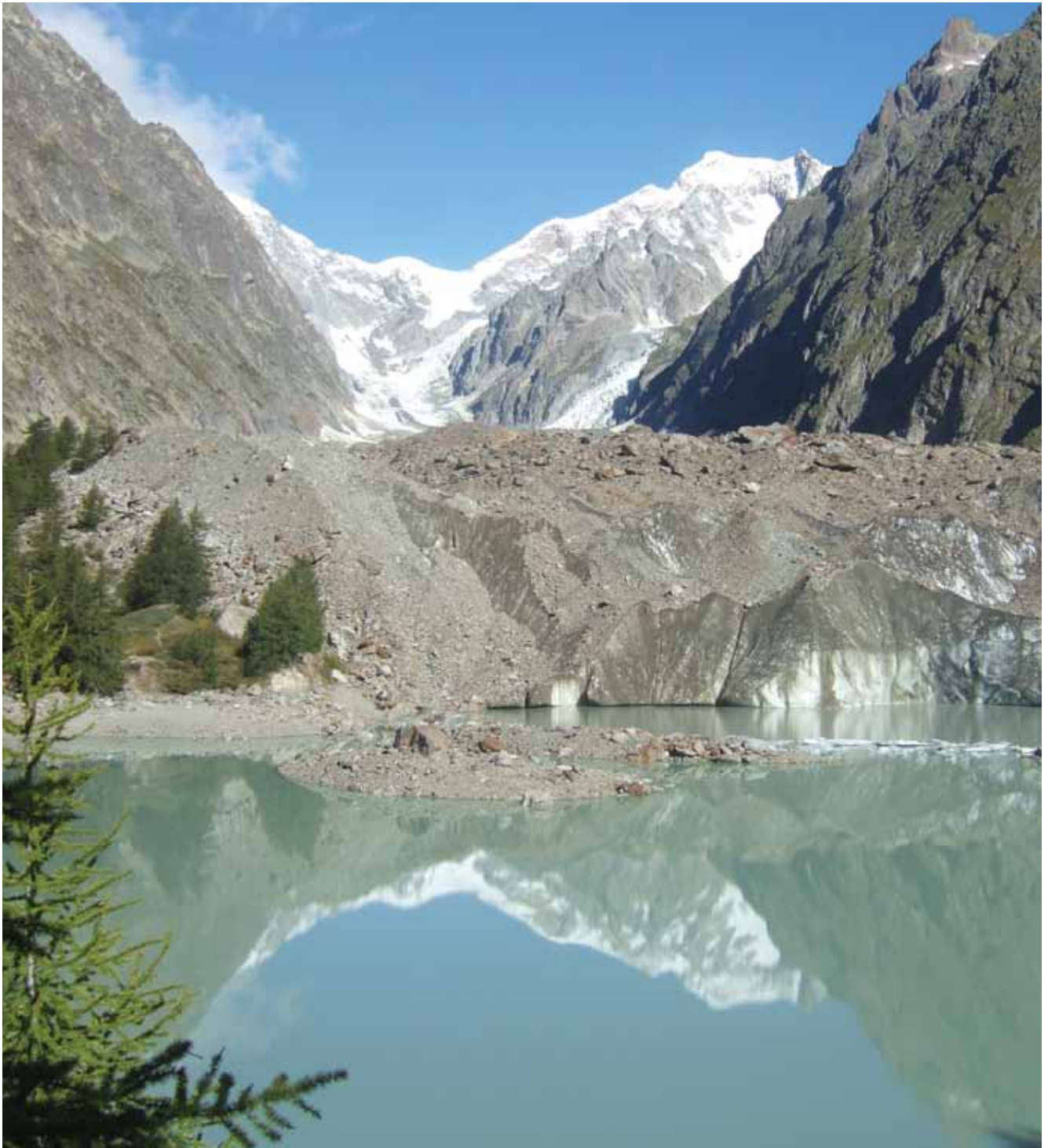


c n t a c t



The magazine of the University of Dundee • October 09



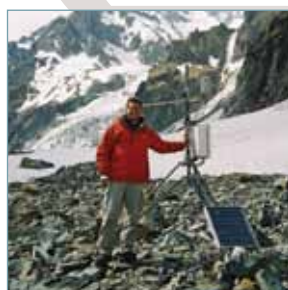
The trouble with glaciers...

contents

news..... 03



award winners.... 05



cover story..... 18



ise SPC profile.... 20

court news..... 26

what's on..... 31

credits

Contact is published by the Press Office, External Relations. Contributions are welcome but cannot be guaranteed publication. Advertising is also welcome. Printed by David Winter & Son Ltd. Editor | Roddy Isles r.isles@dundee.ac.uk t 01382 384910 | f 01382 385515 Design | Tara Wainwright | Design • Print • Marketing t.e.wainwright@dundee.ac.uk Scottish charity no: SC015096

contact • oct 09



from the principal...

It's great to see the campus buzzing with students again after the summer break. I always find the departure of students in late spring leaves the University without its heartbeat, and am therefore relieved to see it re-invigorated as our students return in early autumn. And of course, as always at this time of year, we are welcoming our new intake of undergraduate and postgraduate students.

I formally welcomed our new students at the Caird Hall on 7th September, and I pointed out then, that like the freshers in the audience, I was also a 'fresher', beginning my new academic journey as Principal with them. You will remember that the last time I wrote this column I was Acting Principal. Now, confirmed as Principal, I have the opportunity to take a fresh look at the University and begin a new phase of development.

Those of you able to attend the receptions held at the end of September and in early October will have heard at first hand what my vision for the future development of the University is. Realising this vision will be made more difficult by the prevailing economic climate, but its essential features are not shaped by the recession. Success will enable us to emerge from this period stronger than ever.

This University has many strengths, and throughout its history, it has also maintained close links with and impact on the City and the local economy. These are attributes I wish to expand and develop more fully over my term of office as Principal. We need to extol excellence in all that we do because excellence builds reputation and reputation is the basis for all our relationships: with students, funding agencies, existing and potential staff, government, and with partners throughout the world. To do this effectively, we need everyone, from teachers and scholars, to researchers and technicians, secretaries and administrators, to pull together to ensure the University builds on its successes to go from strength to strength.

To begin this journey, some of you will know that I am leading a strategic review of the University's activities. My intention is that this review, which has as its focus the identification of the University's key strengths in learning, teaching and research, will be completed by the end of the calendar year. We will then be able to agree new strategic priorities, based on the three key drivers of excellence, focus and impact. This will ensure our financial stability well into the future, create financial headroom to invest in new and exciting initiatives, and cement our standing as one of the world's great universities.

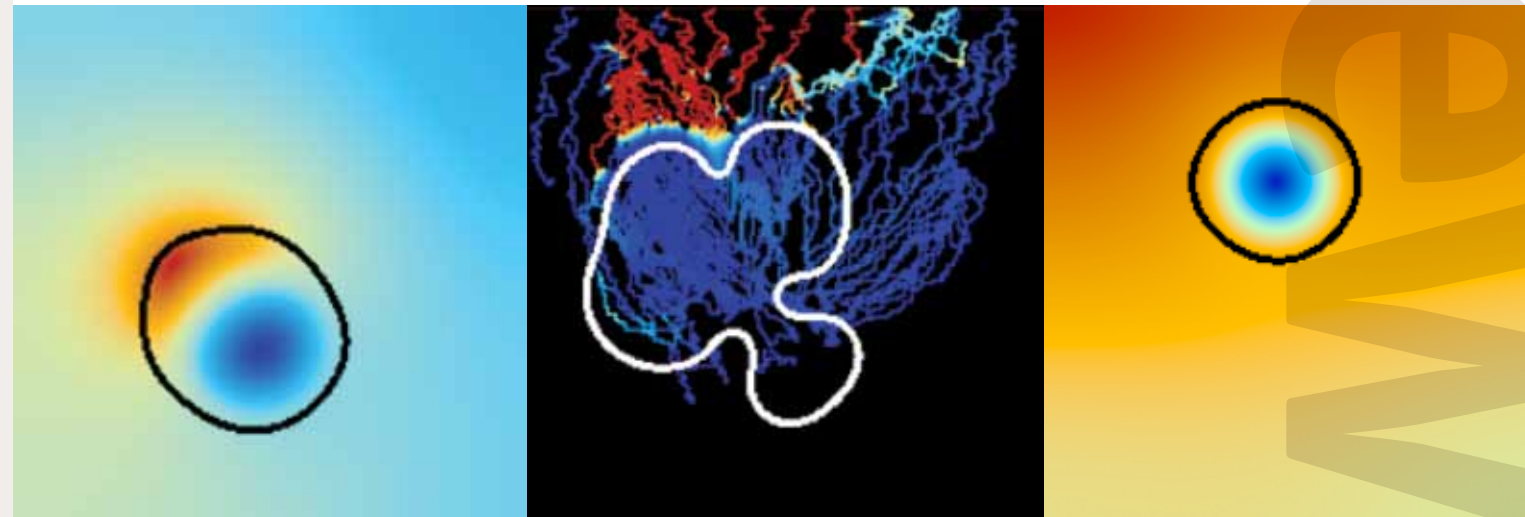
I'd like to take the opportunity here to update you on one of the projects which from previous columns you will know I am particularly passionate about: the V&A at Dundee. It was wonderful to hear confirmation in August from the Scottish culture minister, Mike Russell, that the Scottish Government fully supported the project and would provide resources to help fund it. The strength of the partnership between the City, the University and other stakeholders in driving this project was I think fundamental in winning such solid backing from Holyrood. The University will of course continue to be closely involved throughout the next phase of the project as site and architects are identified and additional funding sought.

Let me finally repeat how honoured I am to have been appointed to lead the University. I have ambitious aims for the University, but I am confident that with your support we can realise the full potential of all our achievements and meet our aspirations.

Have a good year!

Professor Peter Downes • Principal and Vice-Chancellor

€1.7m research boost for Mathematics



The University's longstanding reputation for innovation in the application of mathematics as a tool to predict cancer growth and spread has been boosted by a €1.7million grant from the European Research Council.

Dundee has long pioneered the use of mathematics to develop models which can predict how cancerous tumours develop, measuring their shape and the speed and spread of growth.

This new project, funded by the European Research Council, will lead to a full "virtual cancer" model which could be used to assist clinicians in diagnosis and treatment of patients.

"One of the big challenges in addressing cancer treatment is that you can have two patients with the same kind of tumour in the same area of the body, but they will react to it completely differently," said Professor Mark Chaplain, Head of Mathematics and the lead researcher in the new project.

"The factors which contribute to the creation and growth of cancerous cells can all be measured - most biological processes in the human body involve many different but inter-connected phenomena to which mathematical values can be applied.

"By using cutting-edge applied and computational mathematical techniques to track the many factors involved in cancer growth and spread we can develop a virtual model of how cancers can be expected to grow, which would give clinicians another valuable tool in diagnosing and treating individual patients."

The modelling approach is unique in its development of an individual-based model focussed at the cell level treating the biomechanical properties of each cell.

Professor Chaplain explained that Dundee was uniquely placed to carry out this research, as all the relevant expertise across different disciplines is located close together, enabling excellent collaboration across different schools and colleges.

"We will be working with colleagues in Life Sciences, Medicine and Physics to develop these new models," he said. "It is one of the great strengths of Dundee that we can make these links easily."

The grant covers five years and will provide seven new posts at the University - three post-doctoral research assistants, three PhD students and one research lecturer.

Cancer is one of the major causes of death in the world (particularly the developed world), with around 11 million people diagnosed and around 7 million people dying each year. The World Health Organisation predicts that current trends show around 9 million will die in 2015, with the number rising to 11.5 million in 2030.

The European grant builds on recent success for Maths at Dundee, which is enjoying a boom in recruitment at both undergraduate and postgraduate level.

"There seems to be a real surge of interest in mathematics at the moment which we are delighted to see," said Professor Chaplain. "The sort of work we are doing in cancer modeling illustrates the wide application of maths - in everything from science to sport to business - and there is a new generation who are picking up on that."

PAMIS flush with success

PAMIS – a charity based at the University of Dundee – celebrated three milestones in September with two visits to the Scottish Parliament, and an award of nearly £250,000 to continue its work with people with profound learning disabilities.

PAMIS was one of the largest beneficiaries of the £2 million Self Management Fund, from the Long Term Conditions Alliance Scotland (LTCAS), in partnership with the Scottish Government. The £249,555 grant will allow PAMIS to offer free support to young people with profound and multiple learning disabilities and their families to manage the complexity of the transition into adult services.

PAMIS Director Loretto Lambe said she was “over the moon” at news of the award. “Everybody at PAMIS is absolutely delighted as it will enable us to address an issue that is of great concern to people with profound and multiple learning disabilities and their parents,” she added.

This followed a visit to Holyrood at the start of the month to celebrate the success of their “Changing Places, Changing Lives” campaign. The campaign, led by PAMIS and MENCAP and with the support of several other organisations, aims to ensure that there is at least one public toilet built to the Changing Places standard in every town centre with a population greater than 15,000 and within each new public building such as shopping centres, concert halls, railway stations etc.



It is estimated that there are over 230,000 people in the UK that require these facilities. Dundee has three of the ten Changing Places toilets in Scotland.

A new British Standard has been launched which will ensure that all newly built public buildings will include a Changing Places toilet, which is larger than a standard disabled toilet and with enough space for two carers to work, and include a height-adjustable changing bench and a hoist.

“The inclusion of Changing Places Toilets in the new British Standard is a huge step forward and will make a dramatic difference to the lives of thousands of people with a range of disabilities across the UK who need access to these facilities. Without Changing Places toilets their lives are severely restricted.”

A week later, parent and carer Linda Burke again visited the Scottish Parliament to deliver a 3000-signature petition calling for the Government to implement the new British Standard.

The number of signatories that the petition attracted demonstrates the public support for this campaign,” said Loretto.

PAMIS (which stands for ‘Promoting A More Inclusive Society’) is the sister unit to the White Top Research Unit at the School of Education, Social Work and Community Education University of Dundee. PAMIS and the White Top Research Unit also hosted a successful conference in June which looked at the issues surrounding the carrying out of invasive healthcare procedures in Scotland.

Speakers included Shona Robison, MSP and Minister for Public Health and Sport, and the conference was attended by 150 family members, carers and other professionals from the NHS, local authorities, education providers, trade unions, residential service providers, respite and advocacy services. Its findings are contributing to the development of good practice and guidelines and will be forwarded to the Scottish Government.

Degree Show lands event award



The success of this year’s record-breaking Dundee Degree Show has seen the University pick up a prestigious Scottish Event Award.

The Degree Show, which for the first time was held at the Vision building at Seabraes, was named the inaugural winner of the Best Educational Event award. The award recognised those events which focus on the advancement of education or are organised for or by educational establishments.

The incredible quality of work produced by Duncan of Jordanstone graduates was showcased in the Vision building back in May and June. Supermodel Erin O’Connor, a trustee of the Victoria and Albert Museum, was guest of honour at a special Preview Evening, and around 7000 people attended the exhibition within 24 hours of its doors opening.

Representatives of the College and External Relations picked up the award at a glittering ceremony held at the Hilton Hotel, Glasgow in September.

Joan Concannon, Director of External Relations at the University, said “The award is a fitting tribute to everyone who worked so hard to make the event the success it was and, of course, the students who produced a wonderful array of challenging and thought-provoking work.

In total, nearly 11,000 people visited the 2009 Degree Show during its two-week run. With almost 5000 of those visiting the city and taking an overnight stay, an estimated £1.5million was generated for the local economy.

The Scottish Event Awards recognised the best events staged in Scotland over the past year, and celebrate excellence in a number of areas, including exhibitions, conferences, product launches, sports events and venues.

Scrymgeour Seminar Series Autumn 2009



Friday 30 October

Dr Lorenzo Zucca (King’s College London)
‘The Fragile Architecture of European Human Rights’

Thursday 05 November

Dr Thalia Kruger (Flemish Centre for Minorities)
‘Return of abducted children: does the route to The Hague always run through Brussels?’

Friday 13 November

AG Eleanor Sharpston (European Court of Justice)
‘From child abduction to the European Arrest Warrant: How is the ECJ getting on with its new competences under the AFSJ?’

All seminars will take place at 4pm in the Moot Court Room (Room 4.08, Scrymgeour Building)

ALL WELCOME TO ATTEND

SCHOOL OF LAW, University of Dundee, Dundee DD1 4HN Scotland UK
tel +44(0)1382 386736 email l.d.findlay@dundee.ac.uk

University Chaplain awarded MBE

Rev Dr Fiona Douglas, the University Chaplain, was awarded the MBE, for services to Higher Education, in the Queen’s Birthday Honours List announced in June.

Dr Douglas has been Chaplain at the University since 1998. She said she was ‘delighted’ to be awarded the honour.

‘I am really happy for the Chaplaincy,’ said Dr Douglas. ‘I regard this as a reflection of all the great work our staff do. We have a really vibrant Chaplaincy Centre at the heart of the University community, and one of the reasons it works so well is that the team working in it do such a good job.’

When she receives her MBE it will not be the first time Dr Douglas has met Her Majesty The Queen - she has previously been invited to preach at Crathie Church, at Balmoral. She also led a commemorative service at the Chaplaincy Centre when Her Majesty opened the University’s Dalhousie Building in 2007.

The Chaplaincy Centre welcomes, in Dr Douglas’s words, ‘those of all faiths and none’ and hosts a regular series of services, lectures and concerts.

Dr Douglas grew up in Hamilton, and is a former Head Girl of Hamilton Grammar School. She gained an Honours degree in Sociology from the University of Glasgow and then her Bachelor of Divinity from the University of Edinburgh.

She was Assistant Minister at St Giles Cathedral in Edinburgh from 1988 to 1990, and then returned to the University of Edinburgh to study for her PhD. She later worked in the BBC’s Religious Broadcasting unit before coming to Dundee and taking up the position as Chaplain in 1998.



RIAS honour for Dean

Graeme Hutton, Dean of the School of Architecture, has been elected a Fellow of The Royal Incorporation of Architects in Scotland.

Graeme joined the University as a lecturer in 2000, and became Dean six years later. In that time, he has helped bring about many changes in the School of Architecture, both in terms of research focus and the noted international standard of student's work.

He is widely recognised as one of Scotland's most innovative architectural educators and plays a key role in developing strategy and policy at a national level.

Graeme is also an internationally published designer and has recently picked up a 'shedload' of awards for his work on Drummond House, the Perthshire home affectionately known as 'the Shed'.

He has also recently collaborated with environmental artists Dalziell and Scullion in the design of an innovative pavilion presently being constructed in Saudi Arabia. The pavilion, entitled 'Rain', takes the form of a large porcelain tile-clad water vessel which visitors can enter to hear digitised recordings of 21 days of rain.



Local trusts boost CAHID



The University's renowned Centre for Anatomy and Human Identification (CAHID) has been selected as the forensic anthropology partner in the UK facility for remote reporting in the event of a CBRN (chemical, biological, radiological or nuclear) incident which causes mass fatalities.

Mass fatalities, whether caused by a natural disaster, industrial accident or terrorist attack, occur unexpectedly. When such an event happens, a quick and effective response is essential to deal with the recovery and identification of the deceased.

The current project at CAHID focuses on incidents where the remains are contaminated as a result of a CBRN incident. While a 'dirty bomb' attack has not yet taken place in the UK, this is something for which the Home Office is preparing and is putting the infrastructure in place to respond to such incidents.

Further fundamental research must be undertaken to underpin the Centre's approach to any such mass fatality event, and three local trusts have provided financial support to allow this research to take place.

The Arbroath-based Aberbrothock Skea Trust, Dundee's Lethendy Trust and a third organisation which preferred to remain anonymous agreed to help the University further its groundbreaking and internationally recognised work in this field.

The three organisations are donating a total of £7000 towards helping meet the salary costs of postdoctoral researcher Dr Roos Eisma and an additional Master's student who will be appointed later this year.

Mr George Mathieson, trustee of the Aberbrothock Skea Trust visited the Centre to meet Professor Sue Black, Head of CAHID, and Dr Roos Eisma, postdoctoral researcher, and presented them with a cheque for £3000.

Professor Black expressed her gratitude to members of all three trusts for their generosity, saying, "The underpinning of such important ventures by reliable science is absolutely essential to ensure that we are serving justice and the deceased to the best of our abilities."

Mr Mathieson said the Aberbrothock Skea Trust recognised the worldwide reputation of Professor Black and her colleagues and was delighted to be able to provide assistance.

He said, "Clearly there are significant scientific developments taking place regarding the recovery, and the off-site investigation, of human remains. The Aberbrothock Skea Trust is pleased that we have been able to offer support for such worthwhile and specialist research."

£1.5 million for Dundee spin-out companies

The University of Dundee is investing £250,000 in a new venture fund created to help finance spin-out companies emerging from the University. Frontier IP, a company specialising in the commercialisation of university intellectual property, have also committed £500,000 to the Fund.

Partnership status has been secured with Scottish Enterprise's Scottish Co-investment Fund, meaning that any Dundee Fund investment can be matched pound-for-pound, making a potential £1.5 million available to University of Dundee spin-out companies.

Neil Crabb, Chairman of Frontier IP, said "The University of Dundee is one of the UK's leading universities, with renowned expertise across a number of disciplines," adding that his company was attracted to the University because of its reputation for research excellence.

The fund will remain open to new investors for a further two years. The University has an existing portfolio of 24 spin-out companies ranging from Axis-Shield, which launched 27 years ago, to its most recent, Rapid Quality Systems Ltd, which was established last month.

The University has successfully pioneered a number of innovative knowledge exchange models. The Dundee University Incubator, now in its 5th year, provides lab and office space for up to 12 technology based companies in the heart of the city centre campus at the Dundee Technopole.

NEW ONLINE JOURNAL

CAHID has also just launched an in-house online peer-reviewed journal, with the aim to provide a forum for the presentation of postgraduate and undergraduate student research in anatomy, forensic anthropology and human identification.

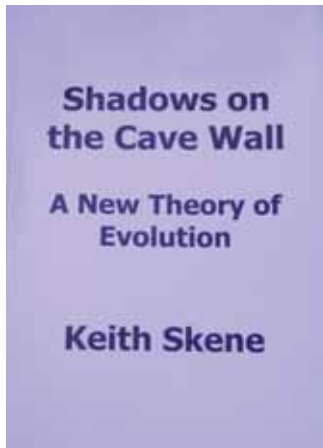
Axis: The Online Journal of Forensic Anatomy and Human Identification aims to be an inclusive venture, and its home page invites contributions from undergraduate and postgraduate students, as well as academic and non-academic members of staff. Issue 1 of the journal is now online, and includes an Editorial from Professor Black as well as research articles, a section including forensic and medical artwork, and book reviews.

Lucina Hackman (programme Director for Disaster Victim Identification) is the Journal Manager and Dr Patrick Randolph-Quinney, Lecturer in Forensic Anthropology, is Editor-in-Chief. It will publish peer-reviewed articles written by and for the Centre's students, including undergraduates in anatomical sciences, forensic anthropology, medicine and dentistry and postgraduates in forensic identification, human anatomy, medical art and forensic art.

Dr Randolph-Quinney said: "With over 400 students passing through our doors every year, it only takes one or two to submit articles from each group to ensure that this initiative succeeds and develops."

Professor Black added: "This new journal means we can demonstrate to the outside world the work that is happening within our Centre by encouraging our own students to gain some experience in research publishing."

The first issue of the Journal can be seen at: <https://ojs.lifesci.dundee.ac.uk/index.php/Axis/index>



Shadows on the Cave Wall: a New Theory of Evolution
Keith Skene
 Ard Macha Press

In 2009 we have celebrated the 200th anniversary of the birth of Darwin, and the 150th anniversary of his famous Origin of Species. It seems timely, then, that a new book offers a fresh perspective on Darwin's theory. *Shadows on the Cave Wall: a New Theory of Evolution* is a radical and challenging book that promises to turn current thinking about evolution on its head.

Dr Keith Skene, former Rhodes Scholar, evolutionary ecologist and Lecturer in the College of Life Sciences, presents a completely new approach to our understanding of how and why life evolved in the way that it did, and why the Biosphere ("the sum of all living things") functions in the way that it does.

Darwinism is based on biology, while neo-Darwinism and Gaian theory rely on chemistry. Dr Skene's hypothesis is that physics, and energy is particular, is the fundamental foundation on which to base our theory of evolution. Written in a popular science style, the book brings together philosophy and science, and discusses the relevance of his energetic theory to major global issues such as climate change, conservation and human geography.

Recent reviews have praised *Shadows on the Cave Wall*. Clive Cookson, Science Editor of the Financial Times, said: "Keith Skene has come up with an original re-interpretation of evolution – and the role played by energy in living systems – which he presents in a very readable way." The Scotsman was also full of praise: "his book will remain an attention-grabbing read for anyone interested in the subject."

Shadows on the Cave Wall: a New Theory of Evolution is available from the publisher (www.ardmachapress.com) and from Amazon (www.amazon.co.uk), priced £9.99.

Dr Keith Skene is a Lecturer in the School of Life Sciences Learning & Teaching.

Fulbright Scholar comes to Dundee



Dr Christopher J. Prom, assistant university archivist and associate professor of library administration at the University of Illinois at Urbana-Champaign, has received a 2009-2010 United Kingdom Fulbright Distinguished Scholar Award.

He will spend the next academic year on sabbatical as a research fellow at the Centre for Archive and Information Studies at the University of Dundee, where he will pursue a project entitled 'Practical Methods to Identify, Preserve, and Provide Access to Electronic Records'.

"I'm excited about the opportunity to learn from my international colleagues. In my project, I'll be working with many people and organizations to identify the best practices and software that archivists can use to preserve a vast amount of materials; including e-mail, websites, documents, media, and other electronic records.

"The most significant and valuable records can be especially vulnerable to loss or deletion," said Chris. "It's a complex area to navigate. I hope that my project will play a useful role in helping to identify approaches and software that archivists can use easily and effectively on a day-to-day basis."

For his project, Dr Prom plans to use several sets of records, including the files of a Nobel Laureate and those of a prominent champion of intellectual freedom. He is also interested in working with the records of community organizations in Scotland. He will live with his family in Dundee for the next 10 months.

Fulbright Scholar Program Award recipients are judged on several criteria, including professional qualifications, lecturing and research activity, language proficiency, previous experience abroad and personal qualities.

The Fulbright Program, the US Government's flagship international exchange program, is designed to "increase mutual understanding between the people of the United States and the people of other countries." The Council for International Exchange of Scholars (CIES), under a cooperative agreement with the United States Department of State, administers the Fulbright Scholar Program for academics and professionals.

Dundee world-leading in clinical skills education



A mobile clinical skills unit being used to deliver medical training to professionals in remote and rural areas of Scotland as part of a project led by the University of Dundee has been attracting international interest.

It is 18 months since the pioneering Clinical Skills Managed Educational Network in the College of Medicine, Dentistry and Nursing was established, and six months since the launch of its mobile skills unit, delivering simulation-based education to remote and rural areas of Scotland.

"Clinical skills" are defined as any action performed by an NHS Scotland employee involved in direct patient care, which impacts on clinical outcome in a measurable way. Clinical skills include cognitive skills (such as clinical reasoning and decision-making); non-technical skills (such as team working and communication) and technical skills (such as clinical examination and invasive procedures).

Dr Jean Ker is Clinical Lead for the Network, and has responsibility for leading and coordinating clinical skills education across Scotland.

"The Clinical Skills Managed Educational Network has made significant progress in its first 18 months," said Dr Ker. "One of the most exciting achievements has been the launch of the mobile skills unit, which has just completed the first six months of a two-year pilot.

"We've also begun to fulfil our other key aims; developing standard skills learning packs to provide better value for money in skills education in Scotland, as well as developing national databases to enhance the sharing of information.

"It's been great for the University of Dundee to be involved in this national project, and our progress is being followed with interest internationally."

Funded by NHS Education for Scotland and managed through the University, the mobile unit has been designed and developed by staff to address inequity of access to high quality clinical skills education across both geographical and professional boundaries.

At a cost of £485,000 for the two-year pilot, the unit provides the space, training staff and state-of-the-art simulation equipment such as the Child Crisis Manikin, SimMan and SimBaby, to enable a broad range of clinical skills education to be delivered in remote areas to the same standard as in central fixed facilities.

Since January 2009 the unit has visited hospitals and health centres in Shetland, Orkney, Wick, Fort William, Oban, Stranraer, the Borders and the Western Isles educating over 800 healthcare practitioners. Locally the unit visited Ninewells on 24th June, where over 200 hospital staff and prospective medical students visited the facility – from healthcare assistants to consultants.

Scotland is the first country in the world to develop and implement a pioneering national strategy for clinical skills. The Scottish Clinical Skills Strategy was launched in 2007, with the University of Dundee awarded funding of over £450,000 from the Scottish Funding Council and NHS Education for Scotland to establish a National Clinical Skills Managed Educational Network.

The Network is ensuring the use of best evidence as a base for skills education and has a national role in supporting research and development in clinical skills across NHS Scotland.

Dr Ker is supported by an Educational Projects Manager, Jeanette Stevenson, a Project Administrator, Felicity Garvie and three Regional Champions in the West (Anna O'Neill), South & East (Janet Skinner) and North of Scotland (Jerry Morse). The team has two recent staff additions with Sarah Thompson joining as Project Officer for the mobile unit and Andrea Baker in resource pack development.

For further information about the project, please visit the website: www.csmen.ac.uk



Exhibition marks DoJ anniversary

Matthew Jarron, Curator of Museum Services



The recent recognition of Duncan of Jordanstone College of Art & Design in the 2008 Research Assessment Exercise as Scotland's leading art school was an extraordinary achievement for an institution that for many years was regarded as a poor relation to its counterparts in Edinburgh and Glasgow. The origins of this remarkable expansion go back exactly

one hundred years to a bequest made by local businessman James Duncan of Jordanstone – the anniversary of which is the basis for a new exhibition in the Lamb Gallery.

Dundee had had an art school since 1856, when evening classes began at the High School. Their undoubted popularity encouraged the establishment of the Dundee Technical Institute on Small's Wynd, which opened in 1888.

Art was taught there from the start, but it was the arrival in 1892 of Thomas Delgaty Dunn as full-time art master that really marked the start of today's Art College. Dunn introduced day classes and massively increased the range of subjects on offer. Soon there were over 300 students trying to cram into two small art studios in the Small's Wynd building.

In 1906 a major fund-raising campaign was launched which led to a new building opening on Bell Street in 1910 with the name Dundee Technical College and School of Art. Money for expansion was tight, but in 1909, while the building was still under construction, a generous bequest came from out of the blue which seemed to be the answer to everyone's prayers, thanks to the late James Duncan of Jordanstone.

Born in 1825, Duncan had earned his fortune trading in South America. In his will, Duncan bequeathed some £60,000 towards "founding in Dundee a School of Industrial Art, to be named and known in all time to come as the 'Duncan of Jordanstone Art School.'"

He listed in some detail the subjects to be taught there and concluded by noting that the school should be run in collaboration with the Technical College but should be entirely independent of it.

The problems were quickly apparent. Duncan had made his will in 1899, but a decade later most of the subjects he wanted to provide for were already being catered for by the Technical College. The trustees of the College made a swift bid for the money, but it soon became clear, however, that they were unable to come to an agreement with Duncan's trustees.

For the next twenty years the bequest would remain like the pot of gold at the end of a rainbow, tantalisingly close but always just out of reach. By the time Delgaty Dunn retired in 1927, he had successfully fought off attempts to have the money spent elsewhere, but was no further forward in securing it for his school.

It was down to his successor Francis Cooper to re-commence battle with the Duncan trustees, the Technical College and the Scottish Education Department. It was Cooper's tenacity which eventually won the day. In 1933 a complete re-organisation led to the creation of Dundee Institute of Art & Technology, with the re-named Dundee College of Art given enough autonomy from the rest of the organisation to satisfy the Duncan trustees.

In 1935 a site on Perth Road was acquired for a new purpose-built art college and architectural plans were approved in 1938 following a national competition. Just as everything was ready to go, the war intervened and the whole scheme was mothballed.

Cooper retired in 1953, just as the foundation stone of the new building was finally laid. The building opened in 1955 and under the dynamic leadership of Cooper's successor, Hugh Adam Crawford, the new college quickly built up a reputation far exceeding anything that had been possible before.

New tutors such as Alberto Morrocco, David McClure and Scott Sutherland were among the best-known artists in Scotland, and were soon attracting students from throughout the country. In 1962 the College finally took the name of its benefactor of so many years before, and became Duncan of Jordanstone College of Art.

To mark the centenary of the bequest, an exhibition is being held in the Lamb Gallery from 24 October – 5 December. Visit www.dundee.ac.uk/museum for more information.

YEAR OF DEMOCRACY

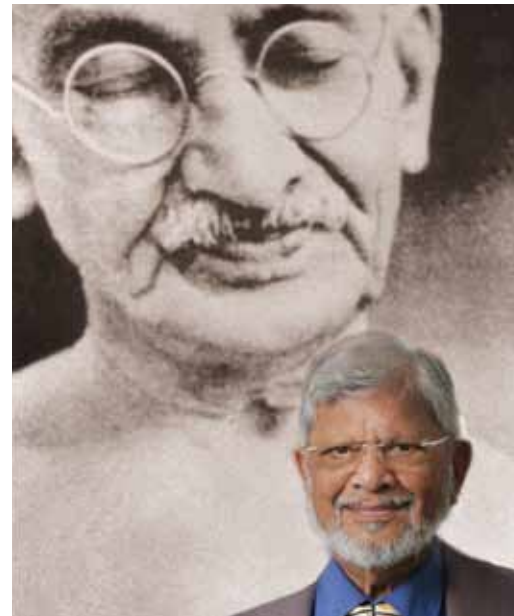
A Government whistleblower, the grandson of Mohandas Gandhi, and a former Guantanamo Bay detainee are among the guests helping to stimulate students' interest in politics as part of DUSA's "Year of Democracy" campaign.

Arun Gandhi (pictured below), himself a renowned political activist, kicked off the campaign when he appeared in Dundee to deliver the Margaret Harris Lecture on Religion, entitled *21st Century Peace-Making: The Gandhi Way*.

The campaign, sponsored by Borders Books, is concerned with promoting politics and debate among students. In all, eight high-profile speakers from across the political spectrum have been lined up to appear as part of the Year of Democracy celebrations. Debates and other events will allow students to participate and voice their own particular opinion, as well as hearing those put forward by the guest speakers.

Early in 2010, Mozzam Begg – an ex-inmate at the controversial US detention centre at Guantanamo – will discuss his experiences of the camp and how they led to him forming Cageprisoners, an organisation which raises awareness of prisoners rights. Film screenings, art and debate focusing on human rights and the War on Terror will accompany his visit.

Katharine Gun, the former Government Communications translator who in 2003 leaked details of an alleged plot to bug UN delegates ahead of the Iraq war, will also visit Dundee. Her actions led to Gun being charged under the Official Secrets Act, the relevance of which to democracy will be covered in her talk.



The spread of democracy across the globe, and efforts to extend the right of participation and representation to each and every global citizen are important features of the Year of Democracy. With this in mind, a Latin American Awareness Campaign, with both attention-grabbing and fun events, will take place.

Craig Kelly, Vice President of Campaigns at DUSA explained that the aim was to bring students together around the concept of democracy. "We have invited a number of fantastic and influential big name speakers and we will be using the campaign as a vehicle for student lead cultural events including art, film and music," he said.

"We will be involving all students and all societies in the events we are hosting and in a non partisan way we will ensure that all voices are heard. We are taking an international approach to the campaign though, in line with our changing student body, and so we are also organising a number of social and cultural events specifically organised around Latin American themes"

"A number of other speakers will be announced later in this semester. On top of this we intend to organise a series of fringe events and bring democracy and politics closer to students."

Other speakers currently confirmed for Year of Democracy include members of The Vine Trust who will discuss their work to promote sustainable development in the developing world, and veteran historian and political analyst Tariq Ali.

Another scheduled event will see University Vice-Principal Professor Christopher Whatley examine the political and philosophical context of Robert Burns, and the range and influence of his work.

The campaign launch coincided with the first ever online elections for the Student Representation Council (SRC). Previously the membership of the SRC has been co-opted, however this year DUSA filled all positions and fully contested elections for six places took place on Friday, September 25th.

DUSA President Andrew Smith said the line-up of lively and interesting events represented a fantastic chance for students to either engage with politics for the first time, or to get more involved.

"What we are doing is presenting a positive message and a positive representation of students," he said. "Our societies are all on board and the early feedback has been great. With our elections for the next rector taking place next year and with an upcoming general election, among other things, there is an appetite for politics on campus and this campaign will be a vehicle for that."

Full details of the campaign can be found on www.yearofdemocracy.co.uk.



The last decade of sustained global economic growth has reinforced the fear of depletion of critical energy and mineral resources.

Graduate school ready to meet global challenges

2009 may have been a year of recession world wide, but interest in the three global challenges of energy security, water security and food security continues to rise despite (or indeed perhaps because of) the recent set-back in economic growth. As a result, demand for the Graduate School of Natural Resources Law, Policy and Management's expertise is at record levels.

Ian Ball, Dean of the School, said: "I'm delighted to report that both the Centre for Energy, Petroleum and Mineral Law and Policy (CEPMLP), and the UNESCO Centre for Water Law, Policy and Science (UNESCO Centre) are seeing major growth, and recording successes across a range of fields. This includes increasing interest in their range of full-time and distance-learning MSc, MBA and LLM programmes."

He added: "There are three global challenges facing us in the twenty first century: to manage depleting or scarce resources in a sustainable manner; to supply affordable water and energy to the poor; and to build skills and local leaders in developing countries. Both Centres are uniquely placed to help us meet these challenges."

During the first eight months of 2009 CEPMLP won two research grants each worth more than £2 million, signed a teaching contract with a potential value of more than £1 million, and introduced an LLM in Climate Change and Energy Law and Policy.

One successful research project under the European Union's 7th Framework Programme aims to identify the main global challenges relating to competition for access to oil, gas and minerals resources, and to propose new approaches to collaborative solutions.

CEPMLP, under the leadership of its Director Professor Philip Andrews-Speed, will be coordinating organisation for the project team which comprises 11 other partners drawn from the United Kingdom, Germany, France, the Netherlands, Italy, Sweden, Switzerland, Italy and Poland, with funding totalling 2.67€ million over three years. The multidisciplinary project draws on expertise in geology, engineering, technological innovation, economics, international relations, political science and law.

Not to be outdone, the much younger UNESCO Centre has recently appointed a new chair in Water Science and Policy, new researchers in international and transnational law, and successfully introduced its innovative new Water Law Water Leaders programme.

A UNESCO Centre team consisting of Professor Geoffrey Gooch, Dr Alistair Rieu-Clarke, and Andrew Allan has also recently won a new major multi-partner and multi-disciplinary EU project (LiveDiverse) looking at water resource management in the context of biodiversity challenges in Costa Rica, South Africa, Vietnam and India. The team has only just completed its part in a multi partner EU STRIVER project, advancing local involvement and legal research into improved water management in Vietnam and Cambodia.

Closer to home, Scotland's River Tweed will provide a useful example of good practice in integrated water resource management. Professor Mike Bonell is European Co-ordinator for UNESCO's International Hydrological Programme HELP Basin initiative and is currently undertaking a range of projects on natural flood management, habitat restoration and hill slope hydrology around the River Tweed.

The last decade of sustained global economic growth has reinforced the fear of depletion of critical energy and mineral resources. Similarly, whilst the world is running out of water, it is not because there isn't enough, but because we pollute and use existing supplies inequitably and unsustainably.

The world's population is set to increase to nine billion by 2050, climate change will dramatically alter global water availability, and water security is already a major issue affecting national economic and political agendas.

How best we can meet the needs of humanity in ways that are efficient, transparent and fair, and which protect fragile ecosystems and the vital services they provide? This is fundamental to the UNESCO Centre, led by its Director Professor Patricia Wouters, and its core vision of "Water for All".

£2 million grant for alternative energy project

If the first global challenge is managing depleting and scarce resources, then the second is supplying affordable energy and water to the poor. In the UK we may worry about rising water bills or not being able to pay for electricity, but more than 25% of the world's population have no electricity supply, over one billion have no access to drinking water and 1.4 billion no access to adequate sanitation. Electricity can significantly enhance quality of life in the home and is essential for modern health services, water and sanitation, as well as communication and commercial development.

To date, policies in many developing countries have been directed at connecting communities to the national or regional electricity grids. With a few exceptions, this approach has failed, mainly on account of the high cost and a lack of government funding.

A consortium from the UK and India led by Dr Subhes Bhattacharyya at CEPMLP think they may have the answer, and has been awarded £2 million over five years from the Engineering and Physical Sciences Research Council and the Department for International Development. Their alternative solution is to promote 'distributed energy', whereby each community generates its own electricity, without having to rely on higher levels of government to make decisions.

The first aim of the project is to identify ways to generate cost effective, secure and reliable local off-grid electricity supplies that will meet future needs and are socially acceptable, economically viable and environmentally desirable. The second is to work out how these solutions could be scaled up and replicated on a large enough scale in the developing world.

Equitable and fair access to water is a topic being examined by Dr Michael Hantke-Domas and Dr Vishnu Rao in the UNESCO Centre which won a contract from SUEZ Environnement, the world's second largest water company. The project will examine whether and to what extent legal frameworks in six European countries provide for public access to information, access to justice, and participation in decision-making as regards the supply of water services.

£1 million grant for oil industry education

Building skills and local leaders in developing countries is another primary aim of the Graduate School of Natural Resources Law, Policy and Management as only solutions which are locally derived, led and delivered will effectively meet local needs.

In August, Dr Sarah Hendry of the UNESCO Centre and international contributors ran its new "Water Law Water Leaders" summer programme, with students participating from Australia, America, Europe, Asia, Africa and the Island of Mauritius. A postgraduate programme involving three UNESCO Centres in Dundee, Delft and Paris, it is an essential part of the course for students from LLM Water Law and LLM Water Governance and Conflict Resolution, and is also open to others on a short course or CPD basis.

CEPMLP, under the leadership of Rulzion Rattray, has won a third major project with a total value of around £1 million over three years; to train a nation of oil experts. Kazakhstan has 3% of the world's proven oil reserves, but Post-Soviet Union, the Kazakh oil industry had to be built almost from scratch, through cooperation with foreign oil companies.

The Kazakh government is determined to train their own citizens so that they can take over the running of the oil industry. The Kazakhstan-Britain Technical University (KBTU) was founded by Prime Minister Blair and President Nazabayev as one of the initiatives to achieve this ambition, and CEPMLP will deliver its LLM in Petroleum Law and Policy over three years collaboration with KBTU.

Climate change: new LLM to meet the ongoing challenge

As well as the three major challenges facing the world relating to water, energy and minerals, there are the overarching challenges of climate change, population growth and of effective legal governance.

For both Centres climate change is an increasing focus of activity. From September 2009 CEPMLP will add an LLM in Climate Change and Energy Law and Policy to its portfolio of specialised LLMs and complementing the recently launched LLM in Nuclear Law and Policy.

Around the world, research and teaching has focused on the scientific and economic aspects of climate change. The legal dimensions have remained relatively unexplored, and yet these are vital to the implementation of strategies to address climate change.

The new LLM degree, builds on CEPMLP's expertise in energy law, and Professor Peter Cameron's efforts to involve the wider stakeholder community in renewable energy research and debate.

Climate change also figures as a backdrop to much of the work that the UNESCO Centre has been doing in partnership with Geography academic staff in Dundee, with a particular focus on flooding and flood risk management. As well as inputting to the development of the Flood Risk Management (Scotland) Act on various committees and workgroups, staff have been leading on research in to natural flood management and looking at the impact of climate change on flooding.

Both Centres also continue to apply for and attract support for smaller research projects at home and abroad, including:

- Dr Elizabeth Bastida's and Mr John Southalan's work on the development of databases of court decisions involving indigenous peoples (Nuffield Foundation)
- A scoping study by Professor Mike Bonell, Dr Sarah Hendry and Professor Chris Spray for catchment restoration on the Eddleston Water (SEPA, Tweed Forum, Scottish Government)
- Dr Xiaoyi Mu's work on the effectiveness of the privatization and restructuring of the Chinese national oil companies (Carnegie Trust)
- Professor Philip Andrews-Speed's work on carrying out a pilot survey of consumer attitudes and behaviours in relation to energy saving in China

Planning 'Oscar' for Gardyne's Land project



For years Gardyne's Land sat hidden just off Dundee's High Street, a complex of buildings with a historic past which had been allowed to decay. By the early 1990s the state of the buildings had become so bad that they were considered to be seriously at risk – another five years of inactivity and they may have fallen past the point of repair.

Now, thanks to a project that was carried out with strong involvement from postgraduate students and staff within Town and Regional Planning at the University, Gardyne's Land has been named winner of one of the 'Oscars' of the planning profession.

It has been named Heritage-led Project of the Year by *Regeneration and Renewal* magazine after being successfully transformed into a back-packers' hostel containing 90 beds. The awards follows plaudits from Historic Scotland, which has described the restoration as possibly the most important urban conservation project in the country.

Gardyne's Land includes a 16th century merchant's house, a former Victorian shop and a 19th century billiard hall. The buildings are in an Historic Scotland Outstanding Conservation Area and the majority are Category A listed.

Dundee City Council and Tayside Building Preservation Trust, supported by Town and Regional Planning at the University and students on the European Urban Conservation Masters programme, carried out the restoration of the buildings.

"This is fantastic recognition for the Gardyne's Land project and all the work which the partners have put in over the past ten years," said Neil Grieve, Programme Director for the European Urban Conservation programme and chairman of Tayside Building Preservation Trust.

"It has been a really good example of 'town and gown' working together on a project which brings real benefit to the city while also highlighting our building heritage. Students and staff from the University have been wholly involved in this right from the outset and it has been a tremendous experience for the students in particular to be working on a real project which has been brought to fruition."

According to the panel of industry experts choosing the winner for *Regeneration and Renewal* magazine, the project had a valuable economic development impact on Dundee.

Announcing the award, a spokesman for the magazine said, "The complete absence of hostel accommodation in the area meant that Dundee was not on the itinerary of the majority of young travellers, so opening this facility filled a real gap in the region's tourism offer. It is refreshing to see such a use within an historic building so close to all the amenities of the city centre."

The spokesman said that the judging panel believed the way in which historical details had been incorporated into the building's new use was particularly impressive.

"A panelled room has been retained and now functions as a reading room, bedboxes are still much in evidence and fireplaces are now put to use as lockable cupboards for guests," he added.

By making a virtue out of such historical details that might otherwise be seen as a problem, the judges felt that the project had capitalised on Dundee's history while helping to regenerate the city, describing the transformation of Gardyne's Land as, "A truly refreshing approach to built heritage."

The judges concluded by describing the project as an excellent example of bringing a semi-derelict heritage building back into use and a worthy winner of the Heritage-led Project of the Year award.

Now students in Town and Regional Planning are turning their attention to the wider region of Tayside. They will consider the future of the area as they take on a new challenge set by TAYplan, the Strategic Development Planning Authority which was set up in 2008 to create a framework for major building activity in Dundee, Angus, Perth and Kinross and North/East Fife.

Working in groups, students in their fourth and postgraduate years will spend much of October helping create a strategy for development throughout the TAYplan area. The students are being asked for their thoughts on how development in the area could look over the next 20 years.

Convener of TAYplan councillor David May said, "We have just completed a seven week consultation on key issues. This student project provides an opportunity to hear their thoughts, and provides a great opportunity to get students involved."

"It's looking at how major developments which can affect people in more than one council area are dealt with in a planned and sustained way and for these students it's not only their future careers, but also what the environment in which they might live and work could look like up to 2032. This student project provides the opportunity for links to be made between the Planning School at the University and the new SDPA."



WEST PARK'S AUTUMN DAY DELEGATE OFFER

As you arrive in the morning, enjoy a **Bacon Croissant** with your tea/coffee

AND LOOK AT WHAT ELSE YOU GET:

- Main Meeting Room Hire for up to 8 hrs
- Stationery, Mineral Water and Mints
- Mid Morning Coffee with Shortbread
- 2-course Hot and Cold Lunch with **'Carvery of the Day'** and Hot Dessert
- Afternoon Coffee with Homemade Hot Scones, Butter and Jam
- Laptop & LCD Projector
- Standard AV Equipment

TEL: 01382 647177

www.westpark.co.uk

319 Perth Road Dundee DD2 1NN

Quote
ADDR 09
at time of
booking

*Available Oct & Nov 09

The not so humble potato...?

There can surely be no foodstuff we take for granted more than the humble potato. One of the mainstays of the British diet, spuds are always available, turn up in dozens of different guises and are served everywhere from the local chip shop to the highest of high-end restaurants.

Yet only now are we finding out more about the potato and its genetic make-up, as well as the diseases which put it at risk. The potato may be regarded as humble but it is a complex crop which has hidden its molecular secrets until recently.

Researchers in the College of Life Sciences have played a key role in unearthing both the code of the potato genome and the causes and actions of its chief diseases. In an era when the issue of food security is becoming ever more important, these are regarded as vital findings in potentially offering the ability to provide better, stronger strains of potato, which would help preserve its status as one of our most common and important crops.

Dr David Martin, of the Division of Biological Chemistry and Drug Discovery in the College of Life Sciences, led the UK Bioinformatics team which formed part of the international Potato Genome Sequencing Consortium (PGSC), a collaboration between 16 research groups in 13 countries which recently released the first draft sequence of the potato genome.

He said that the molecular technology now available was enabling huge leaps in potato research.

"The varieties of potato you see on sale at Tesco or Asda look very plain but trying to untangle how they 'work' is often very difficult," said Dr Martin. "Traditionally, research on potatoes involved breeding programmes which are slow and labour intensive, and that in effect made things difficult. Also, potatoes are actually quite a difficult crop to work on in terms of molecular genetics. Unlike man, cultivated potato has four, slightly different, copies of the genome (it is tetraploid). This makes studying potato genetics complicated and many important traits are poorly understood at the molecular level.

"It is only relatively recently that the molecular tools have been available which enable us to look at them in great detail. The same applies across a lot of crops, but obviously potato is important because of the amount of it we use.

"The potato genome sequence will provide a major boost to gaining a better understanding of how potato traits are linked to genes, underpinning future breeding efforts. Currently, non-genome led potato breeding takes about 10-12 years to develop a new variety. It is expected that being able to use the genome information will dramatically shorten the time taken to breed new varieties as well as reducing the cost.



"Piecing together the exact DNA sequence of the genome has been a technically demanding task, requiring the expertise of all our collaborators worldwide. But we can see for the first time the secrets of the potato genome, and now begins the challenge of analysing them over the coming months and years".

In the UK alone around £40million worth of potato crop is lost due to disease each year, so there is an economic imperative to improve the strains that are available. Far more is spent in chemical control of disease, with weekly sprays of pesticides required throughout the growing season.

"The difficulty lies in producing a disease resistant potato that is also suitable to what the potato industry wants. There is little point in developing something if no one wants it, and what you will find is the big users such as McCain's saying they can't use a strain because it doesn't roast well or isn't any good for chips. We have to take into account the commercial realities of the world," said Dr Martin.

Tackling diseases like potato blight is obviously hugely important, and again the University is playing a key role in understanding how these can be combated.

Professor Paul Birch, in the Division of Plant Sciences, is part of a group which has decoded the genome of the killer mould - *Phytophthora infestans* - which causes potato blight. On the back of that breakthrough he is now leading a £3.5million project investigating how this microbe is able to cause this notorious disease.

Late blight was the disease responsible for the Irish potato famine and still wreaks havoc around the world, accounting for more than £4billion a year in crop failure and the cost of fungicides. In 2003 it wiped out the entire crop of Papua New Guinea.

Professor Birch said, "Late blight, in the mid-19th century, was responsible for the Irish potato famine when a million people died of starvation and more than 1.5 million emigrated from Ireland. Today, it is still the worst potato disease and results in huge losses. Recently, two related species, *Phytophthora ramorum* and *Phytophthora kernoviae* have been introduced into the UK, where they are infecting native trees and shrubs, posing a considerable threat to gardens and the natural environment".

Under the terms of the £3.5 million project funded by the Biotechnology and Biological Sciences Research Council, Professor Birch and collaborators at SCRI and the University of Warwick, will examine how molecules called effectors from the potato pathogen *Phytophthora infestans* are able to cause potato late blight and how *Hyaloperonospora arabidopsidis* effectors cause downy mildew in the model plant *Arabidopsis*

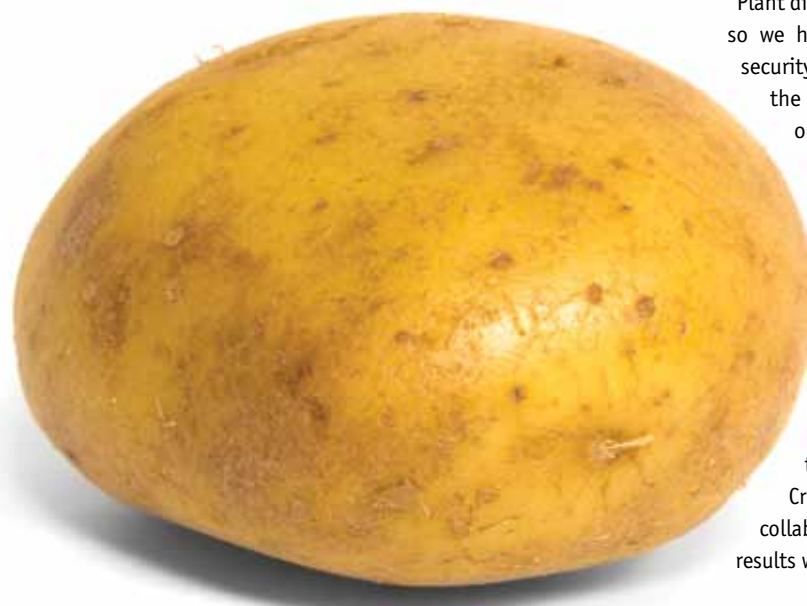
"As in animals, plants have evolved a complex immune system to prevent attack from micro-organisms but microbes continue to evolve ways to get round the defences and establish disease. They achieve this by secreting proteins called effectors into cells of the plant which block the plant's immune responses.

"The discovery that the pathogens *Phytophthora* and *Hyaloperonospora* have hundreds of genes encoding these effectors, along with recent advances in technology to study protein-protein interactions, provides an unparalleled opportunity to investigate how plant defences are targeted and suppressed by invading microbes."

Professor Birch said, "Amazingly, of the hundreds of effectors in *Phytophthora* and *Hyaloperonospora*, it appears that none of them are the same. However, these effectors must suppress common host proteins in the plant immune system. Identifying these host proteins is vital for new strategies for plant disease prevention."

The research could have implications not just for late blight and downy mildew but for many other plant diseases.

"We can imagine that many of the host plant proteins targeted by *Phytophthora* effectors will also represent key 'pressure points' that are manipulated by other pests and pathogens, so understanding late blight will hopefully have knock-on benefits for other plant diseases," said Professor Birch.



About potato

Potato is a member of the Solanaceae, a plant family that includes several other economically important species, such as tomato, eggplant (aubergine), petunia, tobacco and pepper. Potato is an important global food source. After wheat and rice, potato is the third most important food crop, with a world-wide production of 309 million tons in 2007. By 2020 it is estimated that more than two billion people worldwide will depend on potato for food, feed, or income. Improving potato varieties so that they can better cope with environmental challenges such as drought, and pests or diseases are key objectives of global potato breeding programs.

The potato has one of the broadest genetic diversities of any cultivated plant. Wild species of potato are very widely distributed in the Americas, from the South Western USA to Southern Chile and Argentina and from sea level to the highlands of the Andes Mountains. Many wild species can interbreed directly with the common potato and possess a wide range of valuable traits such as resistance to pests and diseases or tolerance to frost and drought, making them a useful resource for breeding new varieties. The Commonwealth Potato Collection (CPC), housed at SCRI, is the world's largest collection of wild potato species, providing a wealth of genetic biodiversity to seek novel genes and traits to meet the abiotic and disease challenges that will be faced in the coming decades.

Worldwide, an economic loss on the potato crop of about 3 billion per year is estimated from diseases such as late blight. These diseases are still largely controlled by frequent application of fungicides. It is expected that one of the first benefits of knowing the potato genome sequence will be a major breakthrough in our ability to characterize and select genes involved in disease resistance.

"Plant disease is a considerable obstacle to global food production, so we hope this research will have wide implications for food security. When we understand the molecular interactions in the plant cell and how microbes cause disease, we can work out novel strategies to control or prevent crop losses and environmental damage."

The work being done at the University is conducted hand-in-hand with collaborators at the Scottish Crop Research Institute, which is located on the outskirts of Dundee. The partnerships being formed locally are playing a key role in worldwide research.

"There is a very strong research base in Dundee between what we have on the molecular and bioinformatics side at the University and the biological expertise at the Scottish Crop Research Institute," said Dr Martin. "There are very strong collaborations between the two institutions and the research results we are seeing show the benefits of those partnerships."

Dundee joins massive climate change project

“In the twentieth century the natural resource preoccupying everyone was oil; in the twenty-first, the most precious natural resource is water.” Dr Ben Brock, Senior Lecturer in Geography in the School of Social and Environmental Sciences, has stood at the top of mountains and seen first hand one of the clear signs that we are heading for major problems with water use and distribution.

Ben is leading the University's involvement in ACQWA (Assessing Climate Change Impacts on the Quantity and Quality of Water), a major €6.5million, five-year international project funded by the European Commission 7th Framework Programme, investigating the natural and socio-economic impacts of climate change in areas where glaciers and snow melt make a major contribution to water resources, including the Rhône and Po river basins in the Alps, the Aconcagua river basin in Chile and the Tien Shan mountains in Kyrgyzstan.

One-sixth of the world's population depends directly on the run off from glacier and snow melt, feeding major rivers such as the Ganges, which millions of people depend on as a freshwater resource. Recent years have seen an increase in glacier melt, guaranteeing a supply of water for domestic use, irrigation and in hydro electric projects.

But glaciers are very much a finite resource, and they are declining in size. “The problem is that mountain glaciers are made up of compacted ice that fell as snow as much as 100 years ago, which is now melting in today's warmer climate,” said Ben. “That means we have a plentiful supply at the moment, but it is a diminishing resource.

The World Glacier Monitoring Service says it can be estimated that glaciers in the European Alps lost about half their total volume between 1850 and around 1975, another 25% (or 1% per year) of the remaining amount between 1975 and 2000, and an additional 10–15% (or 2–3% per year) in the first 5 years of this century.

“Glacier melt means a plentiful water supply in the short term,” said Ben. “Even in the record-breaking hot and dry European summer of 2003, the Rhône was full of water due to the rapid melting of the Alpine glaciers feeding it. Such hot summers are predicted to become more common by 2050, but as alpine glaciers shrink and disappear, river flows will become critically low. If you look elsewhere, central Chile produces an incredible range of fruit, vegetables and, of course, excellent wine – all of these depend on glacial run-off for irrigation. What do they do if the glacier shrinks to the point where there is not enough melting water to support that?”

“By 2050 the size of the glaciers may get critically small, and that is why we are looking very closely at all the factors which can affect the size of glaciers because this is a problem that we have to be very aware of.

“This is a problem that is being exacerbated at both ends – while the glaciers are melting there is also greater demand for water through population growth and development around the world. As countries become more developed, so their water usage rises. The USA's water usage per head, for instance, is several times that of China. But as China is becoming more developed, and more people are getting things like washing machines, they are catching up. More development also means that water sources are more likely to be contaminated, so that places further pressure on the whole system.

“One of the things we are seeing across Alpine Europe is that there is a shift in peak flow of water coming from melting glaciers, and it is getting progressively earlier in the year. The implication of that is that late summer becomes critical, because that is when water levels will be at their lowest. It may be that the Alpine countries will have to look at building large dams to collect water from the spring melt so that they can retain sufficient stores for late summer.

“Obviously a project to build dams on that scale could take at least a decade and cost a significant amount of money, which is why we have to start planning now.”

ACQWA is a huge project is bringing together 34 partner institutions across ten countries and will unite physical geographers, social and political scientists as well as stakeholders such as governments, conservation and land management bodies in Switzerland, France, Italy, Germany, Spain, as well as Chile, Argentina and Kyrgyzstan.

Dundee is strongly represented in the project. Ben is working with colleagues at the Swiss Federal Institute of Technology in Zurich, using numerical modelling to predict the effect of climate change on glaciers and its impact on water supply, and will undertake fieldwork on the Mont Blanc massif in Italy and in Chile as part of the project. He and the rest of the international project team will be forecasting glacier water flows at 2050 and 2100.

Meanwhile, Andrew Allan in the UNESCO Centre for Water Law, Policy and Science at Dundee is leading the socio-economic contribution to the project from four partners.

“The social and economic impacts of changes in water availability are potentially enormous,” adds Mr. Allan, “so the project will apply its formidable scientific research to assess what the human impact is likely to be.” There are likely to be serious consequences for land and water management, electricity generation, winter tourism and agriculture in the European basins, and the UNESCO Centre team of Mr. Allan and his colleague Dr. Alistair Rieu-Clarke will also analyse the water governance regimes, and the hurdles preventing adaptation to a changing resource.

Dundee is one of only two UK institutions involved in ACQWA, a clear recognition of emerging strengths here. “It's important that Dundee is recognised as having this expertise in all aspects of water and its management,” said Ben.



“As it becomes more precious, there are going to be more and more big questions regarding water – how do we conserve it? How do we distribute it fairly? How much do we need? How much have we got? Dundee is making a big contribution to helping find the answers to those questions.”



Research running forwards at

The usual model for academic research operates along the sort of lines indicated by that phrase – academics leading research programmes. But a pioneering initiative at ise (the University's Institute of Sport and Exercise) is giving students the chance to be involved in front-line research.

ise is engaged in consultancy work with many external client groups including a range of national governing bodies of sport, professional sports clubs and organisations, and talented individual athletes.

Through ise's Performance Centre, staff provide physiological support to athletes across the performance continuum, from talented youths, to elite, international level athletes, with the ultimate goal of helping the athletes to train smarter and to improve performance.

Now staff in the Performance Centre have created a unique opportunity to enhance the skills training for students on the undergraduate degree programme in Sports Biomedicine.

"We wanted to give the students the chance to be at the centre of our research activities and get the experience that comes with being wholly involved with clients," said Helen Weavers, sports and exercise physiologist at ise.

An example can be seen in two very successful student research projects recently completed by Fiona Adams and Emilia Thomson, who have both since graduated. They provided physiological support to three local male runners - James Myles, James Hughes and Keith Anderson, collectively known as 'Team Hotrunning' - taking part in the ultra-demanding Marathon Des Sables in March this year. The Marathon Des Sables is known as "the toughest footrace on earth", with competitors having to cross 150 miles of the Sahara desert on foot in the space of just six days, all in temperatures reaching over 40°C daily. Not an easy task, to say the least.

"The Marathon Des Sables is an event that throws up a unique set of challenges for the athletes involved," said Helen. "What the students set out to do was help the runners find the best methods of preparation in terms of training for such a demanding event and in nutrition and hydration, which present major challenges given the distances to be covered and the conditions the race is run in. It is not a normal marathon to prepare for, and there was very little advice available to the runners on how they could possibly prepare themselves for it."



'Team Hotrunning' - left to right - James Hughes, Keith Anderson, and James Myles, after finishing the Marathon Des Sables

The students ran two projects with Team Hotrunning. The first focused on providing physiological monitoring and support to ensure training was effective and to advise on preparation for such a long and demanding event. This included laboratory test sessions to assess developments in fitness and to prescribe a structured training programme. Alongside this, an acclimatisation trial was included to help them plan for the extreme conditions they would encounter in the desert.

The second project addressed the nutritional and hydration strategies. This involved an analysis of current diet and recommendations to get the most of out training through fuelling the body efficiently. This also involved recommendations on what should be consumed during the race to ensure maximum energy. The hydration strategy was particularly key due to the conditions and involved assessing the effects of three different fluids (water, an electrolyte drink and a mixed carbohydrate and electrolyte drink) during exercise in the heat. This resulted in an individualised fluid prescription to ensure effective hydration.

Team Hotrunning all completed the race, albeit with some hard challenges along the way. "Although the runners were not elite athletes, their commitment to the programme was excellent and by discussing ideas as a team it made it a great experience for all involved," said Helen.

The team also raised over £30,000 for the Maggie's Cancer Care Centre in Dundee through their admirable efforts. Full details of their adventure can be seen at the Team's own website at www.hotrunning.net.

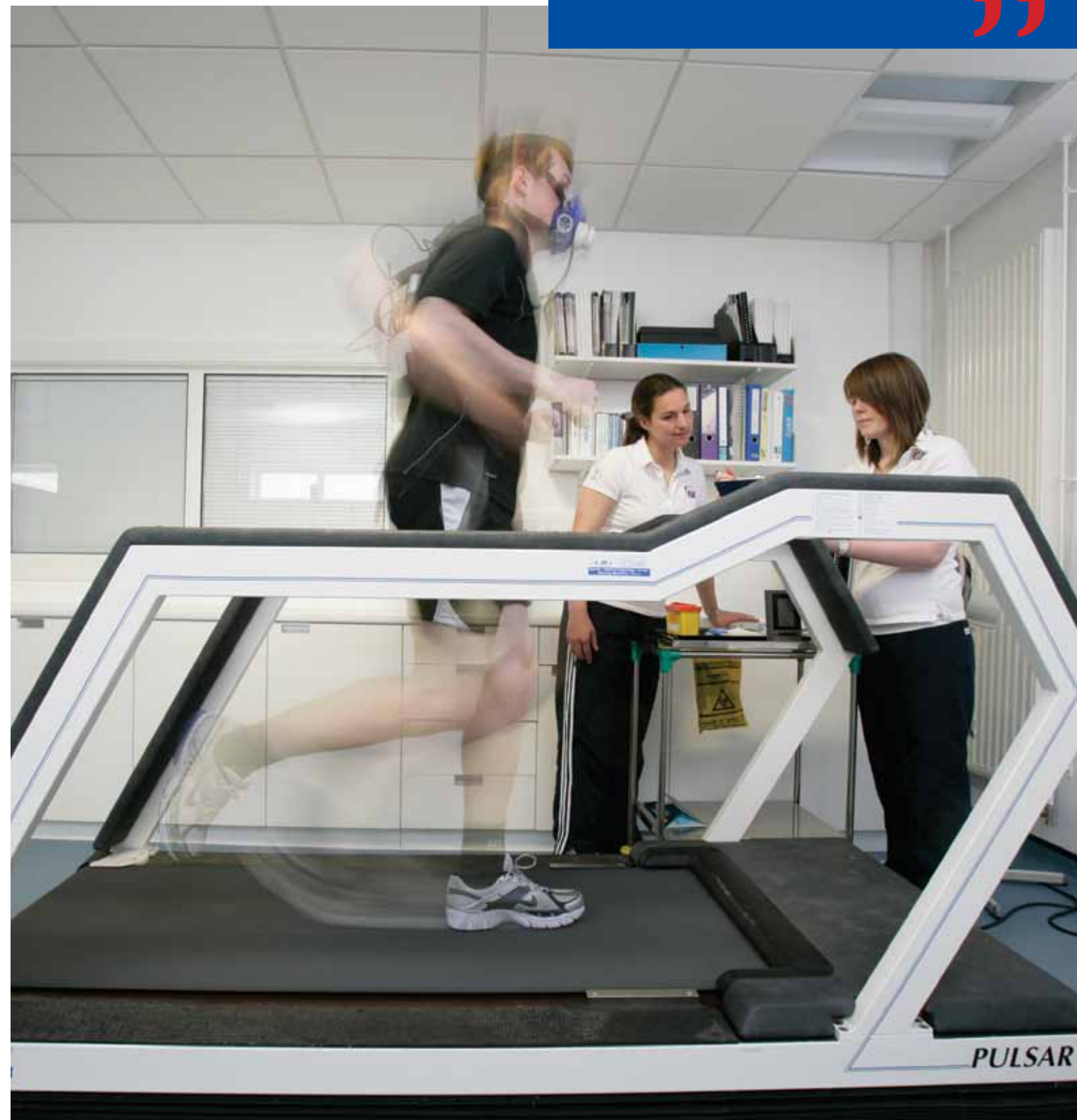
From the research point of view, the work provided interesting findings with regard to the sort of training programmes that may be best applied to such an extreme event. The findings were presented by Helen at the British Association of Sport and Exercise Sciences (BASES) Annual Conference in Leeds which generated significant interest in the field and subsequently led to an article on the research being included in the BASES professional magazine.

"This has been a great example of high quality applied research being carried out in ise with the full involvement of students," said Helen. "This year, we have another two applied research projects which honours students are involved in - both are with the youth teams of a professional football club.

"One project involves monitoring the effectiveness of the team's training and how this impacts on performance from a physiological point of view. The second project involves the implementation of a strength training programme and consequently an evaluation of its effectiveness. Both of these projects allow critical evaluation of the sports science support that is provided and therefore will ensure good practice of ise's Performance Centre in the future.

"That is another key aspect of our whole outlook on this. Through the Performance Centre we are aiming to provide the very best training and advice to sportspeople. If we can contribute directly to the research that informs that advice, and have students involved at the heart of that, then we are extremely happy."

“We wanted to give the students the chance to be at the centre of our research activities and get the experience that comes with being wholly involved with clients**”**



Seeking the science solution



Newspaper headlines bemoaning the number of students opting to study science subjects have become commonplace in recent years. This has led to alarmist predictions about the knock-on effect for the Scottish industry and how the lack of qualified scientists is likely to hamper the economy in years to come.

Invariably, the coverage focuses on speculation that pupils drop sciences once they cease to be part of the core school curriculum, because they are too difficult, because they do not enjoy the subjects, or because they fail to see the relevance of science to their lives and career prospects.

However, this is an oversimplification of the complex reasons for students turning away from sciences, and for deciding against pursuing science degrees, according to Professor Susan Rodrigues and Dr Divya Jindal-Snape.

The pair, from the University's School of Education, Social Work and Community Education have carried out research into the reasons why the take up of science is falling.

They collected data from over 500 Scottish secondary school pupils in the S3 (13-15) age bracket to gauge their understanding of science, their attitudes to science, how the subject is taught in school, and the possibility of going into science as a career.

The pupils reported overwhelmingly positive experiences of science subjects at school, but the majority still said they had no intention of pursuing a career in science. The study's authors said the results confounded existing research concerning pupil's attitudes.

"We were interested in why pupils are opting out of science," explained Professor Rodrigues.

"Our survey asked them about attitudes towards a variety of things like science they've been taught at schools, the science they encounter in their everyday life, their attitudes to scientists, and their opinions about the role of science in society.

"What we found is that issues concerning networks, with their friends and family, are the social capital factors that influence their choices with regard to interest in science or pursuing science.

"When we started this project, we were looking at data and disseminated information that suggested pupils don't like science and that it's not promoted strongly enough in schools. We were quite surprised that our sample showed they did in fact enjoy science and felt it was taught well and encouraged in schools.

"Their responses to questions about whether science was good or bad showed well-informed, balanced views – whilst they don't think science is evil, they don't think it cures everything either.

"They also believe that their parents want them to go to university, and expect to go to university, but they're not planning on doing science."

This aspect of the research – the influence that parents, knowingly or otherwise, exert over their children in terms of their career choice – featured prominently in the media when the findings of the study were published. Dr Jindal-Snape emphasised that this was merely one aspect of the survey, and that the research was somewhat misrepresented in the coverage.

"The pupils we questioned wanted to make their parents proud," she said. "One thing we found is that they wanted to choose careers that they thought would make their parents proud, but the majority then said they would not go for a science career.

"We asked them if their parents wanted them to pursue a career in science, and most said that they didn't. That doesn't mean parents wouldn't support them if they choose a career in science.

"Whilst we said parents weren't encouraging their children to do science, we never said they were discouraging them either, and there is a huge difference.

"We asked the pupils who they spoke to about science and who helps you with homework. Some spoke to their peers, some to older siblings and some spoke to their parents so it wasn't as if there was an issue about that."

"We want to undertake further research where we can get parents' perspectives directly from them."

Professor Rodrigues said, "Also, it is important to remember that this is the pupils' perspective of what their parents want them to do."

"Of the group who were flagging up the parents' aspect, a lot of them said their experiences of science were positive. It's not that they don't want to deal with science in their studies – they're interested in the professions such as medicine, dentistry and veterinary sciences, but are not interested in studying pure science subjects.

"They'll quite happily study science as part of another degree – and enjoy that part of it – but don't see this as a career for them."

Both Professor Rodrigues and Dr Jindal-Snape highlighted the fact that the results showed that pupils understood the importance and relevance of science, but some how saw it as "not for them".

"When we asked them about science in daily life they thought it was useful, and could see the relevance and also identified the work that scientists are doing for the welfare of people as very relevant and very important," said Dr Jindal-Snape.

Professor Rodrigues added, "They were able to see the balance. They thought that scientists were doing work that helped society, but they also thought that scientists created problems in society. They thought that in their everyday life, science was useful.

“One thing we found is that they wanted to choose careers that they thought would make their parents proud, but the majority then said they would not go for a science career”

'The way they're being taught science in school now is helping them to make connections with their everyday life.'

She said that one of the most positive aspects of the study emphasised that the exciting changes which have taken place in the classroom are now beginning to have an effect. Science teaching is becoming evermore geared towards experience-based learning that emphasises the relevance of science in the everyday life of pupils.

"The teaching of science in schools has changed quite a bit, and will continue to change with Curriculum for Excellence. Teachers' strategies are different and allow for much more pupil engagement as well as making the subject more interesting and fun."

The research is funded by the British Academy, and the team hope to follow up the research by monitoring how pupils' attitudes to science change in the coming years.

"The pupils were in S3 at the time, and we want to question them again when they're in S6 and even beyond to post-school transition, to see if their opinions have changed," explained Dr Jindal-Snape. "They told us what they thought they'd do, and we want to find out if that was indeed the case. Have they gone for science subjects after all, and what has brought about this change?"

So what can universities do to try and increase the numbers of students taking science degrees? According to Professor Rodrigues they could do worse than following the example of Dundee.

"I think that the University of Dundee is doing lots of really interesting things. When you look at Café Science, public lectures and other events, you see that the public engagement exercise is on the right track.

"They are genuinely working with wider society in bringing them up to speed with developments in science, and it's heartening to see the public lectures so well attended by a wide variety of people.

"It may be we need to be more proactive in specifics and demonstrate the range of exciting careers open to science graduates. The University is carrying out world-leading research in many exciting fields, and the more local school pupils see first hand the range of world-class scientific research carried out in Dundee, the more they will be inspired to pursue a career in science."

From the archives

Fifty years since the Tower foundation stone was laid

This year marks the fiftieth anniversary of the laying of the foundation stone of one of the best known buildings on the campus and one of Dundee's most recognisable landmarks, the Tower Building. Designed by Professor Robert Matthew, the building was "topped off" (when the last beam is placed at the top of a building) in 1960, and finally completed in 1961. Unlike many other buildings erected in Dundee around the same time, the Tower has remained a popular local landmark and has been at the centre of University life since its opening on 20th April 1961.

T.M. Knox (later Sir Thomas Malcolm Knox), the Principal of the University of St. Andrews, laid the foundation stone in April 1959 and the stone can still be seen to the right of the main entrance to the tower. A plaque to commemorate the Tower's opening by Queen Elizabeth, the Queen Mother was included on the left wall of the entrance, while opposite a plaque was later added to commemorate the historic links between the University and the University of St. Andrews.

The building of the Tower generated considerable excitement. This was partly because it was going to be the second tallest building in Dundee (it was slightly smaller than the Old Steeple), but also because it was very different to anything else in Dundee. Principal Knox liked the striking design, but was concerned that the building might be unfairly criticised before it was completed. These fears may have been based on the fact that this was a modern building replacing the historic college buildings which many graduates and Dundonians remembered with great fondness.

However, for the most part the plans for the new building were well received. The Courier and Advertiser for 28th April 1959 predicted that the "Tower will be Dundee Landmark" and on 15th October 1959 the same newspaper noted that the Tower would be the "nerve centre" of what was then Queen's College.

The building of the tower was in many ways symbolic of a turning point in the life of the University. Its erection led to the removal of the original buildings that had been acquired for the old University College in the 1880s and within a decade the new, visually prominent Tower was to become the administrative heart of an independent and ambitious University of Dundee.

The building of the Tower generated considerable excitement... it was going to be the second tallest building in Dundee

Oliver Twist – the Montrose years?

The story of Oliver Twist is well known. After a dire childhood in a workhouse followed by involvement with a gang of thieves in London, the eponymous hero of Dickens' famous novel finally escapes to a better life.

What is less well known is the fact that in later life Oliver Twist also spent almost two decades living in an asylum just outside Montrose in Scotland.

This isn't a fanciful alternative ending to the book. The University's Archive Services looks after the historical records of NHS Tayside and within these collections are the records of Sunnyside Hospital in Montrose. In one of the admissions registers for what was then Montrose Lunatic Asylum the name "Oliver Twist" appears. The entry is dated 6 November 1868.

"Oliver Twist" was of course not his real name – he was given this name because no-one knew what he was called. He was found in Gorebridge Station, Edinburgh "making the most horrible faces at a train" and incarcerated in Morningside Asylum for two months before being transferred to Montrose Lunatic Asylum.

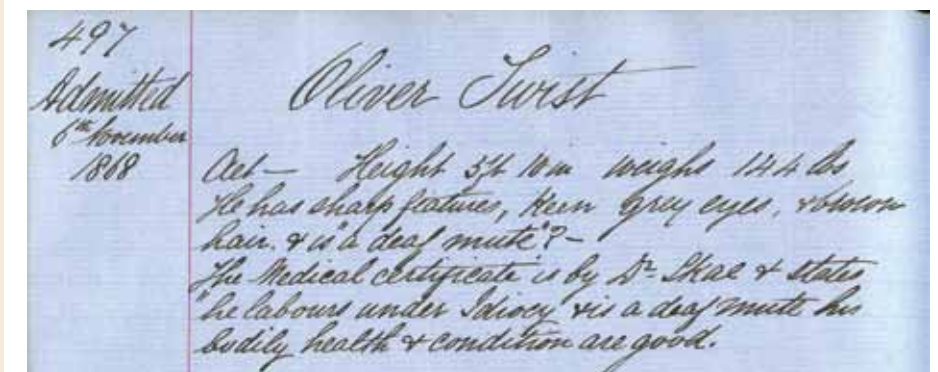
The Montrose case books state that he "labours under Idiocy and is a deaf mute; his bodily health and condition are good." In the Asylum's Annual Report he is described as an "Imbecile", aged between forty and fifty.

However a few days later there is an entry which states that: "He cannot read or write but does not seem devoid of intelligence, works willingly on the farm and assists the attendants in the halls. At times he tries very hard to speak and frequently makes signs as if alluding to some place at a distance." Perhaps this is an indication that far from being an "Idiot" Oliver was a reasonably intelligent person trapped all his life by poverty and his inability to hear or communicate.

The entries in the case book grow somewhat sparse after the first few years and the rest of his time in the asylum seem to have been uneventful, which is possibly a good sign. Montrose Asylum was not the stereotypically grim Victorian mental institution that often features in modern novels and films. Patients spent a lot of time outdoors, not just working on the large farm around the asylum but also going on picnics and trips. Entertainment was provided for the patients on most evenings. Beer was frequently provided at mealtimes and on the outings. One hopes that Oliver Twist was at least able to regard the asylum as a home of sorts.

If he did then it was for just seventeen years. Unlike his fictional namesake who escaped from the poorhouse to a better life, our Oliver Twist was to spend his final years in one, dying of tuberculosis in the poorhouse in Stonehaven where he had lived for his last eight years. Thanks to his name, over a century later a poignant and tragic life is finally remembered.

Oliver's story can be traced in the Asylum case books held by the University's Archive Services, and also in material held by Northern Health Services Archives and Lothian Health Services Archive.



court news

Since the last report, the Court has met on three occasions: its regular June meeting was followed in early July by a special meeting to consider the report of the Appointing Committee for the new Principal; and the Court held a brief business meeting in early September during its annual retreat.

Professor Pete Downes

Staff and students will all of course now be aware that Professor Downes has been appointed the new Principal and Vice-Chancellor of the University of Dundee. The formal process of identifying a successor to Sir Alan Langlands reached its conclusion at a special meeting of the Court on 6 July 2009, immediately preceded by a special meeting of the Senate. The Court unanimously approved the nomination of the appointing committee and took the opportunity to congratulate Professor Downes personally. The Court now looked forward to working with the new Principal through the next period in the University's development.

Finance & Strategy

At its June meeting, the Court formally approved the budget for 2009/10 along with documents for submission to the Scottish Funding Council indicating the financial projections for the years up to 2011/12. The Court noted that there would be significant pressures on public spending as a result of the economic downturn, which might have an adverse impact on the funding for the higher education sector into the future. The Court also agreed that the University, through the Senior Management Team, should carry out a strategic review of the University's activity. The review would help to identify areas of strength for future investment, but would also assist in defining proposals to ensure the University's financial projections were brought back into line with the objectives of the Strategic Framework to 2012.

Other Issues

The Court has endorsed the proposed University employability strategy, which includes the introduction of the Graduate Skills Award. The Court was enthusiastically supportive of both the strategy and award and noted the wealth of initiatives already in action to enhance the work experience and employability of the University's students. At the June meeting of Court, the President of the Sports Union, Paul Blake, presented his annual report. He made Court aware of the increasing financial pressure faced by the union in supporting the increasing successes of individual societies. This year the University had finished 31st out of 153 UK Universities. In addition, the Court approved minor amendments to the constitution of the Sports Union.



Court Retreat

The Court held its annual retreat just before the start of the new session at the West Park Conference Centre. The day comprised presentations and breakout sessions, with opportunities for Court members to get to know each other and discuss issues with officers in a less formal setting than at usual meetings of the Court. The core business of the day was twofold: an examination and discussion of the interim findings of the working group set up to carry out a review of the effectiveness of Court; and a discussion centred on the vision and future strategy of the University, taking as its stimulus a thought-provoking presentation from the Principal and the Director of Finance. The day was marked by spirited but good-natured debate, which all participants found refreshing and constructive.

Goodbyes and Welcomes

Court has said goodbye to a number of valued members over the summer. At its June meeting, Court paid tribute to three members who were leaving the Court: David McLeod, Jim Elliott and Larry Rolland. David had served a term as the DUSA President, Jim had been elected by Senate to serve on Court and was now taking retirement, and Larry was leaving Court after long and dedicated service which had seen him act as Chairman of Court prior to the current incumbent's term. All had contributed greatly and would be sorely missed. At its retreat in September, the Court also said goodbye to Alison Goligher who was to be leaving Court following work relocation to the far east.

The following new members have joined Court for session 2009/10:

- Dr Lesley McLellan (elected by Academic Council);
- Professor Julie Taylor (elected by Senate);
- Dr Angela Roger (re-joining Court as a representative of Senate);
- Emeritus Professor Ann Burchell (elected by the Graduates' Council); and
- Mr Andrew Smith (new President of the Students' Association).

appointments

The Scottish Institute for ceLL Signalling (SCILLS) first Programme Leaders have arrived at Dundee

Dr Thimo Kurz has relocated to Dundee from the Swiss Federal Institute of Technology (ETHZ), Zurich. Thimo was born and brought up in Germany, but carried out the research for his PhD at the University of Oregon, USA, before moving to Switzerland in 2003. He arrived in Dundee in June with his wife Debbie, a Californian, whom he met during his research training in Oregon, and their three year old son Noah.

Dr Gabriela Alexandru comes to Dundee from the California Institute of Technology (Caltech), Pasadena, USA. Gabriela gained her Masters in molecular biology from the University of Bucharest, and her PhD at the Institute of Molecular Pathology, Vienna. She has been carrying out postdoctoral research at Caltech since 2001.

Dr Arno Alpi received his BSc at the University of Vienna in his native Austria, and his PhD in Munich, Germany. Arno joins SCILLS from the MRC Laboratory for Molecular Biology in Cambridge where he moved to carry out postdoctoral research in 2004.



Professor Yolande Muschamp
Dean of the School of Education,
Social Work & Community
Education



Professor Tim Hales
Director of the Institute of
Academic Anaesthesia, Centre
for Neuroscience, Division of
Medical Sciences

Dr Yolande Muschamp took up post of Dean from mid August. For the past five years Dr Muschamp has been Head of the Department of Education at the University of Bath. Prior to that, she was a primary school teacher before moving into local authority advisory positions and then into research at the University of the West of England and then at the University of Bath.

Her involvement in research projects has focussed particularly on assessment, the role of the teacher, and evaluations and critiques of current educational policy and its impact on classroom practice and children's experience. She has been involved in the ESRC initiative on capacity building in educational research, has collaborated with many academic and professional groups and has jointly authored with researchers at Glasgow and Edinburgh.

Professor Tim Hales relocated in September to Dundee from the George Washington University Medical Center (GWUMC) in Washington DC.

Tim was born and brought up in the UK and carried out research for his PhD here at the University of Dundee before moving to the USA in 1989 where he completed his postdoctoral training in Department of Anesthesiology of the University of California in Los Angeles. Tim became a Professor in the Departments of Pharmacology and Anesthesiology and Critical Care Medicine at GWUMC. He is now the founding Director of the University of Dundee's Institute of Academic Anaesthesia, located in the Centre for Neurosciences at Ninewells Hospital.

Professor Hales' research group studies the mechanisms of action of general anaesthetics and opioid analgesics, drugs that modulate neuronal communication within the brain. The goal of the work is to improve the quality of anaesthesia and analgesia by identifying the molecular targets responsible for the desirable and negative effects of these drugs.

Society honour for Prof Reid

Professor Colin Reid of the School of Law has been elected as the Convener for Scotland of the Society of Legal Scholars. The Society, which celebrates its centenary this year, is the main learned association for academic lawyers, with over 3,000 members.

Professor Reid's role as Convener for Scotland is to ensure that the distinctive features of the Scottish legal and higher education systems are not overlooked by a body that draws its members from all over the British Isles and engages with government and professional bodies as well as those directly involved in higher education and research. Professor Reid has also convened the Environmental Law section within the Society since that section was founded in 1995.

Professor Reid has also seen a new edition of his book on Nature Conservation Law published. The book gives details of the legal position throughout Great Britain on species protection and habitat conservation, as well as touching on other topics which can have a big impact on our rural and urban wildlife, such as forestry, agriculture, hunting, countryside access, tree preservation and the threat from non-native species.

This, the third edition of a book that first appeared in 1994, shows how conservation law has become stronger and more pervasive in recent decades, with significant input from the European Community, and has also adopted an increasingly positive and proactive approach. "There has been a marked shift from weak controls that simply tried to prevent direct harm to stronger laws that aim to enhance the environment for wild animals and plants and affect a wider range of people, e.g. the general duty on all public bodies to have regard to biodiversity in all they do," said Professor Reid.

Travelling calendar for academics

The University has more than 7,000 overseas alumni spread across 90 countries. The majority have very fond memories of Dundee and are very keen to remain in contact with the University. This is primarily done through the online community www.dundee-reunited.com with its regular e-newsletters and email bulletins. Many of our overseas alumni offer their services to help with student recruitment and have supported our international officers in previous recruitment activity.

Face-to-face contact is particularly appreciated and the Alumni Office has made arrangements in the past for both academics and international officers to meet up with small groups of alumni.

To make this process simpler and more efficient the Alumni Office has been working to create the Travelling Academic and International Officer Calendar. In simple terms the academic or international officer updates the calendar in www.dundee-reunited.com with details of times and places where they would be available to meet up with alumni. The Alumni Office will highlight this availability to alumni in the local area and the alumni will contact the traveller directly from the information in the calendar.

While planning your trip all you have to do is log on to www.dundee-reunited.com (you need to register if you have not already done so – allow a couple of days for your registration to be processed) and then access the calendar from the left-hand Events menu after clicking on the Event, New and Adverts' on the top navigation bar.

To make it easy for alumni to find out about visits in their local area we have sub-divided the calendar by region: North America, South America, Europe, Africa, Middle East, Asia and Australasia.

To access the appropriate region the user simply clicks on the appropriate area of the map or selects the menu option.

The traveller making a posting then clicks on the New Event link to enter details of their availability like those illustrated below and presses Save. (The calendar is simple to use but full instructions are provided on the calendar pages).

The meetings are not intended to be formal and can take place over coffee or drinks depending on the traveller's own preferences. They offer the alumni the chance to find out first hand what's happening at Dundee and to reminisce about their own experiences.

After the visit, we'd really appreciate any photographs taken and a brief report to post on www.dundee-reunited.com. The more activity the alumni see on the online community the more likely they are to become involved. Our alumni are always our best ambassadors.

Gold medal for Prof Harden

Professor Ronald M Harden, of the University's Centre for Medical Education, has been presented with the Richard Farrow Gold Medal, awarded by the Association for the Study of Medical Education (ASME) in recognition of his contribution to high quality research in medical education and for promoting good educational practice.

Professor Harden expressed his delight at receiving the award, saying, "I am honoured to receive this award from an association which has done so much to improve the standards of medical education in the UK and internationally.

"I am pleased that the award is intended to be forward-looking as well as valuing past achievements."

Professor Harden was formerly Teaching Dean and Postgraduate Dean at Dundee, as well as director of the University's world-renowned Centre for Medical Education.

The development of an approach to the assessment of clinical competence which has now been adopted as a gold standard internationally was among his many achievements. His contributions to excellence in medical education have attracted numerous awards, including the Hubbard Award from the National Board of Medical Examiners in the USA and the Mentoring, Innovation and Leadership in Education Scholarship Award from the National University of Singapore.

Professor Harden was awarded an OBE for his work in medical education and was the winner of the Karolinska Institute prize for research in medical education. He is currently General Secretary of the Association for Medical Education in Europe (AMEE), based at the University.



Generous bequest to charities

The Institute for Cardiovascular Research at the University and the Ninewells Cancer Campaign are among the beneficiaries of a marvellous gesture by a Dundee businessman who left more than £2million to charity in his will.

Mr Walter Craig, who died in March at the age of 83, left around £2million for the creation of charitable trust, "for the public benefit and general welfare." If it is not possible to set up such a trust he directed the money be split between Macmillan Cancer Relief, the Ninewells Cancer Campaign and TICR.

Mr Craig's will also included bequests of £20,000 each to the Ninewells campaign and TICR, as well as large donations to a number of other charities.

Professor Jill Belch, Head of TICR, said she was struck by the generosity of Mr Craig, who had previously been instrumental in raising funding for the skin tissue culture lab at Ninewells.

"What this means is that we can continue our research into what is essentially Scotland's killer disease," said Professor Belch. "Walter was just a real friend – cheerful, kind – and we miss him."

The Bridge – out now



Francis Boag, the internationally renowned artist, has painted an exclusive cover for *The Bridge*, the University of Dundee magazine which is sent out to alumni around the world in October.

Boag, who graduated from Duncan of Jordanstone College of Art and Design in 1969, also features inside the issue where he talks about his time at Dundee, from studying painting under Alberto Morrocco, to booking Pink Floyd for the Christmas Revels in 1968.

His style can clearly be seen in the new painting commissioned for *The Bridge*, entitled "The Observatory, Balgay Hill".

The 2009 issue of *The Bridge* features interviews with Professors Pete Downes, Derrick Pounder, Paul Wyatt and more from around the University, author David Peace, political heavyweight Charlie Cook examining Obama's presidency, and an exclusive short story from Booker Prize-winning author DBC Pierre.

The Bridge is now available around campus or you can request a copy from the Press Office. Francis Boag's work can be seen at www.francisboag.com



7 October onwards
India in Close Up
Exhibition of Michael Peto Photographs. Dalhousie Building, University of Dundee

16 October onwards Lunchtime Concert Series

All held in the University Chaplaincy, Cross Row from 1.20pm to 1.50pm. Open to all, free entry, and snack lunches will be available.

- 16 October • Claire Garabedian (baroque cello)
- 23 October • Ross Knight (tuba)
- 30 October • Joanne Reid (flute)
- 6 November • Euan Crabb (trumpet)
- 13 November • Dundee University Big Band
- 20 November • Kathleen White (soprano)
- 27 November • Pupils from St John's High School
- 4 December • William Stevenson (organ)
- 11 December • Dundee University Choirs

Until 29 November

A Delicate Operation: The History of Surgery in Tayside
Tayside Medical History Museum, Medical School Foyer, Ninewells Hospital. Exhibition exploring the development of surgery in Tayside, looking at notable Dundee surgeons, the growth of specialist disciplines, local surgical instrument makers and more. For more information visit www.dundee.ac.uk/museum/medical/operation.htm

26 October Café Science – A New Theory of Evolution

7pm, Borders Bookstore Dundee. Free entry. *Shadows on the Cave Wall: A New Theory of Evolution* by Keith Skene. On the 150th anniversary of the publication of Darwin's *Origin of the Species*, Keith Skene has written a radical and challenging book that turns current thinking about evolution on its head. Come and discuss your thoughts on this new theory and Darwin's theory of evolution. For more information please visit www.cafesciencedundee.co.uk



29 October Evening Concert

Ástmar Ólafsson (baritone) and Joseph Fleetwood (piano) 7.30pm, Chaplaincy Centre, Cross Row, University of Dundee. Tickets are £8, £4 concession and £1 for school children. More information is available from the Chaplaincy web page at www.dundee.ac.uk/music/evening.htm#concert1

11 November Café Science – Is there More at Home than the Heart?

6pm start at Sensation. FREE entry to all. Is there More at Home than the Heart? The Psychology of People and Places. We are probably all familiar with the sentiments captured in the common saying home is where the heart is about what does home mean to you?

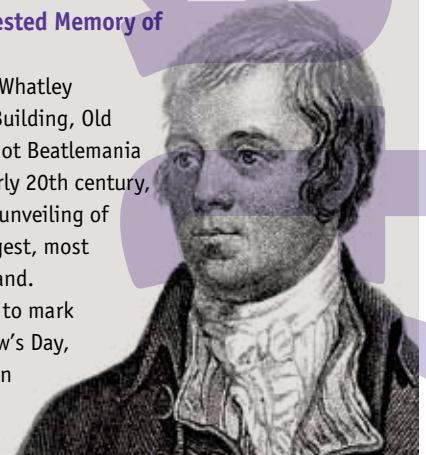
Join Mhairi Bowe, a psychologist studying at the University of Dundee, as she seeks to understand the relationship between places and our sense of identity and to explore the psychological consequences of these relationships. For more information please visit www.cafesciencedundee.co.uk

12 November Working with Traumatized Parents of Traumatized Children Seminar

Dalhousie Building. £75 (includes buffet lunch). Seminar Director – Dr Guinevere Tufnell, Trauma Clinic, Great Ormond Street, London. Details and Registration Form from Jacquie Hay: j.hay@dundee.ac.uk or tel: 01382 381465

26 November Hi-jacked: Scots and the Contested Memory of Robert Burns

Lecture by Professor Christopher Whatley 6pm Lecture Theatre, Dalhousie Building, Old Hawkhill, University of Dundee. Not Beatlemania but Burnsmania – up until the early 20th century, Burns-related events such as the unveiling of memorials, drew some of the biggest, most fervent crowds ever seen in Scotland. It is a fitting occasion with which to mark Scotland's national day, St Andrew's Day, on 30 November. More information and tickets are available at the University's online store.



30 November Café Science – Untangling the Web: Making Computers more Accessible to Older Adults

With Professor Vicki Hanson. 7pm, Borders Starbucks Cafe Dundee. Free entry. Come to Borders Starbucks Cafe to hear how research, and some great facilities, are making the internet and computers more accessible to older adults! For more information please visit www.cafesciencedundee.co.uk

13 November 09 "Kicking Carbon"

Dundee University Students' Association, Airlie Place. Organised by DUSA and The Enterprise Gym. Learn about sustainability from fellow students. Interact with the green experts. Find out what a leading policy maker thinks about climate change. Compare yourself with a green entrepreneur. Know where the new jobs are. Debate with the politicians. Compete for a cash prize. Do the Carbon Walk. www.ds3c.co.uk

sense of achievement

Pioneer: James Bowman Lindsay 1799 - 1862

Known as a visionary and pioneer of electricity, he patented a system of wireless telegraphy through water. He perfected the world's first constant electric light and predicted that cities would be lit by electricity.

Dundee & Angus Convention Bureau will help you achieve an inspirational conference.

The convention bureau is here to help you bring and host a conference in Dundee & Angus. We provide free conference support services and offer a location that is steeped with inspirational pioneering people from the past and present.

Our Conference Ambassador Programme is here to help academics, medical professionals, researchers and business leaders create a successful conference bid and stage an inspiring and memorable conference.

A conference made and pioneered in Scotland with a warm Scottish welcome. Where else can you climb magnificent mountains, dine in the surroundings of exclusive castles and allow your delegates to sample nature and technology working together to provide a memorable experience. We're thinking of your next conference in Dundee and Angus. Are You ?

For further information contact **Lorna Reid** on **01382 434173**
or email lorna.reid@conventiondundeeandangus.co.uk

www.conventiondundeeandangus.co.uk/ambassadors

Dundee & Angus
CONVENTION BUREAU
WORKING WITH YOU FOR YOU
AMBASSADOR PROGRAMME

