

tel:
0500 876 543

web:
[www.ljmu.ac.uk/
sportandexercise
sciences](http://www.ljmu.ac.uk/sportandexercise-sciences)

email:
[j.c.townend@ljmu
.ac.uk](mailto:j.c.townend@ljmu.ac.uk)



Liverpool John Moores University

Sport and Exercise Sciences

tel:
0500 876 543

web:
www.ljmu.ac.uk/
sportandexercise
sciences

email:
j.c.townend@ljmu
.ac.uk

maximum scores for both research (5**) and teaching (24/24)

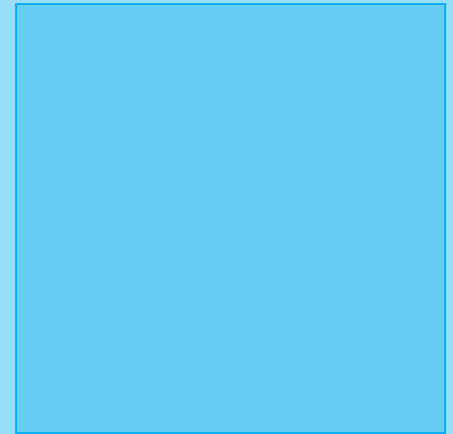
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what makes us so special?

- Market focus and commercial/industry understanding
- Internationally renowned research
- Centre of Excellence in Teaching and Learning (awarded by HEFCE)
- World class academic expertise
- State-of-the-art laboratory facilities

We are the only Sport and Exercise institute in the UK to receive maximum scores for both research (5** as awarded by HEFCE) and teaching (24/24 as awarded by QAA).The Times Good University Guide ranked us first in the country.



consultancy

need a
solution or
some
specialist
advice...

...tap into our wealth of expertise

our
consultancy
services
include:

- Human performance
- Product development
- Performance analysis and talent identification
- Product assessment
- Research based consultancy
- Project management and support
- Strategic analysis
- Physiology
- Biomechanics
- Psychology
- Nutrition
- Lifestyle analysis
- Motor skills
- Analysis and testing

tailored fitness assessments...

LJMU has been contracted by a large number of individuals and professional sporting clubs to conduct full physical profiles of players and athletes so that suitable training programmes could be developed in preparation for competition. LJMU is favoured because of our 5 rating as a World class Research Institute for Sport and Sports Sciences facility.**

Rigorous testing programmes can make use of over 20 different fitness assessment techniques that can be used independently or in combination.

These include:

- Body composition analysis (Dexa scan)
- Blood lactate concentrations
- ECG Heart Trace
- Endurance Capacity/Running Economy

LJMU has long and mutually beneficial working relationships with clients such as, Everton FC, The Football Association, Manchester United FC, Sale Sharks to name but a few.

The outcomes resulting from these partnerships are hugely beneficial for both LJMU and our clients:

- Clients can take advantage of our first class research facilities
- Clients needs are met through our flexible, responsive, custom-designed services
- Clients receive a swift response, from testing through to achieving results and reporting outcomes
- The School obtains valuable research data which can inform and benefit future activities
- Our staff and researchers further their experience at the elite level of sport, developing their expertise for the benefit of future clients



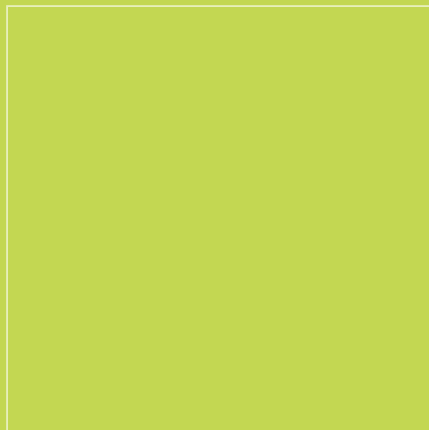
research

The School, which includes The Research Institute for Sport and Exercise Sciences (RISES), provides the focus for a full range of research activity, from studies at cellular level to whole body responses and from research around elite athletic performance to novice physical activity.

Since 2001, our researchers have published over 200 papers that are listed in the Science Citation Index and have attracted over £2 million of external grants.

with LJMU you can

- Draw on the expertise of research active staff
- Make use of state-of-the-art technology and facilities
- Undertake concept and product development and testing
- Be responsive to demands for research
- Explore emerging issues and generate innovative solutions



our areas of expertise include:



- Science and football
- Perceptual-motor skills
- Chronobiology
- Physiology
- Biomechanics
- Psychology
- Human development and ageing
- Exercise and Cardiovascular Physiology
- Behavioural Neuroscience
- Nutrition
- Child health and activity
- Health and activity



cutting edge sports science research

GlaxoSmithKline (GSK) accessed the 5** facilities within the School of Sport and Exercise Science and the expertise of our world class academics for a project involving new lead research for GSK.

Carried out by a team in the School of Sport and Exercise Science, the project was designed to help inform the development and use of GlaxoSmithKline's commercially available product lines relevant to sport and exercise.

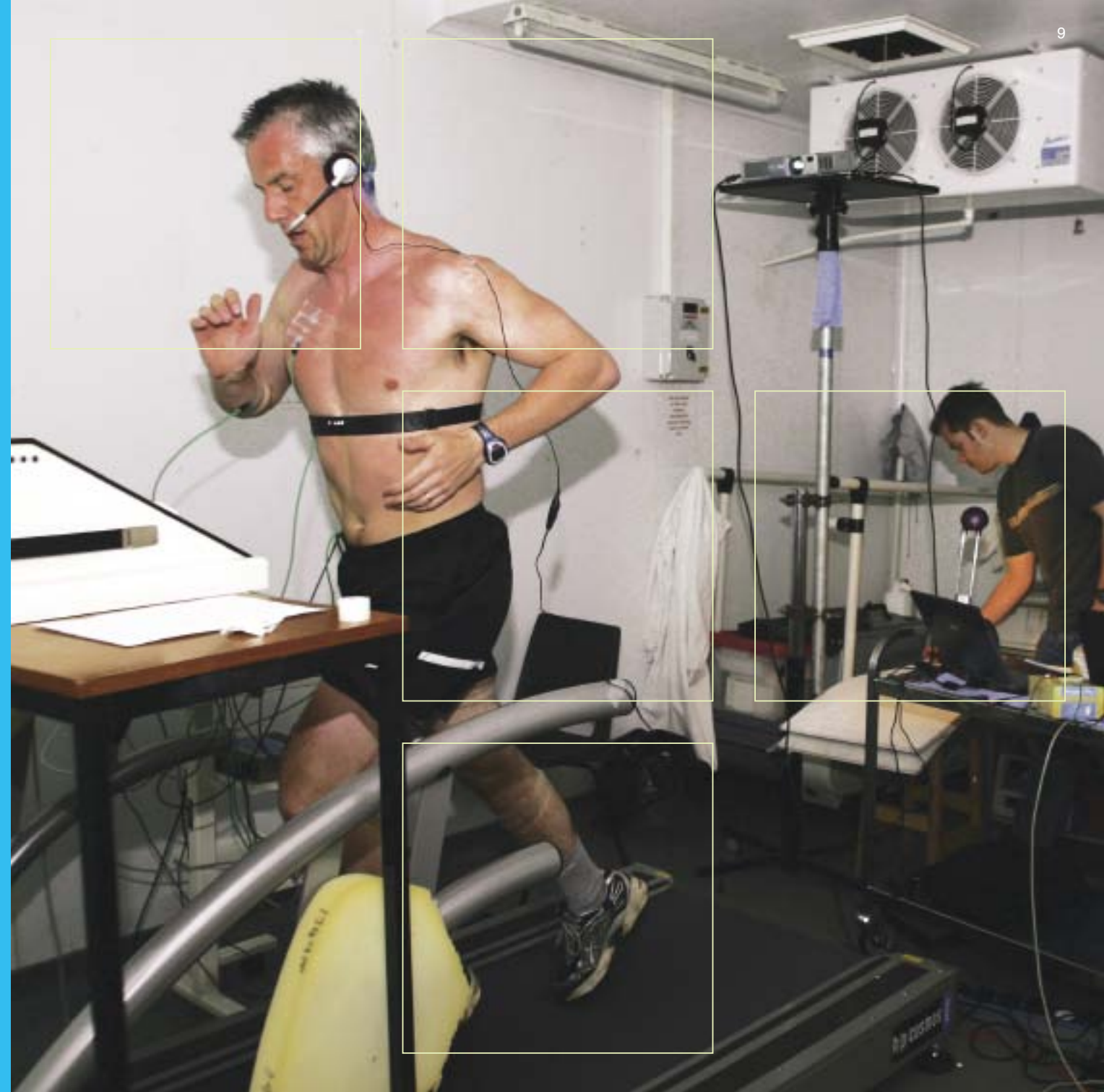
The LJMU team evaluated:

- the effects of initial muscle glycogen concentration on the physiological adaptations to chronic intermittent exercise
- the influence of exogenous carbohydrate supplementation on the physiological adaptations to chronic intermittent exercise (performed with both high and low initial muscle glycogen concentrations).

Results provide an invaluable resource for the preparation of players for a variety of team sports that predominantly utilise intermittent training programmes such as soccer, rugby, hockey and basketball.

The work further strengthened LJMU's links with GlaxoSmithKline and reinforced the University's reputation as a leading authority in the field of intermittent exercise physiology. This research partnership was also highly valued by GSK:

"GSK's research links with LJMU are fundamental to our sport science and sports nutrition strategy. As Lucozade Sport is continually looking to further its knowledge into sports nutrition, metabolism and performance, and currently works closely with the Football Association and the majority of the Premier League football clubs, establishing a strong scientific partnership with the leading research institution on science and football is a great win for us."
Nick Morgan, GSK Sport Scientist.



facilities

- Two Biochemistry Laboratories
- Human Performance Unit
- Environmental Chamber
- Chronobiology Laboratory
- Biomechanics Laboratory
- 60 Metre indoor running track with sand pit
- Muscle Function room
- Cardiac function
- DEXA system
- Hypoxic Chamber
- Movement Function Research Laboratory
- Two Physiology Laboratories
- Underwater weighing tank
- Motor Skills Laboratory
- Eye Movement Laboratory
- Free weights and gymnasium



DEXA system



HYPOXIC chamber



best foot forward

LJMU has the UK's only Movement Function Research Laboratory.

The state-of-the-art Movement Function Research Laboratory enables researchers to control all of the factors that influence human balance. Visual inputs, for example, are controlled by virtual reality and 3D technology designed to reproduce different scenarios.

Participants stand on the motion platform, which accurately echoes the on-screen action. Every motion the participant makes in response to movement of the platform is recorded both on the computer and on film, thanks to the lab's eight-camera system.

Both video projection and platform motion happen in real time and can be driven by the participant's movements.

The Movement Lab has a number of applications and can be used to test the effects of weight bearing, environmental stresses and other changes in stimuli on balance, posture, movement and co-ordination. It can also be used for flight, driving or military transport simulation, where physical and mental performance is monitored.



services include...

■ Physiology

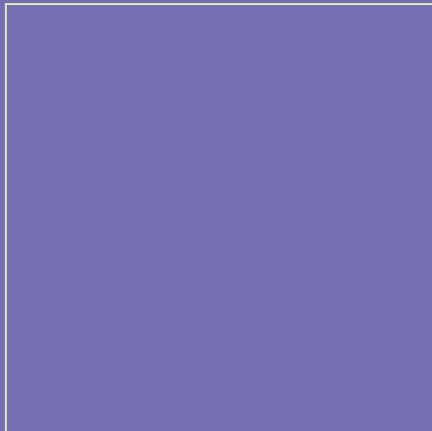
- Anthropometry and Body Composition
- Strength, Power and Muscular Endurance
- Lung Function
- Haematological screening
- Ventilatory Response to Exercise
- Exercise Electrocardiography and Haemodynamic function
- Blood Lactate Responses to Exercise
- Maximal Intensity Exercise

■ Biomechanics consultations and assessments

■ Psychological consultations

■ Nutritional profiling - consultation/analysis feedback

■ Match/Performance analysis





just a few of the clients the School of Sport and Exercise Sciences has worked with...

- The Football Association
- Manchester United FC
- Everton FC
- Liverpool FC
- Grand National Archery Society
- Sale Sharks
- Lucozade Sport (GlaxoSmithKline)
- Red Bull Company Ltd
- British Heart Foundation
- Irish Sports Council
- Liverpool City Council
- Fire Service
- British Army
- Nintendo
- Sport England

The School of Sport and Exercise Sciences is part of LJMU's national Centre for Excellence in Teaching and Learning (CETL)

CETL activity aims to increase students' employability by developing innovative approaches to enhancing their vocational, leadership and entrepreneurial skills.

The School has developed strong links with a wide range of businesses and agencies to enable students to have an understanding of the world of work and to experience it at first hand. The relationships that have been developed with businesses take a number of forms:

- Commercial contracts where staff deliver a service but use their experiences to develop learning activities for the curriculum
- Commercial contracts where students assist staff in the delivery of a service
- Work Related Learning Projects: a business (or external agency) suggests a project that students undertake in order to support the activity of their company

These links provide the School with valuable opportunities for enhancing the student experience and enable businesses and organisations to benefit from the resources of the University.



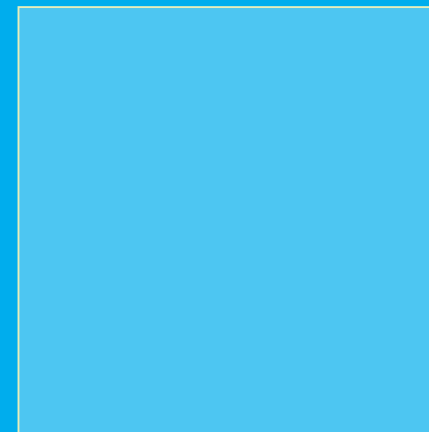
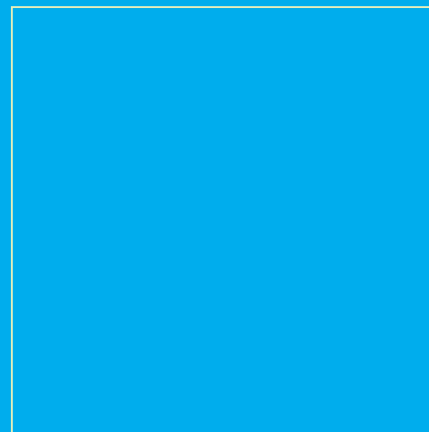


**training and
continuing
professional
development**

maximise your potential...

**we
offer:**

- Short courses
- Continuing Professional Development (CPD) Programmes
- Degrees
- Postgraduate courses
- Professional qualifications
- Bespoke training

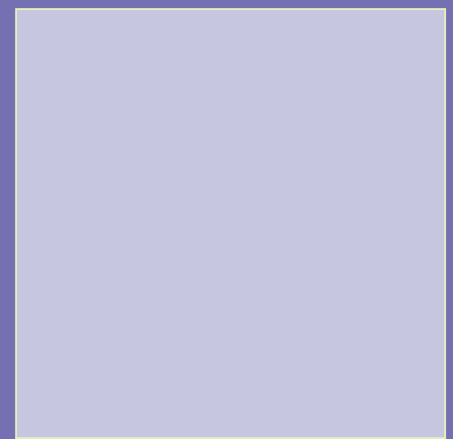
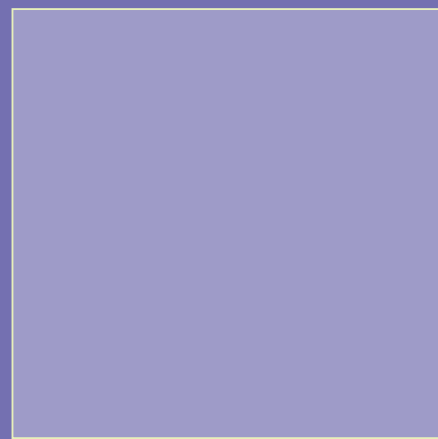
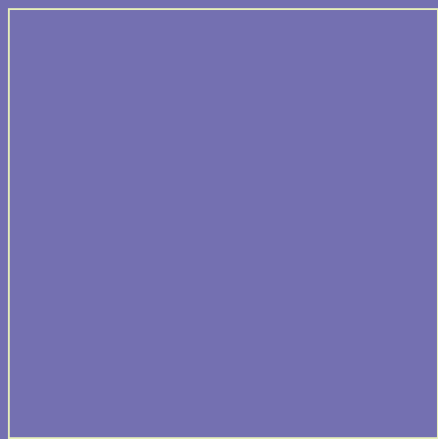
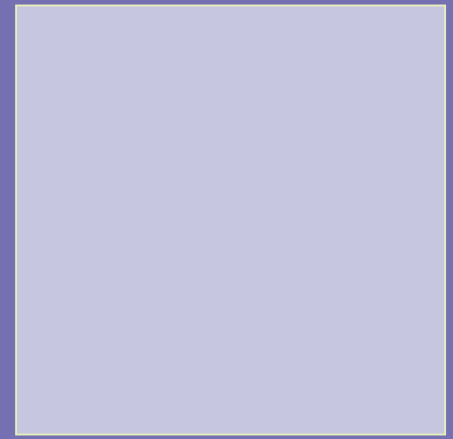




bespoke solutions

join forces with LJMU and gain the competitive edge

- An expertise base second to none
- Unique range of products and services
- Fast, efficient and high quality delivery
- Bespoke solutions
- Long term mutually beneficial partnership



our guarantee to you

We will work in partnership with you to understand your requirements and draw on our world class expertise and facilities to ensure that we meet your needs in full. We will provide exceptional customer service and deliver solutions to the highest possible quality standards.

We will work hard to ensure that your first contact with us marks the start of a positive, productive partnership that will help you to achieve your goals now and into the future.

