

# WORLD magazine

USA AND CANADA EDITION



THE UNIVERSITY OF  
SYDNEY

## WAR OF WORDS

FRANCES CLARKE LOOKS AT HOW ROMANTIC ACCOUNTS  
OF THE CIVIL WAR HELPED AMERICANS MAKE SENSE OF  
THE BLOODSHED

# PRIORITY STATUS FOR EDUCATION



BY **KIM BEAZLEY** AUSTRALIAN AMBASSADOR TO THE USA

**I am delighted to be able to write this introduction to the University of Sydney's international magazine, and to offer my support for closer bonds between universities in Australia and North America.**

Australia's engagement with the United States has traditionally revolved around a military partnership. But over the years this has spread into the broader civilian area of public policy, and I am pleased to say that education is now up there as one of the top priorities.

Since arriving in Washington I have seen at first hand how interested the individual US institutions are in developing arrangements with universities in Australia. This can be at all sorts of levels – and as a starting point, it provides students with the opportunity to go on a year or a semester abroad. Kids here love to study abroad. It's a topic of conversation with all my daughter's girlfriends. It is obviously an increasingly big part of the educational experience of a lot of American students.

But we can also engage as research partners in critical projects, or for the purposes of an exchange of capabilities that contemporary education technologies permit more regularly. There are many opportunities for engagement.

My hope would be that the opportunities that are being taken up on an individual basis could be much more extensively cultivated by a broader selection of Australian universities. This is certainly possible.

The number of colleges and universities in the US is massive – there are hundreds and hundreds. There is the chance for engagement on a major scale. And the American higher education system is probably the most diverse of all the higher education sectors across the globe. It offers the advantages of diversity in everything from small, specialised liberal arts colleges through to massive research universities. It exemplifies choice in the system.

Another thing that I think is very important is that we have established a successful United States Studies Centre in Australia, at the University of Sydney. This was a very good initiative when it was put in place, and it needs to be nurtured. It has got off to a flying start, and we want to see it go from success to success.

**The Hon Kim Beazley AC was appointed Australian Ambassador to the USA in September 2009. He was twice leader of the Australian Labor Party, and is a former Rhodes Scholar who was chancellor of the ANU in 2009.**

The University of Sydney *World magazine* is published three times a year.

**Editor:** Richard North  
**T** +61 2 9351 3191  
**E** richard.north@sydney.edu.au  
**sydney.edu.au/international**

**Designer:** Katharine Vanderwal  
**E** katharine@whocreative.com.au

**Photographer:** Ted Sealey  
**T** 0418 404 188

**Printer:** SOS Print + Media

CRICOS Provider No. 00026A



This publication is printed on Novatech, an environmentally responsible paper certified by the Forest Stewardship Council (FSC). The paper is produced from mixed-source pulp from well-managed forests and other controlled sources and is elemental chlorine free (ECF). Printed with vegetable-based inks by SOS Print and Media, an FSC Chain of Custody certified printer.



6



14



26

# CONTENTS

## 02 THE EAGLE IN THE ROOM

America is still the world's leading source of ideas, writes Professor John Hearn.

## 04 TRANS PACIFIC

A snapshot of the University's links with North America.

## 05 PARALLEL TRACKS

Canadian High Commissioner Michael Small discusses the future relationship between Canada and Australia.

## 06 THE HUNTER AND THE HUNTED

Christopher Neff is carrying out a world-first study into the politics of shark attacks.

## 09 TEAMWORK IN NEW YORK

Musicians from the Conservatorium of Music have performed a rare joint concert with New York's Juilliard School.

## 10 THE LAST ROMANTIC WAR

Historian Frances Clarke looks at the emotional background to the American Civil War in a new book.

## 14 THE LAND OF OPPORTUNITY

High-flying scientists Ben Eggleton and Bryan Gaensler both kick-started their careers in America.

## 16 MEDECINS SANS FRONTIERES

Sydney Medical School has built up a fruitful relationship with Canada.

## 18 POWER CENTRE

America has a great ability to bounce back from crises, says Geoff Garrett, CEO of the US Studies Centre.

## 21 TROUBLED WATERS

Sydney engineer Mike Jakuba was involved in the investigation into the Deepwater Horizon oil spill in the Gulf of Mexico.

## 24 WORKING FOR THE UN

Four Sydney students worked in New York on the UN's highly competitive Spring internship program.

## 25 DISTANT WORLDS

Cliff Kerr is a telecommuter, working from his office in Sydney with a research team in the US.

## 26 MY CITY: MIAMI

Betsi Beem talks about why she loves the vibe of Miami.

## 29 ALUMNI IN NORTH AMERICA

## 30 NORTH AND SOUTH

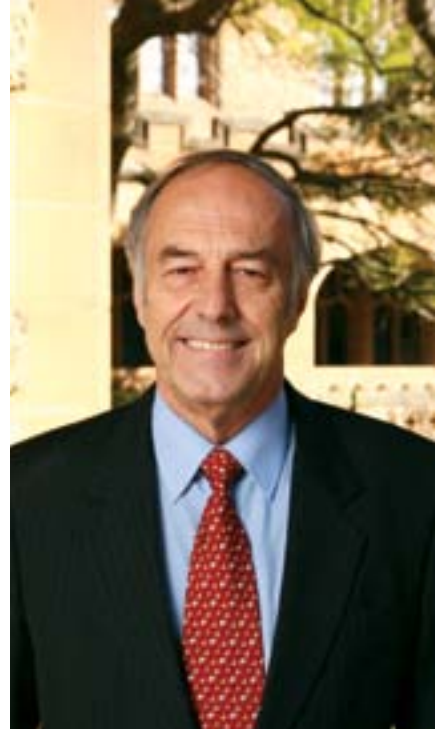
## 31 NETWORKS

## 32 THE LIONS KEEP ROARING

The amazing record of the Sydney Uni Lions American Football team.

# THE EAGLE IN THE ROOM

BY PROFESSOR JOHN HEARN  
DEPUTY VICE-CHANCELLOR INTERNATIONAL



**International education must sometimes seem, to the casual observer, like a real-life version of Age of Empires, with universities and researchers careering round the world trying to secure resources, build relationships, sign agreements and attract overseas students.**

But in the rush to discover new areas and open up new markets, there is always one player in the game that dominates all others, and that owns most of the wonders of the academic world.

America is by any measure the biggest hitter in international education and research. It has a majority share of the best universities, the best researchers and the best outcomes. It is responsible for something like 40 per cent of the world's research papers. It is the model that the rest of us are trying to emulate, the partner we covet most.

In the years ahead, Australia must maintain and deepen its strategic relationship with the United States. We're lucky to be starting from a strong base: we have been friends and allies with the US throughout our history. The US Ambassador Jeff Bleich, quoted in our interview with Geoff Garrett, puts it neatly when he says that America has no

better friend in the world than Australia. The value of that relationship will become evident as we progress further into the Asia Pacific Century, with the resurgence of China adding dynamism to the whole region.

In fact many commentators predict that in 20 years or so, the sheer size of China will see it overtake America as the world's leading economy. If that does happen, let's hope it takes place without the turbulence that has accompanied such fundamental geopolitical changes in the past. And let's not ignore the role that higher education and research could play in the process, as an important driver of peaceful development. Education and frontier research are perhaps the most enduring form of diplomacy.

Whatever happens, it's hard to see America giving up its position as the world's leading source of ideas anytime soon. American thinking on democracy and human rights has led the rest of the world for 200 years. Its science and technology has been dominant for a century. And for nearly as long, American popular culture has extended to every corner of the globe, even though most of us have been able, so far, to resist the lure of baseball.

In education, American universities are powerhouses. They provide world-class courses across all disciplines and generous scholarships for the best and brightest internationally; they have remarkable financial assistance schemes to ensure that any student who is good enough can afford to go to university; and they have a tradition of philanthropic support that is the envy of the world. They benefit from a century-old tradition of close links with federal and state governments, and especially with industry and business.

They also breed healthy competition. The US National Institutes of Health has an annual budget of more than \$40 billion, but only 10 per cent of proposals get funded. Those that do succeed, however, receive their due reward. Australians have a reputation for cutting down their tall poppies, but Americans love – and are happy to invest in – a winner.

So where do we, in Australia, fit in to this picture? Our geopolitical position is obviously important. But it is interesting that Kim Beazley, our Ambassador in Washington, sees a growing enthusiasm among American students for studying abroad. Sydney has certainly benefited from this, with large numbers of American students coming to learn with us.

But it's important to keep the two-way flow going. After seven years at the University of Wisconsin in the 1990s, I can vouch for the benefit of living and working in America, and plenty of Australians have made important contributions to US institutions. We lent two of our brightest graduates, scientists Ben Eggleton and Bryan Gaensler, to the US before bringing them back to the University of Sydney. And an unexpected success story lies in the number of Australian philosophers who are doing well in America, such as Sydney graduates Peter Godfrey-Smith at Harvard, Liz Grosz at Rutgers, Fiona Cowie at California Institute of Technology and Richard Hanley at Delaware.

Sydney has also been active in international networks such as the Worldwide Universities Network and the Association of Pacific Rim Universities, which are supportive of research and teaching collaborations between the world's top universities. By fostering and encouraging links between members, these networks play a vital role in pooling international experience, equipment and expertise. They also assist in the development of research and educational collaborations on a global level.

We are fortunate that the cultural and ideological similarities between Australia and America make links between us relatively easy – some would say that we share common ground, just one degree of separation away from the English language. Let's hope ideas continue to flow freely between two like-minded countries as we make our contribution to global development.

**John Hearn is the Deputy Vice-Chancellor International at the University of Sydney and Chief Executive of the Worldwide Universities Network.**

## TWO-WAY FLOW

One of Sydney's leading researchers will be working in America in 2011 after winning a Fulbright Senior Scholarship.

Robert Park, Professor of Cereal Rust Research, will be spending four months at the US Department of Agriculture's Cereal Disease Laboratory in St Paul.

Rust diseases cause major damage to wheat crops around the world, and Professor Park is carrying out genetic research to help the development of new rust-resistant strains of wheat.

He was one of 25 leading Australian academics awarded Fulbright scholarships in 2010 to carry out research in the USA.



# TRANS PACIFIC



University of Sydney academics published more than 2600 joint papers with American partners in 2009. The USA is the leading source of international collaborations for Sydney academics.

Over the past 60 years, 148 of University of Sydney's highest achieving academics have been awarded Fulbright Scholarships to study in the USA. Historian Dr James Curran was awarded a scholarship earlier this year to study the US-Australia relationship between 1969 and 1983, using recently released documents from the US archives.

The University of Sydney is home to the United States Studies Centre, the first and the leading centre of its kind in Australia. Set up in 2008, it has become Australia's leading think tank on the US, while retaining an academic focus. In 2010 almost 500 students were enrolled at the Centre.

Sydney has more than 60 university-level agreements with institutions in the USA and Canada. The USA is the favourite choice for Sydney students studying overseas, with Canada also among the top destinations.

In 2010 the University of Sydney had 1061 students from the USA and Canada, mainly enrolled in study abroad and exchange programs. The University's innovative internship program placed 30 students from the USA into undergraduate research internships.

There are more than 2600 alumni registered on the alumni database from the USA and Canada. Sydney University Graduates Union North America (SUGUNA) is a non-profit organisation that promotes the interests of the University of Sydney and maintains contact between alumni residing in North America and the University. It was founded in 1990 by William Lew, Warwick Harvey-Smith and Clifford Kwan-Gett who contacted their classmates that they knew to be in North America.

Over the last decade, the University's history department has built up one of the largest concentrations of American specialists outside the United States. Mike McDonnell's study of revolutionary Virginia won the NSW Premier's Prize for General History and Clare Corbould's book about African Americans won the Victorian Premier's Prize for the best first book in history. A collaborative project on Harlem based in the department has also been at the cutting edge of American studies, and the Digital Harlem website won the inaugural Roy Rosenzweig Prize of the American Historical Association for the most innovative use of the web in history.

The University of Sydney has one of the most successful American Football teams in the world. In the last seven seasons it has won 94 games and lost just twice.

Five Sydney academics hold positions at Canadian universities under the Canada Research Chairs program, established in 2000 to make Canada a leader in research and development and to attract and retain some of the world's best academics. They hold chairs in law, political science and IT at British Columbia, Victoria, Ryerson and McGill universities.





What does the next 20 years hold for Canada and Australia? What are the possibilities for closer links between the two countries and how will their relationships with their big regional neighbours, the US and China, unfold? Michael Small, who was appointed Canada's High Commissioner to Australia earlier this year, talked to Richard North.

# ON PARALLEL TRACKS

**“There are probably no two societies that are more similar than Canada and Australia. There’s a natural affinity – it’s as if two societies have evolved in different parts of the universe but with much the same composition.**

We’re both Westminster-style democracies with a comparable legal tradition. We’re former members of the British Empire with relatively small populations in a Continental-size land mass.

We both have publicly-funded university systems, and a highly-educated workforce but resource-dependent economies. We are both federations, we’re both heavily shaped by immigration patterns. And the future of both countries – the future of the world – will revolve around two other places: China and the United States.

We both have an important relationship with the US. It is by far Canada’s biggest source of trade and investment and always will be. For each of us it’s our most important security relationship. The US is a source of endless creativity but it has some difficult issues to negotiate – tough economic times and political polarisation, for example.

It’s going to be extremely important for Canada and Australia, as smaller-sized economies and open societies, to discuss how we’re managing the international environment we operate in, whether that’s economic or political or social. It’s going to be helpful for us to understand where the US is going as a society, and how China’s growth is affecting the whole of the Asia Pacific region.

China has the fastest growing economy in the world. It’s Australia’s biggest

trading partner, and it’s of growing importance to Canada too. British Columbia and Western Canada already look towards the Pacific – British Columbia’s trade with China probably exceeds that with the US. We have a long historic relationship with China – there was an important Canadian missionary movement to China and we established diplomatic relations with the PRC in 1971, earlier than many other countries.

Both countries are going to remain very open to immigration. Canada brings in about 300,000 people every year, and 50 per cent of them are from Asia. Our population is becoming more diverse, but diverse with an Asian flavour.



# THE HUNTER AND THE HUNTED

Christopher Neff is the first doctoral student in the world to focus on the politics of shark attacks

BY JONI SHAM

**In July 1916, during a summer heatwave, a series of shark attacks along the coast of New Jersey left four people dead and another seriously injured. The attacks, over a 12-day period, caused widespread panic, and as newspapers shocked their readers with graphic accounts of the incidents, the vicious man-eating shark soon became part of American folklore.**

Almost sixty years later author Peter Benchley revived the theme of the rogue great white shark in his book *Jaws*, which was turned into a memorably scary blockbuster movie by Steven Spielberg.

The noted surgeon and Sydney University graduate Sir Victor Coppleson also referred to the 1916 attacks in his book *Shark Attack*, which helped to spread the idea of rogue sharks. Coppleson said the pattern and frequency of attacks suggested the likelihood of a single shark ignoring its natural prey and acquiring a taste for human flesh.

In the league table of shark attacks the USA leads the world, followed by Australia and South Africa, and the reporting of shark attacks has become an annual summer obsession.

But first year doctoral student Christopher Neff, who worked as a lobbyist and congressional staffer during eight years in Washington, is seeking to challenge the rogue shark theory, arguing that sharks do not set out to attack or eat people.

He is studying for a PhD at the University of Sydney, investigating how public

policies are impacted by the way the media, society and politicians frame shark attacks. In doing so, he is the first PhD student in the world to focus on the politics of shark attacks.

Raised in a small New England town, he had a childhood interest in sharks. In third grade, he already had an 11-foot long cardboard cut-out of a great white shark hanging in his room and loved reading books on sharks. "The fascination was there early on," he says. "What wasn't there was any political analysis to go with it."

Neff's interest in politics also developed at an early age and he was deeply influenced by his mentor former Senator Robert Kennedy, and his grandmother, who was in the Connecticut local Republican Party.

He went to St John's High School in Worcester, Massachusetts, and was in the school's Model United Nations Team for three years, leading a successful team of around 50 members.

He went on to study at James Madison University in Virginia and served as senior class president in 1999, graduating with a BA in Political Science.

At 23, he became an aide of Senator John Warner of Virginia and also volunteered for Senator John McCain's campaign, helping out at the national headquarters in Virginia. Then he changed course and worked for the Log Cabin Republicans organisation briefly before becoming junior staffer to Senator Harry Reid of Nevada.



In 2002, he became the first lobbyist in the US on behalf of the Servicemembers Legal Defense Network, campaigning for the repeal of the “Don’t Ask, Don’t Tell” legislation which requires the discharge of openly gay military personnel.

He believes getting a higher degree and studying overseas are important. “I think every American should try to get a degree in a foreign country,” he says. “You get twice the experience if you go abroad.”

He completed a Masters in Public Policy with Honours in November 2007 at the University of Sydney. Studying for that degree, he worked on carnivore conservation and encountered the riddle that is the predator policy paradox. “The question of how we protect species that we need protecting from is fascinating,” he says.

His master’s studies included a focus on African lions and the way South Africa educates the public on cohabitation with predatory creatures. That led him to ask whether the same principles could be applied to sharks, and became the basis for his PhD research. He started in March 2010 and will take three and a half years to complete his degree.

He adds: “The central question is how governments develop public policies to protect endangered sharks when the sharks may harm the public.

“Shark attacks are very scary, low-probability events that the government has to try and protect people from, both in terms of public safety and in terms of managing the public’s perception of risk. If there is a loss in public confidence, this becomes a safety issue as well.”

He is keen to dispel the idea that sharks deliberately eat people. “I don’t believe that sharks attack people any more than I attack the buffet at Star City. Swimmers who enter their territory are in the way, not on the menu. Sharks don’t have hands and they are wild, so they move things with their mouths.”

He regards Coppelson’s theory as outdated and alarmist. “There was a straight line from the New Jersey attacks of 1916 to Coppelson’s theory, but there is new data now and we need to update the rogue shark theory,” he says.

He is currently studying shark-bite incidents and the impact of shark conservation policy in the USA, Australia and South Africa. Much of his work involves content analysis of newspaper reports on shark attacks.

He says there are subtle differences in shark control policies in the three countries. “In the US, there are human control measures and they warn swimmers that they are taking a risk, that you can get killed by a lot of things in the ocean.

“In South Africa, there is a different policy implementation where they set up shark spotters on coastal cliffs and give walkie-talkies to fishermen to let people know there are sharks in the water.

“In Australia, there is another narrative. A new positive Shark Smart campaign has been launched recently but nets on beaches have been renewed. This netting creates a unique problem as it reinforces a stigma against sharks and makes conservation efforts to protect great white sharks more difficult.”

Neff’s study is the first social sciences PhD on shark attacks and is a self-funded project. It is supervised by Dr Betsi Beem from the Department of Government and International Relations.

“I am really excited to do this PhD because I think it will help people understand sharks better and advance the concept of carnivore conservation,” he says.

He has been offered a sponsorship to conduct a month-long field research project at the Shark Centre in South Africa in June, in partnership with the University of Cape Town and the Save Our Seas Foundation in Cape Town. He is also working with the Sydney Aquarium Conservation Fund.

“Solving this riddle is a collaborative effort which needs everyone’s support,” he says.

**Writer Joni Sham is a third year Media and Communications student at the University of Sydney.**



## TEAMWORK IN NEW YORK

**Musicians from the Sydney Conservatorium of Music capped an outstanding year by linking up with New York's Juilliard School for a joint concert at the Lincoln Centre on Broadway.**

The collaboration came on top of successful performances by students from The Con at the Bronnbach Festival in Germany and the World Expo in Shanghai earlier in the year.

It was only the second time that the Juilliard – the world's leading music education college – had teamed up with another music school for a concert performance. Thirty-four musicians from each college combined to form a 68-piece orchestra, conducted by Professor Imré Pallo from the Con and James DePreist, the Juilliard's Director of Conducting and Orchestral Studies.

They performed work by American composers William Schuman and Norman

Dello Joio, a new piece by Australian composer Richard Mills, and finished with *The Young Person's Guide to the Opera* by Benjamin Britten.

Professor Kim Walker, Dean and Principal of the Sydney Conservatorium of Music, said the experience of playing alongside the Juilliard students would be a life-changing experience for the Australian musicians.

"It also shows that Australian music and Australian musicians can be as good as any in the world," she said.

The President of Juilliard, Joseph W. Polisi, described the concert as "a colossal success".

After leaving New York the Sydney musicians crossed America for two more collaborative concerts, with the San Francisco Conservatory of Music and the College of Music at the University of Colorado at Boulder.

# STEEL SHARP-SHOOTERS!

---

## SPINOLA'S BRIGADE!

---



---

**ORGANIZED UNDER SPECIAL AUTHORITY**

---

THE REGIMENT WILL BE COMMANDED BY OFFICERS WHO HAVE ALL SEEN ACTIVE SERVICE.

**PAY FROM \$13 TO \$21 PER MONTH.**

Each man, as soon as mustered, provided with comfortable quarters, abundant rations, and good uniforms. RELIEF TICKETS GIVEN TO FAMILIES.

**\$100 BOUNTY AT THE EXPIRATION OF ENLISTMENT**

250 OF WHICH WILL BE PAID AS SOON AS THE REGIMENT IS MUSTERED INTO THE SERVICE.

**LOUIS WIEDERHOLD, Major.**

**F. X. BRAULIK, Col. Commanding.**  
**LOUIS PUJOL, Lieut. Col.**

---

**Headquarters, 413 Broadway, cor. Lispenard St.**

---

# THE LAST ROMANTIC WAR

BY KRISTI MAROC

A NEW BOOK BY UNIVERSITY OF SYDNEY HISTORIAN FRANCES CLARKE SHEDS FRESH LIGHT ON THE AMERICAN CIVIL WAR BY EXAMINING THE EMOTIONS AND FEELINGS OF UNION SOLDIERS AS EXPRESSED IN THEIR LETTERS, DIARIES AND SONGS.

The American Civil War is often seen as the first modern war, not least because of the immense suffering endured by both sides. But unlike later conflicts, says historian Frances Clarke, it did not produce an outpouring of disillusionment or cynicism.

“The culture of the Civil War was tremendously sentimental, religious, idealistic and romantic,” says Dr Clarke, whose book *War Stories: Suffering and Sacrifice in the Civil War North* is about to be published by the University of Chicago Press.

The book looks at the culture that Union soldiers took with them to war, and the way they understood war from the perspective of this culture.

“My focus is on the sentimental, patriotic stories that people told during this time – from tales of soldiers who died heroically, to those in which tireless volunteers exemplified the Republic’s virtues.

“Whereas most scholars dismiss this writing as propaganda, I think we need to reconsider the everyday writing of the period – the letters, diaries, songs and journalism penned by Union soldiers and

their caregivers – to fully understand the war’s impact and meaning,” she explains.

“The stories that I examine enabled people to make sense of their hardship, and to express their beliefs about religion, community, and personal character.”

Dr Clarke began studying American history at La Trobe University in her home city of Melbourne, and completed her honours degree in politics and history with a project on the Vietnam War.

“I started out by studying the way wars are remembered and memorialised, and sort of fell into looking at America’s past. But once I started I couldn’t stop!”

Finishing her PhD in late 2001 at Johns Hopkins University, she worked as a researcher at the American Historical Association before starting as a lecturer at the University of Sydney in 2003.

“As soon as I began focusing on America I was fascinated by the similarities and differences between that country’s past and ours,” she says.

“When I first started contemplating research projects on American history, I thought I’d end up focusing on some

continued next page



aspect of Australia's relationship to America. Then, in thinking about how memories of war are passed down through the generations, I stumbled into the field of Civil War history, and I've been there ever since."

Over the past decade she has become increasingly absorbed in the culture and memories that surround the conflict.

"It's generally seen as America's biggest watershed – the moment when modern America came into being. By ending slavery and enshrining the power of the federal government over the states, the war led to a fundamental shift in the way people thought about themselves as members of the nation."

She has been overwhelmed by the interest among students for courses in American history at the University's School of Philosophical and Historical Inquiry.

"One of the most surprising things to me about teaching US history in this country is the high level of student interest," she

says. "I didn't actually think I'd get to teach the Civil War in Australia because I didn't imagine that Australian students would either know or care about such a distant event."

But with 250 students enrolled this semester, her course 'A House Divided: The American Civil War' is one of the department's most popular senior units – and other American history topics share similarly high enrolments and interest.

"I think American culture is so influential in our modern world – it's both so familiar and so strange that students want to know more," she says. "The same could be said about the nineteenth century as a whole – it's a subject that's both recognisable yet peculiar."

"We've come a long way since the Victorian era, yet the echoes of that culture are all around us. We still tell war stories like the ones my subjects told, about virtuous self-sacrifice and noble battlefield suffering. But the stories are



Dr Clare Corbould from the Department of History has won a Victorian Premier's Literary Award for her first book, *Becoming African Americans: Black Public Life in Harlem, 1919-1939*.

not exactly the same. It's the slow, often imperceptible nature of cultural change in relation to how people have experienced war that I'm trying to chart."

She has previously written about nationalism, feminism, and volunteerism in the Civil War era, and is currently working on other projects that deal with the memory of the American Revolution and the memory of the First World War.

Dr Clarke's work is helping to consolidate SOPHI's reputation as one of the world's leading centres for the study of American history.

"It is probably the best place to work if you're studying America. The department has a huge cohort of Americans, more than you get at many US institutions," she says.

\* Dr Clarke's book, *War Stories: Suffering and Sacrifice in the Civil War North*, will be available in June 2011.

Contemporary images of the American Civil War, such as the photograph above left of the 23rd Ohio Volunteer Infantry Color Guard (courtesy Ohio Historical Society) show war in a sentimental light, says Frances Clarke.

Dr Corbould won \$15,000 in the 'First Book of History' category. Her book was described as 'one of the most engaging and important books on the Harlem Renaissance in years'.

Dr Corbould said: "The book was based on 10 years of research into the history of Harlem during the 1920s 'Jazz Age'.

"It shows how the grandchildren of America's slaves came to embrace both the American and African aspects of their culture and history. In doing so, they pioneered the kind of 'hyphenated' identities that later became the norm in a multicultural United States and, for that matter, in Australia."

The book was also selected as an 'Outstanding Academic Title' of 2009 by the *American Library Association Journal*, *CHOICE*, and shortlisted for the NSW Premier's General History Prize in 2009, and was runner-up for the WK Hancock Prize of the Australian Historical Association.

Bryan Gaensler (left) and Ben Eggleton in the School of Physics



# THE LAND OF OPPORTUNITY

**Ben Eggleton and Bryan Gaensler, two of Australia's leading research physicists, both made the most of career opportunities in America, writes Trina Del Vecchio.**

They were both outstanding undergraduate students at the University of Sydney in the early 1990s. They each completed PhDs in physics, and are now back at the University as ARC Federation Fellows, Australia's top tier of academic researchers.

But Ben Eggleton and Bryan Gaensler share something else in common: they both spent time in the United States at the start of their careers, working with the world's leading scientists in their areas of expertise.

As a PhD student, Ben Eggleton's interest in optical communications

led him to go to the USA in 1996 to join Bell Laboratories, the world's leading research institute in information science. He became a member of staff and was promoted to Research Director of Photonic Devices, technologies which use light in the process of transferring information.

Professor Eggleton says his experience at Bell Laboratories was a career-defining opportunity, which came at the best possible time for him.

"This was the world's leading research laboratory with the top people in the field and the best facilities. It was when

they were building first high speed optical communications systems and my research solved some of the key technical challenges."

Since leaving Bell Laboratories, Professor Eggleton has continued to push the boundaries of photonics and optical science. He is currently Director of the Institute of Photonics and Optical Sciences at the University of Sydney and Research Director of CUDOS, the ARC Centre of Excellence for Ultrahigh bandwidth Devices for Optical Systems. CUDOS has secured funding of \$33million for the next seven years to build on its already significant achievements.

Professor Eggleton believes the scientific community at the University of Sydney has much to gain from maintaining links

with US researchers, and that Sydney's international collaborations have helped the University keep pace with global research developments.

"I think the US is still leading the world in science," he says. "Most of the scientific breakthroughs are still coming from the US. The US also has the big industry and defence focus that drives enormous progress in the physical sciences."

Like his colleague, Bryan Gaensler also spent several years researching and working in the USA. After receiving his PhD from Sydney, he held postdoctoral fellowships at the Massachusetts Institute of Technology (MIT) and the Smithsonian Astrophysical Observatory. He then spent five years as an assistant and associate Professor of Astronomy at Harvard before returning to Sydney in 2006.

Professor Gaensler says his postdoctoral fellowships enabled him to reach the forefront of X-ray astronomy through his involvement with NASA's Chandra X-ray Observatory, which is largely a product of MIT and the Smithsonian.

"I arrived at MIT knowing nothing about X-ray astronomy, but departed the USA as a world-expert in the field, with close collaborations with the key players behind Chandra," he says.

He continues to work closely with American scientists on several projects including the Murchison Widefield Array, a \$30million radio telescope being built in Western Australia that is a collaboration between various Australian universities, Harvard University, MIT and the Smithsonian.

Professor Gaensler is also supervising an American PhD student at Sydney and a PhD student at Harvard. He says Sydney is in a good position to continue developing strong relationships with universities in the USA.

"Sydney has the capabilities and resources to do things off our own bat, and to set the research agenda," he says. "In this sense it has a lot in common with the big American universities, and there is a lot of fertile ground for partnerships, collaborations and exchanges of students."





# MÉDECINS SANS FRONTIÈRES

BY HAMISH BOLAND-RUDDER

**Over the past decade the number of international students studying in Australia has doubled. Whilst most of the new students have come from Asia, Sydney Medical School has looked to the other side of the Pacific to develop a new and fruitful relationship with Canada.**

Final year medicine student Jocelin Des Jardins came to Australia at the beginning of 2007 after completing a Bachelor's degree in Science at McGill University in Montreal. She spent 18 months travelling after finishing her undergraduate studies, and was looking for an opportunity to continue exploring new parts of the world.

"Obviously, Australia is a big draw for people who like to travel," says Jocelin. "My husband came here in 2005 and decided that Australia was great and that we should come here to live."

Canadian students make up almost two-thirds of the international students studying in the University of Sydney's graduate medical program. "It made it seem a bit easier to be so far from home," says Jocelin. "But it's not too many to be overwhelming, you still get to meet other people."

Martin Facini, a third year student who is president of the North American Medical Students' Association, believes that despite the distance between the two countries, the transition from Canada to Australia isn't too difficult.

"Canada and Australia are very similar. I think that's one of the reasons we have so many Canadians here," says Martin. "Australia is a great place to live, and the University gives a top quality education."

NAMSA holds a large variety of education evenings, bringing students together to share their experiences in

selecting and applying for placements, and assisting students wanting to return home and practise medicine in North America after finishing their degree. "It gives students an insight into the process, and how to make their applications more competitive," says Martin.

"One of the strengths of the course out here is the immediate clinical exposure. On the first day of medical school you can be out seeing patients with your tutor. That is definitely one of the strong points."

Like Martin, Jocelin also believes that the early introduction to the health system is an asset to the course, as is the variety of placements available. "There were a lot of opportunities to do rotations and different placements," says Jocelin. "It's nice; you get a really big variety in terms of location and in terms of different kinds of medicine."

However there are growing concerns amongst Canadian and other international students about a recent change in government policy which has made it difficult to secure the compulsory one-year internship upon graduation, an integral component of medical training.

"There's a lot of uncertainty about whether the State Government will fund enough training spots," says Martin. "But the Dean has assured us that there will be enough spots this year."

"It's a problem because a lot of people come here and meet someone, or really like the place and want to stay," says Jocelin. "The Dean is really good, really supportive."

Professor Bruce Robinson, Dean of Sydney Medical School, has been campaigning against the policy changes,

in an effort to ensure that all students graduating from Sydney Medical School receive an internship. He has been pushing for a more diverse range of internship placements to be offered, including training under general practitioners, overseas experience and placements within research organisations.

"We've been agitating for the government to think more broadly about the type of internship places that could be offered," he says. "We've got to be thinking about alternate opportunities for people to get clinical training."

While the Dean's office has been lobbying, NAMSA has been keeping students informed about everything that is happening within the degree and the profession of medicine.

"As far as I know we're the only university with a group like NAMSA," says Martin. "We wanted to find a way in which we could connect other international students together and help spread information."

"We can't change too much politically; we leave that up to the University. They've been our biggest advocate. They've been very supportive, and have held meetings with the international students to give regular updates."

The Dean believes that a resolution to the issue must and will be found, and has vowed to continue working towards a positive outcome for Sydney's international students.

"These students have studied here in Australia, and are surely the most desirable people to have stay here," he says. "The Canadian students have been a great group and we'd like to continue that good relationship."



# POWER CENTRE

**Don't write off America, says Geoff Garrett, CEO of the University's US Studies Centre. He talked to Richard North about the prospects for President Obama, the rise of China – and his choice of all-American heroes.**

**You wrote recently, paraphrasing Mark Twain, that news of America's demise was exaggerated. What makes you so confident about America's future?**

On the negative side, after the global financial crisis Americans have more self-doubt than I have ever known. At the moment Obama is getting attacked from both the left and the right, and everyone is saying that he's doing a bad job and the consequences will be dire for the country.

But on the positive side, the US has always bounced back from crises, and I think the reason for that is its power for innovation. Look at any Apple device and what it says on the back is 'Designed by Apple in California, assembled in China'. All the value in that device is added in California and the profits are in California, even though it is made in China. Innovation is at the core of the American economy.

If I was making a prediction I would say the next great wave of innovation in the US is going to be in greentech. But that puts China in the equation too, because it is investing big time in cutting-edge technology and it's all greentech.

I just think it's unwise to write off the US. The earliest that anyone is predicting the US will no longer be the world's number one economy is in about 2025, and even then China would only be about a quarter as wealthy per capita. Nobody is expecting that China's military or cultural or political power will be anything like that of the US. For the next several decades at least, the US will continue to be the world's most powerful country.

**One of the most striking developments in the last year has been the growing disenchantment at home with President Obama. Where did it all go wrong?**

If you go back to 2008 the expectations on Obama were extraordinarily and unrealistically high. The economic mess he inherited was extreme – the headline unemployment rate in the US today is 10 percent, another 5-10 percent of people are in involuntary part time employment, and the poverty rate is the highest in generations. The US is mired in a prolonged slump as deep as the early 1980s .

Obama has not changed his position on any of the major issues and he has actually achieved quite a lot: he has withdrawn combat troops from Iraq ahead of his announced timetable, he has carried out the biggest financial reform since the 1930s, and his healthcare reforms are the biggest since the 1960s. On top of that he forced through the \$800 billion stimulus package during his first month in office.

But because of those sky-high expectations and the grim economic reality, nobody seems to like him any more. The left doesn't like him because he's not doing enough, the right doesn't like him because he's doing too much.

**How would you rate Obama's presidency so far?**

Given the hand he was dealt, I think Obama has done pretty well and I would still expect him to win the next presidential election in 2012.

The Democrats will take a beating in the mid-term elections, but that may not be a bad thing for Obama. In history presidents typically do better when they are representing the country against the sectional interests in Congress, and it will play well if Obama is trying to work with Congress in the national interest.

If the Democrats really take a bath in the mid-terms, the Republican party may well move even further to the right, and the party base may be revved up to choose an unelectable candidate to run against Obama in 2012.

**Australia's traditional alliance with the US is under scrutiny because a third party – China – has become involved in the relationship. Can all three live happily together?**

There are two sides to the debate in Australia at the moment: we have to side even more strongly with America, or we have to tell the US to back off in favour of China. I think those positions misread both the history of our relations with America and the current state of US-China relations.

Over the past 30 years the biggest achievement of Australian foreign policy has been to get close to China economically while strengthening our US relationship. I don't see why that should change now.



And US-China relations are not conflictual at their core. For 30 years, and certainly since Tiananmen Square in 1989, US policy towards China has focused on economic engagement. Yes the US has to stand up for its principles over human rights, yes it has to think about Taiwan's security, yes it is concerned about unfair trading by China. But the US believes that economic engagement with China is the best way forward. It's in the economic interests of the US, it will reduce the prospect of conflict in the world, and it's the best investment in political change in China. There's no partisan deviation in this – from Bush Snr to Clinton to Bush Jnr to Obama, the policy is nearly identical.

The rise of China is a big factor in the world and we need to insure against the prospect of conflict. But the way we are going to ensure that doesn't happen is to engage with China. The either-or solutions are both historically misplaced and unwise going forward.

**What might upset the current equilibrium between the US and China?**

Issues can flare and blow up, but I see them more as pressure release valves. So you walk to the brink of some sort of military conflict over Taiwan and both sides back down, or the US looks on the brink of labelling China a currency manipulator and then

doesn't do it. Or China gets upset when Obama sees the Dalai Lama but doesn't follow through on it.

The current flash points are the three Ts of Trade, Taiwan and Tibet. But for both sides the stakes are too high to have a trade war, and Taiwan's economic integration with the mainland is going gangbusters. The new Taiwanese government doesn't want to talk up independence.

Geopolitically, Tibet is a bit more complicated because it brings India into the equation. Tibet is a large cushion between India and China, and I sense that water will be a really critical issue. There are some people in India who are very concerned that the Chinese goal is to divert water eastwards that would normally flow into India and Bangladesh.

**The United States Studies Centre was set up to increase understanding of the US in Australia. Are we succeeding – do you think Australians get America?**

Some of the renderings of the US in Australia are a bit stylised and out of date. For example my feeling is that most Australians don't really have a sense of just how extraordinarily important the Latino population is in the US. When they think race in the US they think African-Americans, but Latinos are now a bigger minority group than African-Americans and the population is going to grow to perhaps a quarter or higher

continued next page



of the US population. And they are politically up for grabs – they're socially conservative but on economic grounds are closer to the Democrats.

One of the things we're looking to develop at the centre is a dialogue on public policy issues where Australia and the US face similar challenges. The area we have done most work on is sustainability, and we have just signed a major agreement with Stanford University to look at comparative water management. The west coast of America doesn't have much water and Australia has major water challenges. It seems to me that bringing together the best Australians and the best Americans to talk about the problem is a really good idea.

### **Is the US paying more attention to Australia now as we move into the Asia-Pacific century?**

I don't think the US needs Australia as a mediator for its major relationships in Asia, and it doesn't need our eyes and ears on the ground to tell it what's going on in the region. But I do expect Asia will become increasingly significant to the US as Europe declines, and the US's major geopolitical allies in Asia are the market democracies – South Korea, Japan and Australia, followed by India and Indonesia. Jeff Bleich, the US Ambassador, puts it well when he says the US has no better friend in the world than Australia. He doesn't say we're America's best friend, but we're a very important country for the US.

### **What first took you to the United States?**

A quirk of fate. In the early 1980s, when I was looking to study overseas, Margaret Thatcher imposed the full cost of higher education on foreigners in the UK, so as a consequence the number of postgraduate scholarships went way down. But my honours advisor at the ANU told me I could go to the US instead on a generous scholarship, so I went to Duke University.

### **Who are your American heroes?**

Um...I always enjoy the seeing the pinnacle of athletic achievement and I loved watching the rise of Michael Jordan and the rise of Tiger Woods.

Closer to my own life, one person for whom I have respect higher than I could describe is my former boss in Los Angeles, Warren Christopher, the former US Secretary of State. He's a man of few but incisive words, the absolutely highest level of integrity, and unmatched judgment. Working with him was an extraordinary privilege for me.

**Professor Geoffrey Garrett is founding CEO of the United States Studies Centre and Professor of Political Science at the University of Sydney.**

## **A DYNAMIC EVOLUTION**

In late 2006 the Australian government announced a \$25 million endowment to create an Australian-based Centre to improve understanding of the United States. Nine months later the University of Sydney won the right to form the Centre in partnership with the American Australian Association and additional support from the state government and private sector.

The United States Studies Centre held its first National Summit on the Bush presidency in December 2007, and admitted its inaugural intake of postgraduate students in March 2008. The Centre's first undergraduate class was offered in March 2009. In 2010, almost 500 students enrolled in Centre classes.

Led by founding chief executive Professor Geoffrey Garrett, an engaged Board of Directors and a distinguished Council of Advisors from both Australia and the United States, the Centre has developed a unique combination of academic focus and think tank analysis. Along with leading commentary on issues as diverse as US-China relations and urban renewal, the Centre also hosts an annual postdoctorate program for emerging scholarly leaders, provides research grants for Australian scholars, and hosts visitors and summits on issues ranging from the future of cities to the Australia-US alliance.

The Centre has also added high-calibre appointments to its list of experts, including leading American journalist James Fallows as Professorial Chair in US media, former President of the American Political Science Association Margaret Levi as Chair in Politics, and former Australian Ambassador to the United Nations and government minister Robert Hill as Adjunct Professor in Sustainability. The Centre has quickly become a go to resource for the Australian media on all aspect of American politics, foreign policy, business and culture.

The Centre's major initiatives include programs on innovation and sustainability with additional work in planning regarding energy security, trade and investment. The Centre's partners include other Australian universities such as the ANU and leading American universities including Stanford.

By bringing together students, scholars, business leaders and policy makers interested in engaging with America and its ideas, the United States Studies Centre aims not only to inform but also to be an agent of productive change.

**Nina Fudala**



# TROUBLED WATERS



Getty Images

**As millions of gallons of oil spilled into the Gulf of Mexico after the Deepwater Horizon explosion, Sydney engineer Mike Jakuba was one of the scientists who took part in the underwater investigation to assess the extent of the catastrophe. Kristi Maroc reports.**

On the evening of 20 April, a methane explosion on the Deepwater Horizon drilling rig, 66km off the coast of Louisiana, triggered the worst environmental disaster in US history.

The explosion cost eleven lives and caused widespread and extreme environmental damage. Over the next three months, around 4.9 billion barrels of crude oil flowed into the Gulf of Mexico.

Although the leaking well has now been secured, speculation continues about the extent of the pollution caused by the disaster. Satellite images of oil on the sea surface were at first used to estimate the spill, but underwater camera footage later showed oil gushing below the surface as well.

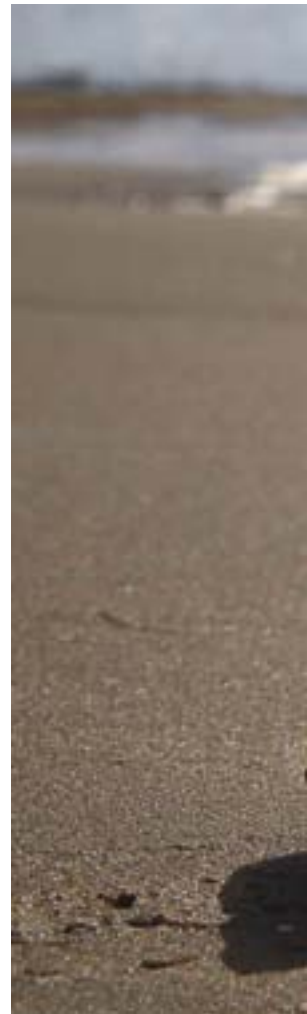
In the weeks following the spill, Dr Michael Jakuba, an engineering postdoctoral fellow from the University of Sydney's Australian Centre for Field Robotics, joined a team of scientists led by the Woods Hole Oceanographic Institution (WHOI) to investigate the sub-sea plume, and to map and confirm its origin.

"Our goal was essentially to follow up on some earlier indications that there was a plume of oil or something fairly deep and resident beneath the ocean's surface," says Dr Jakuba, who completed his PhD at Woods Hole.

The team's mission was to investigate the spatial extent and dynamics of the plume, and collect samples for analysis

continued next page

Sydney engineer Mike Jakuba (right and below) pictured checking the data supplied by an underwater robot in the Gulf of Mexico. Far right: an oil-covered crab crawls along the beach at Grand Isle, Louisiana, more than a month after the Deepwater Horizon explosion (Photo by John Moore/Getty Images).



in government laboratories, a requirement of the US law for environmental disasters.

“Obviously there are pretty significant legal and financial implications from spills of this magnitude, so any kind of sample work that might be brought up in the court of law has to go through pretty rigorous procedures in terms of analysis and oversight,” says Dr Jakuba.

His role was to manage the two vehicles that were used to collect samples from the plume. The first, armed with chemical sensors to detect dissolved hydrocarbons, was lowered from the ship on a cable and was used to locate the plume, identify its vertical extent and collect samples.

The second machine was a robotic vehicle called Sentry, for which Dr Jakuba has written operating software. “It excels at moving horizontally through the water and can be very precisely navigated. We used the robot to basically map out the horizontal extent of the plume,” he says.

Dr Jakuba was previously part of a team that guided a remotely operated underwater vehicle to the Mariana Trench in the Pacific, the world’s deepest ocean bed.

“I’m interested in how we can use undersea robots to more intelligently analyse chemical phenomena in the ocean,” he says. “My research is in the area of adaptive surveying and semi-supervised surveying. Surveying the chemical phenomena intelligently requires

surveying efficiently, and it is best done through adaptive means. If you can adapt a vehicle’s trajectory to spend its time in the area of interest, in the plume in this case, then you end up with a lot more data than you would if you just completely pre-planned everything.”

Dr Jakuba research has focused on hydrothermal vents, with the specific aim of identifying hydrothermal vents on the sea floor.

“Hydrothermal vents are structures that occur throughout the 60,000km worth of mid-ocean ridge that spans the entire globe, mostly in the centre of oceans, like a big mountain chain down the centre of the South and North Atlantic.

“Sea water is circulated through the ocean floor and warmed by nearby



magma or some other heat source, and then basically sprayed out of the sea floor as heated liquid that contains a number of chemicals that can be used as energy sources to sustain chemosynthetic ecosystems.”

There are still some big questions about the biology of hydrothermal vents: how they affect the chemistry of the oceans, their effect on the heat content of the oceans, and how the animals that live there propagate from one vent to another. Dr Jakuba’s PhD project involved developing methods for analysing the chemical data coming back from the vehicles and coming up with estimates of where the vents were likely to be on the sea floor.

“Since then I’ve started to realise that intelligently surveying the plumes, rather

than just trying to locate their sources, may be of more general interest, and not just for hydrothermal plumes. We’ve got sewage outfall plumes, for example, and their environmental impacts are dependent on dosages that the downstream environment experiences. Robots capable of making simultaneous measurements of that environment, for instance photographs of the seafloor combined with chemical data from within the plume, could augment the sophisticated models currently used to predict the environmental impact of sub-sea industrial plumes.”

Intriguingly, after the WHOI team finished its investigation in the Gulf of Mexico, other researchers using DNA studies discovered that much of the plume quickly vanished as a result of natural processes.

“In fact, two or three weeks after the well was finally capped, all evidence of the plume in the mid-water column had basically disappeared. Presumably it had been consumed by bacteria,” says Dr Jakuba.

“The thing you’ve got to understand about oil spills, in the Gulf in particular, is that there are a large number of natural seeps. So oil and hydrocarbons are always being spilled into the Gulf, and always have been.

“This was a big thing, but there are animals and bacteria in the Gulf that thrive on exactly this phenomenon. Not usually not on this scale, but nevertheless nature does have its mechanisms to help.”



# WORKING FOR THE UN

## Four students from the University of Sydney spent time at the United Nations headquarters in New York as part of the UN's highly competitive Spring internship program.

Eleven Australians were among the 220 successful candidates chosen from 3,200 applicants worldwide, with Sydney supplying more representatives than any other Australian university.

Susanna Montrone, a postgraduate international studies student working in the Department of Social and Economic Affairs, said: "I couldn't have had a better internship. You're actually working on programs and policies like the International Monetary

Fund and Millennium Development Goals that before were just subjects in the classroom."

"It was an amazing experience," said Rohani Foulkes, a postgraduate education student, working in the Department of Public Information's Education Outreach program. "I want to be involved in curriculum development on an international scale, and my work at the UN was relevant to each course of my Master's degree."

Rohani was dealing with the abolition of the Atlantic slave trade; Susanna helped contribute items for the Beijing + 15 review and the Annual Ministry Review of the Millennium Development Goals; another Sydney student, Tom Champion [pictured], was writing obituaries for the 101 UN staff victims of the January 12 Haiti earthquake; while Beth Lee attended high-profile conferences on international law.

"Dealing with media and communications at the UN is intense," said Tom Champion, a postgraduate media student working in the Department of Public Information. "Internal communication at the UN turns into investigative journalism, dealing with war and current events and with missions in Haiti, Congo or Sudan."

Beth added: "I'm looking for a career change from private to public law and the UN definitely gave me an insight into public law. Beth, a postgraduate law student, worked at the Department of Management with the Headquarters Committee on Contracts.

Although the UN is sometimes criticised as being ineffective and policy-led, the Sydney students said they had benefited greatly from the internships. "Every single person I came across showed enthusiasm and commitment on a daily basis," said Rohani. "You do get that feeling sometimes that you are in the epicentre of the decision-making process, and that diplomacy will get you there in the end," added Susanna.

In order to qualify for the internship, applicants are required to be enrolled in a postgraduate studies program. Interns are exposed to high-profile conferences, participate in meetings, and contribute to analytical work as well as organisational policy.



Cliff Kerr at the Conservatorium of Music.

# DISTANT WORLDS

RESEARCH PHYSICIST CLIFF KERR TELECOMMUTES TO NEW YORK EVERY DAY FROM HIS OFFICE IN SYDNEY, WRITES JOHN FAREY.

Cliff Kerr's journey to work doesn't end when he sits down at his desk at the University of Sydney. With the click of a button, he telecommutes to the State University of New York's Downstate Medical Center and joins the rest of his research team online.

Dr Kerr, a physicist, and his fellow postdoctoral researchers are working to "crack the neural code" as part of a \$41 million project funded by the United States Department of Defense's Advanced Research Projects Agency (DARPA).

DARPA – the research wing of the US Military – is most famous for inventing the Internet, and is now set on figuring out the 'language' the cells in the brain use to exchange information.

The project is called REPAIR, or Reorganization and Plasticity to Accelerate Injury Recovery, and will be used to aid the development of mind-controlled prosthetic limbs for soldiers and civilians.

"My role in the project is to build a computer model of the brain that's 'as simple as possible, but no simpler,'"

says Dr Kerr, using a quote attributed to Einstein. "The aim is to make the activity in the simulation match the activity in the real brain, and to make the simulation respond to input in the same way the real brain does".

If successful, Dr Kerr's work could potentially lead to robotic limbs being able to communicate with the simulation through a chip implanted in the brain. The 'brain-chip' will consist of a sensor sitting on the surface of the brain, reading the activity beneath it and sending it wirelessly to the robotic prosthesis, allowing it to be controlled with fine detail.

"Unsurprisingly, we haven't cracked the code yet," he says. "The most difficult part is deciding what's important and what can be ignored. That's our first step – trying to make an educated guess about where to even look for the neural code."

Dr Kerr says telecommuting is strengthening research ties with the US. "It's so much easier now to be in virtually constant contact with researchers from both countries," he says. "I'm still based at the University of Sydney and do this

work remotely – I've never actually met my boss!"

Away from the research laboratory, Dr Kerr is also an accomplished composer and concert pianist. He studied at the Sydney Conservatorium of Music, and says he finds an affinity between the two disciplines.

In 2007 he took part in the first performance of *Music and the Cosmos*, a unique production bringing together some of the University's leading astronomers and musicians, during which he performed his piece *Quasars, Pulsars and Black Holes*, a tribute to the most extreme objects in the universe. His approach was to capture every dynamic, every articulation and every colour by featuring all the notes of the piano at least once.

"I suppose the most striking thing about the physics of the universe is its grandeur and elegance," he says. "The ancients believed in the 'music of the spheres' and thought the heavenly bodies were perfect. Now, more than two millennia later, the equations have become more complicated, but the sentiments remain the same!"

# MY CITY MIAMI



**Betsi Beem is a senior lecturer with the Department of Government and International Relations. Originally from Miami, Florida, her research interests include the interaction of science and policy making for the management of marine resources. Dr Beem spoke to Kristi Maroc about why she loves her home town.**

Miami is renowned for its warm tropical climate, an environment ideal for a marine enthusiast like Dr Betsi Beem. But Betsi's love for her home town also extends to its diverse culture and lively, colourful atmosphere.

"I grew up in a small bohemian neighbourhood called Coconut Grove, which was home to all the artists – it's where Jimmy Buffet used to go play before he made his first record. It was this really cool, quirky place," she says.

"Miami is a vibrant and dynamic city that the last time I checked is over fifty per cent Hispanic, so it has this amazing music and food and culture that's been brought there by the Cubans and the Hispanic community, as well as a mix of different American cultures.

"It's a fabulous melting pot of great cultures that's primarily dominated by the Latin beat. Not to mention the great weather and access to water!"

Betsi attributes her love of the water to her childhood in Miami, moving there with her parents when she was about six months old.

"Part of what makes me who I am is that I have an avid sailing background. Before returning to do my postgraduate work I was actually a yacht captain, so I've sailed across the Atlantic Ocean and done all types of fun things like that."

She even lived aboard a sailboat for more than a decade, and was a licensed maritime captain before turning to an academic career.

"Yes, I lived on a sailboat for ten years – until my husband made me move onto shore. He said 'I'm not moving onto that thing with you!'" she laughs.

"The best thing about living on a boat in Miami is that you can step away from everything very quickly and sail off to a beautiful remote island, or be sailing over stingrays and have



dolphins swimming alongside you. And when it's time to move house, you just untie four lines and you're gone."

Not able to leave her love of the water too far behind her, nowadays Betsi and her husband live on an island to the north of Sydney, and she commutes to work across the water each day.

"So I still sail about twice a day. There's no bridge to Scotland Island. Every morning I go down to the water and sometimes I boat-pool with people, sometimes I take my own boat".

A keen environmentalist, much of Betsi's research has examined the intersection of politics and natural resources, primarily around the marine environment but also in other protected areas such as national parks and world heritage areas. And she is enthusiastic about the natural environment of Florida.

"There are the Florida Everglades which are a big national park, a world heritage area, in the south west part of Florida. It's this vast wetland that's home to alligators and wading birds, and it used to have a very vibrant big cat, or panther, population," she says.

"My in-laws and my husband and I were going for a hike around some levies a couple of Christmases ago – stepping over alligators on the banks and that kind of thing – and then we looked ahead and there was a panther just lying in the middle of the pathway, just like a house cat.

"But it was a lot bigger than your average house cat, it was huge. It just kind of got up and looked our way and then sauntered off into the grass. It's probably one of the neatest experiences I've ever had!"

Miami is a tropical city, lushly vegetated with palm trees, bromeliads and hibiscuses. It's a cruise ship port, an

continued next page



Water world: Betsi Beem – and her cat – developed a love for sailing in Miami.



international resort city, and the gateway to Latin America, home to a majority population of foreign-born residents largely from Cuba, Nicaragua, Haiti, Honduras, the Dominican Republic and Colombia. The city's culture is heavily influenced by the large Latino population, with music such as the conga and rumba introduced by the Cubans, merengue by the Dominicans, and reggae and calypso by the Caribbean migrants.

"We've got a great Caribbean influence. There's a really strong African American population, the islanders, the Caribbeans, Bahamans, Jamaicans, plus a really vibrant Haitian community with colourful art that brings another whole dimension to the city.

"There's one part of Miami that's got the Cuban beat and the neon lights, and it's a really upbeat, very embracing culture there, very energetic."

There was a dramatic influx of Cuban migrants to Miami when Fidel Castro took over during the Cuban Revolution in 1959.

"The 1950s brought the first wave of Cubans, and I think they fundamentally transformed the city from just being a vacation

spot in the winter time. They made it more of a full-time city. Before that they used to pretty much close up Miami for the summer time because everybody would go back up north," says Betsi.

"It started off as a sleepy little southern town, but Florida really boomed when Henry Flagler built the railroad down there. There's a myth about a woman who sent an orange blossom up north to Flagler in the middle of winter, and he got it and was like 'Oh, well now I need to build my railroad the rest of the way to South Florida'."

Henry Flagler was a key figure in the development of Florida, renowned for linking the entire east coast of the state through his railway network, for building hotels, streets, water and power systems, and for financing Miami's first newspaper.

These days the city of Miami is home to a population of 433,136 residents. It is a major centre of commerce, finance, media, culture, arts and international trade, and one of the largest cruise ship ports in the world. The state of Florida attracts about 60 million tourists every year, flocking to enjoy the hundreds of miles of beaches and year-round mild climate.

# ALUMNI IN NORTH AMERICA



Vancouver, venue for the 2011 SUGUNA conference.

**More than 3000 Sydney alumni live in North America, and the University operates an alumni program of events in conjunction with SUGUNA, the Sydney's North American alumni association. SUGUNA is open to all graduates and friends of the University currently living in the United States, Canada and Mexico.**

Recently, 120 alumni and friends of the University gathered at the Juilliard School in the Lincoln Center in New York for a SUGUNA VIP Alumni Cocktail Reception. The reception was held to celebrate the historic US tour by the Sydney Conservatorium of Music's Orchestra (see page 9).

Professor Kim Walker, Dean of the Conservatorium, was the evening's Master of Ceremonies, while renowned conductor and chair of conducting and opera production at the Con, Professor Imré Pallo, entertained the gathering with a behind the scenes view of the international tour. Mr Joseph Polisi, President of the Juilliard School, spoke of the strong links between the Sydney Conservatorium and the Juilliard School and his delight at the historic collaboration. Guests were also treated to a performance by Mr Hyung Suk Bae of Brahms' Cello Sonata no.2 in F major

1st movement. Mr Hyung has had a long association with the Conservatorium and has been described by its Professor of Cello, Georg Pedersen, as "one of the most gifted young musicians I have ever come into contact with, in 35 years teaching at university level".

SUGUNA is also delighted to announce that its next Annual Conference will be held on the campus of the University of British Columbia on Vancouver Island, over three days between 4 and 7 August, 2011. All alumni and friends of the University of Sydney are welcome to attend an event which will feature thought-provoking presentations by leading academics in a variety of fields as well as social and professional networking luncheons, dinners and other gatherings.

Although most who attend lock in for the full three day program with associated discounts, it's possible to pick and choose the events you would particularly like to attend, as individual tickets are also available.

For information on the conference on this and other upcoming University/ SUGUNA events, please visit [sydney.edu.au/alumni/suguna](http://sydney.edu.au/alumni/suguna) or contact the Alumni Relations Office at [alumni.office@sydney.edu.au](mailto:alumni.office@sydney.edu.au) or on +61 9036 9222.

# NORTH & SOUTH

**1** Aisha Harun, a medical student at the Johns Hopkins School of Medicine in Baltimore, Maryland, is spending a year at the University of Sydney on a Fulbright Postgraduate Scholarship, carrying out research into the interaction between multiculturalism and health outcomes in Australia.

She is working at the University's School of Public Health participating in a research project at the Surgical Outcomes Research Centre to identify the unmet needs for supportive care for Australian cancer patients.

Aisha chose to study in Australia because of its long history of immigration and diversity. She will draw on her own experiences as a Muslim African-American woman, and contrast those with the experiences of other individuals living in a diverse society. She has a Bachelor of Science from the University of Wisconsin-Madison in Biology (Neurobiology) and has extensive experience as a volunteer in health and multicultural activities.

The Fulbright program is the largest educational scholarship of its kind, and aims to promote mutual understanding through educational exchange.

Aisha will be joined at Sydney in 2011 by Marissa Brookes, a political science student from Northwestern University, who will be researching the causes of success and failure of transnational alliances led by Australian trade unions.

**2** American students Caitlin Henry and Isabel Clark, both from Tulane University, and Anna Pickens from Siginau Valley State University, have been taking part in research-based internships at the Brain and Mind Research Institute in Sydney.

The internships are designed to enable the students to acquire a range of research skills, and give them hands-on experience in clinical research studies.

All three students have been working on research projects looking at chronobiology and sleep patterns among patients with a range of conditions, from bipolar disorder and depression to Parkinson's disease and Alzheimer's disease.

**3** In May 2010, Sydney Nursing School at the University of Sydney hosted the first-ever nursing student delegation to Australia through the International Scholar Laureate Program. Twenty-six nursing students from 22 universities across the USA, Canada and Malaysia were chosen to join the delegation.

The week-long visit to Australia gave delegates the opportunity to learn about the healthcare system in Australia, the delivery of health services in a variety of settings and to meet Sydney Nursing School students to exchange information, perspectives on their local health systems and experiences about nursing education and university life.

Participants in the International Scholar Laureate Program are considered to be exceptional students from universities,

mainly from across the United States, who demonstrate exemplary leadership with a dedicated interest in pursuing a career in nursing.

A video can be seen at [sydney.edu.au/nursing/news\\_events/videos\\_index.shtml](http://sydney.edu.au/nursing/news_events/videos_index.shtml)

**4** Leading academics from Cornell and Columbia gave an international dimension to the centenary celebrations at the Faculty of Agriculture, Food and Natural Resources in 2010.

Dr Per Pinstrup, the Andersen H.E. Babcock Professor of Food, Nutrition and Public Policy at Cornell University (pictured), and Professor Pedro Sanchez, the Director of the Tropical Agriculture and Rural Environment Program and director of the Millennium Villages Project at the Earth Institute at Columbia University, were both keynote speakers at a Centenary Research Symposium in June.

The symposium examined the changing face of agriculture and the vital role it plays in our lives. The program examined the demand for natural resources, explored its effects on social and political development and discussed the future of sustainable production in a changing climate.

The faculty is a global research leader in the sustainable use of environmental systems and brings together a diverse range of expertise ranging from biotechnology to resource economics.



4



3



1



2

# NETWORKS

As part of its international strategy, the University of Sydney is involved in a series of networks that foster close links with many of the world's leading universities.

The University is a member of four international networks, including Academic Consortium 21 (AC21), the Association of Pacific Rim Universities (APRU) and the Worldwide Universities Network (WUN).

Our partners include some of North America's leading universities including Stanford, California Institute of Technology, the University of California system, and the Universities of Washington, Alberta, Seattle, Wisconsin and Penn State.

The benefits are far-reaching and include international research collaboration, academic and student exchange, and participation in global higher education discussion.

"Our involvement shows our commitment to innovation and leadership in international higher education," said Professor John Hearn, the Deputy Vice-Chancellor International, who is also the Chief Executive of the WUN.

In 2010, more than 80 University of Sydney academics and postgraduate students were directly involved in 39 research projects under the banner of international networks.

The University also allocated \$500,000 in funding to 53 projects under its International Program Development Fund, which is designed to invest seed funding in competitive international collaborative partnerships.

Professor Hearn said future growth and success of the networks was essential. "International network engagement is relatively inexpensive to maintain but is a highly effective means of raising our international profile while continually generating new relationships and opportunities," he said.

"With strategically targeted seed-funding we have been able to establish solid institutional links, facilitating dialogue between academics, building frameworks that support bids to external funding sources and engaging the next generation of scholars."



# ON PARALLEL TRACKS

Continued from page 5



I often meet Australians who tell me that their parents or their grandparents emigrated from somewhere in Europe, and that one member of the family decided to go to Australia and another went to Canada. That's a common 20th century historical story.

I think what we're going to find in future is that people from the Philippines or India or Malaysia or China, will

talk about how one family member went to Australia while another went to Canada. That's an entirely healthy thing from my point of view and a natural evolution, given that we're modern pluralistic countries. It creates opportunities for all sorts of business, scientific, cultural and economic connections with Asia.

Our economic dependence on resources – in our case it's shipping oil and natural gas to the US, while the Australian economy is doing very well based on its mineral exports to Asia – is fine as long as commodity prices remain high.

But an issue that's of concern to both governments is that productivity in both countries has remained flat. The Canadian government put hundreds of millions of dollars into high-end R&D capacity in our universities as a way of stimulating productivity, and it certainly improved the research standing of our universities.

But because we have a small capital market in Canada, people go for venture capital to the US or elsewhere. We don't see the commercialisation of R&D and it's becoming increasingly evident that people with good marketable ideas have to look abroad to get financial backing.

Our future as a service- and a knowledge-based economy is something we're very seized with. It's all very well to engage in massive mining and LNG (liquefied natural gas) exports, but that creates a small number of very high-paying jobs and doesn't do much for small resource-based towns. Forestry, for example, has been in a chronic crisis for about ten years and is not going to rebound quickly.

We're working hard on improving things like distance education and skills-based learning over a dispersed population, and we'll need to continue this in future if we're going to remain competitive. The two societies are going to be running on parallel tracks and it will benefit us to talk to each other about how we manage those dynamics which Australians call the two-speed economy. It's not a term we use in Canada but it's a concept we know well."



Your record over the last seven seasons reads 94 wins and just two losses, and you haven't lost in 55 games. Your record over 27 seasons is 258 wins, 52 losses and five tied games for an 82.8 winning percentage.

That's the proud history of the Sydney Uni Lions American Football team.

This team, primarily made up of Australians (two American players have come out as part of a coaching/playing program) can lay claim to being the most successful American Football team in the world based on winning percentages.

The team's success has led to recognition of its players at the representative level. At the 2010 National Championships, the NSW team was dominated by Lions players. They included three of the four team captains – Kiernan Dorney, David Thode and Joe Lim – and 13 of the 22 starters.

The NSW Wolfpack went through the tournament undefeated and won a fifth straight National Championship in the process.

Sydney University players also formed the core of the 2009 national team, the Australian Outback, which defeated Great Britain on its UK tour.

# THE LIONS KEEP ROARING

**IMAGINE FINISHING YOUR REGULAR SEASON UNDEFEATED WITH A 10-0 RECORD, WRITES ANDREW TILLEY.**

The Outback were led at quarterback by 2010 University Blue Kiernan Dorney, who was joined on offence by fellow University Blue David Thode, and five other Sydney University Lions players – Matt Croasdaile, James Gifford, David Allen, Liam Erby and Mathew Freeman.

On the defensive side of the ball, another Sydney University player, Joe Lim, was a team captain and received the MVP award for the tour.

A number of players from the Sydney Uni squad are in the running to be selected for the Australian Outback team which will compete in the World Cup in Austria in July 2011.

While many teams in the Gridiron NSW Division 1 'Australianise' the sport by running rugby style back-line plays, the Lions prefer to stick to the football schemes used in the US.

Lions Coach Steve Dunne worked to make the Lions the most innovative team in the league. "On offense the unit is 'no huddle' to make the offense quicker," he explains. "This means that the team stays in their formation and gets hand signals from the coaches on the sideline to tell them what to do.

"It adds an exciting element to the team's play."

This year the Lions had a scoring average of 57 points per game and crossed for 82 touchdowns in their ten games.



Astronomer Bryan Gaensler (see page 14) has won the Pawsey Medal, awarded annually by the Australian Academy of Science for outstanding research by a scientist under the age of 40. The medal was won by his colleague Ben Eggleton in 2007.

Professor Gaensler is about to take on a major new role as an Australian Laureate Fellow in early 2011. He is carrying out research into the overall magnetic field of the Universe, one of the final unsolved problems in cosmology.

For information about the University of Sydney's links with the USA and Canada, contact:

Victoria Romaniuk | International Development  
Manager (Americas)  
Office of the Deputy Vice-Chancellor International

Room No 207c, Old Teachers' College A22  
The University of Sydney  
NSW 2006 Australia

T +61 2 9036 7511  
M +0423 797 306  
F +61 2 9351 4462