

# Bush Telegraph

The House Magazine of the Edinburgh Consortium for Rural Research

## NEW SCIENCE CHAMPION FOR SCOTLAND

Professor Anne Glover has been appointed to the new post of Chief Scientific Adviser for Scotland. Her role is to

- provide independent advice to Scottish Executive ministers,
- take the lead in co-ordinating science policy across the Executive,
- work closely with the science community, in partnership with the Chief Scientists in the Health and Rural Affairs & Environment Departments.

Anne holds a personal chair in Cell & Molecular Biology at the School of Medical Sciences at Aberdeen University.

As an undergraduate Anne studied biochemistry at the University of Edinburgh, followed by a PhD in microbial biochemistry at the University of Cambridge, and a postdoc in Aberdeen investigating the genome of slime mould. She was granted a lectureship at Aberdeen University under the 'new blood' scheme to allow her to focus on research.

Currently, her main research areas are molecular microbial ecology, microbial signalling and biosensor technology. The biosensors have been applied to diagnose environmental pollution and have been commercialised through a university spin-out company called Remedios, of which Anne is Technical Director. Her work within Remedios includes the development of biosensors for environmental analysis, bioavailability assessment, toxicity and

risk analysis, assessment of bioremediation potential and application of biosensors for human toxicity assessment. In 2000, the industry and government group Biotech Scotland named Remedios as the nation's best new biotech company.

She has served on a number of committees including NERC's Freshwater Sciences Peer Review Committee (1998-2001) and is currently a member of the NERC Environmental Genomics Steering Committee and the DTI/BBSRC LINK Bioremediation Programme Management Committee.

In responding to news of her appointment Anne said:

"I am delighted to be appointed as the Chief Scientific Adviser for Scotland."

"Scotland's scientific endeavour is outstanding in both national and international arenas and I want to contribute to ensuring that our scientific excellence translates to increased prosperity and quality of life for the people of Scotland."

"I also hope to convey the excitement and potential of science to non-scientists so that they can share in the pleasure of new discoveries."

"I have a strong commitment to knowledge transfer and want to explore ways

of enhancing the uptake of scientific research in Scotland by government, industry and society."

"All scientists need to assume responsibility for communicating their research to a wide audience so that science seems less remote and more relevant to everyday life."



Professor Anne Glover, FRSE

In her new role Anne will work three days a week as Chief Scientific Adviser and will continue her scientific work at Aberdeen University for the remainder of the week.

Professor Wilson Sibbett, the Chair of the Scottish Science Advisory Committee, and the Executive's

external Chief Adviser on Science, will continue in that role until December 2006 when his role as science champion will be taken on by Anne.

ECRR members will have the opportunity to hear much more from Anne on 13 February 2007, when she has kindly agreed to give the annual Peter Wilson Lecture. This event is co-sponsored by ECRR, the Royal Society of Edinburgh and the Institution of Biology (Scotland). Tickets are available through the Events Team at the RSE or through Mike Talbot, ECRR Secretary. Anne will speak to her title, "Does Science Matter?"

# Scientific Director's Notes

Over the summer months, ECRR hosted an Education and Outreach seminar, immediately prior to our Summer Reception at Abden House, in order to improve contacts and connections between the many initiatives and endeavours in this field which members engage in. Fourteen delegates representing 13 institutions/departments, shared knowledge of their programmes and experiences in stimulating interest in science among school children and the wider population of Scotland.

Among us, there were two participants external to the ECRR community to bring other dimensions to the discussion: John Richardson of SSERC brought us the message that teachers are looking for opportunities to gain "hands-on" and "brains-on" experiences of science at work, not just lectures about it. So, in addition to providing more conventional Continuous Professional Development (CPD) courses, they engage teachers in "fusion days" with visits to major industries and institutes where science is a significant component of commercial and academic success (eg BP, Roslin, SAC, SCRI). These provide practical

experience and anecdotal material for application in the classroom.

Jack Jackson, Assistant Chief Inspector of Schools (now retired) provided a view from the centre of the Scottish education system, and he gave us the historical perspective. He provided messages that we do not have a shortage of specialist biology, chemistry and physics teachers in Scotland; every secondary school has them. But in primary schools there is a problem with sufficient qualified staff, and in their confidence with science. The biggest problem in both areas is adapting to a changing and more demanding curriculum, which emphasises the importance of lifelong CPD for teachers.

During the ECRR Summer Reception which followed, Professor Wilson Sibbett, Chairman of the Scottish Science Advisory Committee, picked up the education theme noting the emphasis which the Committee has placed on the central role that science must continue to play in Scottish life, in the economy, and in securing our prosperity. It is, therefore, of paramount importance to

maintain a first-class science education system for pupils, students and the population at large. This advice has been consistently provided to the Scottish Executive.

Next year, on 30 May, ECRR's Biennial Forum will be hosted by Scottish Natural Heritage, at its Battleby Centre, on the theme of Scottish Energy. The discussion meeting will address the potential mix of energy sources technically available to us, and, in particular, the environmental and social factors to be taken into account as we plan to renew existing capability and bring on-stream the new technologies at a capacity which will make a difference. So, the session themes will provide the spectrum from traditional oil and coal through onshore wind, marine wind, wave and tide systems, to biofuels and solar opportunities

**Chris Browitt**  
*ECRR Scientific Director*  
 September 2006



Ladhar Bheinn in Knoydart with Loch Hourn below – Photo courtesy of Dr James Barnes

# Scottish Crop Research Institute



**Sarah Stephens**

Science Communication Officer  
Scottish Crop Research Institute  
Invergowrie, Dundee DD2 5DA  
Phone: 01382 560000  
email: Sarah.Stephens@scri.ac.uk

## FIELDS OF GOLD

Scottish science has scored again. The scientists at SCRI in partnership with Greenvale AP have developed a new potato variety "Mayan Gold". Mayan Gold is like potatoes eaten in Peru, tasty, fast cooking and rich in carotenoids. It is praised by many leading chefs.

The story started in the 1960s. Mike DéMaine MBE remembers "My colleague George Mackay first recognised the potential of the long-day adapted phureja population for producing a niche novelty vegetable for the UK. We found cooking characteristics were quite a bit different from common potatoes – although they produce delicious mash after careful steaming, we liked them best fried. We were getting exciting flesh colours – orange, all shades of yellow and then some with red or purple markings. Dormancy was a problem. In their native country they cropped up to three times per year – they didn't want to stop growing. We improved on the dormancy issue significantly but they still sprout early unless you have chilled storage. All the improvements were made by selection followed by allowing the best to interbreed pollinated by bumble bees. Classical plant breeding with minimal interference by us!"

Deputy Food Minister Rhona Brankin, on a recent visit to SCRI, said:

"This product clearly demonstrates the excellent science we support in Scotland. The adaptation of a tasty potato native to equatorial regions to production in the Scottish climate, shows the outstanding contribution science can make to our lives – and it takes less time to cook, saving both time and energy."

Anne Colquhoun, Abertay University, who did a lot of the taste and cooking tests at

Dundee University, says "An exciting alternative to potatoes currently on the market offering unique colouring and flavour"

The Director of SCRI Professor Peter Gregory said "SCRI is proud to add to its catalogue of outstanding blackcurrant and raspberry varieties a new potato developed through Scottish scientific creativity. This new product, resulting from a close partnership of strategic research and commercial know-how again demonstrates our commitment to the delivery of high quality and healthy food".

## FRUITS OF SCIENCE

Rhona Brankin, Deputy Minister for Environment and Rural Development visited SCRI on the 22nd August to sample the fruit of the new raspberry variety, Glen Doll and review the progress of the Living Field Project.

Deputy Environment Minister Rhona Brankin said: "Scottish raspberries are world class, with an excellent reputation for quality and flavour. The Glen Doll raspberry is the first new product to come to fruition from the raspberry breeding consortium. It's already attracting a lot of interest from growers and I'm sure it'll be a great success.

With a number of potential new varieties coming through, this whole project shows a great determination by the industry to keep Scottish raspberries among the best in the world."

Glen Doll is a late season variety with superior flavour and shelf life and has in-built defence against aphids. Canes have been released to the industry and fruit is expected in the shops next summer.

The raspberry breeding programme at SCRI is best known for the 'Glen' series of cultivars which are grown throughout the world. The first of the series, Glen Clova, was released in 1970 and for many years was the mainstay of the raspberry industry. Glen Moy released in 1981, was the first spine-free raspberry cultivar. SCRI-bred cul-

tivars currently occupy 96% of the raspberry market in Scotland and Glen Ample, released in 1996, is the most widely grown raspberry cultivar in the UK at present and Glen Lyon the number one variety in Spain.

SCRI's blackcurrant cultivars, named after mountains in Scotland, include Ben Hope, Ben Gairn and Ben Alder. It is estimated that SCRI-bred blackcurrants account for more than 50% of the global crop, and new varieties are being launched most years.

## NEW SCIENCE LEADER

Professor David Hopkins has taken up the new post of Director of Science Planning. His role will be to help drive forward the science agenda of the Institute and contribute to its research programmes.

David Hopkins previously worked at the University of Dundee, but joins SCRI from the University of Stirling where he was Professor and Head of the School of Biological and Environmental Sciences. He brings with him experience of research into soils and nutrient cycling in agricultural, semi-natural and natural systems including research in the Antarctic dry valleys, where complex communities of organisms live in the world's most extreme terrestrial environment.

## SCIENCE AWARD

Dr Alison Lees has been awarded the Peter Massalski prize for her research into potato pathology. This prize is given for the most meritorious research by a young scientist. After completing a first degree in Biology at the University of Wales, Bangor, Dr Lees carried out research at The John Innes Centre, Norwich, into the detection and control of wheat pathogens, gaining her PhD in 1995.

Dr Lees then moved to SCRI to take up a position in the potato breeding group, assessing germplasm for resistance to diseases, before moving to her current job in the Programme of Plant Pathology.

# Biomathematics & Statistics Scotland



**Professor Chris Glasbey**  
 BioSS  
 Edinburgh University  
 JCMB, King's Buildings  
 Edinburgh, EH9 3JZ  
 email: c.glasbey@bioSS.ac.uk

## MAKING NUMBERS TELL

Modern biological research generates large amounts of data. These data need to be analysed to enable treatments for common diseases, such as diabetes and cancer as well as crop and animal diseases, to be developed. Bioinformatics brings together skills in computing, mathematics, statistics and biology to allow this analysis to happen.

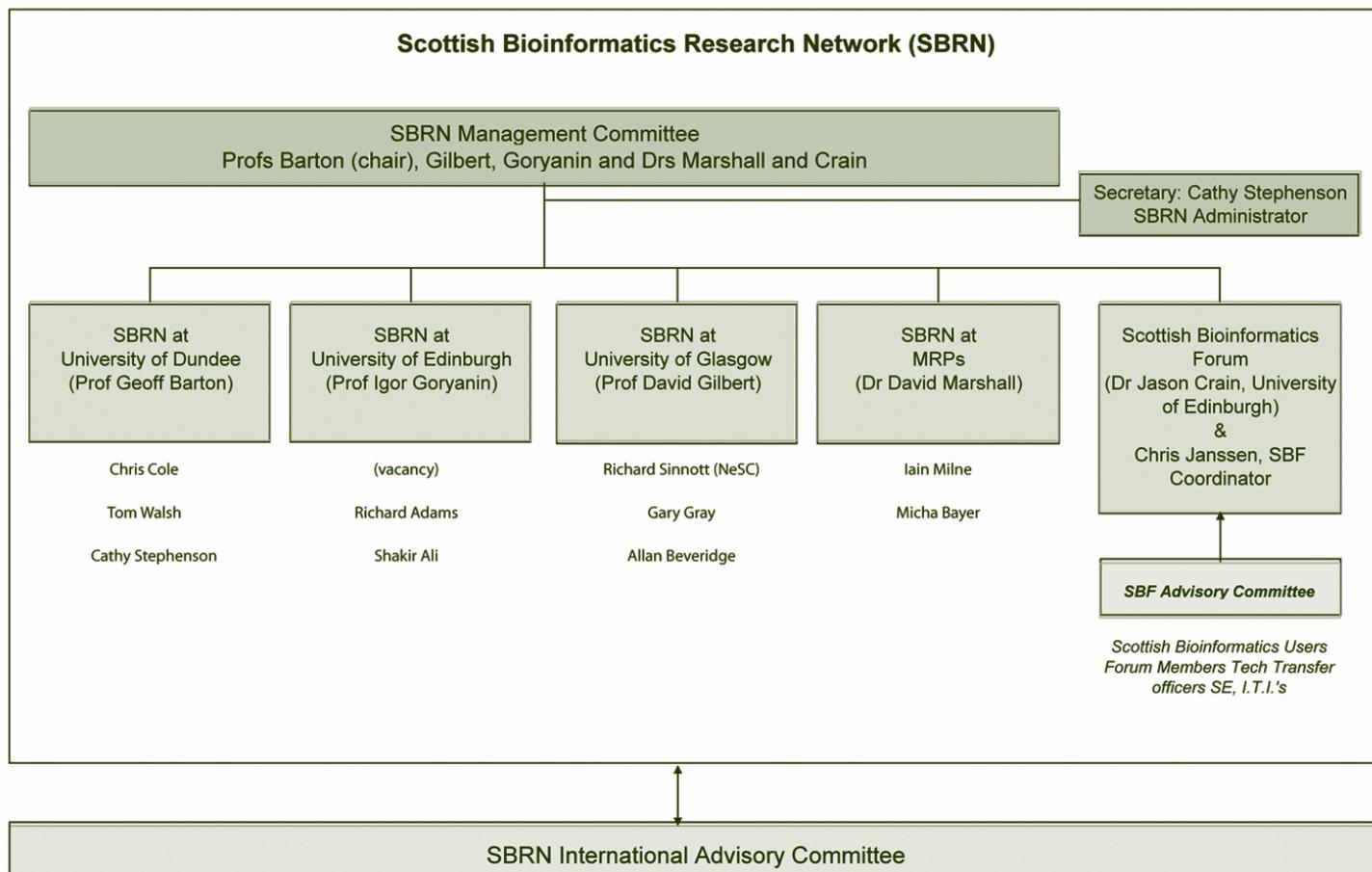
BioSS is a partner in the recently created Scottish Bioinformatics Research Network (SBRN). SBRN has been funded jointly by SHEFC and SEERAD to facilitate collaboration among bioinformatics research centres in SEERAD's Main

Research Providers (MRPs), the Universities of Edinburgh, Glasgow and Dundee, and the Scottish Bioinformatics Forum (SBF). The aim of SBRN is to speed the development of new treatments for disease in humans and commercially important crops and animals, and place Scotland at the forefront in developing integrated computational resources for biomedical research. Although the emphasis is academic, involvement of SBF will enable the scope to be widened, through collaboration, training courses, conferences and other outreach activities, to include all in Scotland with a commercial or academic interest in bioinformatics research.

The MRP node, led by the Scottish Crop Research Institute (SCRI) and BioSS, is initially focusing on:

- Automation of analysis/workflows;
- Improved access to Linux clusters at SCRI and RRI and external clusters in Scotland and beyond;

- Improving data sharing between MRP collaborators;
- Support for interactively linking graphical displays to external data and storage of data in databases rather than flat files etc.;
- QA implications of high throughput data generation;
- Act as a peer group focus for bioinformatics expertise at MRPs;
- Specific Projects – MRP Node will develop a series of research projects focussed on MRP priorities;
- The formation of a steering group for the MRP node with representation/input from the SEERAD funded organisations.



# Royal Botanic Garden Edinburgh



**Shauna Hay**

*Press & Marketing Office,  
Royal Botanic Garden Edinburgh  
20a Inverleith Row Edinburgh EH3 5LR  
Tel: 0131 248 2900  
email: shauna.hay@rbge.gov.uk*

## CONSERVING THE CONGO'S FORESTS

Two Edinburgh botanists are at the forefront of a major new project, funded by the UK government through the Darwin Initiative, to support the future management and conservation of large areas of ancient forest in northern Congo, thereby helping to protect many rare and endangered plants and animals.

Dr David Harris, Herbarium Curator at RBGE, is working with WCS-Congo and Marien Ngouabi University, Brazzaville, on this £184,500 initiative which will increase forest inventory work, provide botanical data to local users in a novel, accessible and useful format and promote forest

management. The main focus of the project will be training and capacity-building, which started this August with Dr Harris and Dr Jean-Marie Moutsambot\_ of the university running the first parataxonomy course for seven conservationists in northern Congo.

The Republic of Congo is rich in biodiversity and some sixty per cent is covered by lowland tropical forests including some undisturbed wilderness. It is important that these areas are properly managed to ensure they are conserved for future generations.

## CLIMATE CHANGE IS NO STORM IN A TEACUP

The implications of climate change at home and around the globe have come under the spotlight this autumn when members of the public engaged in three weeks of thought-provoking events at the RBGE. Aimed at sparking an interest across all age groups and levels of interest, the line-up ranged from lectures by high-profile academics and authors to open debates on the pros and

cons of ecotourism, as well as children's story times and art sessions. Running through October the series was organised in association with Stop Climate Chaos and with the support of WWF Scotland.

Mike Robinson, Head of Development at RBGE and chairman of Stop Climate Chaos Scotland has been keen to involve both experts and the general public in the debate about what can be done to protect the environment. Mike feels the debate is not about whether climate change is or is not going to happen – it is already happening and there is no doubt about whether or not humans are causing it. What matters now is how long we have to repair it – and time is running out!

## ECOTOURISM IN THE GARDEN OF ADEN

Ecotourism has already been under the spotlight at RBGE's successful "Soqotra – Land of the Dragon's Blood Tree" exhibition which opened at the beginning of July and has been attracting up to 500 and 600 visitors a day. The archipelago of Soqotra, often referred to as "the Galapagos of the Indian Ocean", is one of the world's most diverse, yet least known areas. RBGE botanist Dr Tony Miller has spent 20 years researching its flora and has witnessed how man and nature have lived in harmony. He recognises the fragile balance is now under threat as development and tourism begins to affect life on the islands.

Sunbathing on Soqotra, where tourism is in its embryonic stage, is an example of the culture clash that can occur when travellers start to explore new territories – and with little knowledge of the religious and cultural values of the host country. Other less overt issues range from how travellers choose to reach their destinations and the impact on the environment by burgeoning resorts with a wasteful attitude to water use. Conversely, travel can have very positive aspects on people and countries.



*Dr Harris with Congolese fellow conservationists*

# Scottish Agricultural Science Agency



Scottish Agricultural Science Agency  
1 Roddinglaw Road  
Edinburgh EH12 9FJ  
Tel: +44 (0) 131 244 8890  
Fax: +44 (0) 131 244 8940  
email: [info@sasa.gsi.gov.uk](mailto:info@sasa.gsi.gov.uk)

## NEW HOME – RENEWED ENERGY

*[Editor's note: Prepared these notes following the ECRR Directors' visit to SASA's new HQ.]*

The ECRR directors held their August meeting at the SASA's spanking new building at Gogarbank, near Heriot Watt University. Professor Gordon Machray hosted the lunch and talk and he and Simon Cooper showed those attending around the facilities.

The new building, officially opened in June 2006, cost £33M and includes offices, labs, greenhouses, and an excellent lecture theatre and is situated on the Agency's 150 acre farm. The site gives panoramic views down towards the Forth which on sunny days like that of the ECRR meeting are spectacular. The move to the new site had been well planned and went without any major troubles. The 170 staff had all had an opportunity to comment on their own new facilities and a great deal of flexibility had been built in. Thus a contented staff!



Outline of SASA's new HQ

SASA is an executive agency of the Scottish Executive Environment and Rural Affairs Department (ERAD). Its aims are to provide scientific and technical advice and information to ERAD. It is primarily arable orientated and spends a good deal of time on issues covering plant breeders rights, plant health and implementing EU regulations. Some 90% of the work is thus in service delivery with the remaining 10% research orientated.

Of the work that SASA does cover on research and development projects work has included the rapid identification of potato varieties through genotyping, the risk posed by *Ralstonia solanacearum* (which causes brown rot in potatoes), the prevalence of Potato Mop Virus and the relationship between Potato Virus P and Potato Rough

Dwarf Virus. Transitional research on molecular assays has resulted in the inclusion of tests for the plant pathogens *Microdochium nivale* and *Tilletia caries* within the scope of quality assurance under UKAS.

The agency is responsible for inspecting both potato and cereal crops grown for seed in Scotland which involves looking at over 1000 cereal and 4000 potato crops annually. They sample seeds directly and also on behalf of farmers. The ECRR members were shown the germination assessment techniques for cereals and also the unique collection of potato varieties that are maintained at Gogarbank. This included old favourites like King Edward and Arran Pilot and all of the Pentland varieties, the latter having been developed in Edinburgh.



# Scottish Agricultural College

Janette Elder  
 SAC Corporate Information Officer  
 King's Buildings  
 West Mains Road, Edinburgh  
 Tel: 0131 535 4185  
 email: [janette.elder@sac.ac.uk](mailto:janette.elder@sac.ac.uk)

## LOOKING AHEAD WITH CONFIDENCE

A very positive report for 2005-2006 year was presented to the SAC AGM by the Chairman, Mr Ian Ivory and Chief Executive, Professor Bill McKelvey. Increasing student recruitment figures, increased numbers of consultants and consultancy clients, and a new research strategy were reported, together with another positive financial performance.

SAC is a leading player in the new Centre of Excellence for epidemiology, population health and infectious disease, a consortium of prominent researchers from six organisations. The centre creates a forum for knowledge transfer that will be particularly important in the design of livestock disease surveillance programmes and for the control and prevention of animal diseases. SAC has initiated two new monitor farms that will focus on environmental best prac-



SAC Board members 2006

tice. These farms, in priority catchments, in Angus and Ayrshire designated by SEPA, will concentrate on environmental impact assessments, water quality and biodiversity. SAC will be working closely with the Macaulay Institute, SEPA, SEERAD and NFUS on this project.

Student recruitment for the current year is also buoyant, with latest figures showing a 33% increase in acceptances of offers for first year places.

## SAC LINKS OVERSEAS

At a European Agency for Reconstruction meeting in Belgrade in September, SAC Consultant Matthew Brown spoke on the development of 'An integrated socio-economic development plan based on the rehabilitation of the middle Danube River Basin and Inland waterway system of Serbia.'

Simon Oxley, senior researcher in SAC's Crop & Soil Systems Group and expert on the barley disease *Ramularia*, has just returned from France where he has been sharing his knowledge with leading French farmers, maltsters and brewers at a series of meetings.

## RENEWABLE ENERGY FAIR

More than 2,800 people attended a fair at SAC's Auchincruive Estate in September – this was Ayrshire's first public fair devoted to renewable energy. Visitors to the event crowded the lecture rooms to hear presentations by specialists and consultants on the workings of solar, heat pump, wind, hydro and wood-burning systems, energy efficiency, grants and government policy on renewables. Demonstrations of the renewable energy technologies included a working wood pellet stove, wind turbines and solar panels.



A few of the large gathering at the Renewable Energy Fair in September

# Roslin Institute



## Professor Harry Griffin

Director

Roslin Institute (Edinburgh)

Roslin

Midlothian EH25 9PS

Tel: 0131 527 4200 Fax: 0131 440 0434

email: [harry.griffin@bbsrc.ac.uk](mailto:harry.griffin@bbsrc.ac.uk)

## MAJOR DEVELOPMENTS

By 2009/10, Roslin Institute will have moved from its present site to a new £65M+ facility on the Easter Bush campus of the University of Edinburgh.

The new institute will bring together researchers currently in Roslin Institute, the Neuropathogenesis Unit of the Institute for Animal Health and the Royal (Dick) School of Veterinary Studies and may also accommodate livestock researchers from the Scottish Agricultural College (SAC).

With a critical mass of +500 staff, students and visiting scientists and state-of-the-art facilities for in silico, in vitro and in vivo research on animals and their pathogens, the new institute aims to be the world leading centre for research in animal bioscience.

With close links to the nearby Moredun Research Institute and to researchers at the University of Edinburgh's King's Buildings and Little France campuses, the new institute will provide an intellectually stimulating environment that will attract the very best staff and students. The University of Edinburgh is also investing £37M in building new teaching facilities on the Easter Bush campus which by 2010 will be home to 1000 veterinary students.

The concept of a Centre of Excellence in animal bioscience in Edinburgh was first floated by Professor John Clark OBE FRSE when he was appointed Director of the Roslin Institute in 2004.

RI had a very successful Visiting Group Report and in February 2006, BBSRC Council approved the creation of the new institute and committed £35M to the project. A Programme Board has

been established to lead the project forward and the position of the new institute Director is currently being advertised later this year.

BBSRC have committed £2M extra core funding to the new institute and the University of Edinburgh are creating four new Professional posts to be based there. A recent joint advert for career-track/academic fellows by Roslin Institute and the Royal (Dick) School of Veterinary Studies attracted over 80 applications

## GENE MARKER TECHNOLOGY AT WORK FOR THE UK SHEEP INDUSTRY

A Roslin Institute led project is bearing fruit for three UK sheep breed organisations. MASACS (Marker Assisted Selection Applied to Commercial Sheep) is developing new genetic markers for muscle depth and worm resistance which will be incorporated into breeding programmes by Charollais Sires, British Texel Society Ltd and the Suffolk Sire Referencing Scheme Ltd. The project is led by Prof. Stephen Bishop.

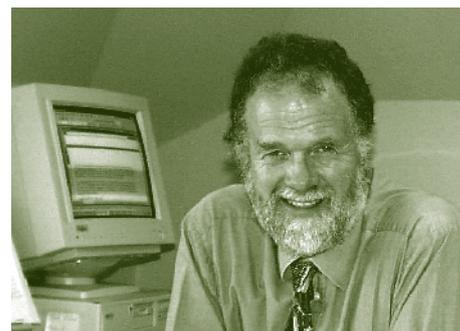
## CRACKED EGGS NO MORE?

Roslin scientists have been involved in an EU funded consortium looking to optimise the quality and safety of table eggs. Cracked eggs are both an economic cost and a health risk as this can allow the entry of bacteria into the egg. The team has produced a method of selecting birds whose eggs are less prone to crack.

## FISH AND A CHIP

Salmon farmers and wildlife biologists share a common dilemma: how do you assess well-being in an animal that often gives few indications that things are badly wrong before being found dead?

Collaborative research between scientists at Ark Genomics at Roslin Institute, the Institute of Aquaculture at the University of Stirling, the Universities of Aberdeen and Cardiff, and



## DIRECTOR TO RETIRE

Professor Harry Griffin has announced that he intends to retire as Director of the Roslin Institute in March 2007. Harry took over leadership of the Roslin Institute in 2004 on the death of Professor Peter Clark. Harry has been a key figure in defining the Institute's vision and strategy over the years. He has also played a pivotal role in the development of the new Edinburgh Bioscience Research Centre.

the Norwegian School of Veterinary Science, is developing a DNA chip to monitor indicators of health and performance. The idea behind the chip is to take a 'snapshot' of biological processes within the fish, from small tissue samples. The 'snapshot' provides a means of detecting changes that may signal a problem.

The development of the chip is the culmination of a four-year study known as Salmon TRAITS (Transcription Analysis of Important Traits in Salmon) The project is co-ordinated by Prof Alan Teale of Stirling University's Institute of Aquaculture.

## ROSLIN CELLS CENTRE LAUNCHED

A new initiative has been launched to underpin the development and exploitation of stem cell science in Scotland. The Centre is a partnership between Roslin Institute, Scottish Enterprise Edinburgh and Lothian, the University of Edinburgh and Scottish National Blood Transfusion Service (SNBTS) and will create clinically useable human stem cell lines compliant with UK and European regulatory requirements.

The Centre is led by Dr Paul De Sousa of the University of Edinburgh and will be based at Roslin initially before transferring to the Centre for Biomedical Research being developed by the University of Edinburgh and Scottish Enterprise.

# In Brief...

## Centre of Excellence to fight animal diseases

Deputy Rural Development Minister Rhona Brankin has announced the award of a research contract, worth £2.5 million over the next five years, to a Centre of Excellence to carry out research on the epidemiology of animal diseases. The contract has been won by a consortium of prominent researchers from six organisations: University of Edinburgh, University of Glasgow, Scottish Agricultural College, Moredun Research Institute, Macaulay Institute and Biomathematics & Statistics Scotland.

The research work to be undertaken will focus on major endemic diseases problems of livestock. Diseases that will benefit from these advances include worm and liver fluke infections in sheep and cattle, pneumonia in cattle and tick borne diseases in sheep. Emerging areas such as antibiotic resistant bacteria, drench resistance in worms infections and exotic diseases will also benefit from generic tools and methods that will be developed by the Centre.

The Director of the new Centre, Professor Mark Woolhouse of the University of Edinburgh said: "By bringing together the combined talents of several leading Scottish research institutes in this partnership, we will greatly improve our understanding of the spread of infectious diseases and how to control them. It is the kind of resource that was needed during the foot-and-mouth disease epidemic of 2001 and will be needed again in the future".

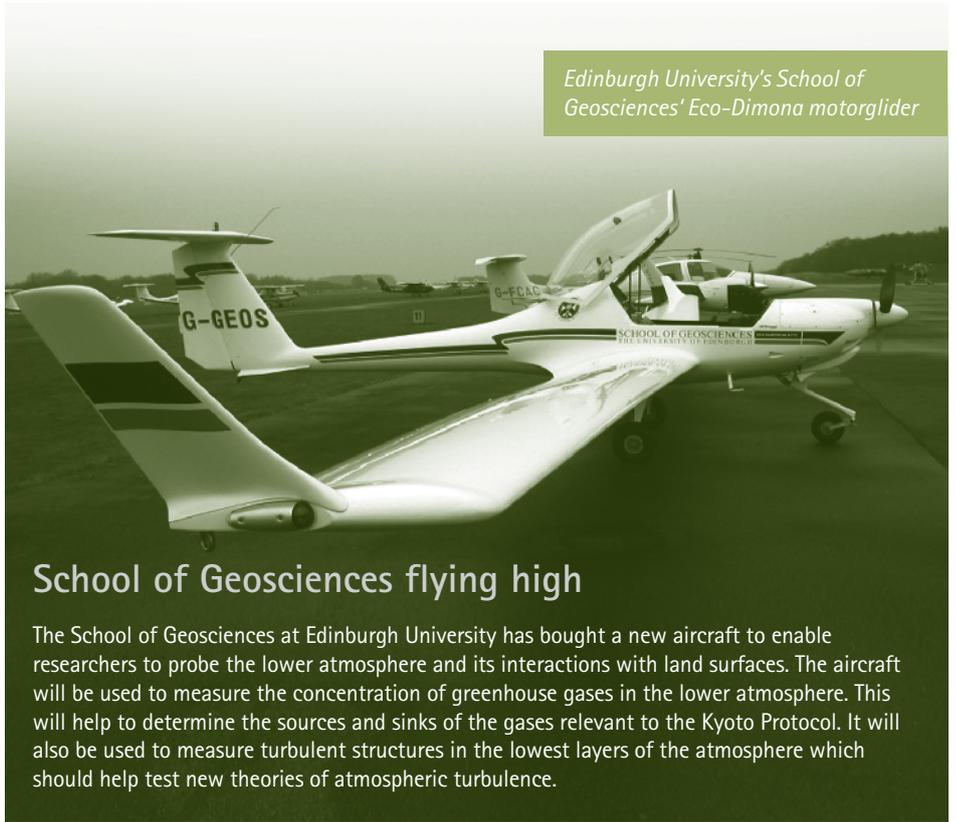
Mark Woolhouse is Professor of Infectious Disease Epidemiology at the University of Edinburgh. He has worked on a variety of infectious disease systems in humans and animals and has published over 150 scientific papers. Mark was a government advisor during the UK 2001 foot-and-mouth disease epidemic (work for which he was awarded an OBE in 2002).

## New School Head



Professor Martin Siegert has taken up the post of Head of the School of Geosciences at Edinburgh University. He was previously Professor of Physical

Geography and Director of the British Glaciology Centre at the University of Bristol. He specializes in the exploration of Antarctica, using direct and remote methods.



Edinburgh University's School of Geosciences' Eco-Dimona motor glider

## School of Geosciences flying high

The School of Geosciences at Edinburgh University has bought a new aircraft to enable researchers to probe the lower atmosphere and its interactions with land surfaces. The aircraft will be used to measure the concentration of greenhouse gases in the lower atmosphere. This will help to determine the sources and sinks of the gases relevant to the Kyoto Protocol. It will also be used to measure turbulent structures in the lowest layers of the atmosphere which should help test new theories of atmospheric turbulence.

## New research facility at King's Buildings

A £5.5 million research facility that will help researchers tackle some of the toughest challenges in civil and environmental engineering was officially opened at the King's Buildings Campus of the University of Edinburgh on 22 September 2006.

Work carried out at the William Rankine Building will have direct impact on industry and commerce and help support green initiatives in the wider community. The building also features a sunlight tracking device – the first of its kind on the United Kingdom – which draws daylight into the building and further reduces energy bills.

A crucial component of the work will be to build a better understanding of the ways in which construction materials behave; another key strand of the research will be to devise more efficient ways of cleaning up contaminated land.



William Rankine Building

## Economics Discussion Circle

The Environmental & Agricultural Economics Discussion Circle holds monthly meetings from October to March at Greens Hotel, 24 Eglinton Crescent, Edinburgh. The meetings are usually held on the first Monday of the month and commence at 6.30pm.

The autumn programme covers the following topics:

- Mon 9 Oct  
What does Scotland want from the new Rural Development Programme?  
Speaker: Sarah Skerratt, SAC
- Mon 6 Nov  
City regions and rural development  
Speaker: Neil Ward, Centre for Rural Economy, Newcastle
- Mon 4 Dec  
The role of Scottish land-based industries in mitigating carbon dioxide emissions  
Speaker to be confirmed

Further information about EAEDC meetings can be had from Paul Allanson at [p.f.allanson@dundee.ac.uk](mailto:p.f.allanson@dundee.ac.uk).

# In Brief...

## Napier's new appointments

Napier University has appointed two Associate Deans in the Faculty of Health, Life & Social Sciences.

Dr Keith Guy takes up the position of Associate Dean of Research & Knowledge Transfer. Keith has been a lecturer and researcher at Napier since 1997 and was appointed as a Reader in 2001. Previously he was an immunologist with the MRC Human Genetics Unit in Edinburgh.

Professor Morag Gray has been appointed Associate Dean of Academic Development. She is a former Head of Curriculum Development with the Faculty of Health & Life Sciences and has extensive experience in developing curricula and facilitating learning at undergraduate and post-graduate levels.

## New £37m vet school

Her Royal Highness, The Princess Royal, unveiled the first artists' impressions for a multi-million pound facility for the Royal (Dick) School of Veterinary Studies, when she visited Edinburgh University in June. The new teaching facilities, to be built next to the hospitals for small and large animals at Easter Bush, Midlothian, will enable the Dick Vet to give trainee vets the best possible education and equip them to meet the challenges of veterinary practice in the 21st century.



*Her Royal Highness, The Princess Royal meets The Principal, Head of the Vet School, Elaine Watson and Vice-Principal of Development, Young Dawkins.*

## Getting together at Millport



An informal meeting of fish researchers and postgraduate students at Scottish universities and institutes was held on 12-13 August 2006 at the University Marine Biological Station Millport to exchange ideas and encourage collaboration. The event was organised by DR Steve Simpson of the Institute of Evolutionary Biology at Edinburgh University.

*Socialising at the Scottish Universities Fish Symposium*

## New map to ease conflict between wind farms and wildlife

A new map indicating Scotland's most sensitive areas for building wind farms has been produced by RSPB Scotland in an effort to help developers avoid the most important areas for birds. It is hoped the map will help minimise the conflict between wind farms and birds of high conservation concern by helping developers avoid the most sensitive sites. The map, jointly funded by Scottish Natural Heritage and the RSPB identifies those areas where wind farms would pose a high to medium risk for important bird populations.

## People and parasites

A series of free public events highlighting the very diverse relationships between people and parasites in the modern world has been developed, thanks to an initiative lead by a Moredun scientist.

The programme of events developed by the British Society for Parasitology, Moredun and the University of Glasgow launched on 8 August with a series of public lectures at Glasgow's SECC and an exhibition celebrating the parasitic discoveries of Scottish scientists through the years. The exhibition will travel around various science centres and take part in science festivals throughout the UK over the next year accompanied by a full series of public lectures.

Dr Lee Innes from Moredun's Parasitology Division was the driving force behind this project, successfully securing funding from the Wellcome Trust as part of their Engaging Science programme.

## Crisis for seabirds

Reports of hundreds of dead or starving young seabirds around Scotland - including some many miles from the coast - are leading to speculation among experts that these incidents may be linked to a much larger problem.

Post mortems on the birds shown that many of the birds are underweight and have empty stomachs, suggesting they are suffering from a chronic shortage of food. Sandeels are a principal prey for guillemots and many other seabirds.



*Guillemots at Sumburgh earlier this year. Photo courtesy of Tony & Beth Gerrard*

Dr Euan Dunn, head of marine policy for the RSPB, said: 'Able to dive 300 feet for fish prey, guillemots are massively buffered against scarcity, so evidence of starvation signals a desperate lack of food'.

So far there have been reports of nearly 100 dead or dying guillemots in Northern Ireland, principally washed up on the shores of South Down, and around 120 guillemots in the Loch Fyne area of western Scotland. Several guillemots have also been reported from highly unusual inland locations, including the centre of Glasgow, Crianlarich and Loch Awe. Some birds have been reported swimming up small burns, presumably in a desperate attempt to find food.

# People & Events

## ECRR DIARY

### 2006

Nov 1	Main Board Meeting & AGM	Board Room, Crew House, King's Buildings, Edinburgh	14.30
	Careers workshop for postgraduates	SAC, Peter Wilson Building, King's Buildings, Edinburgh	16.00
	Winter reception	SAC, Peter Wilson Building	17.00
Dec 4	Executive Committee	SAG Peter Wilson Building, King's Buildings, Edinburgh	10.30
	Directors' lunch	Biomathematics & Statistics Scotland JCMB, King's Buildings, Edinburgh Host: Professor David Elston	12.30

### 2007

Feb 13	Annual ECRR Peter Wilson Lecture	"Does Science Matter?" given by Professor Anne Glover at the Royal Society of Edinburgh George Street, Edinburgh	17.30
Mar 5	Directors' lunch	Napier University, School of Life Sciences Host: Dr Kathy Velandar	12.30
May 30	ECRR Biennial Forum	Scotland's Energy-One-day meeting at SNH Battleby Centre near Perth	

## HEAD OF CROP AND SOIL SYSTEMS RESEARCH



Dr Bill Spoor

Dr Bill Spoor has been appointed Group Manager for SAC's Crop and Soil Systems Research Group.

After taking a degree in agricultural botany in Aberystwyth, he completed a PhD on breeding systems in graminaceous species at Reading University. He joined the East of Scotland College of Agriculture (ESCA) in 1975 as a lecturer in Plant Genetics and Breeding, a post which was shared between ESCA and the University of Edinburgh. In that role he made a major commitment to undergraduate education but steadily developed research interests in genetic diversity of crop species, acquiring a wide spread of interest including work on soft fruit (raspberries and strawberries), brassicas and even peanuts.

Since then Bill has established an impressive research record. He went on to lead the Plant Biotechnology group in the emergent SAC in 1989 - around which time he was also appointed Director of Postgraduate Studies in the Institute of Ecology and Resource Management (IERM) for the University of Edinburgh. In 1995 he became Head of the Crop Science Group in the Plant Sciences Division and, following restructuring, became Deputy Manager of the Crop and Soil Systems Research Group. Bill has maintained research interests in the use of varietal mixtures and ecological combining ability amongst genotypes and in the general area of base broadening in crops.

# ECRR Member Organisations

University of Edinburgh	<a href="http://www.ed.ac.uk">www.ed.ac.uk</a>
College of Science & Engineering	
College of Medicine & Veterinary Medicine	
College of Humanities & Social Science	
Scottish Agricultural College	<a href="http://www.sac.ac.uk">www.sac.ac.uk</a>
Research & Development	
Education & Training	
Napier University, School of Life Sciences	<a href="http://www.napier.ac.uk/fhls/lifesciences">www.napier.ac.uk/fhls/lifesciences</a>
University of Stirling, Institute of Aquaculture	<a href="http://www.aquaculture.stir.ac.uk">www.aquaculture.stir.ac.uk</a>
UHI Millennium Institute	<a href="http://www.uhi.ac.uk">www.uhi.ac.uk</a>
University Marine Biological Station Millport	<a href="http://www.gla.ac.uk/centres/marinestation">www.gla.ac.uk/centres/marinestation</a>
Moredun Research Institute	<a href="http://www.mri.sari.ac.uk">www.mri.sari.ac.uk</a>
Forest Research, Northern Research Station	<a href="http://www.forestry.gov.uk">www.forestry.gov.uk</a>
Roslin Institute	<a href="http://www.roslin.ac.uk">www.roslin.ac.uk</a>
Biomathematics and Statistics Scotland	<a href="http://www.bioss.sari.ac.uk">www.bioss.sari.ac.uk</a>
British Geological Survey	<a href="http://www.bgs.ac.uk">www.bgs.ac.uk</a>
Centre for Ecology & Hydrology Edinburgh	<a href="http://www.ceh.ac.uk">www.ceh.ac.uk</a>
DEFRA Lasswade Veterinary Laboratory	<a href="http://www.defra.gov.uk/vla">www.defra.gov.uk/vla</a>
MRC Human Reproductive Sciences Unit	<a href="http://www.hrsu.mrc.ac.uk">www.hrsu.mrc.ac.uk</a>
National Museums of Scotland	<a href="http://www.nms.ac.uk">www.nms.ac.uk</a>
Royal Botanic Garden Edinburgh	<a href="http://www.rbge.org.uk">www.rbge.org.uk</a>
Royal Society for the Protection of Birds – Scotland	<a href="http://www.rspb.org.uk">www.rspb.org.uk</a>
Scottish Agricultural Science Agency	<a href="http://www.sasa.gov.uk">www.sasa.gov.uk</a>
Scottish Crop Research Institute	<a href="http://www.scri.sari.ac.uk">www.scri.sari.ac.uk</a>
Scottish Natural Heritage	<a href="http://www.snh.org.uk">www.snh.org.uk</a>
Scotland & N. Ireland Forum for Environmental Research	<a href="http://www.sniffer.org.uk">www.sniffer.org.uk</a>
Edinburgh Centre for Tropical Forests	<a href="http://www.nmw.ac.uk/ectf">www.nmw.ac.uk/ectf</a>
Scottish Centre for Animal Welfare Sciences	

## CONTACTING ECRR

Scientific Director:	Dr Chris Browitt	Email: <a href="mailto:cbrowitt@staffmail.ed.ac.uk">cbrowitt@staffmail.ed.ac.uk</a>
Secretary/Treasurer	Mike Talbot	Email: <a href="mailto:m.talbot@bioss.ac.uk">m.talbot@bioss.ac.uk</a>
Bush Telegraph Editor	Mike Steele	Email: <a href="mailto:mike.steele@sac.ac.uk">mike.steele@sac.ac.uk</a>

ECRR, University of Edinburgh, Room 3618, JCMB, King's Buildings, Edinburgh EH9 3JZ  
Tel: 0131 650 4890 Fax: 0131 650 4901

## FUTURE ISSUES

Contributions to the Bush Telegraph are welcomed. All contributions, comments and suggestions can be emailed to Mike Steele at [mike.steele@sac.ac.uk](mailto:mike.steele@sac.ac.uk).

## DISTRIBUTION

For queries about Bush Telegraph distribution please contact Mike Talbot at [mike.talbot@bioss.ac.uk](mailto:mike.talbot@bioss.ac.uk).

## ON THE WEB

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