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Land deal will capitalise on University's status

Loughborough University has announced the purchase of a 23-acre area of land which will help propel the region into the spotlight as the centre for sporting excellence and innovation.

The land, which is adjacent to the University, lies between New Ashby Road and the Holywell Park area of campus. It was acquired from 3M Health Care Limited with significant financial support from East Midlands Development Agency (*emda*).

It is anticipated that this investment will enable the University to foster its research and business agenda, which will impact positively on local employment and further enhance Loughborough's profile as one of the best universities for innovation.

Part of the land will also be developed to accommodate the national offices of various UK sporting organisations. The East Midlands has a long and successful sporting history, and with London 2012 only six years away, a base for UK sporting organisations in Loughborough will provide an excellent opportunity to build on our existing successes by attracting people and resources to the region.

Professor Shirley Pearce, Vice Chancellor of the University, said: "We are delighted to announce this acquisition, which marks another significant milestone for Loughborough. The purchase of this land will enable the University to lay the foundations for its future development in science, enterprise and sport, and will confirm Loughborough as one of the country's leading universities for collaboration with business and industry."

Jeff Moore, *emda's* Chief Executive, said: "*emda* has made a substantial contribution towards this exciting scheme which forms part of a long term partnership with the University. This is a huge project and complements our aims to create a flourishing region by helping to reinforce Loughborough, and ultimately the region, as a centre of innovation and sporting excellence. It will also create a significant number of jobs within the national sporting centre and the new Loughborough science park."

William Cruise, Business Director, 3M Health Care Limited, said: "We have a long standing relationship with Loughborough University in many areas of mutual benefit and support its ongoing development as a leading academic and research centre for science and technology."

The land sale was negotiated on 3M Health Care's behalf by Mike Tebbutt, director of Mather Jamie, who added: "I was delighted to be involved in such a significant transaction for the Loughborough area." Purchase on behalf of Loughborough University was managed by GVA Grimley.

The acquisition augments the Loughborough University campus to 433 acres.



The campus now stands at 433 acres.

University and Students' Union host first ever sustainability awards

A brand new award scheme, designed to acknowledge environmental sustainability initiatives at Loughborough University, was launched earlier this month.

The BEST (Building Environmental Sustainability Together) Awards are a joint initiative between the University and Students' Union and aim to recognise the individuals and groups who have shown real commitment to green issues.

At the ceremony, which took place on 8 May at the Students' Union, ten awards were made, with two special awards also presented – the Vice Chancellor's Award for Sustainability, which was given to the Students' Union's Simon Alsbury for his work on both ethical and environmental issues this year, and a 'Lifetime Contribution' award, presented to Wesley Marriot, who has raised more than £142,000 for charity over the last 18 years by collecting cans from various venues, including the Students' Union.

"The awards provided the perfect opportunity for the Union and University to showcase the really important sustainability initiatives that are being undertaken across the campus. I was absolutely delighted to be named as one of the award winners!" said Simon Alsbury.

He continued: "I sincerely hope that this proves to be the springboard for further development in this very important area and judging by the success of this first event, I'd say that the future is bright – and most likely green!"

The evening also marked the official launch of Loughborough's commitment to the Higher Education Carbon Management Programme, with the Vice Chancellor, Professor Shirley Pearce, and the Director of Estates Services, Roy Hill, signing a special certificate. The primary focus of the Carbon Management Programme is to reduce the University's emissions from, for example, its academic, leisure and accommodation buildings and its vehicle fleets.

The University is already very committed to sustainability – it switched to renewable sources for all its electricity almost five years ago and also runs an energy efficiency league between its halls of residence. Signing up to the Carbon Management Programme will enable it to develop its 'green' initiatives still further.

The winners of the 2006 BEST Awards were:

- **Martin Tailby** and **Rachel Smithson**, from imago – for their contribution to achieving Fairtrade University status
- The **van drivers and handymen teams** from imago – for their contribution to campus recycling logistics
- **Nik Hunt**, from imago – for his organisation of campus recycling eco-zones and the new collection system
- **David Burgess**, from Estates Services – for his contribution to the Burleigh Woods Management Group
- The **Students' Union building department** – Most improved area of Loughborough Students' Union
- **Lea Adlard**, from the Students' Union – Best Staff Volunteer
- **Lycia Lobo**, from the Students' Union – Best Student Volunteer

- **Lucy Moorcroft**, from the Students' Union – Best Contribution to the Ethics of Loughborough Students' Union
- **Lauren Goodchild**, from the Students' Union – Best Contribution to the Environment
- **Cayley Hall** – Winners of the Energy Efficiency League
- **Wesley Marriot** – Lifetime Contribution
- **Simon Alsbury** – Vice Chancellor's Award for Sustainability

Investment in 2012 Champions welcomed

Loughborough University, home of many of the UK's elite athletes, has welcomed the Government announcement of a £300m funding package to help support Britain's 2012 London Olympics medal hopefuls.

Chancellor Gordon Brown revealed details of the extra funding during his Budget speech. As well as a £300m cash injection, the Chancellor announced that there would be an annual Schools Olympics, held in a different city every year until 2012; a new national sports foundation, with £34m from the Government and other funding from private companies; and a further £2m for evening sports clubs for young people.

Loughborough is the UK's premier University for sports development, research and training. In the Melbourne Commonwealth Games athletes from Loughborough won 30 medals – testament to the strength and depth of the University's facilities and support network. Many of the UK's Olympic medal hopefuls will train at Loughborough, and the campus will play a key part in the 2012 Games. Speaking about the funding boost Chris Earle, the University's Director of Sport, said: "We are absolutely delighted to hear that the Chancellor has announced an additional £300m for the preparation of GB athletes for the Olympic Games in Beijing and London.

"Loughborough has a proud track record in producing Olympic and World Champions, including Lord Seb Coe, Paula Radcliffe, David Moorcroft and Steve Backley. Lottery-funded investment in world-class facilities at Loughborough over the past four years has already paid huge dividends in the outstanding performance of Loughborough-based swimmers and athletes who, between them produced 30 medals at the Commonwealth Games in Melbourne. If the University were a country it would have been ranked eighth in the medal table.

"The Chancellor's announcement means that we can look forward to working closely with our partner governing bodies of sport and the English Institute of Sport to give our Loughborough athletes the best possible chance of getting Team GB into the top five places at the London Games. Many of the athletes with the potential for competing in the 2012 Games are already here at Loughborough or will be with us in the next year or two. It is vital that they get the support and preparation they need now in order that they are able to compete with the world's best in 2012.

"I am delighted for our colleagues at UK Sport, and in the Governing Bodies of Sport, who have worked so hard to make the case for the necessary increased spending on our potential 2012 Olympians. 2012 will be a fantastic celebration of our sporting and cultural heritage and I know that we at Loughborough want to ensure that we play our part in this once-in-a-lifetime event."

Vice Chancellor reflects on time at Loughborough

Loughborough's seventh Vice Chancellor, Professor Shirley Pearce, officially joined the University in January. Below she reflects on her first few months at the campus:

"I have been at Loughborough for four months now and am grateful to everyone for making me feel so welcome. I am greatly enjoying working here with you and feel privileged to have joined the University at such an exciting time.

"Loughborough is special and I am impressed that, right across the University, there is a tangible passion to create a learning environment that promotes international excellence while addressing real world problems. Whether you look at our teaching and learning programmes or our research partnerships, you see evidence of this high quality and willingness to solve issues of direct relevance to industry and society.

"The 'Loughborough Experience' is something to be proud of. It is felt by staff and students, both undergraduates and postgraduates, and continues to be developed by our alumni right across the world. We may not yet be able to describe it adequately but it is certainly there!

"I have been fortunate to join the University at the time of the Commonwealth Games and have shared the excitement of the success of our students as they, together with other Loughborough based athletes, have come home with no less than 30 medals.

"This high profile sporting success is a credit, not just to the athletes, but to the whole University. It contributes to, and grows from, the atmosphere of success and the desire to succeed that permeates all aspects of Loughborough's activities.

"There are real challenges ahead and we must find ways to anticipate and influence these changes so as to keep us at the forefront of excellence. Loughborough has a great history of adapting to change and using this to its advantage. I am sure that will remain the case and I am proud to be part of this next phase of Loughborough's development.

"Our first major task is to prepare our strategic plan for the next five years. As part of this we will be working with Senate, Council and heads of major support sections to ensure that everyone can contribute to our view of the kind of university we want to be in five to ten years time.

"Please feel free to let me know directly of the values and ethos that you think we should aspire to and which should guide the way we develop.

"I am conscious that there are disputes at the moment regarding pay and pensions. Like all of us, I hope that swift resolutions can be found to situations which are often outside the control of us at Loughborough. In the meantime it is especially important for us all to maintain dialogue and respect for each other – whatever our position on any issue.

"Thank you very much for welcoming me. It's been fun being here so far and I hope you will enjoy the next few years as much as I expect to."

Shirley Pearce, Vice Chancellor

Cash boost helps Centre to safeguard UK jobs

The Innovative Manufacturing and Construction Research Centre (IMCRC), based at the University, has been given a boost of £18m from the EPSRC (Engineering and Physical Sciences Research Council).

The cash injection means that the IMCRC can continue its pioneering work, creating and safeguarding UK manufacturing and construction jobs, for another five years.

The IMCRC is a world-leading research centre that works with Government and industry to improve the efficiency and competitiveness of UK businesses. By advising on new technology and other strategies, the Centre expects to play a major role in defining the future of construction and manufacturing, and to help bring more jobs to the UK.

The Director of the Centre, Professor Phill Dickens, who is leading the project, said: "We are very pleased to receive this funding as it recognises the world-leading research that is being done and the very positive effect we are having on UK industry and society.

"We want to give UK manufacturers and construction companies a competitive edge by increasing their efficiency and introducing them to new technologies. As a result of our research, it is more likely that people will be able to buy high quality buildings, products and services made in the UK."

Sir John Gains, chairman of the Centre's Steering Group, said: "This cash provides continuity of the excellent work that is already being carried out and ensures that we can retain the fantastic research staff that are available to us at Loughborough University."

The Loughborough Innovative Manufacturing and Construction Research Centre is the largest centre of its kind in the UK, drawing on the expertise of 43 academics and 80 researchers.

The Centre's success in securing the funding coincided with a visit by Loughborough MP Andy Reed on 12 May.

Continued support for LSSF

Local company Gill Cooke Personnel Ltd has agreed for the sixth year running to join forces with the University to raise funds for the Loughborough Students Sports Foundation (LSSF).

The generous support of Gill Cooke Personnel Ltd has allowed the University to run the '250 Club', to raise money for the Foundation. Since the '250 Club' started it has raised £30,000 to support sports scholarships. LSSF enables the University to support talented young sports men and women through the largest sport scholarship scheme in the country. Recent sports scholars include Melbourne Gold medallists athlete Lisa Dobriskey and swimmer Caitlin McClatchley, and England Cricketer Monty Panesar.

Annual membership of the '250 Club' is £25. There are 10 monthly draws of £100, one draw in November of £250 and a £1,000 Christmas prize draw. Contact Jane Fitzmaurice for more information, email j.f.i.fitzmaurice@lboro.ac.uk

CRSP hosts renowned US professor and announces 2006 conference

For the next six months, the Centre for Research in Social Policy (CRSP) will be hosting Philip K Robins, Professor of Economics at the University of Miami, Coral Gables, Florida, who is here on sabbatical.

Professor Robins is an internationally regarded labour economist specialising in the design and evaluation of public policies toward low-income families. He has also been involved in the design and evaluation of many social experiments, including the Self-Sufficiency Project in Canada, and has published extensively in these subjects.

While at CRSP, Professor Robins will continue his research on several projects involving low-income families, including meta analyses of job training programmes, financial incentives programmes for welfare recipients, and child care responses to welfare reform policies.

He will present several seminars summarising his current research and will conduct training sessions for staff in cutting edge quantitative methods of evaluation which are relatively new in the UK. He will also serve as an adviser on technical issues in CRSP evaluation projects.

Professor Robins said, "I'm delighted to be spending my sabbatical at such a centre of excellence for social policy research, as evidenced by the recent award of a fifth Queen's Anniversary Prize to Loughborough. I hope my visit here will help to strengthen further CRSP's reputation for methodological expertise and technical skills in evaluation."

CRSP has also recently announced that it will be holding its 2006 Conference: 'A Fairer Society? A Review of Policies for Vulnerable Groups' on Wednesday September 20. Following the success of CRSP's 21st anniversary conference the 2006 event will provide an opportunity to explore policies intended to promote a fairer society for all, with particular emphasis on people in vulnerable groups.

Keynote speakers will include: Professor Robert Walker, Department of Social Policy and Social Work, University of Oxford, Research Fellow, Institute for Fiscal Studies; and Professor Jonathan Bradshaw, Department of Social Policy and Social Work, University of York. In addition, papers will be presented by policy makers, academics, and researchers under the following themes –

Young People and Future Prospects: covering child poverty and policies to overcome disadvantage in early years through services directed at health, education and family support.

People of Working Age – Opportunities and Limitations: encompassing employment, welfare to work, social inclusion, benefits and childcare.

Older People – Needs and Resources: covering pensions and financial security, services and support, care, independence, and other issues that may influence older people's quality of life and well being.

Transitions Through the Life-Course: including transitions into and out of work, study, childrearing, sickness, disability, retirement, old age and other changes in family or personal circumstances.

The conference, supported by BMG Research, will be held at the University's Holywell Park conference centre. Further information and registration details can be found at: www.crsp.ac.uk or contact CRSP on 01509 223372, email CRSPConference@lboro.ac.uk



Seven Loughborough students have been selected to take part in the IDEALS project.

New sports project provides amazing opportunity

Seven Loughborough students were among a group of around forty who gathered at the University in April to mark the launch of a pioneering new international sports initiative.

Ben Nash, Jock Wright, Helen Curtis, Claire Jenkin, Paul Williams, Richard Saunders and Jennie Platt have all been selected to take part in IDEALS (International Development through Excellence and Leadership in Sport) Advanced – a leadership exchange programme, which offers students and new graduates the opportunity to enhance their leadership skills before embarking on their professional careers.

The project has been developed by UK Sport, in conjunction with the newly formed Wallace Group of universities and Sport in Action, a sports development team based in Zambia.

The Wallace Group is a partnership of six universities – Bath, Durham, Loughborough, Northumbria, Stirling, and the University of Wales Institute, Cardiff (UWIC) – which was established to work on and promote joint sports development projects that provide 'added value' to the students of the partner universities and to the communities in which they work.

As part of the project, each of the Wallace Group universities will send six students to Lusaka, Zambia, for four weeks this summer. Working with Sport in Action, the students will use sport and recreation as a vehicle to promote healthy lifestyles and, in particular, to address the major concern of HIV/Aids among the young people of Lusaka.

"This project has the potential to dramatically affect the lives of thousands of young people living in and around Lusaka, while also being a life changing experience for the students involved," explains Stephen Stewart, Deputy Director of Sport at Loughborough.

The placements will provide the students with experience of working in challenging circumstances, helping them to enhance their leadership skills and improve their knowledge and understanding of other cultures.

The Wallace Group was named after the former Vice Chancellor of Loughborough University, Professor Sir David Wallace, in recognition of his outstanding support over many years to university sport.

Of the IDEALS project, Sir David said: "I am really delighted to see the way that these universities are working together on this marvellous initiative. It is a superb way to channel the idealism and energy of young people towards helping others, as well as a wonderful opportunity for those who participate."

The students will leave for Zambia in June.

Sounds of success

The use of audio CDs before and after football matches can positively influence the motivational and emotional states of players, according to Loughborough's Dr Chris Harwood.

'How to create the most effective CDs to enhance performance' was the subject of a workshop held by Dr Harwood at the British Psychological Society's Division of Sport and Exercise Psychology Football Psychology event at the City Hall, Cardiff, in March.

Pre-match audio CDs should deliver a range of messages, including reminding players about past successful performances, visualising success, emphasising their place in the team and developing a sense of emotional and physical control. This serves two purposes: to build self-confidence and achieve mental readiness for the event.

A player's favourite music may also be a key part of the CD. Many professional athletes have advocated the use of songs to motivate and mentally prepare them. It has been widely reported that tennis star Andrew Murray listens to The Black Eyed Peas' 'Let's Get It Started' as part of his pre-match preparation. While audio is widely used in elite sport circles to provide pre-match motivation, the use of audio in post-match routines can sometimes be overlooked.

As Dr Harwood notes: "Post-match CDs are just as important. To be at their most effective, they should emphasise relaxation and recovery as well as help the player to recall and review their performance. They can help the player both wind down emotionally after a game and maintain self-belief between matches."

Staff graduate from management programme

Twenty two managers from across the University were awarded an Institute of Leadership and Management (ILM) qualification this month, at a celebratory awards lunch hosted by Registrar John Town, and Director of Professional Development Andy Wilson.

Successfully completing the management development programme, arranged by Professional Development in partnership with Aspire at Loughborough College, entitles the cohort to membership of the ILM, a leading international body in the field of workplace leadership and management. With this first line management qualification under their belt, they are now on their way to developing their leadership and management skills further, with support from internal professionals whose goal is to see them succeed, grow and lead successful teams of people in the pursuit of the University's aims.

Commenting on the success of this internal programme, John Town highlighted the necessity for managers within the University to be equipped with skills to help them lead staff 'on the front line' and congratulated the delegates for their commitment to management and leadership development.

If anyone else is interested in developing their skills in this area, and wants a programme that offers immediate, practical application of

theory in the workplace, the programme is being repeated in the autumn. This forthcoming session will include some changes to the assessment process, in response to feedback received during an evaluation of last year's programme.

This programme will form part of a portfolio of leadership and management development activities offered by Professional Development for staff with supervisory or management responsibilities at Loughborough. Further details are available from Professional Development – contact Claire Bradshaw, Staff Development Adviser, by emailing C.L.Bradshaw@lboro.ac.uk

Maths adds up to Gold

A novel initiative, developed to help A-level students improve their maths skills, has struck Gold for Loughborough in a leading marketing awards scheme.

The 'Maths Card' – which is the size of a credit card and opens out to reveal nearly all of the pure maths formulae a student will ever need for their A-level studies – claimed top honours in the Direct Marketing category of the Heist Awards.

The A-level card was first created by Loughborough's Faculty of Engineering in 2002, to help students develop their maths skills and encourage them to consider engineering as a career. In 2004 the University took the initiative a stage further by producing a GCSE card to help reignite pupils' interest in maths.

Describing the initiative as "an exemplar of outstanding direct marketing", the award judges were particularly impressed by the popularity of the cards, which are now being used regularly by over 100,000 A-level students in two thirds of schools and colleges in England, Wales and Northern Ireland. The GCSE cards – which contain formulae relevant to the Intermediate/Higher syllabus – are being used by over 500,000 students each year.

Professor Chris Backhouse, Dean of the Faculty of Engineering, said: "The cards are undeniably popular with students and teachers alike, and they're fast becoming a 'must have' in student learning. We're delighted that the University has been recognised for its work in this area. It's been a real team effort, involving the Faculty of Engineering, Media Services and the Mathematics Education Centre, and the award is an important acknowledgement of all the hard work staff have put into this exciting initiative."

Andrew Cooney and Gill Youngs from the Faculty of Engineering, and Paul Atkins from Media Services are pictured accepting the award in London.



research@lboro



Professor Alastair Gale will be leading the MEDUSA project

Loughborough Professor to develop cutting edge CCTV that can detect hidden weapons

High-tech systems that will aid CCTV cameras in the identification of people carrying concealed guns are being developed at Loughborough University.

Gun crime is a growing problem in the UK, with almost 11,000 firearm offences recorded in England and Wales in 2004/2005 – an increase of six per cent from the previous year.

The aim of the MEDUSA (Multi Environment Deployable Universal Software Application) project is to try and reduce the occurrence of gun crime by developing intelligent software that is able to detect a person carrying a concealed weapon from CCTV footage, in real time.

Over the next three years academics at Loughborough will work with colleagues from Kingston, Brighton, Liverpool, and Sunderland universities, to develop the software.

The research team will examine genuine CCTV footage of people carrying concealed firearms, to identify any characteristics which are associated with the behaviour and activity of criminals before they commit a gun associated crime. This could be body stance/shape, movement or eye contact with cameras. Using this information they will then develop a novel machine-learning system for behavioural interpretation. This software will enable CCTV camera systems to automatically scan footage, searching for any behavioural characteristics which indicate that an individual may be carrying a gun and, if necessary, alert CCTV operators.

The research team will also develop a training programme for CCTV operators to enable them to improve their ability to detect suspicious characters. For this they will meet with experienced operators and identify the key cues they already utilise to detect people carrying concealed weapons, and then make these available for training purposes. A detailed database of CCTV footage of individuals carrying or not carrying concealed firearms will also be generated, which can then be used by local authorities and the police for training CCTV operators in what to look for.

Professor Alastair Gale, Head of Loughborough's Applied Vision Research Centre, is leading the MEDUSA project. He said: "The primary aim of this research is to make the UK a safer place to live by reducing the occurrence of gun crime. To do this we need to develop ways of identifying a potential gun crime before an incident occurs – a key instrument in this is CCTV.

"The new software we are creating will significantly improve the ability of CCTV systems to detect and predict gun-related behaviour, enabling individuals to be apprehended before they commit a crime. As the CCTV infrastructure is already in place it would be relatively easy to implement MEDUSA. Its introduction would also lead to the more efficient usage of police time, as well as more socially acceptable police practices as the identification of potential criminals becomes improved. Additionally, the system will yield faster post-event analysis of CCTV footage.

"This is a very ambitious project, but I am confident that by the end of the three years we will be able to demonstrate that CCTV operators using the MEDUSA system are quantitatively more efficient than the same operators working unaided."

The MEDUSA project is being funded by the Engineering and Physical Sciences Research Council (EPSRC).

Research Grants and Contracts for March

Aeronautical & Automotive Engineering

ATAP10 Extension to Project F – Experimental Analysis of Air-Swirl Fuel Injector and Pre-Mixers.
Dr A Spencer
£85,000 Rolls Royce Plc

Unsteady Fluid Mechanics Experiments – Instrumentation and Equipment
Prof J J McGuirk, Dr J F Carrotte, Dr P A Denman and Dr A Spencer
£850,000 EMDA

Support for INTELLECT DM Project
Prof J J McGuirk
£10,328 Rolls-Royce plc

Business School

Design & Implement a Clinical Trial Support System
Dr N F Doherty and Prof R Summers (Info. Sci.)
£92,696 KTP/University Hospital Leicester NHS Trust

Chemical Engineering

Fifth Tokyo Conference on Advanced Catalytic Science & Technology
Dr B Saha
£1,000 Royal Academy of Engineering

International Travel Grant
Dr Z Nagy
£700 Royal Academy of Engineering

Gas Plasma Decontamination of Fresh Foods
Dr G Sharma and Prof M Kong (Elec. Eng)
£45,971 DEFRA

Chemistry

Lithium polymer active carbon cathode and commercial coated lithium foil supply
Prof S Fletcher
£10,000 Schlumberger

Civil & Building Engineering

Noise futures network
Prof A Bristow
£101,972 EPSRC

Improving public transport research - Monitoring Kickstart Schemes
Prof A Bristow and Dr M Enoch
£59,600 Department for Transport

Evaluation Study of Demand for Responsive Services in Wiltshire.
Dr M Enoch and Dr S Ison
£34,378 Wiltshire County Council

Computer Sciences

Storybank : Sharing stories across digital divides
Dr E Edirisinghe and Mr P J Palmer (Mech. & Manuf. Eng.)
£89,833 EPSRC

CRSP

The Public Sector Responses to the Provisions of the Disability Discrimination Act – award increase
Dr S Roberts, Dr M Magadi, D A Ivaldi and Mr Viet-hai Phung
£11,524 Dept for Work & Pensions

Electronic & Electrical Engineering

Gas Plasma Decontamination of Fresh Foods
Prof M Kong and Dr G Sharma (Chem Eng)
£22,950 DEFRA

Beyond Nimbyism: A Multidisciplinary Investigation of Public Engagement and Renewable Energy Technologies
Prof D G Infield
£47,458 De Montfort University

MEDUSA (Multi Environment Deployable Universal Software Application)
Dr C Grecos and Prof A Gale
£174,895 EPSRC

Optimised Configuration of Sensing Elements for Control and Fault Tolerance
Dr A Zolotas
£198,588 EPSRC

e-CAP: Cold Atmospheric Plasmas
Prof M G Kong, Dr G Shama (Chem. Eng.) and Prof I R Smith
£338,516 EPSRC

English & Drama

The Bridge Project (East Midlands)
Dr N Swettenham
£15,600 Arts Council England

ESRI

Co-operative Crash Injury Study Phase 8, Part A2
Mrs J Lenard, Mr P D Thomas and Dr A P Morris
£1,379,975 Department for Transport

MEDUSA (Multi Environment Deployable Universal Software Application)
Prof A Gale and Dr.C.Grecos
£223,803 EPSRC

Geography

The response of aquatic invertebrate fauna to supra-seasonal drought and drying in a largely perennial chalk stream
Dr P Woodhead
£84,285 NERC

The evolution of Rome's maritime façade: archaeology & geomorphology at Castleporziano
Prof H Rendell
£41,579 AHRC via Royal Holloway and Bedford New College

Human Sciences

Relationship of salivary phytoestrogens to age-related cognitive decline and possible dementia in Indonesia
Prof E Hogervorst
£30,800 Alzheimer's Research Trust

Information Science

Study to investigate the impact of restricted staff access to ICT based communications upon staff within UK higher and further education institutions
Dr L Cooke and Dr J E Davies
£49,338 JISC

Consultation: NSF National Library for Health - award increase
Mrs J Harrison
£4,850 University of Oxford

National Electronic Library for Health
Mrs J Harrison
£4,850 NHS

Design & Implement a Clinical Trial Support System
Prof R Summers and Dr N F Doherty (Bus. School)
£92,696 KTP/University Hospital Leicester NHS Trust

Mathematical Sciences

Control of Noise-Induced Motion
Dr N Janson
£184,068 EPSRC

Support of Joint Research Group – East Midlands Mathematical Physics Seminar – award increase
Dr H R Dullin
£980 London Mathematical Society

Mechanical & Manufacturing Engineering

Initial phase of a programme of research related to powertrain manufacturing control systems
Dr R Harrison
£22,000 Ford Motor Co.

CLOVES : Complex low volume electronics simulation
Prof P Conway, Dr A West and Dr D Whalley
£125,000 DTI

Dynamic Fracture and Crack Propagation (Support for Overseas Visitor: Prof. Nikita Morozov)
Prof V Silberschmidt
£2,360 The Royal Society

School of Sport & Exercise Sciences

Research Studentship "A Multi-disciplinary investigation of the characteristics of young, elite, male and female hockey players
Dr M Nevill and Dr J Morris
£21,000 England Hockey

Social Sciences

Centre for Child and Family Research
Prof H Ward
£728,250 Department for Education and Skills (DfES)



Lieutenant General Sir John Kiszely.

Lieutenant General Sir John Kiszely opens new home of University's Typhoon Squadron

Lieutenant General Sir John Kiszely KCB MC, the Director of the MOD Defence Academy, officially opened the University's Keith Green building on 8 May.

The building, which is named after the former Chairman of the University's Council, is home to the University's Defence Technical Undergraduate Scheme's (DTUS) Typhoon Squadron.

The University was selected to take part in the DTUS in 2004. The scheme was set up by the MOD to support sponsored students studying for engineering and science degrees, all of whom are committed to become officers in one of the services (Army, Royal Navy, Royal Air Force, Civil Service).

Loughborough is one of only five universities in the UK to be a part of the DTUS, with each having its own squadron for students to join.

Thirty-seven cadets have now joined Loughborough's Typhoon Squadron. The students are mentored throughout their academic study to help them develop the skills and attributes they will need to fulfil their long-term commitment to the services. In return for its support, the MOD will recruit high quality qualified engineers, who are ready to assist the military in its work across the world.

During his visit to the campus Lieutenant General Sir John Kiszely was able to meet some of the Typhoon Squadron staff and students, as well as representatives from the University.

He also visited the Department of Aeronautical and Automotive Engineering and the Wolfson School of Mechanical and Manufacturing Engineering.

Wing Commander Keith Pearce, who is based at Loughborough University and is responsible for its DTUS students, said: "The Typhoon Squadron is delighted that Lieutenant General Sir John Kiszely officially opened our new building. It was a great opportunity for us to show him our base, here at the University."

World's first fully customised football boot accelerated by Rapid Manufacturing experts

British firm Prior 2 Lever's invention of the first-ever football boot designed uniquely for the individual player is supported by pioneering Rapid Manufacturing research from Loughborough University.

Selective Laser Sintering, an innovative platform technology already used in the International Space Station and Formula 1 cars, now opens up the possibility of personalised, high performance soccer footwear.

Prior 2 Lever (P2L) has combined world-class expertise in podiatry and performance footwear design to create boots uniquely designed to meet the needs of professional and elite athletes. Having spent many years perfecting the knowledge to create a 'corrective geometry' for an outsole individually designed for maximum support and reduced injury, P2L approached Loughborough's Rapid Manufacturing Research Group to help realise their unique invention.

Aided by a DTI grant, the Loughborough team and P2L looked into various manufacturing processes including injection moulding and machining before declaring selective laser sintering the most competitive.

"Selective laser sintering is ideal for bespoke football boots, as such small batches of outsoles



are needed for each player," says research director Dr Neil Hopkinson. "There is no need for expensive moulds or tooling and the CAD model reproduction is so precise that the exact 'corrective geometry' can be realised."

Despite its widespread commercial application, such as components for the US Navy/Boeing Super Hornet jet fighter, selective laser sintering needed to be tested specifically for use in football boots. Having proved the process could cost-effectively produce bespoke outsoles, the challenge remained to prove that laser sintered outsoles were durable yet light and flexible enough for professional football. "Partnering P2L provided the perfect opportunity for us to challenge the technical boundaries of rapid manufacturing," says Hopkinson.

Meeting this challenge created a basis for P2L to bring to market a truly innovative new product by exploiting the UK knowledge base, through Loughborough's Rapid Manufacturing Research Group. P2L and Loughborough partnered a Premiership football club to complete the 12-month project, using Government funding from the University's Innovative Manufacturing and Construction Research Centre.

The culmination of the research was marked by the launch in April of Assassin, P2L's performance soccer footwear featuring laser sintered outsoles and hand-crafted one-piece leather uppers.



At the signing are: (L-R standing) Dean of Science Professor Ken Parsons, Director of the International Office Tony Westaway, Professor Halliwell, Mr Munir Lone of Campus Consultancy, Dean of Engineering Professor Chris Backhouse, (seated) Vice Chancellors Professor Shirley Pearce and Professor Syed Imtiaz H Gilani.

MOU signing marks research partnership

Professor Syed Imtiaz H Gilani, the Vice Chancellor of NWFP University of Engineering and Technology Peshawar in Pakistan, visited Loughborough last month to sign a Memorandum of Understanding (MOU) with Vice Chancellor Professor Shirley Pearce.

The MOU cements a partnership agreement between the two universities, which will help to further strengthen Loughborough's international links and assist Pakistan in its aim for its universities to become more research intensive.

Under the scheme academics from NWFP University of Engineering and Technology Peshawar will come over to Loughborough to study for PhDs. Once they have graduated they will be able to return to Pakistan as research active academics. The scheme is already proving to be successful. Five academics from the University of Peshawar are currently at Loughborough, and it is anticipated that a further ten will commence their studies here next year.

Professor Neil Halliwell, Pro Vice Chancellor for Research, said: "This is an excellent arrangement for both universities and testimony to Loughborough's growing international research profile."

Chemical Engineers win international acclaim

Dr Zoltan Nagy from the Department of Chemical Engineering and his collaborator Professor Richard Braatz from the University of Illinois, USA, have been honoured at the Control System Society Awards Ceremony in Spain.

They were presented with the 2005 IEEE Transactions on Control Systems Technology Outstanding Paper Award, as winners of the best paper published in the Transactions during 2003 and 2004. The award winning paper was 'Worst-case and distributional robustness analysis of finite-time control trajectories for nonlinear distributed

parameter systems', published in the IEEE Transaction on Control Systems Technology in 2003.

The award was presented at the 44th IEEE Conference on Decision and Control, and the European Control Conference ECC 2005.

Other researchers from the Department of Chemical Engineering have also been honoured in India. Professor Richard Wakeman, Professor Vahid Nassehi, Dr Atul Waghode, Dr Navraj Hanspal and Dr Walter Ruziwa were presented with the Chemical Weekly Award 2005 in New Delhi. The award is presented for the best paper published in the 2004 issues of the journal of the Indian Institute of Chemical Engineers, Indian Chemical Engineer. The award winning paper was 'Computational fluid dynamics of free porous and coupled flows'.

RSA awards success

The inventive designs of two Loughborough University Industrial Design and Technology students have claimed top awards at this year's RSA (Royal Society for the Encouragement of Arts, Manufactures and Commerce) Design Direction Awards.

Peter Humphery received the £1,000 HEAD Trust Award in the 'Design for Debate' category for 'SEDATAIR' – his futuristic system that allows air passengers to travel under sedation in special capsules. Peter's design could help to reduce passengers' fear of flying, allow them to arrive more refreshed, and increase on-board security.

The second top prize was won by Chris Johnson, whose digital radio for users of all ages and abilities was awarded the Helen Hamlyn Research Centre Award of £2,000 in the 'Inclusive Worlds' category.

Another student, Rebecca Lawson, was awarded 'highly commended' in the 'Ceramic Futures' section for her work – a shower tray with a special textured surface that also enables feet to be exfoliated.

A further seven Loughborough University students were shortlisted in their chosen categories.

The RSA highlights the best of British and European design. The Design Directions Awards, launched in 2003, are the RSA's student awards scheme that challenges young designers to respond to projects with a strong social context and intend for them to question the role of the designer in the modern world.

Paul Wormald, a lecturer in the Department of Design and Technology, said of the students' success: "Our Design and Technology students performed excellently in the RSA competition. It is a significant achievement to have so many students do so well in this prestigious international design competition, and we've even improved on last year when we had seven students shortlisted and won two awards."



Obituary

Nimal Wijayaratna

Nimal Wijayaratna, who died unexpectedly on March 29, was born in Sri Lanka (then Ceylon) in 1938. He graduated in agriculture from the University of Ceylon in 1963, and entered the Ceylonese Civil Service to work in land administration and policy development. He travelled to the UK in 1976 to study for a Diploma in Management Studies at Kingston Polytechnic, followed by employment as a financial controller at a company in Surrey, before joining the International Co-operative College at Stanford Hall as a lecturer in 1979.

Nimal was a major contributor to the academic and social development of the International Co-operative College for almost twenty years, serving as Assistant Director of Studies and Director of International Programmes. Whilst at the College, he graduated with an MBA from Loughborough in 1985, and was instrumental in forging closer links with the University for accreditation of the College's programmes. In addition to his academic qualifications he was a Fellow of the Institute of Financial Accountants and a Member of the British Institute of Management.

In 1997, Nimal moved to the University's Business School as Lecturer in International Business and Strategic Management, teaching on a wide range of undergraduate and postgraduate programmes. He made a major contribution through the scope and depth of the topics that he taught and the large numbers of students who successfully completed his modules; and he was a regular and well-respected contributor to the Business School's Singapore Programme. His outstanding characteristic as a professional academic was his collegiate approach to staff and students alike: he was always loyal, conscientious and meticulous, and had an overriding concern with students' academic welfare.

Sport was one of Nimal's abiding interests, especially cricket, which he had played at a high level in Sri Lanka. He was also active in politics and religious affairs in the East Midlands reflecting his lifetime humanitarian concerns with social and international development, and he served for many years as a school governor. Nimal was always excellent company, especially at sporting events which could range from a five day Test to a raucous ice hockey match.

Nimal is sadly missed by colleagues in the Business School and other departments within the University, and by ex-colleagues from the International Co-operative College. Our sense of loss, however, must pale by comparison with that felt by his family, which was the centre of his life. We extend our deepest sympathies to his widow, Pragna, his two sons and their wives, and his three grandchildren.

Malcolm Hill, Loughborough University Business School



Dyscalculia and dyslexia in Higher Education

The Dyscalculia and Dyslexia Interest Group (DDIG) held its second full day event in April at the University.

The key presentations of the day focused on maths anxiety, mathematical resources and calculators and dyslexia.

Dr David Sheffield, Reader in Biological and Health Psychology from the Department of Psychology and Mental Health, Staffordshire University, asked 'How does anxiety influence maths performance and what can we do about it?'

His research has shown that maths anxiety has an effect on accuracy, particularly when performing a secondary task that puts heavy demands on working memory. He also found that students with high levels of maths anxiety reported greater anxiety and performed less well, particularly with respect to sums involving carry operations, compared to non-anxious students.

His neuropsychological investigations have revealed that waveforms representing the mental calculation procedure were greater for those with a high level of maths anxiety, but only when calculating problems involving a carry problem, and this is thought to be the result of the consumption of working memory resources in those who are highly maths anxious. He went on to describe a brief intervention that has been found to reduce anxiety during maths tasks and improve performance.

Presentations from the Mathematics Education Centre at Loughborough University focused on 'Mathematics for all – supporting your students with mathematics and statistics at the transition to university', and 'The Difficulties Dyslexic Students Experience Using Calculators'.

A wide range of optional sessions were available in both the morning and afternoon. These covered such topics as dyscalculia, neurodiversity, satellite navigation, dyslexia and student nurses and mathematics study skills.

The conference was supported by an excellent exhibition of relevant books and products.

Approximately 120 people attended the event, representing nearly 70 different institutions and organisations.

For more details about the DDIG visit the website <http://ddig.lboro.ac.uk> or contact Clare Trott by emailing C.Trott@lboro.ac.uk

Anniversary exhibition

A new exhibition has been put on public display in the Library to celebrate the University's 40th anniversary.

Using material from the archives, the exhibition illustrates the University's origins and development leading to the award of university status in 1966. Included in the display are the Royal Charter and rarely seen Grants of Arms to Loughborough College and Loughborough University of Technology, dating from 1920 and 1967 respectively.

University to play key role in new sports alliance

A new regional sports alliance, which aims to encourage people to be more active, was launched at the University on 8 May.

The Charnwood Sport and Active Recreation Alliance (CSARA), of which Loughborough University is a key member, has been set up to make sport and active recreation accessible for all, thereby helping to improve the quality of life of the people in Charnwood.

CSARA is a partnership body made up of several stakeholders including Charnwood Borough Council, Loughborough College, Burleigh College, Charnwood and North West Leicestershire Primary Care Trust and Charnwood Sports Council, as well as the University,

It will aim to provide a strategic coordinated approach to sport and active recreation provision across Charnwood that meets the needs of the local community and improves the quality of life of everyone living in the region through participation in physical activity.

Chris Earle, Director of Sport at the University and Chairman of CSARA, said: "This is a great opportunity for the local providers of sport and active recreation to work together to deliver an action plan that fits the needs of the local community in Charnwood."

For further information on CSARA contact James Ellis, the Charnwood Sport and Recreation Alliance Manager, on 01509 226185.

Camp Olympia launched

A brand new series of sports camps is being launched at the University this summer.

Camp Olympia is aimed at children aged between five and 14 years and offers activities ranging from dodgeball and 'duck duck goose' to table tennis and trampolining.

The children will be split into three age groups. 'Team Nike' is for the five to seven year olds, who will be able to play their favourite sports and take part in games to help improve skills such as hand eye coordination, teamwork and spatial awareness.

Those aged eight to ten will be in 'Team Hercules', and the 11 to 14 year olds will be in 'Team Zeus', with activities including swimming, archery, tennis, cricket and football on offer to the two groups.

There will be weekly awards for the 'best attitude' and 'most improved', and Camp Olympia Games winners on a Friday. Each child will receive a T-shirt and cap for their team and anyone with a birthday during the camp will receive a present.

Camp Olympia will run for four weeks, beginning on 24 July. Children can attend for five or three days (prices are £115 and £70 respectively).

There is a £5 per day discount for the children of Loughborough University staff, and a 10% discount if two weeks are booked or two children are registered at the same time.

Further information and booking forms are available from the University's Sports Reception, tel: 01509 226250, email: sdcc@lboro.ac.uk

Are relationships the key to better sports performances?

Researchers from the School of Sport and Exercise Sciences and the Department of Social Sciences have teamed up to examine a new scientific field.

Dr Sophia Jowett from Sport and Exercise Sciences and Dr Duncan Cramer from Social Sciences are conducting a research project, funded by the Economic and Social Research Council (ESRC), which aims to understand how the stressors imposed by the sporting environment influence the relationship quality of sportsmen and women, and in turn how relationship quality influences sport performance.

Sport performers are likely to face difficulties with their personal relationships due to the continuous and intense commitment required to achieve top-level performance. Sportsmen and women have to commit wholeheartedly to their sport and spend long hours training. They are also expected to participate in competitions on weekends, evenings and holidays, and frequently travel away from home.

While this would seem to be an obvious trade-off – a successful sports career for a harmonious relationship with one's partner – it doesn't mean it has to happen. There are many examples that demonstrate the positive influence partners can have on the career of sportsmen and women, so much so that high profile coaches have publicly recognised the positive impact athletes' partners have on their performance.

The research is longitudinal and data is being collected at two time points – during the highly demanding competitive season, and during preparation or off-season. This will allow the exploration of different sporting stressors while also enable the researchers to examine how sport performers' relationships with their partners ebb and flow through these different periods.

If you are interested in taking part in the study, contact Stephen Scales, Research Assistant, S.Scales@lboro.ac.uk or 01509 222757. Findings from the research will be valuable in informing sport performers and coaches about the role and significance of their personal relationships.

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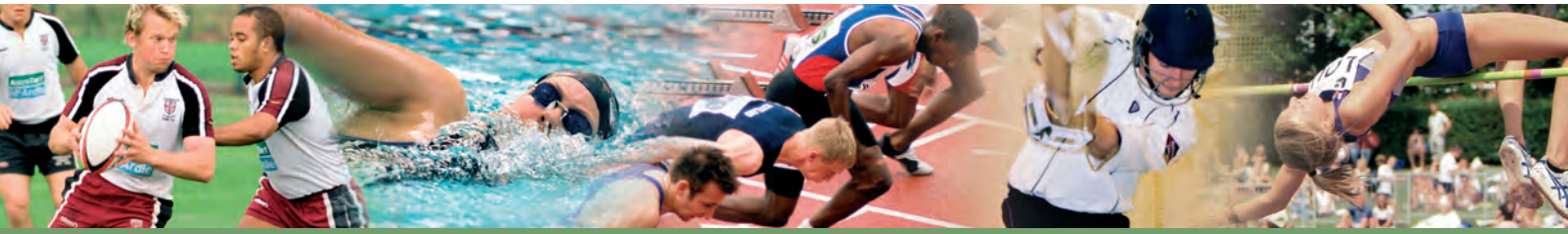
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BUSA success again for Loughborough

At the time of writing it looks as though Loughborough will once again be crowned British Universities Sports Association (BUSA) Champions after the students' recent successes in the major championship sports.

In the blue ribbon Football competitions both the men's and women's 1st team championships were won by Loughborough at Queens Park Rangers' Loftus Road ground. The men's success against Bath is a particularly significant feat – last year Loughborough was the first team ever to successfully defend the Championship, and this year they have gone one better to make it three wins in succession.

In an attritional final with several bookings, Loughborough went behind to a penalty in the 50th minute, before Robbie Simpson equalized. With the match seemingly destined for extra time, another good finish from Simon Dolman sent Loughborough into the lead. The last ten minutes were made more tense with Simpson being dismissed for a second yellow card offence to take Loughborough down to ten men, but the defence stood firm and there were soon celebrations from a significant Loughborough crowd at Loftus Road.

Not to be outdone, the Loughborough Football women's 1st team defeated UWIC (University of Wales Institute, Cardiff) 3-1 to take their Championship title for the 6th time. Milly Durant gave Loughborough the lead with a superb volley before UWIC equalised. In the second half, Anna Renken gave Loughborough the lead again, before Amber Cook took the game beyond the Welsh side.

In another successful day for Loughborough Sport, the men's 1st XV Rugby team took the major championship prize at Twickenham, successfully defending their 2005 championship win, this time against Bath – who had recently been defeated in the Varsity Match at Loughborough. At Twickenham, Bath succumbed 10-7 in an often dour, hard fought final.

Loughborough were on top in a close first half with an unconverted try the only score. Both teams were strong in the scrum, and hard tackling defences dominated, but it was Bath that broke through with a converted try to take the lead in the second half. Again, strong forward play led to Loughborough's quick response with Dan James going over the line. Although unconverted, that try proved decisive as Loughborough defended well to take the Championship.

These titles are added to a women's 2nd team victory in the Tennis BUSA Trophy, after a good Loughborough showing in the Individual Tennis Championships earlier in the year.

Loughborough's women also retained their Hockey Championship title in 2006 with a 3-0 final win over Brunel West London, while the 2nd team also took their title.

Loughborough's athletes retained the Indoor and Outdoor Athletics Championships by significant margins, and the swimming squad cleaned up the men's, women's and overall titles in the Short and Long Course Swimming Championships, claiming nine national student records in the latter.

With Loughborough women's cricketers continuing to dominate the BUSA Championships and the men's 2005 champions also handily placed, most of the main sporting titles of the year have once again come to Loughborough, and the 2006 overall British Universities Championship title seems destined for the East Midlands once again.

The 1st XV Rugby team celebrate their victory at Twickenham.

