, 6th year - *Inclusion or excellence? The impact of competing cultures on students’ perceptions of achievement in a UK specialist Sports College.* DoS: Prof Geoffrey Elliot. Team: Malcolm Armstrong & Dr Derek Peters.

Julia West: MPhil/PhD, 4th year - *Identifying and clarifying the concept of state motivation in sports.* DoS: Dr Paul Castle. Team: Prof Paul Robinson & Dr Clare Rhoden.

**Supervision of postgraduate research students in other UW departments:**


Erica Thomas - *Habit and the Intention-behaviour relationship within the Theory of Planned Behaviour: The case of physical activity.* Team: Prof D Upton (IHSCP), Dr Victoria Mason (IHSCP) & Dr DM Peters.
Supervision of postgraduate research students at other HEI's:
Dr Derek Peters and Chris Hughes with Dr M Edwards and Prof D Carroll in the School of Sport & Exercise Sciences, University of Birmingham. Jason Martin (full-time) - The effects of aging on movement performance.

Number of staff supervising:
Thirteen staff from the School are involved in the supervising research degrees:
- Malcolm Armstrong (2)
- Dr Paul Castle (4)
- Mick Donovan (2)
- Prof Ken Hardman (3)
- Chris Hughes (1)
- Dr John Kelly (1)
- Dr Lynn Kidman (2)
- Louise Martin (1)
- Dr Derek Peters (10)
- Andrew Renfree (1)
- Dr Clare Rhoden (2)
- Prof Jim Riordan (2)

Six staff from other UK and International HEI are also involved in the supervisions of UW students.
- Dr Mark Hollands, University of Birmingham (1)
- Prof David Jones, University of Birmingham (1)
- Dr Nic James, University of Swansea (1)
- Dr Rune Holgaard, University of Agder (1)
- Prof Paul Robinson, University of Birmingham (5)
- Dr John Visser, University of Birmingham (1)

Staff undertaking part-time postgraduate research degrees at University of Worcester:
Susie Hart, MPhil/PhD (Sports Management)
Lucy Holmes, MPhil (Performance Analysis)
Gareth Jones MPhil/PhD (Sport Psychology)
Ruan Jones MPhil/PhD (Teaching Games for Understanding), SEDA
Julia West, MPhil/PhD (Sports Psychology)

Staff undertaking part-time postgraduate research degrees at other institutions:
Liane Azevedo: PhD , 6th year Biomechanics of Achilles Tendinopathy at the University of Cape Town.
Mark Pierkatz: PhD, 5th year - Political risk management, tourism and sport at Cranfield University.

Activity related to professional bodies, learned societies
See Appendix 5 for Membership of subject associations, learned societies and relevant professional bodies.

In addition:


Dr Lynn Kidman is on the International Teaching Games for Understanding Task Force.
Christina Boxer was a reviewer for *Journal of Sports Sciences*.

Ruan Jones was a reviewer for Human Movement.

Louise Martin was a reviewer for the *International Journal of Sports Physiology and Performance* the *International Journal of Sports Medicine*.


Dr Peters also reviewed grant proposals for the *UK Economic and Social Research Council*.

Dr Clare Rhoden was a reviewer for *Journal of Applied Sport Psychology*.

**Additional information:**
Liane Azevedo won a student travel award for the American College of Sports Medicine Biomechanics Interest Group and the Nike award for athletic football research.

Dr Peters was invited to become a Visiting Associate Professor in the Faculty of Health & Sport, at the University of Agder, Norway from August 2008 for an initial term of three years.

Dr Peters also achieved British Association of Sport & Exercise Sciences accreditation as a Sport & Exercise Scientist (Interdisciplinary – Research).

Dr Castle BPS Chartered Sport and Exercise Psychologist

- **Discussion of how research and scholarly activity and knowledge transfer feeds into teaching.**
  All research undertaken in the School is applied in nature and feeds directly into teaching, whether the teaching is research-led, research-oriented, research-based or research-informed (Jenkins, 2005).
  Many undergraduate modules involve teaching that is research-led through the use of curriculum content drawn from research undertaken by module staff. Teaching is strongly research-oriented (promoting the understanding of the research process) and research-based (using inquiry-based activities, supported by staff experiences) in all of the research methods modules taught across all courses in the School and to an increasing degree in many other UMS modules especially at levels 5, 6 and 7. Teaching is also directly research-informed, with a number of staff engaged in externally and internally funded projects that investigate teaching and learning processes themselves within the discipline.

- **Collaborative research and related activities, including international links, including knowledge transfer**
  A strong external collaborative research ethos is evident in the emerging collaboration with other HEI in supervision of postgraduate research students, particularly the University of Birmingham and in the growing number of students supervised at other HEI by School staff. There is also a strong theme of cross-departmental collaboration within the University itself with evidence presented via publication authorship and both successful and un-successful research grant applications.

SSES has Research Interest Groups (RIG) who meet regularly to discuss possible research ideas and collaboration. Several major initiatives have been drawn from that, e.g. Mountain Biking research, Biomechanics and MARRC research and Obesity and Physical Activity research. RIGs are used for mutual research interests including further development of staff PhDs.

The School’s engagement with international research collaborations continues to develop.
Appendix 1: Staff Actively Involved in Research, Knowledge Transfer Activities

**Research**
Ms Liane Azevedo (Achilles Tendinopathy in Runners and Mountain Biking)
Mrs Lerverne Barber (Initial Teacher Education and Primary PE)
Mr Joe Bevins (Physical Activity and Obesity)
Mr Will Bowen-Jones (Teaching and Learning)
Dr Paul Castle (Sport Psychology and Teaching and Learning)
Mrs Helen Corke (Physical Education Teachers’ Employment Opportunities)
Mr Christian Edwards (Motivation and Physical Fitness)
Mr Glyn Harding (Coaching Pedagogy)
Professor Ken Hardman (Physical Education Pedagogy and UNESCO)
Ms Susie Hart (Sport Management)
Ms Lucy Holmes (Sport Performance Analysis)
Mr Chris Hughes (Biomechanics)
Ms Vanessa Incledon (Physical Education Pedagogy)
Mr Haydn Jarrett (Physical Activity, Exercise and Health)
Mr Gareth Jones (Sport Performance Analysis, Sport Psychology)
Mr Ruan Jones (Pedagogy of Teaching Games for Understanding)
Dr John Kelly (Sport and National Identity)
Dr Lynn Kidman (Athlete-centred coaching, Coach Development)
Ms Annie Lambeth (Mountain Biking Physiology and Nutrition)
Mrs Louise Martin (Mountain Biking, Physiology, Learning and Teaching)
Mr Richard Medcalf (Physical Education and Special Needs)
Ms Alice Mooney (Sport Massage)
Mr David Mycock (Coaching – Skill Development)
Dr Derek Peters (Physical Activity & Health, Childhood Obesity, Physical Education, Sport Performance Analysis, Learning & Teaching in HE, Sport Physiology, Teaching Games for Understanding; )
Mr Mark Pierkatz (Tourism, Sport and Adventure)
Mr Andrew Renfree (Endurance Physiology and Nutrition)
Dr Clare Rhoden (Stress Management and Psychological Skills Training)
Professor Jim Riordan (Sport History and Sociology)
Ms Julia West (Sport Motivation and Moods)
Ms Rachel Wright (Physical Activity and Health)

**Knowledge Transfer**
Ms Liane Azevedo Brazil Football, MARCC and Alpargatas Shoe Company, Brazil –UK football course)
Mrs Lerverne Barber (Sports Youth Trust)
Mr Will Bowen-Jones (Student Retention, Learning and teaching)
Dr Paul Castle (West Bromwich Albion Academy; Worcester County Cricket Academy; British Dragon Boat Squad; Worcester County Archery Squad; Team Dynamics - British Touring Car Championship Team; TASS support Sport Psychology consulting)
Mr Mick Donovan (Worcester Wolves and Learning through Sport)
Ms Christina Boxer (Sport Coach UK and Schools Sport Awards)
Mr Christian Edwards (Testing Droitwich High School and British Dragon Boating)
Mr Glyn Harding (Coaching and Brazil Football)
Professor Ken Hardman (UNESCO)
Ms Susie Hart (Community sport, Worcester Wolves, Coaching Courses)
Ms Lucy Holmes (summer school, Brazil Football, Testing)
Mr Chris Hughes (Brazil Football and MARCC)
Ms Vanessa Incledon (Physical Education and Schools)
Mr Haydn Jarrett (Worcester Walking Scheme)
Mr Gareth Jones (Performance Analysis and Summer School)
Dr Lynn Kidman (Sports Coaching)
Mr David Mycock (Fitness and Skill Assessment)
Dr Derek Peters (Physical Activity, Childhood Obesity, School Physical Education)
Dr Clare Rhoden (Stress Management and Psychological Skills Training)
Mr Craig Williams (Sport Coaching Courses)
Ms Rachel Wright (MARCC)
Appendix 2: Publications

Books:

Van Berlo, K. (2008). *Case studies to exemplify outstanding practice and to support the guidance for Qualified Teacher Status and Initial Teacher Training Requirements*. Developing Trainees’ Professional Attributes in TDA.

Book Chapters:


Refereed Journals:


Conference Proceedings:
Appendix 3: Output and Dissemination of Knowledge Transfer

Armstrong, M., Azevedo, L., Harding, G., Holmes, L., Jones, G., Mycock, D., West, J., Williams, C.,
Brazilian Football School

Azevedo, L., and Hughes, C. MARRC Consultancy

Azevedo, L., Sao Paulo Alpargatas Product Development and Marketing Consultancy

Barber, L., TOP Link with West Midlands Secondary Schools

Boxer, C., Leominster Sports College Sports Awards

Boxer, C. Wyre Forest Sports Awards

Boxer, C., Partnerships with University of Birmingham West Midlands Regional Sports Coaching Centre

Boxer, C. West Midlands Learning Skills Council

Castle, P., Community Sports Day, Sport Psychology Workshop, ; Chamber of Commerce, Workplace and Wellbeing – Psychology of lifestyle change; Bobst Group, Workplace Well-being Workshop Series

Donovan, M., Harding, G., Holmes, L., Incledon, V., Jones, G., SSES Sport Summer School

Donovan, M., Holmes, L., Learning Through Sport, West Midlands

Hardman, K., UNESCO

Incledon, V., Dyson Perrins High School Consultation

Jarrett, H., Worcester Cardiac Walking Group, working directly with clients/patients

Lambeth, A., A Level Workshops, St. Mary’s Convent

Lambeth, A., Kidderminster College

Lambeth, A., Dragon Boat Workshops

Martin, L., Working with Athletes, Physiological Assessments

Mooney, A., Visiting Tutor, PGA National

Mooney, A., Worcester Wolves Sport Massage Therapist

Mooney, A., Race for Life ’08 Sport Massage Therapist

Mycock, D., Kidderminster Harriers, Fitness Assessments

Mycock, D., WBA FA, Fitness Assessments

Mycock, D., Droitwich High School, Fitness Assessments

Mycock, D., British Dragon Boat Team, Fitness Assessments

Jarrett, H., Worcestershire Walking Network

Jones, G., Telford College of Arts and Technology, HE Taster Day

Kidman, L., West Midlands RFU Coach Development
Kidman, L., Elite Youth Coach Development Consultations

Kidman, L., RFU Consultation – Coach Development

Kidman, L., Blackburn Rovers – Consulting Athlete-centred Learning and TGfU

Kidman, L., RFU Referee development Consultation

West, J., Chamber of Commerce, Workplace and Wellbeing – Motivation
Appendix 4: Conferences Presentations

Invited/keynote speakers:


Conference presentations:


Bowen-Jones, W., Barber, L., & Chapman, V. Engaging the Interest and Commitment of Academic Staff to the Further Development of Inclusive Learning and Teaching, The Full 360: Mapping the Undergraduate, Research and Enquiry Landscape, University of Gloucester, May 2008.


Holland, G.B. & Peters D.M. Football specific fitness and salivary testosterone levels in university and semi-professional footballers. BASES Annual Student Conference: Beyond the Lecture: Putting Theory into Practice, University of Bedfordshire, UK, 3-4th April, 2008.

Jones, R. TGfU in the trenches: Are theory and practice as one? 4th International TGfU Conference, University of Vancouver, Canada, 14-17th May 2008.


## Appendix 5: Membership of subject associations, learned societies and relevant professional bodies

<table>
<thead>
<tr>
<th>Surname</th>
<th>First Name</th>
<th>Membership of Subject Association</th>
<th>Member of Learned Society</th>
<th>Member of a relevant professional body</th>
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<tbody>
<tr>
<td>Azevedo</td>
<td>Liane</td>
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<td>American College of Sports Medicine</td>
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<td>Azevedo</td>
<td>Liane</td>
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<td>International Society of Biomechanics</td>
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<tr>
<td>Azevedo</td>
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<td>Association for Physical Education</td>
<td>British Psychological</td>
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<td>Barber</td>
<td>Lerverne</td>
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<td>Psychologist</td>
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<td>Castle</td>
<td>Paul</td>
<td>UNESCO Association for Physical Education</td>
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<tr>
<td>Kidman</td>
<td>Lynn</td>
<td>TGFU Task Force</td>
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<td>British Educational</td>
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<td>Alice</td>
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<td>National Association for Special</td>
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<td>and Behavioural Difficulties</td>
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<td>Association</td>
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<td>Mycock</td>
<td>David</td>
<td>The Professional Footballers’ Association</td>
<td>The English Football Association Coaches Association,</td>
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<td></td>
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<tr>
<td>Peters</td>
<td>Derek</td>
<td></td>
<td>Fellow of the Higher Education Academy</td>
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<tr>
<td>Peters</td>
<td>Derek</td>
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<td>National Obesity Forum (NOF):</td>
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<td>Rhoden</td>
<td>Clare</td>
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<td>Van</td>
<td>Karen</td>
<td>Association for Physical Education</td>
<td>European Higher Education Officers</td>
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Exercise and sport sciences continue to grow as a collective set of disciplines by investigating a broad array of basic and applied research.

Affiliations: 1Physiology Discipline, Australian Institute of Sport, Canberra, ACT, Australia. 2Centre for Exercise and Sport Science Research, School of Medical & Health Sciences, Edith Cowan University, Joondalup, WA, Australia. 3Department of Biomedical Engineering, Northwestern University, Evanston, IL. 4Department of Exercise and Sport Science, University of Wisconsin-La Crosse, La-Crosse, WI. 5University of Canberra Research Institute for Sport and Exercise (UCRISE), University of Canberra, Bruce, ACT, Australia.