

Issue 1 | Spring 2008

# SOES News

Welcome to SOES News - the School of Ocean and Earth Science (SOES) magazine for current and prospective students, alumni and friends. We look forward to sharing exciting updates on our world-renowned scientists, features on cutting-edge research, profiles on talented alumni, and fun stories on our students. Enjoy!

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**National Oceanography  
Centre, Southampton**

UNIVERSITY OF SOUTHAMPTON AND  
NATURAL ENVIRONMENT RESEARCH COUNCIL

# Alumni Visit NOCS for Ocean and Earth Day

SOES alumni who graduated prior to 1998 were invited to visit the National Oceanography Centre Southampton (NOCS) during Ocean and Earth Day. For many it was their first visit to NOCS and they all seemed duly impressed. "I really enjoyed my time at Southampton and have to say that the course would have been even better if the facilities you have now were open, but we made the best of what we had!" said Louise Wiseman (née Allen, Class of '95). In addition, alumni were offered the opportunity to have a personalized "preview" of Ocean and Earth Day prior to the doors opening. Ten alumni participated in the tour which was led by the always dynamic Dr Rachel Mills (Oceanography Class of '88). Steve Horton, a graduate of the Geology Class of '93 added "...the guided tour was excellent. We also had a look around the main campus which is still a great place. It brought back some good memories after 15 years."



SOES Alumni touring the NOCS

Alumni outreach is an important part of reconnecting our graduates with the School and the wider University, engaging them with our events and activities, and helping to raise the profile of NOCS.

In addition to the tour, alumni visited the Alumni Table, chatted about their "glory days" at the University with staff and academics, and all marvelled at what a fantastic place the National Oceanography Centre, Southampton is.

Front page photo: M. Conquer

# SOES Student One of Three UK Winners for Prestigious International Event

Second Year Geology student Amy Carter was one of three UK winners chosen from a national essay competition to participate in the International Year of the Planet Earth (IYPE) event run by the Geological Society of London. All winners were invited to attend the global launch event in Paris in February, with all UK participants sponsored by the Geological Society of London.

The aim of the IYPE is to raise awareness about the importance of geoscience in today's world via a series of global launch events, summit meetings and media coverage.

Students submitted an essay or poem on one of ten geohazard topics selected by the IYPE committee. Amy's essay addressed the subject of geohazards under the title "Raising Awareness, Reducing Risk", which focused on the 2004 Boxing Day Indian Ocean tsunami. Amy examined the need for increased educational awareness of tsunamis and the development and installation of early warning systems as methods to mitigate the effects of any such future events. Her elegant handling

of the subject matter resulted in her prestigious win and the opportunity to travel to Paris.

"Culturally, it was incredible to be able to meet so many other students with whom I shared a common geological 'bond'" said Amy. "I now have a much more informed perspective on the practical application of geoscience in other parts of the world through having met other students."

While in Paris, students attended the launch event at the UNESCO headquarters, met with leaders from the Geological Society and the Association of British Science Writers and had the opportunity to meet with fellow students, scientists and politicians to discuss geohazard management. The visit ended with a trip to the Museum of Natural History in central Paris and a dinner for students and their guides

"Not only did this event open my eyes to the problems associated with geological hazards, but also the importance of communication in the effective management of these hazards and the crucial role that education plays"



Amy's IYPE presentation at the UN in Paris

Photo: Amy Carter

# Soil Sampling and Sandsurfing! - in Southern Africa



Sedimentary structures in the core



Drilling in South Africa

Just how much did you cram into your summer last year? You'd have to be doing well to compete with the example of Alex Webber (now 4th year MGeol), who secured a two month placement working with Rio Tinto Exploration in southern Africa. As Alex recounts: "My first three weeks were spent in Namibia, where I was involved in planning a new exploration project looking for magmatic nickel deposits. I was also involved in planning the logistics for a sampling survey by helicopter – and I managed to get some sandboarding in on the Namibian coast before moving on to South Africa!"

Variety is often the key with this type of summer placement, and Alex then found himself searching for magmatic nickel deposits by undertaking a soil sampling programme close to the famous Bushveld Complex, before being moved onto a coal project. "I spent two weeks working on a drill rig, logging core and chip samples and was often the only geologist on site – a real responsibility!"

His experiences in southern Africa clearly inspired Alex, as he tells us: "Not only did

I learn an awful lot about the minerals exploration industry, from setting up a new project and dealing with the government and the local communities, to preliminary sampling and finally to drilling, I also now know how difficult it can be to simply gain access to land and how problematic language barriers are! Moreover, this experience very much highlighted for me the fact that a career in mineral exploration is a massive life-style choice and certainly isn't for everyone – but it's also extremely rewarding. I was able to travel extensively (all expenses paid!), saw a wide variety of different geological settings and met loads of fascinating new people. It was an extremely worthwhile experience which I would recommend to anyone studying geology."

Alex's future in mineral exploration seems assured as he has now accepted a PhD project in economic geology at SOES which he will start following his graduation in July.

Photos: Alex Webber

# Science Comedy Show raises £3,500 to Support Future Scientists

In support of National Science and Engineering Week, the National Oceanography Centre, Southampton (NOCS) hosted "The Lighter Side to Science and Climate Change" Comedy Show on March 10th, featuring Marcus Brigstocke and Mark Stevenson. Proceeds totalling £3,500 benefited Discover Oceanography, the South coast's leading public outreach programme for education about oceanography and the environment which is based at NOCS.

Marcus Brigstocke, stand-up comic, writer, presenter and actor, who is best known for hosting his own live topical BBC television show *The Late Edition*, shared his take on environmental issues with a sense of humour that holds people accountable and encourages those with the power to effect change to do so. The show also featured Mark Stevenson, Britain's 'premier scientific comedian', with his entertaining take on the science of laughter. The Irish Independent called him 'a uniquely funny and unashamedly intelligent comedic talent'.

Professor Ed Hill, Director of the National Oceanography Centre, Southampton, said: "Through the Discover Oceanography programme and the work of the *RV Callista*, NOCS is providing the latest scientific information to young people interested in oceanography, and also helping to raise the national and global profile of the importance of oceanographic sciences and their role in mitigating global climate change."

For more information on Discover Oceanography and how you can become an oceanographer for the day, please visit [www.discoveroceanography.co.uk](http://www.discoveroceanography.co.uk)



Yes, Marcus did take the helm on his climate change fact-finding cruise to the Norwegian-Greenland Sea!



Local school children enjoying a Discover Oceanography session.



Photo: Tom Hindson

## "Czech" This Out

Tom Hindson, a Third Year Master of Geology student and The American Association of Petroleum Geologists (AAPG) Southampton Student Chapter President, has just returned from Prague where he attended the European final of the Imperial Barrel Award Program. The competition pits teams of Earth science students competing against each other to produce an interpretation of a real-world hydrocarbon exploration dataset.

Tom attended meetings and presentations by the five finalist teams, and spent time networking and developing Southampton's links with AAPG, and with the multinational oil companies who attended the meeting. The panel of judges for this year's competition included, amongst others, senior employees of ExxonMobil, Schlumberger, Total and BG, illustrating not only the high profile of the AAPG, but also the value of maintaining close ties between AAPG Student Chapters and those recruiting future employees.

A team from the University of Leoben in Austria won the competition this year and now go on to compete in Houston in the World Finals – let's see if some of our current and future students have what it takes to win their way to such gatherings in the future!

The AAPG is an international professional geological organization with student branches in universities across the world. Run by students, the SOES AAPG Student Chapter organizes visits by AAPG guest lecturers to highlight the role of Earth scientists in the hydrocarbon exploration industry, in addition to facilitating our increasingly popular annual Careers Fair.

# Antarctic Research Makes **Time Magazine's** Top 10 List



Xenophyophore - giant protozoan from the deep Weddell Sea  
(Photo: A. Gooday)

Antarctic biodiversity research comes in at fourth place in Time Magazine's Top 10 list of scientific discoveries and significant advancements in 2007.

The discovery of over 700 new species, including giant sea spiders and carnivorous sponges, was reported in Nature in May 2007. Professor Andy Gooday of the National Oceanography Centre, Southampton, was one of the leading scientists on an international cruise to the Weddell Sea that found many new organisms at depths of up to 5000 metres.

Professor Gooday said: 'The Weddell Sea is the source for much of the deep water in the World's oceans. This means that organisms

with dispersive phases that are found in the Weddell Sea can be transported to other oceans via deepwater currents that flow northwards. This process has the potential to create gene flow across very large distances'.

Professor Gooday is a world expert on foraminifera – also known as forams. He was able to recognise over one hundred new species in the Weddell Sea samples. Some types of forams are well known but other kinds, those with very delicate shells, are not and include many new species. Nevertheless, these sediment-dwelling organisms have colonised the world, living in the top few centimetres of the seafloor, from mudflats to the deep abyss.

Photo:  
Sue-Ann Watson

**TIME**

# Building a Culture of Philanthropy

The University of Southampton is among the top ten research universities in the UK and was recently ranked as one of the “Top 100 Universities in the World.” The National Oceanography Centre, Southampton (NOCS) where SOES is based, is the UK’s main focus for marine science and one of the leading five oceanography centres in the world. It is no wonder that in recent years, our alumni, friends and industry have recognized our achievements and significant contributions to society through increasing support and partnership.

Last year, NOCS hired its first Associate Director for Alumni Relations and Development. In her new post, Joanne Donahoe is looking forward to getting to know many of you and helping to advance the good work of our scientists and students. The great tradition of philanthropic support has the potential to elevate our efforts to world-class prominence.

We are starting to see results. Last year we achieved several “Firsts” that will have a significant impact on our students and the academic experience:

- We received the largest individual gift to the Centre from the Gillings Family Foundation to support an innovative Trans-Atlantic Student/Faculty Exchange Program.
- We hosted the largest U.S-based alumni gathering with featured speaker Professor Andrew Roberts, Head of SOES who discussed the National Oceanography Centre, Southampton.
- We received approval to endow the first scholarships in SOES, the Kristin Bruhn Endowed Memorial Scholarship and the Robin Saunders Endowed Bursary to support student international travel and mature/disadvantaged students.
- We welcomed alumni back to NOCS for “Ocean and Earth Day,” the largest single annual event hosted by NOCS.
- And in April, SOES will honour scholarship donors and beneficiaries at the University’s First Annual Scholarship Luncheon.

We appreciate the generosity of all of our donors. If you would like to learn more about how to support the School of Ocean and Earth Science at NOCS please contact Joanne Donahoe at [development@noc.soton.ac.uk](mailto:development@noc.soton.ac.uk).



## Investing in Student Success

The School of Ocean and Earth (SOES) remains committed to maximizing students’ access to a premier university education. Through a broad array of need and merit-based scholarships our goal is to attract and retain the best and brightest scholars.

In February, Head of School Andrew Roberts bestowed the second annual “Entrance Scholarships” to students (pictured above). Students who succeeded in acquiring at least three Grade A classifications in their A-level exams were given the £1,000 entrance scholarships.

In addition, this year we received approval to endow two funds: the Kristin Bruhn Endowed Memorial Scholarship and the Robin Saunders Endowed Bursary. These represent the first endowed scholarship funds for the school and a significant step forward in ensuring a lasting legacy of support for our students.

Increasingly, we are also benefiting from the generosity of individuals and industry whose private support is making an impact on the student experience. Last year Rio Tinto provided the School’s first industrially-funded student bursary to support tuition fees and living expenses for a Master of Geology or Master of Geophysics student in their Final Year.

“During my final year at University there is no doubt that the £5000 will be extremely useful by easing financial strain and aiding my studies,” said 2008 Rio Tinto Bursary winner Ben Saunders. “Furthermore, the additional work experience that Rio Tinto has offered makes the bursary considerably more beneficial to my future career in mineral exploration.”

Our congratulations to all of our scholarship recipients! And a special thanks to the individuals and organizations whose generosity is making a difference for our students.

# Ocean Stewardship Conference Promotes Integration

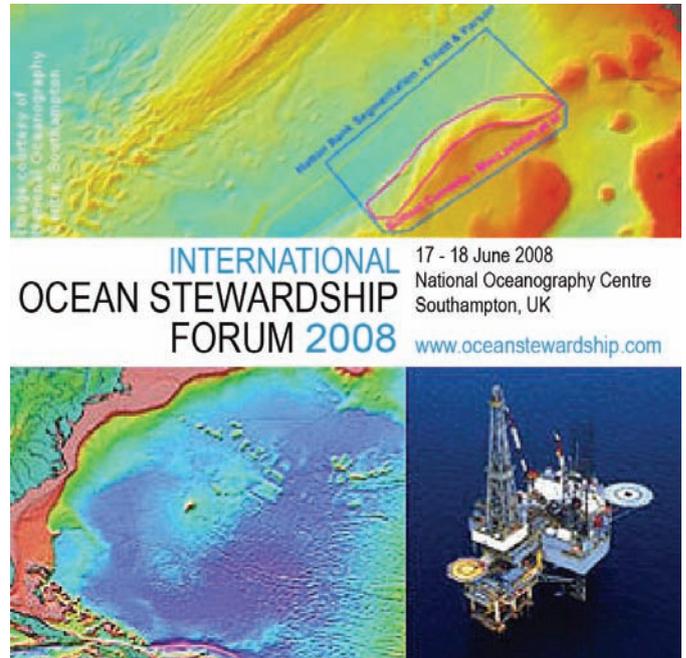
**The first international conference bringing together leading marine scientists, policy-makers and legal experts to develop an integrated approach to the protection of the marine environment takes place at the National Oceanography Centre, Southampton 17-18 June.**

The International Ocean Stewardship Forum will cover a range of topics of immediate concern, including territorial sovereignty and the exploitation of marine resources, carbon emissions from shipping, the transportation of hazardous materials, carbon sequestration, environmental impact assessment and the implementation of international law instruments.

The forum will promote greater integration between the legal and technical aspects of marine policy making and will address issues including Marine Protected Areas and the use of marine genetic resources.

The International Ocean Stewardship Forum is organised under the guidance and leadership of the UNCLOS group at the National Oceanography Centre, Southampton, who deliver independent, high-quality scientific advice on territorial sovereignty, marine scientific research, resource management, and the preservation of the marine environment.

Visit [www.oceanstewardship.com](http://www.oceanstewardship.com) for more information and to register.



## Farewell to a Scientist and a Friend



NOCS and the science community lost a valued colleague and friend when Peter Killworth died on 28 January after a long battle with Motor Neurone Disease.

Peter will be remembered for his unbridled enthusiasm for science, his dedication to work, and his selfless and generous nature that fostered and encouraged the scientific development of the numerous colleagues he worked with. Many of the PhD students and postdoctoral workers that he supervised are now leading figures in oceanography in their own right, having received an unparalleled start to their research careers from Peter.

With interests across the whole of physical oceanography as well as making a world-class contribution to the study of social networks, Peter's phenomenal published output exceeded 160 scientific papers. He was recently awarded the

"Stommel Research Medal" by the American Meteorological Society for "his many important contributions to ocean modelling and theoretical oceanography", a sentiment echoed by his colleagues and friends around the world.

In memory of Peter Killworth and his many contributions to the science community, NOCS has established the *Peter Killworth Memorial Fund*. The fund will provide an annual award to students to support their research, studies and professional development and will serve to honour Peter's commitment to fostering and encouraging the careers of budding scientists.

If you would like to support the *Peter Killworth Memorial Fund*, please contact Joanne Donahoe ([development@noc.soton.ac.uk](mailto:development@noc.soton.ac.uk)).

# Internationalizing the Student Experience

SOES welcomed five exchange students from partners in the USA this semester as part of our expanding "study abroad" programme. SOES' strategy is to increase capacity and to internationalize undergraduate and postgraduate training with the specific aim to create a new generation of mobile, highly trained researchers. These exchanges enhance the student experience, providing opportunities to study oceanography and Earth sciences in different settings and a range of educational systems. The chance to carry out fieldwork in different countries is invaluable to student learning and their ultimate career goals. This year we have already sent our first Master of Geology student, James Nowecki, to study at Penn State

University, and Master of Oceanography (MOcean) students Kris Stevenson and Martyn Papworth are currently studying the marine biology of coral reefs in Honduras as part of the UNCW (University of North Carolina at

Wilmington) Gillings Family Foundation Student/Faculty Exchange Programme. We will send five MOcean students to the University of Washington in August 2008 for a full year which includes fieldwork in the Puget Sound.



Pictured from left to right: Helena Dodge, Alex Bryk, Allison Martin, Jesse Herron and AJ Recipido extend a warm welcome to their Southampton hosts.

## University Receives Highest Possible Accolade for Teaching Quality

The University of Southampton has been awarded the highest possible accolade following its recent Institutional Audit by the Quality Assurance Agency for Higher Education. The audit team confirmed 'confidence' (the top rating possible) in the academic standards of our degree awards and in the quality of the learning opportunities available to students.

The audit listed nine items of good practice, including the design of the Learning and Teaching Enhancement Review and Action Plan, the implementation of the employability strategy and the level of involvement of students in the education agenda.



The audit team chose to focus in particular on the whole range of undergraduate and postgraduate degree programmes offered by the School of Ocean and Earth Science and the service provided by the National Oceanography Library at NOCS. The team met with academic and library staff as well as students from the School. The excellent result of this audit confirms that anyone applying to SOES for a degree can be assured of the highest quality education possible.

## Milestone Anniversary - SOES is Ten Years Old!

Did you know that August 2008 marks the 10th anniversary of the School of Ocean and Earth Science (SOES)? In 1998, the departments of Oceanography and Geology merged to form SOES. The development of SOES has been considerable and we are particularly excited to welcome our alumni back during our 10th anniversary year. Stay tuned for more information on a 10th Anniversary Alumni Event Autumn to be held in the 2008/2009 academic year at the National Oceanography Centre, Southampton.

If you have a memory you would like to share about your time pursuing an Oceanography or Geology-related degree at the University of Southampton, please let us know! Please email us at:

[alumni@noc.soton.ac.uk](mailto:alumni@noc.soton.ac.uk)

contact -  
J. Donahoe



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