

Volume 39, No. 13

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## European praise for Canterbury research centre

The work of the National Centre for Research on Europe (NCRE) at the University of Canterbury is extremely important to the European Union, according to Martin Sajdik, Director General for European Integration and Economic Affairs in the Austrian Foreign Ministry.

He spent last week at the centre presenting five public lectures covering a wide range of EU-related issues such as the prospect of Turkey and Russia becoming members and the benefits of membership for Western Balkan countries.

NCRE is the only dedicated European research centre in New Zealand. It is a multi-disciplinary centre that operates nationally, uniting students and scholars from a wide range of fields to research and study European issues.

Ambassador Sajdik says the centre's work is held in very high regard.

"In some of the internal documents of the EU but also in the last document that was adopted by New Zealand and the European Union on the priorities for future co-operation, there is quite an interesting section devoted to the work of the National Centre for Research on Europe.

"I am here now for the second time — I was here last year — and I think what is done here is extremely important to bring New Zealand closer to Europe and to show dimensions of Europe that are not focused on how much meat and butter is exported to the European Union. There is more to the New Zealand-European relationship than that."

He believes the European Union is valuable politically, as well as economically, to New Zealand and says the physical distance between this country and Europe should not be a barrier to close relations.

"New Zealand is on its own geographically



(Left to right) NCRE Director Professor Martin Holland, Ambassador Martin Sajdik and University Chancellor Dr Robin Mann.

but out of this one should not make a philosophy or ideology. This could lead to a very isolationist approach and in the long-run, from my point of view, could only be detrimental.

"In many, many ways I think New Zealand and the European Union, especially the middle-sized and smaller countries like Austria, have very similar views."

Other issues Ambassador Sajdik covered in his public lectures last week included maintaining neutrality and identity while working to develop common foreign and security policies.

He accepts there is a wide range of opinions among European countries on these issues, but believes there is potential for the EU to develop what he calls "integrated policies", a

potential which he says, is borne out of a past shared by all European nations.

"There is a common past of wars, a common past of rivalries, a common past of blood that we should never forget and we have a certain vision of a Europe that is together that is also, unfortunately, based on our historical past which is graveyards. We know why we have come together and we know why we work together because we want to avoid repeating historical experiences."

### Inside your Chronicle

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## Alumni mission of great value – VC

Valuable alumni and academic links were cemented during the recent high-level development visit to Malaysia and England, the Vice-Chancellor told Council members.

Reporting to the July meeting of the University Council, Professor Roy Sharp said he and the Chancellor, Dr Robin Mann, had been graciously hosted at New Zealand House, Oxford and Cambridge universities and at Rhodes House.

A highlight was a function in the Penthouse of New Zealand House, hosted by New Zealand High Commissioner the Honourable Russell Marshall and attended by a capacity audience of 120 alumni.

"The venue was fantastic and our alumni were very grateful for the opportunity to network with staff and fellow alumni at what was the first university-wide alumni event held in Britain," Professor Sharp said. "Offers to

organise a British chapter of alumni have flowed in since the event."

The timing of the visit was to coincide with the establishment of a British-registered UC charity, which allows the University to reap the tax benefits of donations made by British residents.

The University delegation also visited Oxford University and discussed the Oxford-Canterbury staff exchange scheme with university officials and with recent exchange scholars.

A tour of Christ Church led to an offer from Archdeacon John Morrison to act as host to UC visitors to Oxford, in recognition of the historic links between Christ Church and Christchurch's University of Canterbury.

Following those discussions the party met with Dr John Rowatt, Warden of Rhodes House and Secretary-General-designate of the Association of Commonwealth Universities.

The Vice-Chancellor of Cambridge University, Professor Alison Richard, met with the group and lent her support to a Cambridge-Canterbury staff exchange scheme similar

to the Oxford one. Detailed discussions with senior university staff followed and the scheme will be finalised later this year.

The party also visited the Scott Polar Research Institute, reinforcing links with UC's Gateway Antarctica, and arranging for a SPRI launch of Canterbury University Press's book *Polar Castaways*, which involved substantial research in the archives of SPRI.

Professor Sharp also noted the value and importance of his attendance at the first New Zealand Alumni Convention in Kuching, Malaysia, which was supported at the highest level in Malaysia and which attracted two New Zealand Vice-Chancellors and a Deputy Vice-Chancellor.

Canterbury alumni were the largest single alumni group, reflecting the considerable cultivation of Malaysian alumni undertaken in the last six years. Three of the best presentations at the convention were from UC alumni: British MP and former lecturer Austin Mitchell, Dr David Given, Director of the Christchurch Botanical Gardens and Professor David Simmons of Lincoln University.

## Le Grew portrait

Auckland painter Martin Ball has been commissioned to paint a portrait of former Vice-Chancellor Professor Daryl Le Grew.

The artist, selected by a working group comprising Chancellor Dr Robin Mann, Council member Judge Stephen Erber and the former Head of the School of Fine Arts, Associate Professor Ian Lochhead, has a "considerable reputation", Dr Mann said at the July meeting of the University Council.

The portrait will join those of previous Vice-Chancellors on the walls of the Council chamber. It is expected to be finished by mid-2005.

## Chinese officials tour campus

Last Friday's wet weather did not dampen the warm Canterbury welcome for two visiting officials from the Chinese Embassy in Wellington.

Mr Yang Xiaochun, First Secretary of Education, and Mr Xia Guoshun, from the Consular Office of the Embassy, visited Canterbury to find out more about what the University has to offer. The morning was spent touring the campus and visiting the HitLab and Nanotechnology Research Centre. After lunch with the Vice-Chancellor

Professor Roy Sharp, the two men spent an hour talking to some of the 1200 Chinese students currently studying at Canterbury. The students were encouraged to get involved in the various activities offered by the University and to take the opportunity to learn more about New Zealand's culture from Kiwi students.

Students attending the seminar were surveyed on how they felt about their studies and life in New Zealand.



Chinese embassy officials Mr Xia Guoshun (left) Mr Yang Xiaochun (right) were shown around the University by Miss Percy Chan of the International Office and Pro-Vice-Chancellor (Law) Professor Scott Davidson.

## Research project turns up the heat on climate change predictions

Current predictions about the likely impact of global warming on marine eco-systems could be blown out of the water by the findings of an 18-year research project on the California coastline involving a University of Canterbury researcher.

Associate Professor David Schiel (Biological Sciences) and his US collaborators found the discharge of hot water from a power generating plant at Diablo Cove had what they describe as "a dramatic impact".

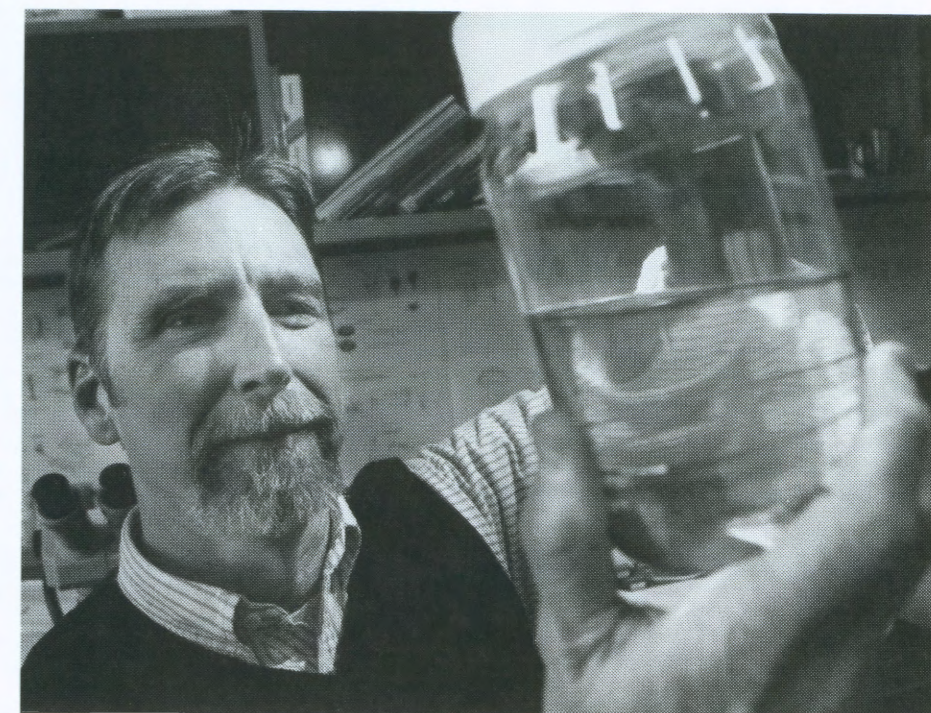
The plant draws seawater from outside the area, uses it in a cooling system to re-condense freshwater steam before discharging it into the cove on an exposed rocky coastline in central California.

Professor Schiel says records show that in the period between 1976 and 1985, before the heated discharge began, seawater temperatures inside and outside the cove were similar.

But he and his fellow researchers found that in the 10 years after 1985 the water temperature in the cove increased by an average of 3.5degC, impacting heavily on 150 species of seaweed and animals.

Fifty-four percent of algae species and 27% of invertebrate species declined by at least 50%. Many kelp and large seaweeds virtually disappeared, the numbers of grazing snails and sea urchins increased while abalone were found to have died-off in that time.

Professor Schiel says the research has highlighted the complexities of predicting



Associate Professor David Schiel warns of the complexities of predicting likely impacts of climate change.

the likely impact of climate change on marine eco-systems.

He also believes they strongly indicate the commonly held belief that cold-water species affected by warming seawaters will be replaced by warm-water species is wrong.

"We found there was no replacement of cold-water species. Our study clearly shows that changes in marine systems due to warming

are unlikely to be simple," he says.

"If ocean warming continues, our study implies that large and mostly unpredicted changes may occur in nearshore communities.

"The changes were real, lasting and comprehensive, providing both clues and a caution about predicting effects of climate change."

## Book of essays a 'rare honour' commensurate with law professor's standing

Friends and colleagues of the late Professor Gerald Orchard have produced a book of essays in memory of the former Canterbury School of Law professor.

*Essays on Criminal Law – a tribute to Professor Gerald Orchard* was edited by the Honourable Justice Bruce Robertson, President of the Law Commission, and includes contributions from lawyers and academics from around the country as well as from Professor ATH Smith, Professor of Criminal and Public Law at the University of Cambridge. Canterbury is represented with an essay on contesting acquittals by Associate Professor Jeremy Finn.

Professor John Burrows (Law) said the book was in recognition of the immense contribution Professor Orchard made to criminal law in New Zealand prior to his death in January 2003.

"A book of essays in one's memory – or *festschrift* as they are known – is a rare honour, accorded only to those who have reached the peak of intellectual achievement. Gerry was

one of those," Professor Burrows said.

"He taught a generation of law students; he contributed in a large way to *Adams*, the leading text; he argued complex and important cases in the Court of Appeal; and he helped shape the future of the subject by his work on the Criminal Law Reform Committee as an adviser to the Law Commission. He was a master of the subject."

Professor Burrows said the essays covered some of the law's "thorniest problems" including sentencing, staying criminal proceedings to prevent abuse of process, "disease of the mind" evidence, the physical discipline of children, and consent in rape.

"So important are the topics that the essays will be useful and authoritative for many years to come.

"It is particularly fitting that one of the essays is by Gerry himself. An analysis of similar fact evidence, it is the last thing Gerry wrote and it was unpublished at his death."

The book also includes a personal tribute from long-time friend Bernard Brown, retired associate professor of law at the University of Auckland.

"Bernard's reminiscences, expressed in his typically eloquent prose, will delight all who knew Gerry. Some of his stories are touching, some very funny indeed."

Royalties from the sale of the book will be donated to the Gerald Orchard Memorial Fund, established last year to provide prizes to students and to further the study of criminal law and evidence at Canterbury.

## People

**Professor Kon Kuiper** (Linguistics) has been awarded a 2004 Distance Education Association of New Zealand Award valued at \$650. The award was made for Professor Kuiper's paper, "E-lectures within an integrated multimedia course design".

## Chronicle

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## Emeritus Professor Graham Nuthall 1935 - 2004



**Internationally acclaimed educationalist Emeritus Professor Graham Nuthall has died at the age of 69 after a two year battle with leukaemia.**

Professor Nuthall retired in 2001 after nearly 40 years with the University of Canterbury's Education Department.

He is credited with the longest series of related studies of teaching and learning in the classroom that has ever been carried out and it has been recognised by the educational research community as one of the most significant. A pioneer in his field, his research focused on the intimate relationship amongst students and the teachers within the classroom, resulting in a deeper understanding of the significant and often very subtle classroom interactions which influence learning.

Professor Nuthall earned his BA and MA degrees at Canterbury and then trained as a primary school teacher and speech-language therapist at the Christchurch Teachers' College.

He was first appointed to the University of Canterbury as an assistant lecturer in education in 1960. After three years, he went to the University of Illinois on a Fulbright Scholarship, where he gained a PhD in education and psychology in 1966.

He returned to lecturing at Canterbury and was made a professor at 37.

Professor Nuthall was head of the Education Department in 1976, from 1980 to 1986, and again in 1996. From 1979 to 1983, and from 1985 to 1994, he was the University representative on the Council of the Christchurch College of Education. He served

on many committees and boards throughout his years at Canterbury, including holding the chair of the Joint Board of Studies in Education from 1981 to 1985 and again from 1992 to 1996.

His work was published in many international journals including the *Harvard Educational Review*. He won many awards including the New Zealand Science and Technology Medal from the Royal Society. Last year he was made a Member of the New Zealand Order of Merit for services to education.

Associate Professor Alison Gilmore (Education) said Professor Nuthall was well respected personally and professionally within the University, nationally and internationally.

"His passion for teaching and classroom research was evident, as was his compassion for students, teachers and colleagues. Graham was modest and self-effacing about his work, but that his work was innovative, original, intellectually challenging and gained international recognition as well as having a profound impact on teachers' practices in the classroom is a testament to Graham's commitment to understanding and improving children's learning.

"He will be sorely missed as a friend, colleague, mentor and visionary," said Professor Gilmore.

Associate Professor Bob Manthei (Education) said his colleague was "unique". "Everyday conversations with him were almost like being mentored, such was the depth and breadth of his insight, experience and knowledge about so many topics. His wisdom and compassion for others was very special and rare."

Senior lecturer Baljit Kaur (Education) said Professor Nuthall always had time for others. "He was an engaging story teller, with terrific memory for detail. And he was an interested listener. He showed tremendous patience and generosity of spirit in his interactions no matter who he was dealing with.

"The grace with which he lived the last 20 months of his life is just another example of the inspirational person he was for many who like me had the privilege of working with him."

Sue Collins of the Christchurch College of Education said it had been a privilege to have been one of Professor Nuthall's last doctoral students and to have worked with him on a daily basis for three years on the Project on Learning.

"I am indebted to Graham for constantly challenging me to look beneath the surface to better understand the complexity of the teaching - learning process. Graham's work will continue to benefit generations of teachers and learners as the findings are incorporated into the teaching of those of us who were privileged to have been taught by him."

Dr Adrienne Alton-Lee, Chief Education Adviser with the Ministry of Education in Wellington, said Professor Nuthall would be remembered for his "immeasurable contribution" to research on teaching and learning. "He is admired internationally as one of the pre-eminent researchers in classroom research. His work will be transformational in the New Zealand education system in deepening understanding of the needs of our children and their teachers."

Tributes have also flowed in from around the world. Professor Maurice Galton (University of Cambridge) said Professor Nuthall was "a giant among classroom researchers" while Professor Jere Brophy (Michigan State University) described him as "one of the few truly innovative leaders in our field".

Professor Nate Gage (Stanford University) said Professor Nuthall was "one of the most creative, rigorous and productive researchers and thinkers in the word in the field of research on teaching".

Virginia Stead (OISE/University of Toronto) said as a graduate student, Professor Nuthall had impressed her with his sincerity, his understanding of the field, and his commitment to teaching those who wished to learn. "None of us chooses our time in history, but I'm glad that mine overlapped with Graham's, however briefly."

Professor Nuthall's legacy lives on through the Graham Nuthall Classroom Research Trust, launched in May. Speaking at the time of the launch, Professor Nuthall said he was delighted his career-long commitment to furthering classroom-based research was to carry on.

Professor Nuthall is survived by his wife Jill, four children and ten grandchildren.

## DNA analysis to unlock clues to rediscovered 'extinct' storm petrel

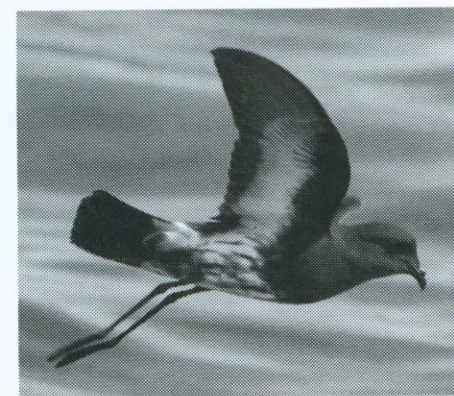
**A brown envelope from Paris containing tissue samples from the "extinct" New Zealand storm petrel has just arrived for Dr Bruce Robertson to begin a taxonomic study on the bird.**

"These are important pieces in the puzzle in determining the taxonomy of the New Zealand storm petrel," said Dr Robertson, a postdoctoral scholar in Biological Sciences.

The New Zealand storm petrel, that was thought to be extinct, and which has been tentatively described as *Oceanites maorianus*, is only known from three museum skins collected in the 19th century.

But that could change with sightings initially reported by Brent Stephenson and Sav Saville off the Coromandel in January 2003, and since then in the Hauraki Gulf and northern New Zealand. The sightings captured national and international media attention and reports indicated the "extinct" bird was alive and well in some numbers, although this has still not been officially confirmed by the Ornithological Society of New Zealand's Rare Birds Committee, the governing body for such cases.

The museum specimens were the only record of the bird until 2003. To confirm that the rediscovered birds are New Zealand storm



New Zealand storm petrel.

petrels, samples from the two specimens, which are held at Paris Muséum National d'Histoire Naturelle have been sent to Dr Robertson for molecular testing to determine taxonomic similarities. Another bird is also held in the British Natural History Museum, Tring, Hertfordshire, from which samples have also been requested.

"We shall test the museum samples to confirm that New Zealand storm petrel is a separate species, or whether it is a subspecies or variant of another storm petrel. We then need to determine whether the northern New Zealand birds are the same. If it is, then this will be an extremely important step

in the recognition of this rare species and aid in setting its conservation priority," Dr Robertson said.

The location of the breeding colony and assessment of population size is being attempted this summer by the New Zealand storm petrel workgroup. With a permit to capture the birds granted by Department of Conservation, it is hoped a blood sample will be collected. "Being seabirds they will be quite resilient to capture. Once we have some samples we can determine the genetic variation within the group and figure out what we have got."

The sightings certainly appear to be of the extinct New Zealand storm petrel, the first in around 150 years, Dr Robertson said. "They have distinctive black belly markings, longer foot projection, and long narrow wings.

"This work is highlighting how little we know about storm petrels, their taxonomy and populations, and how a taxonomic study of this nature is so important," he added.

The molecular and taxonomic work will be carried out in Dr Neil Gemmell's DNA laboratory in Biological Sciences with the recently acquired state-of-the-art automated sequencer for DNA sequence analysis.

Jane Lucas

## Staff encouraged to speak Māori

**Encouraging staff to use Te Reo in their offices and common rooms was one of many Māori Language Week initiatives at the University of Canterbury.**

UC's Māori equity and access advisor, Keela Atkinson, said the main aim of the week was to encourage people to "give it a go" so activities focused on demonstrating practical uses of the language which could be incorporated into daily living.

A Māori language resource kit, which included a CD Rom, book and labels displaying Māori words, was distributed free to every academic department at the University to encourage daily use of Te Reo. The resource kit was developed by the University's Māori Department and the Te Wiki Working Group which was set up to coordinate Māori Language Week activities.

The resource kits were a big hit with University staff and word has spread beyond the campus.

"We have had requests for additional packs and people from outside the University and teachers' college are asking to purchase the kit," said Ms Atkinson.

"The pack was only initially created for academic departments within Canterbury but we have now got a cost for reproducing the



Māori Department tutor Fern Jenkins (left) and assistant lecturer in Māori Nichole Gully present Vice-Chancellor Professor Roy Sharp with a Māori language resource kit.

kit and will be sending this price list out to interested parties.

"The cost is very minimal as the purpose is to uplift the level of Te Reo and for people to give it a go in the comfort of their own office or home."

As part of the week's activities students

were encouraged to include Te Reo in their CVs. Guest speakers from Ngai Tahu talked with students about the benefits they have gained from using the Māori language in their professional and private lives. Other events included a Māori quiz night, a debate and weaving displays. The week's activities culminated with a hangi on Friday.

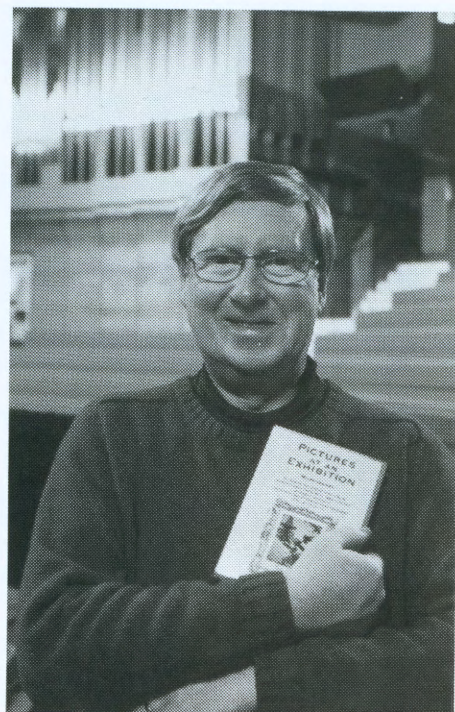
## Brushstrokes fired by music now on DVD and video

The highly acclaimed *Pictures at an Exhibition* concert featuring Associate Professor Martin Setchell on the organ is now available on DVD and video.

The concert, which premiered in the Christchurch Town Hall last May, was a unique art and music event. Mussorgsky's epic was played on the Rieger pipe organ by Professor Setchell and 70 artworks inspired by the music were painted by leading New Zealand abstract colourist and Canterbury alumnus Philip Truttum. Images of the paintings, measuring 2.4 metres by 2.1 metres, were projected on to a big-screen during the performance thanks to John Chrisstoffels of the School of Fine Arts.

The Christchurch performance was a juxtaposition of the original which saw Russian-born Mussorgsky compose the piano suite in 1874 in response to drawings and paintings by his close friends Viktor Hartmann.

*Pictures at an Exhibition* has just had its North Island debut at the Fuel Festival in Hamilton where it was performed at Waikato



Associate Professor Martin Setchell with the new DVD.

University's Performing Arts Centre and at St Peter's Cathedral.

"In October we take the performance to the Otago Festival – St. Paul's Cathedral Dunedin will display the canvasses," said Professor Setchell. "Further performances are scheduled for the Adelaide Town Hall next February and Melbourne Town Hall in October 2005. I am also performing it at various venues during my sabbatical leave next year which takes me to USA, Canada, and Europe."

The DVD/video gives music lovers the change to enjoy Professor Setchell's powerful performance of Mussorgsky's colourful music while absorbing Truttum's compelling interpretation of each picture. During the *Promenades*, for which there was no picture painted, you can see rare footage of the organ console, the organist's hands and feet in action and the interior of the organ case.

- The PAL multi-zone DVD (\$25) and video (\$15) can be purchased at the School of Music or may be ordered online at [www.nzorgan.com](http://www.nzorgan.com).

## Exploring opportunities in China



(Left to right) Vice-Chancellor Professor Roy Sharp, Mayor Garry Moore and delegation interpreter Eugene Fong.

**Civic, business and education leaders met at the University of Canterbury last week to report back on the city's recent delegation to Wuhan in central China.**

Christchurch Mayor Garry Moore led a 50-strong delegation to Wuhan in June in a bid to develop the foundations for a long term strategic partnership between Christchurch and China's fourth largest city. Amongst the group were 29 education providers including Canterbury Vice-Chancellor Professor Roy Sharp.

The delegation was the result of relationships built up between the University and Wuhan. In 2002 the University's Centre of Continuing Education was approved as an overseas training base by the Chinese Government. As a result it held its first Public Sector Management Programme in 2003 which was attended by 23 officials from Wuhan. The programme included placements and visits to Christchurch businesses, local and central government, and government agencies.

"The city delegation was the result of the work done by this training group with the Canterbury Development Corporation," said Geoff Pearman, Director for the Centre of Continuing Education.

Mr Moore said the trip had been very successful. "We showed that as a city we have a package to sell."

Canterbury Development Corporation chief executive Chris Piekrill, said Wuhan, with a population of 8 million, was an important base of education and research. He said there

was opportunity to add value in education based around professional development and local collaboration.

Toni Brownlee, of Education Christchurch and Canterbury, said international education was the country's third biggest export industry and was worth \$300 million to the Canterbury region. New Zealand's profile in China had in recent times being severely effected by negative reporting in the local media, she said.

"We have to show we are a safe and reliable market."

That sentiment was also echoed by Mr Pearman.

"We are operating in a global market. There will be a shake down of international suppliers of education and when that shake down occurs we still want to be there.

"Quality and brand are important."

He said the University's approach was clear – "quality is not traded for quantity".

"We have to build capacity and capability through collaboration across the Canterbury Tertiary Alliance.

"Education and training can be a catalyst for longer term economic, social and cultural development for the wider city," he added.

Following on from the success of the Mayoral delegation, the University of Canterbury has a delegation visiting Wuhan University in September.

## Book takes a fresh look at the strike of '51

The 1951 waterfront lockout was a defining moment in New Zealand trade union history.

Lasting 151 days, it involved as many as 22,000 workers at a time when the population was around one million people.

*The Big Blue: Snapshots of the 1951 Waterfront Lockout* is an anthology of short stories written by people involved or affected by the dispute, edited by Wellington historian David Grant.

The Canterbury University Press publication presents the experiences of the locked-out workers and their families, as well as union leaders, government officials and a major political figure.

"These accounts highlight the propinquity and emotion that came with first-hand experience of the conflict," Grant says.

"It is an event that has not been written about since 1962 and there's a lot of new evidence, new insights, cartoons that have never seen the light of day before, poems and photos, which made it an interesting project for me to work on.

"It's easy to read as the contributors all come from a range of backgrounds and write on different view points of the event. It is a style that makes it accessible to everyone, and it's a very fascinating topic to read about."

Contributors include 1951 lockout veterans Ted Thompson, Bill Andersen and Bill 'Pincher' Martin; activists Rona Bailey and Dick Scott; playwright Renée; trade union leaders Ken Douglas, Chris Kenny and John Whiting; prominent public servant Noel Woods; oral historian Judith Fyfe; veteran Australian unionists Alwyn Allport, Alistair Couper and Harry Black; diplomat Hon. Sandra Lee; historians Bruce Brown, Anna Green, Melanie Nolan, Jock Phillips, Pat Walsh and Redmer Yska; cartoonists Max Bollinger and Len Gale; poet Bill Sewell; and a number of anonymous poets of the time.

- The Big Blue: Snapshots of the 1951 waterfront lockout. Edited by David Grant. Published by Canterbury University Press. Price: NZ \$29.99 Paperback, 228 x 152 mm, 216 pp; 8 pp photographs ISBN 1-877257-28-1



## UC talent on show in musical carnival

**Renowned Christchurch director, performer, teacher and University of Canterbury Adjunct Professor Elric Hooper, will take to the stage at the James Hay Theatre on 18 August to narrate Saint-Saens' *Carnival of the Animals*, in the annual Di Gala concert.**

The Di Gala production showcases the talents of staff and students from the University of Canterbury's School of Music and Christchurch Polytechnic Institute of Technology (CPIT).

*Carnival of the Animals* has been described as a musical Noah's Ark, in which the listener is taken on a musical romp through the animal kingdom.

The performance on 18 August will combine the music of Camille Saint-Saens, widely regarded as one of the greatest French composers, with the poetry of Ogden Nash.

Saint-Saens composed *Carnival of the Animals* as a private joke for family and friends. It is one of his most famous works, said to have been written within a few days while the composer was on holiday.

Other features of this year's Di Gala will be opera excerpts from the *Magic Flute*, performances by CPIT's jazz choir, and classical and jazz ensembles.

Prior to the concert there will be a talk by Elric Hooper and Susan de Jong, of the CPIT Jazz School, from 6.45pm in the James Hay Theatre. The concert begins at 7:30pm. Tickets are available from Ticketek.

## Excellence brings prizes for three engineering students

**Three outstanding Canterbury engineering students have been awarded a total of \$6000 in prizes by the Beca group.**

Beca, the largest New Zealand-owned professional consultancy services group in the country, established the prizes in 1990 to support the University's School of Engineering and promote engineering as a profession to New Zealand's top students. The prizes are awarded each year to support promising young engineering talent and encourage excellence in engineering.

This year's prize winners are Sandra Shewan and Keryn Goble who are studying civil engineering, and Nathan Baker who is studying mechanical engineering. The three students are all in their third professional year

of the Bachelor of Engineering degree.

Beca's South Island Regional Manager, Craig Price, who presented the awards said, "Not only have these students excelled academically, they are outstanding young members of the community who have shown real all-round potential to make a great contribution to the profession. We look forward to them becoming professional engineers and leaders in their fields".

Canterbury's Dean of Engineering, Associate Professor Alex Sutherland, said it was a pleasure to have worked with Beca to select the prize winners. "Sandra, Keryn and Nathan are outstanding students who will go a long way in the profession. We congratulate them for their achievement".



(Left to right): Craig Price, Beca South Island Regional Manager Keryn Goble, Sandra Shewan, Nathan Baker and Associate Professor Alex Sutherland, Dean of Engineering.

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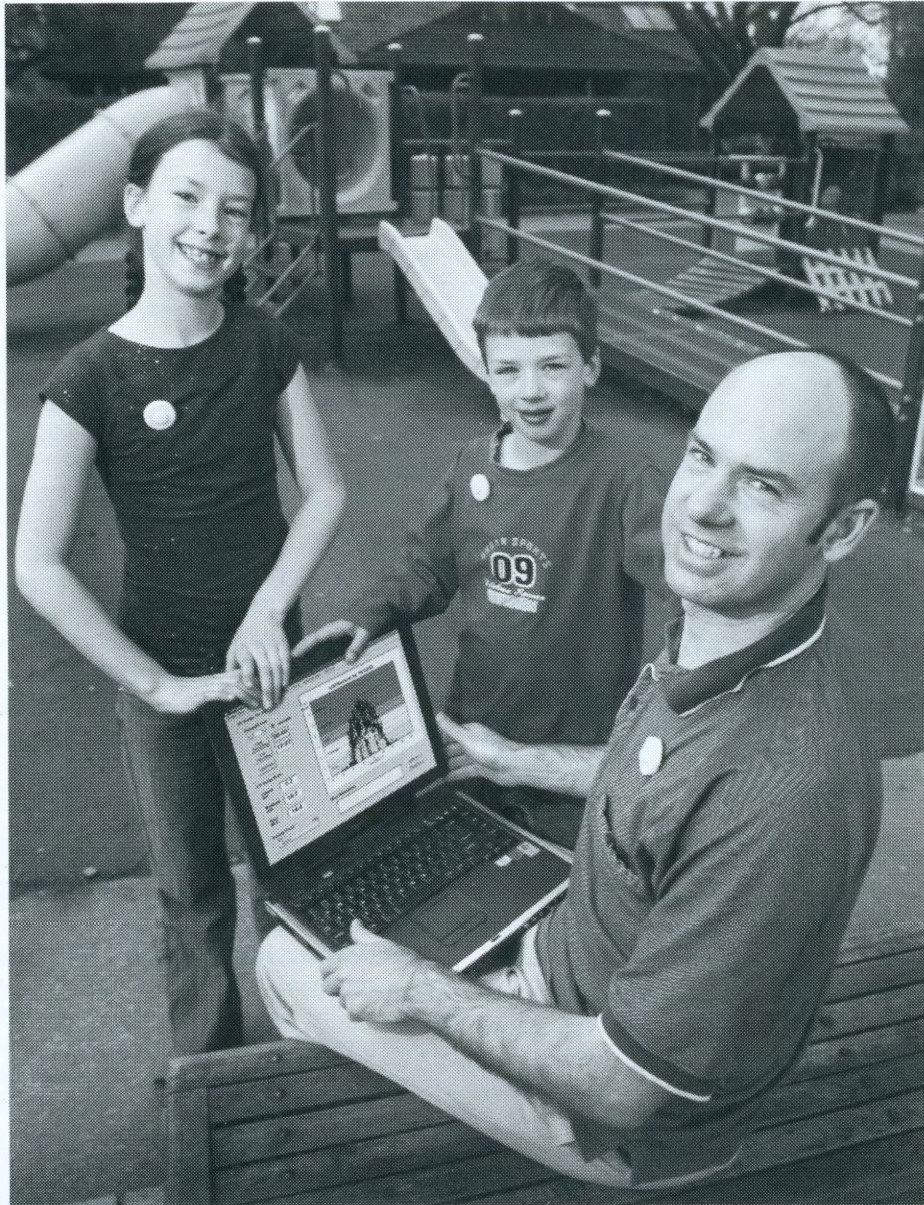
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## Time out of the classroom gives rise to UV monitoring badges



Martin Allen tries out the UV badges on his children Danielle, aged 10, and Matthew aged 6.

**Madly making up to 100 electronic badges to measure the UV radiation exposure of school children is Martin Allen's latest project, one that doesn't leave him much spare time between teaching at Lincoln High School and trying to research ways of making cheaper UV detectors at the Department of Electrical and Computer Engineering.**

Mr Allen took a year off teaching physics and electronics at Lincoln High School to take up a Royal Society of New Zealand Teacher Fellowship to develop a range of UV monitoring tools and the software to run them. Hosted by the Department of Electrical and Computer Engineering, he undertook the project with support from NIWA and the Department of Preventive Medicine at the University of Otago.

The Cancer Society of New Zealand has now funded a three year project to measure school children's exposure to UV radiation, with the aim of identifying ways to reduce excess, harmful exposure. The University of Otago

and NIWA are carrying out the project, while Mr Allen is producing the electronic badges and software in the Department of Electrical and Computer Engineering. "This research will provide quantitative data to reinforce and refine the messages we give people about the harmful UV radiation from the sun," he said.

"Currently UV exposure is measured using polysulphone chemical stickers that measure the cumulative dose of UV radiation over time. The electronic badges provide much more information as they record UV radiation levels almost continuously, so we can tell exactly how much radiation a child receives at different times of the day and during different activities. The data is played back and displayed on a computer giving a graph of each day's exposure"

"We can see how radiation exposure is affected on clear sky days, cloudy days, days with broken cloud, and the days with low ozone levels. It will also allow us to measure exposure during different outdoor activities

such as swimming, sailing, skiing or simply being outside at lunchtime, which the polysulphone chemical stickers couldn't do."

Mr Allen who hails from Portsmouth, England, had heard from his Kiwi wife how "strong" the sun was in New Zealand, but didn't realise it was so harsh until he arrived here eight years ago. "My kids went to a local primary school with strict rules about playing outside with sunhats and in playgrounds with shade sails. It was all very unusual for me coming from "sunny" England. Then I started work at a high school where the children are usually outside at lunchtime for a full hour, when daily UV intensities are at their strongest, without hats, shading or sunscreen. So the idea to develop something that measured UV exposure arose."

Mr Allen is currently also developing a large display panel that can be mounted on a building to show real time UV radiation levels. "Then people can make an informed decision as to cover up or seek shade when the levels are high. The display panel uses the same technology as the badges, it's just the badges are shrunk into a small, light and waterproof package.

"It was an amazing experience working at the University, one that I would love to do again. The people at the Department of Electrical and Computer Engineering were incredibly helpful and friendly. Having immediate access to a pool of experts was a critical factor in the success of the project. Special thanks go to Maan Alkai, Richard Blaikie and Simon Round plus all the technical staff who willingly shared their skills and knowledge with me," Mr Allen said.

Data collection will run from October to the end of March with up to 1000 children from schools throughout Auckland, Waikato, Wellington, Canterbury and Otago/Southland taking part.

Jane Lucas

### Roll growth of 6%

**Following the second semester enrolment period, student numbers are up by 6% on the comparable period last year, with first-year numbers up by 3.9%. The related EFTS figures are up by 2.9% and 2.6% respectively.**

At the end of July the student roll was 13,037 and the EFTS count was 12,269, with an end-of-year EFTS projection of 12,721.

Full fee-paying EFTS increased by 30.4%, with a drop of 1.9% in domestic EFTS. At first year level, international student EFTS grew by 9.6% and domestic EFTS rose by 0.7%.