Partnerships in learning: UWA’s Indonesian connection
The extraordinary bequest of Sir John Winthrop Hackett founded The University of Western Australia more than 100 years ago. The gift of one man has inspired the giving of an entire community of UWA friends and alumni such as Jean Kahan.

Jean was one of UWA’s first female science graduates, a regular visitor to Antarctica and a generous contributor to the University throughout her life. Jean’s bequest to the University she loved will help countless young people beyond her lifetime.

**Become a UWA pioneer – remember the University in your will.**

Contact Development and Alumni Relations on +61 8 6488 1688 or visit [development.uwa.edu.au/bequests](http://development.uwa.edu.au/bequests)
Cricketers cherish memorable playing moments: the catch that clinched a match or the personal best with the bat – and former Australian Prime Minister Bob Hawke (and University Cricket Club member) is no exception.

Speaking at the Club’s centenary celebrations in December, the graduate told an audience (including WA’s first test cricketer John Rutherford and sporting great Ric Charlesworth) that his time at UWA and as UCC wicket-keeper were the best years of a life mostly lived on the national stage.

“In 1947 I came to the only free university in Australia – as distinct from those in the Eastern States where entry depended on the size of your father’s wallet rather than your intrinsic talents,” said the distinguished graduate.

Bob Hawke’s playing highlight came when facing Subiaco’s Bill Alderman. “Occasionally in your career you do something that is just perfect,” he recalled.

“I suggested the second ball of the next over should be an in-swinger going down the legside and the bowler did it perfectly and as Alderman snicked it down the legside I caught and stumped him at the same time. I immediately said ‘Howzat?’ and the umpire at square leg responded: ‘Bloody marvellous!’”

Cricket talk continued with a panel hosted by The West Australian’s cricket writer John Townsend. Guests included Cricket Australia chairman Wally Edwards, current and past national selection chairman John Inverarity, Laurie Sawle, club stalwart Mark Donovan and last year’s Ashes debutant, Ashton Agar.

When Prime Minister Tony Abbott opened the impressive Harry Perkins Institute of Medical Research at the QEII Medical Centre, there was a shared sense that medical research in this State was on the cusp of a brave new era.

The opening realised a vision – nurtured by governments, donors, health professionals and researchers – that a key to advancing healthcare was bringing together laboratory-based and clinical researchers from the State’s major institutions.

And the high expectations gained traction as guests inspected the fine 10-storey building that will house 800 researchers along with cutting-edge equipment and technology.

Creating the Institute had long been the dream of the late Harry Perkins who played a key role in the formation of the UWA-affiliated WA Institute of Medical Research (WAIMR) that was recently rebadged to honour its chairman. “Harry would have been delighted to see this magnificent facility,” said the Institute Chairman Larry Iflla.

Former Institute Director, Professor Peter Klinken worked tirelessly to secure Federal and State funding support for Harry Perkins’ vision, and now research scientist and Perkins Institute Director, Winthrop Professor Peter Leedman, will carry it forward.

Professor Leedman paid tribute to both men and predicted the Institute would attract the best and brightest researchers working on cancers, cardiovascular disease, diabetes and more, and the fine facilities would encourage them to stay in Perth.

“This building has been designed to bring researchers together because we can achieve so much more by collaborating on discoveries,” Professor Leedman said.

Apart from laboratories, the building designed by the architectural firm Hames Sharley includes exhibition areas where science meets art, the McCusker auditorium, a central staircase styled on a strand of DNA and interactive community areas including a demonstration laboratory funded by Lotterywest.

Researchers from UWA, the Lions Eye Institute, the Heart Research Institute, the Lung Institute of WA, the Keogh Institute and others will work alongside Perkins Institute researchers to identify genetic causes of major diseases and to develop new treatments.

Funding from the Federal and State governments and UWA, along with land made available by the Lions Eye Institute and the QEII Medical Centre Trust, and support from Lotterywest, the McCusker Charitable Foundation and the Stan Perron Charity Foundation made this milestone possible.
Our Scientist of the Year

Winthrop Professor Mark Randolph, WA Scientist of the Year

It is appropriate – given the State’s burgeoning oil and gas industry – that the UWA scientist most associated with the majority of oil and gas developments in WA’s north-west was named Scientist of the Year at the WA Science Awards. A Fellow of many international science bodies including London’s Royal Society, Winthrop Professor Mark Randolph says he is first and foremost an engineer working at the very applied end of science. In accepting the award, he was delighted to see “the rather mundane – and I might say the grubby – world of soil mechanics and geotechnical engineering elevated in this way.”

In 1997, Professor Randolph founded UWA’s hub of geotechnical excellence, the Centre for Offshore Foundation Systems (COFS), at a time when its expertise played a crucial role in addressing problems plaguing the fledgling industry. “To me COFS epitomises the benefits of the investment in science, starting with a clear policy to develop local expertise to understand the root causes of foundation problems in the first oil and gas platforms of the North West Shelf,” said Professor Randolph.

“Investment by UWA, the State Government, the Commonwealth – and the support of industry – has led to Perth’s current status as perhaps the world’s leading research centre in offshore geotechnical engineering for both research and practice.”

The industry-supported WA Science Awards were a double celebration for COFS, with Associate Professor Shazzad Hossain (ARC Postdoctoral Fellow) winning the Woodside Early Career Scientist of the Year award.

Other UWA award winners included Professor Myra Keep (Science Ambassador of the Year for structural geology/tectonics work and outreach activities in East Timor) and PhD candidate Tristan Clemons (ExxonMobil Student Scientist of the Year award for applying nanoparticle technology to a range of diseases).

Accolades also went to the ARC Centre of Excellence in Plant Energy Systems (EXS) that was recently awarded $10.8 million of ARC investment, and the Centre for Geodiversity, an $8.5 million project led by Professor Myra Keep that is an offshoot of WAAP.

CONVOCATION ELECTIONS

Fifteen candidates nominated for the UWA Senate and after a postal vote of the 75,000 graduates eligible to vote, the following candidates were declared elected for a four year term: Hilary Silbert, Simon Dawkins and Quang Ly.

The Warden of Convocation Adjunct Professor Warren Kerr and the Deputy Warden of Convocation Paul McCann were elected unopposed for another one-year term.

AN INVITATION TO LIFE-LONG LEARNING

UWA has long been acknowledged as a valued community resource offering access to its theatres, galleries, museums and libraries.

Also drawing visitors to campus are public lectures and life-long learning opportunities in UWA Extension’s programs (see www.extension.uwa.edu.au) and through public lectures provided by the Institute of Advanced Studies (IAS).

Global and national challenges invariably find a place in the IAS program and a May public lecture at the University Club Theatre Auditorium is likely to stir wide interest. Emeritus Professor of Education Bill Louden will address the “long-running left-right curriculum wars” providing a personal view on the strengths and weaknesses of Australia’s national curriculum.

Both events are free but require booking at: www.ias.uwa.edu.au/lectures

INDONESIA’S VICE-PRESIDENT VISITS

Vice-President Boediono with Chancellor Dr Michael Chaney

When he welcomed Indonesia’s Vice-President Professor Dr Boediono to UWA to deliver the 52nd Shann Memorial Lecture, Chancellor Dr Michael Chaney observed that the University’s long friendship with Dr Boediono was symbolic of our nation’s friendship with our nearest neighbour, Indonesia.

Professor Dr Boediono delivered the annual lecture that also marked the 100th Year of Economics teaching. During his visit, the Colombo Plan graduate visited the Business School to meet key staff members, Indonesian students studying at UWA, and staff and students involved in teaching focussed on Indonesia.

You’ll notice that our research articles on floating LNG and sharks mention that the researchers involved also write for The Conversation, the increasingly popular source of news and views sourced from academics and researchers and delivered direct to the public. Launched in 2011, 35 per cent of its readers now come from beyond Australia. The Conversation’s team of professional editors work with universities, the CSIRO and research institute experts to share their knowledge with the wider community. A recent and topical example of the informed commentary you’ll encounter on the site is an article entitled In the unverifie digital world are journalists and bloggers equal? If you’d like to read more, visit: theconversation.com

MED STUDENTS’ CHARITY BALL

Students from the Western Australian Medical Students’ Society of UWA are busy organising Perth’s only red-themed charity event, the inaugural Red Aware Gala Ball on May 16. The event is aimed at doctors and health professionals.

The student-run organisation, Red Party, has had great success, raising awareness – and over $200 000 – for HIV/AIDS over the past seven years. All funds go to Oxfam Australia’s Integrated HIV and AIDS Program in South Africa.

JOIN THE CONVERSATION

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The latter, an outreach program featuring eminent local and visiting international scholars, provides a forum for community engagement and its lectures are generally free.

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In the latter, the 2014 IAS Professor at Large Jonathan Rigg (from the National University of Singapore) will explore the ‘underside’ of development in Southeast Asia.

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Indonesia’s Vice-President visits

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Academic fire-fighter

UWA academics can be great role models for community service – as demonstrated by the involvement in January’s devastating Parkerville fires of Emeritus Professor Mark Bush, who is Chair of the WA Australian Academy of Technological Sciences and Engineering.

A Parkerville resident and volunteer Bush Fire Brigade fire fighter, Professor Bush still vividly recalls the worst fire locals can remember: “Flames reaching more than 20 metres into the tree canopy, burning houses and cars, exploding gas bottles and car fuel tanks and falling trees and power-lines,” he recalls. “We engaged in what I can best describe as guerrilla warfare with the fire through the streets of Parkerville and Stoneville, trying to stay one step ahead…”

Professor Bush spent 22 hours on the fire-ground over four days and his own home was saved by one of those fickle wind-changes that make fighting fires so unpredictable.

Business simulation system a winner

Also contributing to firefighting in Parkerville – while addressing the unpredictable nature of bushfires – was a UWA-designed computer system developed by Winthrop Professor George Milne and colleagues (School of Computer Science and Software Engineering). A central component of the system is a website showing real-time predictions based on satellite hotspot data and forecast weather data feeds.

The UWA team worked with Landgate and the Department of Fire and Emergency Services (DFES) to develop Aurora for the Regions, Australia’s first national bushfire spread prediction system that was recently recognised in the 22nd WA Information Technology and Telecommunications Awards. It went on to claim the Australia-wide prize in Melbourne.

“The ability to rapidly predict wildfire behaviour is an essential component of both planned and unplanned fire management,” says Professor Milne. “The Aurora system has run simulations for DFES of all the fires in WA detected by satellite, and DFES officers throughout the State have access to it.”

The Aurora project was a regional initiative funded by the Department of Broadband, Communications and the Digital Economy.

In this issue’s Graduate Profile we interview the UWA graduate in the hot seat: Wayne Gregson, DFES’s new Commissioner.

Corporate sustainability and social responsibility are at the core of the Principles of Responsible Management Education (PRME), a United Nations initiative – and the UWA Business School’s commitment to these principles has led to its acceptance as a PRME signatory. The initiative provides an engagement framework for academic institutions to advance global social responsibility through the incorporation of universal values into curricula and research. It is the UN’s first organised relationship with management-related academic institutions, business schools, and universities.

Dean of the UWA Business School, Winthrop Professor Phil Dolan, said the School’s commitment to responsible citizenship was reflected in its teaching, research and community engagement activities.

More than 450 leading business schools and management-related academic institutions from more than 80 countries across the world have now become signatories of PRME.

Business School joins UN initiative

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In the Zone

The Australian newspaper’s Editor-at-Large Paul Kelly sees UWAs In the Zone conferences as a sign that, as Australia’s economic gravity moves west, this State is making a bid for intellectual leadership. “It is the latest manifestation of the west flexing its intellectual muscle – and Australia would be a better nation if it happened more often,” he says.

In the Zone (May 1 at the University Club) will feature Federal Minister for Foreign Affairs Julie Bishop, WA Premier Colin Barnett, UWA Chancellor Michael Chaney and Paul Kelly. The UWA initiative highlights the geo-strategic importance of the Indo-Pacific region and the advantages of WA’s proximity to Asia’s resurgent economies.

The previous evening, a Who’s Who of the nation’s political and business leaders will gather for the 2014 American Australian Association Benefit dinner.
Going from good to great

In this issue we explore the research underpinning what promises to be the next big thing in WA’s oil and gas story: Floating LNG (see Unlocking remote resources).

Tim Shanahan, Director of UWA’s Energy and Minerals Institute (EMI), believes our State is yet to take full advantage of its strength in the high-tech fields of running resources operations, plant and equipment design, servicing, and remote technologies.

“We have the potential to go from good to great, and to be among the best in the world in offshore technologies,” he says.

“International resource and energy companies are currently investing billions through new projects that create jobs, wealth and prosperity for many Australians. As a result, projects like Pluto, Gorgon, Prelude and Wheatstone have become household names.

“Now we have an extensive public debate on whether we should have floating LNG or not. WA will be the new frontier for LNG production when the world’s first floating gas liquefaction facility begins operating off our coast, at Prelude. The world will be watching to see how this advance in technology will help unlock this gas reserve, giving our State and nation a first mover advantage to provide the knowledge and skills needed to support this emerging industry.

“UWA, along with our partner research and education institutions, is focused on supporting the development of the State – and generating a further comparative advantage from floating systems for WA is what UWA is delivering.

New Indian Ocean Marine Research Centre

A campus where tomorrow’s leaders, educational excellence and communities connect – that’s how UWA’s leaders see our campus in the 21st century. And it’s a campus where change is constant as new facilities rise around the classic heart of UWA’s heritage buildings.

Recently work began on a new, purpose-built marine research centre bringing together leading researchers in a $62 million collaboration between The Australian Institute of Marine Science (AIMS), CSIRO, UWA and the Department of Fisheries WA. The project is supported by a $34 million grant from the Australian Government as part of the Education Investment Fund, along with contributions from the four organisations.

There will be links to the past as this fine new facility takes shape: it is designed by former UWA architect Dr R J (Gus) Ferguson (Ferguson Architects), a graduate with a long association with our campus and its award-winning buildings. Dr Ferguson is also the sponsor of the Ferguson Travel Scholarship in Architecture.

The Indian Ocean Marine Research Centre, due for completion in 2016, will target a 5 Star Green Star rating and will feature UWA’s signature sandstone finish, terracotta wall panels, and castings representative of marine life at the entrance. Located on the western side of campus, the facility will also provide a new landscaped pedestrian spine into the campus.

Unview The University of Western Australia | 5
GRAD BRIEFS

IN FOCUS

UWA School of Music is proud to present a diverse concert program from large-scale orchestral concerts to intimate ensembles. Don’t miss this opportunity to see WA’s finest in concert. Their verve and innovation is not to be missed!

For information & bookings: music.uwa.edu.au
Request a brochure: concerts@uwa.edu.au

Nurturing aspirations

That’s how a Year 12 student summed up her experience in the annual Residential Summer School hosted by Fairway UWA. More than a hundred students from Broome to Denmark participated in the four day event that builds confidence, motivation and academic skills in young people facing financial and other challenges. No wonder UWA staff – and students who are Fairway ambassadors – find hosting the visitors a rewarding experience.

Not even summer heat could dilute the enthusiasm of this year’s students who were accommodated in the impressive new University Hall. The campus experience allowed them to explore facilities and disciplines, make friends, acquire leadership skills and strengthen language skills.

One participant wished the event could go on longer – “I don’t want to go home yet,” she complained – and she was not alone!

The Residential Summer School kick-starts the year-long program of mentoring and academic skills development. Students completing the program, achieving language competency and an ATAR of 70 or above, are eligible for an offer in one of UWA’s three-year undergraduate degrees. Significant support is possible through generous donations from UWA alumni who have helped fund tutoring and revision sessions.

Last year’s Fairway participants had a great track record with 76 out of 78 students receiving offers from UWA and other WA universities. Students can access support in their transition to UWA study from the Fairway team and Student Services. For further information contact Fairway Coordinator Dr Ummeea Khan on 08 6488 6785 or visit the website: fairway.uwa.edu.au

On the Map

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Music + 'pictures of the floating world’

The School of Music sometimes performs in the beautiful acoustic space of the Lawrence Wilson Art Gallery and this will happen in May when the UWA Guitar ensemble is featured.

The backdrop to this pleasurable mingling of music and art will be the gallery’s current exhibition of Korean art and the Japanese woodblock prints in the Berndt Museum.

Ukiyo-e: Japanese prints of the floating world (to June 28) takes viewers back to Japan during the evocative Edo period (1600 – 1867) that produced vividly-colourful woodblock prints. This genre was rapidly adopted by artists producing small cheap art prints for a mass market, and a number of moku hanga (woodblock printing) schools emerged.

Our amazing graduates

Congratulations to all our graduates whose “over and above” contributions have been recognised with Australia Day Awards (see Grad Briefs).

Also recognised for her work with the English National Opera is graduate Loretta Tomasi. The London-based graduate (who we wrote about in the Summer 2013 issue of UNIVIEW) has been awarded an OBE that will be presented in the near future.

Visiting Perth recently Loretta tells us that she is still amazed that “a girl from Balingup who did not have exposure to the arts until much later in life received an OBE for services to Opera”.

“I finished at ENO at the end of last year after more than 10 wonderful and fulfilling years there, eight of them as CEO,” says Loretta. “In making the decision to leave, I timed it so I could have three months in Perth over summer – to catch up with people, recharge the batteries and learn to swim! Then I’ll start to look for my next role and adventure. At this stage I’m not sure what that will be or in which sector – which is exciting and somewhat scary!”

“We're sure, given her track record, it will be equally impressive.

High-profile graduates back on campus

Perth USAsia board member Stephen Smith

When former Federal Foreign Minister Stephen Smith joined the board of the UWA-based Perth USAsia Centre and Australia’s Ambassador to the US Kim Beazley recently delivered a lecture at the Centre, both were back on familiar territory.

The Centre’s CEO Gordon Flake was delighted the two high-profile graduates could be present at the first official public event of a Centre that he predicts will prove to be a leading policy resource for Australia and the region.

Announced in 2012 by former US Secretary of State Hillary Clinton during a visit to the campus, the Centre aims to become a leading policy think tank on the Australia-Asia-US strategic and economic relationship. It is also a teaching and research centre and a conduit for a deeper understanding of US business, culture, history and politics.

“The work of the Perth USAsia Centre goes to the heart of Australia’s and WA’s future role in the Indo-Pacific region,” said Mr Smith.

UWA's Fulbrights

A professor determined to feed a hungry world, a postdoctoral fellow who sees marine scientists as custodians of global hotspots, and a UWA law graduate focussing on the State’s anti-discrimination laws – this UWA trio clearly impressed those selecting Australia’s 2014 Fulbright Scholars.

Fulbright Senior Scholar, Winthrop Professor Zed Rangel (School of Earth and Environment) believes the next ‘green revolution’ is likely to come from finding new crop genotypes that are efficient in taking up water and nutrients from soils, and he intends to identify molecular markers associated with such characteristics while working at Kansas State University.

Professor Jean-Paul Hobbs (UWAs Oceans Institute) was awarded the WA State Category Postdoctoral Scholarship to advance his research on the conservation of marine endemic species in Australia, the US and elsewhere. His scholarship will take him to Kansas State University later this year.

The WA State Category Postgraduate Scholarship went to Arts/Law graduate Joanna Vincent who is currently working as associate to the Chief Justice Robert French of the High Court of Australia (also a graduate). Joanna’s Master of Laws studies will explore how State and Federal Governments can more effectively address workplace discrimination.

Professor Siddique’s personal and collaborative research output over the past two decades has helped UWA earn this global recognition, with pioneering chickpea research spearheading an industry currently valued more than $250 million annually. Australia is one of the world’s major grain legume exporting nations, so it’s no surprise that chickpea genomics features in research links with Indian and Australian research partners.

“Through UWA’s membership of the Worldwide Universities Network we have advanced research on adaptation to climate change and turned UWA’s Future Farm 2050 into a research site of national and international significance,” says Professor Siddique.
Women across regional and remote Western Australia have improved access to breast screening thanks to four BreastScreen WA digital mobile screening units.

The BreastScreen WA digital mobile screening units aim to:
- reduce unnecessary recalls following initial mammograms
- improve accessibility
- enhance the screening experience for women.

All metropolitan screening clinics use digital mammography.

It is important for women 50 years or over to have a FREE breast screening mammogram at BreastScreen WA every two years.

Once is not enough.

For an appointment phone 13 20 50
It’s been a busy start to 2014 for The University of Western Australia.

In recent weeks the campus – quiet over the summer break – has returned to being a vibrant hub of activity as we welcome thousands of students for the start of the new teaching year. It was good to see students streaming onto the campus, many for the first time, with looks of excitement, anticipation and enthusiasm.

Among them are more than four thousand first year students who will help write the next chapter of UWA’s history by being our second century’s first cohort of students.

I had the pleasure of meeting many new students as part of orientation week activities. They have come from across the state, the nation, and the world, and from a wide variety of backgrounds. While each has a dream and a goal for the future, what they share is a desire to make themselves better through knowledge and education, and to contribute to our University’s vision for a better world.

When I formally welcomed them to the University I shared with them some advice on how to make the most of their UWA experience, and to ensure that they, like the more than 100,000 graduates before them, will look back on these years as some of the best of their lives.

I urged them not just to excel in studies, but to become better people and citizens by expanding their thinking and attitudes, challenging the norm, forming new friendships, and becoming involved in the University community through clubs, societies and other on-campus activities – for during its first century, our University became known for the social breadth and intellectual rigour of its thriving student clubs.

We wish all our students, new and returning, local and international, the very best for their studies this year.

In this issue of Unview we report on the strength of the partnership we are forging with our nearest neighbour, Indonesia. The recent visit of our distinguished Colombo Plan graduate, Vice-President Dr Boediono, reflected the importance of this relationship – and the New Colombo Plan’s opportunities to establish a two-way flow of students as the ‘Asian Century’ unfolds.

Such engagements play an important role in our overall mission to become a truly global university – a goal advanced by initiatives such as the Perth USAsia Centre and the In the Zone Business Forum that highlights the shared time zone and the growing geo-strategic importance of the Indo-Pacific.

Such engagements underscore the transformation of this University: from an institution that addressed pressing local needs a century ago to one that is now reaching out to the region and the wider world.

Professor Paul Johnson
Vice-Chancellor
Unlocking remote resources

While Australia’s largest resource project, the Gorgon joint venture, will pipe gas to a Barrow Island processing plant, the first Browse Basin gas (from the Prelude field) will be liquefied for export on a floating vessel as big as two aircraft carriers. UWA geotechnical engineer Professor Susan Gourvenec believes the expertise garnered from developing the world-first floating LNG facility could make Western Australia a centre of excellence for this new technology.

Susan Gourvenec was doing postdoctoral research at Cambridge University – investigating the stability of London’s famous Underground tunnels built during the Victorian era – when her supervisor returned from a sabbatical with UWA’s Centre for Offshore Foundation Systems (COFS). As a geotechnical engineer, she was instantly drawn to his accounts of the 21st century challenges of founding massive oil and gas platforms on the fickle carbonate seabed off Western Australia’s coast.

These engineering challenges – and accounts of the COFS research environment along with the landscape and lifestyle of Perth – prompted her to approach ex-Cambridge researcher, Winthrop Professor Mark Randolph, who founded COFS in 1997.

The centre was established in response to industry needs and it put Perth on the map as a hub of geotechnical excellence. Foundations had been an early problem for offshore development in the unfamiliar carbonate seabed soils encountered offshore Australia. By assembling a critical mass of international expertise, the Centre has played a key role in developing the State’s knowledge economy and its booming resource industry.

When he recently accepted his WA Scientist of the Year award (see In Focus), W/Professor Randolph shared his pleasure at seeing “the rather mundane – rather grubby – world of soil mechanics and geotechnical engineering elevated in this way.”

Professor Gourvenec already shared Mark Randolph’s fascination with soil mechanics and geotechnical engineering when she joined the COFS team in 2001. She is now acknowledged as a specialist in offshore geotechnical engineering with particular interests in foundation, anchoring and pipeline solutions. She uses state-of-the-art physical modelling and numerical analysis, particularly in relation to seabed engineering, to develop solutions to help unlock stranded oil and gas once considered too remote or too costly to extract and process.

“Browse Basin was always going to be challenging to develop because of its remoteness,” says Professor Gourvenec of the 140,000 square kilometre field discovered in 1971.
The identified fields within the Browse Basin are hundreds of kilometres from any offshore or onshore oil and gas infrastructure. The conventional model for natural gas developments is for the gas to be piped from the field to an onshore plant where it is processed and liquefied, then offloaded to tankers.

At one stage, an onshore facility at James Price Point was considered for Browse, for development of the Brecknock, Calliance and Torosa fields, but as costs for an onshore processing solution rose and the technology for FLNG matured, the onshore processing option became less viable and the operators of the field decided that an FLNG solution was more viable.

FLNG may not always be the best solution to field development, it is not intended to replace the conventional model, but it adds to a portfolio of options – a tool in the toolbox – to increase competitiveness and enable projects to get in development that might otherwise not be viable.

Royal Dutch Shell’s Prelude facility over the Prelude and Concerto fields in the Browse Basin is likely to be the world’s first producing FLNG facility. Other FLNG projects are under construction and floating technology is being considered for various fields in Australia and overseas. FLNG was certainly a hot topic at the international conference LNG17 in Houston last year and it is likely to dominate the stage when Perth hosts LNG18 in 2016. My work at COFS includes the development of new foundation and anchoring systems that have the capacity for mooring these giant floating structures, which require a step out in seabed engineering technology.

When there are changes in technology there is always a first mover advantage to be secured. In my view Western Australia has the opportunity to become a centre of excellence for FLNG, as it has in other areas of offshore engineering, particularly seabed engineering.

UWA expertise is very much involved in Australia’s offshore oil and gas success story, both in the past and looking forwards. Many UWA graduates and in particular COFS PhD graduates now form the base of expertise in the local industry. The seabed engineering of virtually every development offshore Australia has had input from current COFS staff or alumni now working in industry. “
The calibre and variety of expertise within COFS – that industry can tap into – is extraordinary. At the helm is Director, Winthrop Professor Mark Cassidy, Rhodes Scholar, ARC Laureate Fellow, winner of the Prime Minister’s Australian Physical Scientist of the Year award and a Fellow of the Australian Academy of Technological Sciences and Engineering. Professor Cassidy is widely acknowledged for his outstanding contribution to the offshore oil and gas industry at an international level, particularly in the analysis of mobile drilling rigs, foundations and pipelines.

Taking up his Shell EMI (Energy and Minerals Institute) Chair in Offshore Engineering last year is geotechnical engineer W/Professor David White, whose work in pipeline stability analysis has won him an international reputation.

The ARC Future Fellow joined COFS in 2006, also from Cambridge, and was named WA Early Career Scientist of the Year in 2011. COFS is a group of over 70 academic, technical and professional staff and post graduate students. The research work of COFS, embodied in Mark Randolph and Susan’s recent text book “Offshore Geotechnical Engineering”, has influenced the practice of offshore geotechnics in Australia and the rest of the world.

The experimental facilities at COFS are also world-class. UWA is the only place in the southern hemisphere to house both a beam and drum geotechnical centrifuge backed by its own electronics laboratory and workshop that custom designs and builds equipment as needed.

The centrifuges at COFS have spawned many collaborations – including those with Cambridge, the National University of Singapore and the Hong Kong University of Science and Technology – since they were installed in 1989. Major industry projects from across the world include the Euripides piles (UK), Tai Po LNG pipeline (HongKong), Gwang Yang bridge (South Korea), Hong Kong LNG pipeline, PSVM field pipeline (Africa), Maari platform (New Zealand) and around studies for many of the recent Australian pipeline projects including Gorgon, Wheatstone, Ichthys and Pluto, pile investigation for North Rankin A and Goodwyn and suction caisson validation for Laminaria.

UWA’s geotechnical centrifuges have been pivotal in the analysis and design of offshore seabed infrastructure because the scale of offshore structures mean small-scale simulations are used to analyse the stability and safety of offshore anchors, pipelines, platforms and foundations.

With the help of the Australian Research Council, and under the direction of COFS’ Professor Christophe Gaudin, UWA is commissioning a new centrifuge that will further empower Australia’s knowledge industry and contribute to WA’s growth as an oil and gas hub.

A book written by Professor Mark Randolph and Professor Susan Gourvenec recently hit the top of the Amazon book sales list. Offshore Geotechnical Engineering features much of COFS recent research output and is a useful reference for professional engineers in the offshore industry.
Iain Grandage arrived on campus intending to study law, but after encountering fellow musicians and mentors in UWA’s School of Music, he changed direction. Today he is one of Australia’s busiest composers and performers, with four Helpmann awards to his credit and his first opera (based on Tim Winton’s *The Riders*) being staged by Victorian Opera and Malthouse Theatre later this year.

Talk to composer, musician and conductor Iain Grandage and it is instantly clear that he loves what he does – and he does a lot.

Last year saw him collecting two Helpmann awards for Best Original Score and Best Music Direction for the Perth Festival production of Kate Grenville’s *The Secret River* (adapted for the stage by UWA graduate Andrew Bovell), providing a score for Natalie Weir’s *When Time Stops* for the Brisbane Festival and joining graduate Tim Minchin in an Australia-wide tour with several State Symphony Orchestras.

He also collaborated with Richard Tognetti and the Australian Chamber Orchestra on a multi-media performance at the Sydney Opera House that brought together classical instruments and the didgeridoo. *The Reef* project was born at Western Australia’s world heritage listed Ningaloo Reef.

Iain capped off an amazing year by winning the prestigious Sidney Myer Performing Arts Individual Award worth $50,000. His versatility was remarked upon by the judges:

“Iain is a thrillingly original artist and genius collaborator. The theatre, dance and cabaret stages of Neil Armfield, Michael Kantor, Meow Meow, Splinter Group and the Black Arm Band, to name just a few, have achieved extraordinary dimensions in dramatic narrative through his original music and arrangements, and no less some of the great classical music ensembles of our time, including the Brodsky Quartet. He is a singular and much loved artist whose contribution is close to the heart of our performance culture.”

In September this year Iain’s string quartet *After Silence*, a work inspired by the meeting traditions of the Noongar people of the Perth region will be given its Perth premiere performance. In the same month, his first opera (based on Tim Winton’s novel *The Riders*) will be staged by Victorian Opera and Malthouse Theatre.

During last year’s Perth Festival launch, Artistic Director Jonathan Holloway quipped that having Iain in each of his festivals had been written into his contract when he took the job – and certainly he has been a presence in programming going back more than a decade.

When he arrived at UWA in 1988, Iain’s considerable musical talent – he played piano and cello and sang with choral groups – had already been nurtured by the likes of Richard Gill at the WA Conservatorium, the WA Youth Orchestra and the UWA Collegium. He had planned to become a lawyer, but at the time UWA Law
Studies began in second year, so he used his first year to continue his cello studies.

“I just loved it so much in the UWA School of Music and I made so many great friends – Craig Ogden, Sara Macliver, Paul Tanner – people with whom I instantly felt a bond and started making music,” he recalls.

The stimulating company, the expertise of cello teacher Gregory Baron, the compositional guidance of legendary composer Roger Smalley (“his history unit was a huge influence”) and the Wigmore Music Library’s Jenny Wildy (“I’d go searching for an obscure, esoteric choral piece and she’d say, ‘Third aisle, bottom shelf, in a pink folder!’) all combined to orchestrate his switch to a BMus degree majoring in cello.

“In the end the choice was easy because I just didn’t want to lose music,” he remembers. “I also discovered how much I love making music with people – it’s the ultimate joy.

“Quite early on, I met UWA musicians like Lindsay Vickery, Cathy Travers and Paul Tanner and we formed a new music ensemble (saxophone, cello, keyboard and percussion) called Magnetic Pig. Essentially it was a composers’ ensemble and we had a fantastic time with it.

“We learned a lot about how to write music because it was a non-threatening environment – we were all composing for each other and were there to help one another.”

After graduating with Honours, his first composition was a trio of carols for the UWA Collegium Musicum Christmas Concert at Winthrop Hall which later became Three Australian Bush Songs. He later returned to Winthrop Hall, writing the score for the hugely successful Black Swan Theatre Company’s Perth Festival production of Plainsong.

Since then he’s been ‘making music’ and composing for an incredible variety of performing arts groups, from major orchestras to theatre and dance companies in almost every State.

He’s also won a swag of awards, been composer-in-residence for a string of orchestras including the WA Symphony Orchestra (WASO) and in 2010/11 won the coveted Ian Potter Foundation Emerging Composer Fellowship.

He particularly values his time as composer-in-residence with the WASO which has strong links with UWA.

“After playing in WASO for a long time I had this great opportunity to write for the orchestra,” he says. “Being composer-in-residence gives you the chance (not dissimilar to a theatrical environment) to spend a lot of time with the same group of artists. They become familiar, so you get to know people’s individual aesthetic and can write music that hopefully reflects their own character.

“When I teach composition students, I try to make them think primarily about their relationship with the performers of their work; how they connect their conception of a work with the practical considerations of the musicians who will interpret it,” he says.

As a composer, the graduate has made himself as versatile as possible, producing music from classics to cabaret and performing whenever possible.

“One of the unexpected benefits of composing a wide variety of music is that it tends to open arenas for performance for me,” he explains. “You write music with and for performers; they’re the medium for your music. If they enjoy your work first, there’s more chance an audience will get something from it. The triangular relationship of composer-performer-audience is vital – there is literally nothing if one of those elements isn’t nurtured.

“I am constantly seeking environments that allow me to continue to play and since moving to Melbourne I’ve found more performance opportunities.

“Sometimes incredible opportunities come my way because I’m involved with arranging and composing for an ensemble – for instance, I got to play the Schubert Cello Quintet with the Brodsky Quartet simply because I had been working with them as a composer (an opportunity, interestingly enough, that arose from my relationship with UK-based graduate and guitarist Craig Ogden).

“I feel blessed in being able to keep that performance line going. There is a fundamental transaction in music: the longer you continue to perform, the more your music reflects the relationship between musician and instrument that’s so clear in composers I find inspiring – like Brett Dean or Roger Smalley – and it comes from mastery of an instrument.

“I seek as many different avenues for musical expressions as possible. Conducting an orchestra, for instance, informs the way I write music; writing music for theatre informs how I play my cello. Every aspect of the many avenues I pursue informs another part, whether consciously or not.”

“Of course being diverse and wide ranging in my interests is not always plain sailing. Sometimes I feel I am being pulled in too many directions, but ultimately that’s OK. In the end, it’s my choice to pursue a variety of creative outlets, and I feel lucky to be in a position to do so.”

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Musician/composer Iain Grandage with Trevor Jamieson and Miranda Tapsell in Sydney Theatre Company’s *The Secret River* that was one of the stand-out successes of the 2013 Perth International Arts Festival. The production won the graduate two Helpmann awards.

(Photo: ©Heidrun Löhr)

“Iain Grandage
PO Box 1436, Carlton 3053

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The UWA graduate spoke to Uniview from the home in Melbourne he shares with partner, cellist Melanie Robinson who studied at UWA and is now arranging and collaborating with artists such as Washington, Jimmy Barnes and You Am I front man Tim Rogers.

Two works by Iain were included in the centenary CD *Musical treasures from UWA*. One was a piece for the Winthrop Hall organ, recorded by renowned organist Annette Goerke, while a second, *Halcyon* (commissioned by Janet Holmes à Court in honour of Emeritus Professor Margaret Seares) was performed by the WA Symphony Orchestra and recorded by the ABC.

Currently, Iain’s commissions will keep him busy until 2016. He recently became an Honorary Research Fellow at UWA, continuing the link that launched his amazing musical journey.

Uniview
The University of Western Australia | 15

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Top: Dr Michael Chaney AO CITWA, Chancellor and Chair of the New Century Campaign Leadership Committee, Ms Kay van Norton Poche and Professor Paul Johnson, Vice-Chancellor.

Bottom: Professor Dennis McDermott, Director Poche Centre, Flinders University; Mr Reg Richardson AM; Dr Michael Chaney AO CITWA, Chancellor and Chair of the New Century Campaign Leadership Committee; Dr Tom Calma AO; Patron of the Poche Centres; Dr Susannah Morris; Professor Paul Johnson, Vice-Chancellor; Ms Kay van Norton Poche; Winthrop Professor Ian Puddey, Dean, Faculty of Medicine, Dentistry and Health Sciences; Ms Vinka Cummins-Barunga, 4th year medicine student; Mrs Sally Richardson; Winthrop Professor Jill Milroy AM, Dean, School of Indigenous Studies.

Above: Professor Paul Johnson, Vice-Chancellor and Ms Kay van Norton Poche.
Multi-million dollar investment to tackle Aboriginal health

Tackling the health challenges facing Aboriginal people is a priority of UWA's new Poche Centre for Indigenous Health.

Leading Australian philanthropists Greg Poche AO and his wife Kay van Norton Poche are laying the foundation for the WA-based centre through a $10 million donation to The University of Western Australia.

Echoing the thoughts of Ralph Waldo Emerson that we are rich only through what we give, Mr Poche, founder and former owner of Star Track Express, believes that the greatest tragedy in life is enjoying the benefits of wealth and privilege without helping others.

The Poche gift is a significant contribution to UWA’s New Century Campaign, which will revolutionise how we educate, research and engage with our communities. With a target to raise $400 million by the end of 2017, the New Century Campaign is our largest fundraising effort since the founding of the University and the largest in the history of the State.

UWA’s new centre will join sister centres at Flinders University in Adelaide and the University of Sydney. All three centres have a goal to significantly improve the health of Aboriginal people.

“The establishment of the Poche Centre at UWA will bring together the University’s considerable expertise, programs and resources in Aboriginal health.”

UWA’s Vice-Chancellor, Professor Paul Johnson, said the University has long-established national strengths in Aboriginal health research and education.

“The establishment of the Poche Centre at UWA will bring together the University’s considerable expertise, programs and resources in Aboriginal health. Fostering collaborations between health professionals and Aboriginal communities is critical for successful health outcomes for our Indigenous communities,” Professor Johnson said.

The issue of poor health for Aboriginal people is multi-faceted and positive steps can only be taken by working closely with Aboriginal communities and listening to their collective wisdom. Empowering community members through training and support also plays an important role.

The UWA Poche Centre will work with the University’s School of Indigenous Studies, and the Centre for Aboriginal Medical and Dental Health in UWA’s Faculty of Medicine, Dentistry and Health Sciences, which is geographically the world’s largest medical school. The Centre will also collaborate with the Faculty’s Rural Clinical School, the Combined Universities Centre for Rural Health and the School of Paediatrics and Child Health.

The recent Closing the Gap report delivered by Prime Minister Tony Abbott revealed that the life expectancy of Aboriginal people is approximately 10 years lower than non-Indigenous Australians. The historic legacy, intergenerational trauma, chronic stress, contemporary trauma and loss, and disadvantage – particularly in Education – all contribute to poor mental and physical health, and chronic disease.

School of Indigenous Studies Dean, Winthrop Professor Jill Milroy AM, said closing the gap in health and life expectancy for Aboriginal people continues to be a nationwide priority.

“We are pleased that the new Centre recognises the centrality of culture and wellbeing to good mental health in Indigenous communities. Aboriginal knowledge systems are the key to the development of a framework for research, education and the delivery of programs,” Professor Milroy said.
Partnerships in learning

As Indonesia takes its place as a major economic and political force within our region, UWA is forging strong partnerships with our nearest neighbour: sharing expertise in the development of sustainable mining, helping to hone the skills of eye surgeons and to establish the nation’s first audiology education program, and rallying to conserve some of the world’s most spectacular coral reefs. The University is also welcoming increasing numbers of postgraduate students – continuing a trend set in the 1950s when the first Colombo Plan students arrived on our campus.

Trea Wiltshire reports
“For me, one opportunity has led to another at UWA...”
POSTGRADUATE STUDENT KARLIA MEITHA

“There is no doubt in my mind that this University (UWA) provided my intellectual foundation and had a profound influence on my journey in life.”
PROFESSOR DR BOEDIONO, INDONESIA’S VICE-PRESIDENT

“UWA can significantly contribute to Indonesia’s education success story.”
UWA PROFESSOR LYN PARKER

“...we need this grand new initiative, this signature policy...”
FOREIGN MINISTER JULIE BISHOP
While thousands of regional students continue to study in Australia, the New Colombo Plan will see a two-way flow of students. From Australia’s perspective, our students will return Asia-literate, and with valuable language skills, perceptions and ideas. A pilot is currently being rolled out, with undergraduate scholarships and mobility grants on offer for study experiences across selected locations (including Indonesia). The full program involving universities, business, government and NGOs will unfold through 2015.

When he visited UWA recently to deliver the Shann Memorial Lecture (and to attend UWA Business School marking 100 years of Economics at UWA), Indonesia’s Vice-President observed that studying the language and culture is the best way to learn about his country. That’s a sentiment echoed by Asian Studies/Law graduate Oliver Rogers who has a place in Canberra’s public service graduate program (see 'The language ‘ambassador’). Hoping to become a diplomat, the graduate was acknowledged at UWA as a language ‘ambassador’ to local schools. “And when you learn the language you tend to fall in love with the culture,” says Oliver.

For Winthrop Professor Krishna Sen, Dean of the Faculty of Arts, a highlight of Dr Boediono’s recent visit was seeing him conversing in Bahasa Indonesia with UWA students, watched by winners of the first Boediono Awards. “When we asked the Vice-President if we could name an Indonesian language scholarship after him he was so delighted he endowed a new prize for high achieving students studying Indonesian,” says Professor Sen, who is fluent in Indonesian and other Asian languages (see Charting democratic change).

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“UWA students often mention how many Arts academics have a second language, so this becomes their model. It’s about this University valuing and supporting foreign languages. The result – at a time when Indonesian at most universities is static or declining – is that UWA

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Indonesia’s Vice-President Dr Boediono, a Colombo Plan student in the 1960s, recalls his studies in Economics at this University as “the basic building blocks of my subsequent view of the world”. Many Indonesian students would follow in his footsteps, gaining skills to invest in their home country and becoming leaders in government, industry and academia.

Now a New Colombo Plan will make study in Indonesia and the region a rite of passage for Australian students. At the launch of the Federal Government’s New Colombo Plan, Foreign Minister Julie Bishop recalled the original initiative that brought to Australian campuses the “best and brightest” from the region.

“Australia reached out and engaged on a people-to-people basis. Over 30 years, some 40,000 students came, lived in our homes, studied at our universities, engaged with our people, came to know us and forged deep and lasting friendships,” she said. “If we are truly serious about broadening and deepening our engagement in Asia, we need a grand new initiative, a signature policy…”

The New Colombo Plan will undoubtedly be as mutually beneficial as its predecessor – for apart from developing skills for the region, the arrival of Colombo Plan students broadened local horizons, making us aware of the rich cultures and opportunities on our doorstep. It also forged friendships and academic links that have flowered into a network of research and learning partnerships that have given this University a head start in Asian engagement.

When he accepted an honorary doctorate at UWA in 2011, Dr Boediono memorably said: “There is no doubt in my mind that this University provided my intellectual foundation and had a profound influence on my journey in life. If someone asked the greatest influence this institution had on me personally, I would say its contribution to the formation of my attitude to people and toward society... With my UWA experience and credentials, new doors of opportunity opened for me.”
is seeing substantial increases, partly because New Courses emphasises the value of language education. Scholarships and prizes also indicate this is an area for which there is support and encouragement."

Professor Sen, a Fellow of the Australian Academy of the Humanities, has been appointed to the New Colombo Steering Committee.

Currently more than 150 Indonesian postgraduate students are studying at UWA across all disciplines and our University has formal agreements with Gajah Mada University (UGM), Universitas Indonesia (UI), Universitas Airlangga, Rumah Sakit Cipto Mangunkusumo, Indonesian Institute of the Arts in Denpasar, Bali, Udayana State University and the Indonesian Ministry of Energy and Mineral Resources. Several academics are also fellows at Indonesian universities.

UWA anthropologist Professor Lyn Parker is now a familiar face in the corridors of academia in Indonesia. A Visiting Fellow at UI since 2009, the researcher is drawn to projects as relevant to Indonesians as to Australians studying this complex multi-ethnic nation.

In recent years, Professor Parker has investigated how Indonesia is forging a multicultural nation; how moderate young people are negotiating ‘being a good Muslim’ in a world of Hollywood movies and western influences; how adolescents are spearheading not only globalisation and consumer youth culture but also the Islamisation movement; how family planning, divorce and the blossoming women’s movement are changing the social landscape, and how domestic violence, “once invisible, has exploded as an issue for the extent that there are now family police and shelters for the victims”.

“From the start I knew I didn’t want to work in a library doing research. I wanted to be out there among people so I did PhD fieldwork in east Bali, living with a family in a village and studying the integration of a traditional kingdom into modern Indonesia,” she recalls. “The mother was a midwife, the father the village head, so I had insights into health, family planning, the birth of the green revolution, and how fertilisers and insecticides were changing farming practices. That village was a microcosm of all the amazing changes happening across Indonesia.”

Professor Parker has witnessed “the transformation of an education system that once served only the elite”.

“Today nine years of education are compulsory for all young people: enrolment rates for primary school are virtually 100 per cent, and about 60 per cent of young people aged 16–18 go to senior high schools. The education trajectory is upwards and while there is currently a mismatch between student expectations and the jobs available, jobs will shift to the services sector, increasing demand for more educated young people.”

Perhaps the most rewarding aspects of her three decades of research within WA’s School of Asian Studies has been training postdoctoral students and watching them move into the upper echelons of government, business and academia in Indonesia. And often these graduates continue their association with the University.

During his UWA studies, Dr Raihani, a senior lecturer in Education Studies at Sultan Syarif Kasim State Islamic University (UIJ) Riau, worked with Professor Parker and one of her former PhD students, Dr Chang-Yau Hoon, on an ARC Discovery Grant project led by Professor Parker. Dr Raihani’s book, *Creating Multicultural Citizens: A Portrayal of Contemporary Education in Indonesia* (published by Routledge, 2013).

Dr Raihani and Dr Hoon are Adjunct Research Fellows at this University. They are two of several academics who move between UWA and Indonesia. Dr Emielda Yusiharni completed Masters and PhD studies at UWA and lectures at the University of Mataram on Lombok while continuing her research at UWA (see *From waste to fertiliser*).

Dr Yusiharni’s research is guided by Emeritus Professor Bob Gilkes (School of Earth and Environment) who supervises many international postgraduate students.

Professor Gilkes’ recent Crawford Fund Medal acknowledges his enduring contribution to global food security and international agricultural research.

Professor Gilkes is also addressing the problem of small-scale artisan gold mines that use mercury and cyanide to extract the ore, often next to family kitchens close to houses. “It’s contaminating entire villages in Asia, Africa and South America,” says Professor Gilkes, “and we’re developing a program to identify the risks and find solutions.”

One of the more visible links between UWA and Indonesia has been the involvement of Western Australian doctors in natural disasters that have devastated parts of Indonesia.

When the 2004 tsunami hit Aceh, Professor Bruce Robinson provided pro bono medical services ‘at the coalface’, in Meulaboh. “Since then, I’ve returned to Aceh to help many times and also provided volunteer health clinics for the poor in rural Indonesia,” says the 2013 Western Australian of the Year.

Professor Robinson is also Medical Director of the International Skills and Training Institute in Health (ISTIH)
that has collaborated with Indonesian partners to establish the Indonesian Clinical Training and Education Centre (modeled on UWA’s Clinical Training and Education Centre). It has already trained more than a thousand participants across 55 clinical skills workshops and a UWA/UI scholarship program sees medical students undertaking electives in Perth.

Another much-honoured UWA leader active in Indonesia is Professor Ian Constable, who established BaliEye to ‘give back’ to the people of Bali. This outreach is supported by UWA’s Centre for Ophthalmology and Visual Science, incorporating the Lions Eye Institute (see The gift of sight).

Looking ahead, Professor Lyn Parker predicts that such outreach and training, will only grow.

“It is wonderful that UWA is welcoming more Indonesian postgraduate students on Australian and Indonesian scholarships and that the Indonesian Government is being proactive in upgrading qualification requirements for staff at Indonesian universities: this means more funding for PhDs and sabbaticals. I believe our University can significantly contribute to Indonesia’s education success story.”

Fellow anthropologist Assistant Professor Greg Acciaioli is also impressed with changes he’s witnessed over two decades of research against the backdrop of dramatic changes as Indonesia moved from military dictatorship to democracy, from one of the world’s most centralised governments to one of its most decentralised.

The drama of decentralisation takes on added dimensions, he says, given that the archipelago comprises more than 17,000 islands (around 900 being inhabited) and its population of some 237 million includes 365 ethnic and sub-ethnic communities, many defined as komunitas adat terpencil (geographically-isolated customary law communities). (See Taking advantage of adat)

While the country faces many challenges, Professor Acciaioli believes it has successfully navigated “an incredibly successful transition”.

“The current government has turned the nation around, put Indonesia on the world stage, and moved from show elections – ‘festivals of democracy’ – to real political contests,” he observes.

No doubt the New Colombo Plan will spur more Western Australian students to learn the language – and, following in the footsteps of researchers such as Professor Parker and Professor Acciaioli, to understand the complex constellation of islands that lies to the north of our island continent.

When attending a Business School function celebrating 50 Years of Commerce at UWA, former WA Premier (and UWA graduate) Richard Court observed that the first Colombo Plan was “the right plan at the right time”. He believes the ‘bridges’ it built are still being experienced today. Since leaving politics 13 years ago, he has worked within the mining and oil and gas sectors, with a client base that spans Asia and includes Indonesia.

“I recall with fondness many of the Colombo Plan students who boarded with my elderly grandmother in a modest home near the University,” he says. “Today we have a New Colombo Plan designed to be relevant for today’s world, allowing students to study and immerse themselves in languages and cultures. And that’s critical as we grow closer to our neighbours.”

UWA academics are currently engaged in a diverse research and training partnerships: in the UWA Business School, the Head of Economics, Winthrop Professor Peter Robertson is gauging the impact of China’s rapid growth on Asian economies such as Indonesia. In Asian Studies, Dr Natsuko Akagawa has projects on local history, identity and culture, funded by the International Institute of Asian Studies, while in the School of Psychiatry and Clinical Neurosciences, Professor Dieter Wildenauer is collaborating with UI to investigate the molecular genetic causes of schizophrenia.

The International Mining for Development Centre’s UWA Director Ian Satchwell is delighted that the Indonesian Government sees the centre as a preferred partner.
for capacity-building in resources governance and administration. A former National President of the Australia Indonesia Business Council, Mr Satchwell says: “Our partnership involves contributions by both organisations. Together we’re building capacity and improving our mutual understanding of leading practice in global and local mining governance.” (See A resource worth tapping)

These research and training links may be wide ranging (see Sharing the knowledge) but they share a common thread: strengthening partnerships with our fast-growing neighbour.

When he welcomed Dr Boediono to our campus, Chancellor Michael Chaney said the Vice-President had helped to build many of this University’s links with Indonesia.

“As a University that is based locally but acting internationally, we have a renewed focus on building global linkages – and we regard our links to Indonesia as particularly important,” said the Chancellor.

These links are already shaping the aspirations of two current students. Indonesian PhD candidate Karlia Meitha says study at UWA has expanded her networking because our campus hosts so many international plant scientists.

“For me one opportunity has led to another at UWA: in addition to getting first hand training from my supervisors and visiting experts, I was invited to spend four months at the plant biology laboratory in the University of Leeds.”

Meanwhile Boediono Scholar Rebecca Lawrence, is an exchange student at Gajah Mada University (UGM) in Jogjakarta, which happens to be Dr Boediono’s alma mater.

The Boediono Scholar is interested in the intersection of culture, business and politics. “I recognise the need for skilled bilingual speakers in countries that rely heavily on international trade,” says the high achieving BPhil student. “I hope eventually to work in international business or in foreign affairs.”

Both have made an excellent start to their careers – and added another link in this University’s Indonesian connection. ■
Sharing the knowledge

With Indonesian postgraduate students exploring diverse projects to hone their research skills and benefit both local and Indonesian industries, UWA’s Indonesian connections are proving to be mutually beneficial. Three current students reflect this. In the School of Population Health, Mila Dirgawati is exploring the impacts of air pollutants on human health, while in the School of Plant Biology PhD candidate Karlia Meitha (centre) is studying the respiratory regime of vineyard grapes and her colleague Uswatun Khairah is focusing on climate change adaptation.

L–R: Mila Dirgawati, Karlia Meitha and Uswatun Khairah (Photo: Matthew Galligan)
The gift of sight

“We've enjoyed the warmth and hospitality of the Balinese for decades. I think Western Australians are always looking to give something back to Bali,” says Professor David Mackey of UWA's Centre for Ophthalmology and Visual Science (incorporating the Lions Eye Institute). The Chair of Ophthalmology was endorsing the aims of an outreach program, BaliEye, established by LEI's founding managing director, Professor Ian Constable.

BaliEye’s ‘giving back’ includes sight restoration, blindness prevention, children’s corrective surgery, education assistance, prosthetic eyes, and assistance to desperately ill children and young people – and it is widely appreciated. The outreach is part of the Rotary-supported John Fawcett Foundation and its Indonesian counterpart, the Yayasan Kemanusiaan Indonesia.

Professor Constable, who is an Honorary Member of the Indonesian Ophthalmologists Association, says over the last three decades LEI/UWA has conducted more than 40 training programs across Indonesia and has offered training to postgraduate students who have worked in Perth.

“Our research links have included the first satellite transmission of telemedicine images from Surabaya to Perth in 2002 as part of an NHMRC program grant, a survey of cataract blindness, and the building and installation of the first corneal refractive laser to be used for myopia correction – with the first volunteer patient being a female eye surgeon!” says the highly regarded ophthalmologist.

Bali-based ophthalmologist Dr Dini Dharmawidiarini is just one of many Indonesian specialists who have benefited from training at the UWA Centre and she plans to further consolidate her training during future visits to study the complex cases that LEI ophthalmologists specialise in.
Song of the gibbons

The Indonesian island of Siberut is a refuge for endangered primates – and it attracts a steady stream of international researchers. It is remote: an international flight to Sumatra is followed by a 12-hour ferry ride, hours in a speedboat, then a longboat with an outboard motor as rainforest envelopes a narrowing waterway. Finally, a jungle trek, complete with laden backpacks and porters – conditions at the Siberut Conservation Program (SCP) field research camp are basic and food and equipment are carried in.

Two UWA researchers have made this journey: PhD student Helen Dooley and her supervisor, Assistant Professor Debra Judge from UWA's School of Anatomy, Physiology and Human Biology.

Founded in 2002 as a collaborative venture between the German Primate Centre and Bogor Agricultural University, SCP is supported by Indonesian and international researchers – and by the local forest community. The aim is to preserve the remaining forest ecosystem and a suite of endangered primates, and to provide local employment and build capacity. Visiting researchers depend on local guides and assistants who are graduates of local universities. The research thus contributes to local training and scientific knowledge.

Helen Dooley spent two years studying the Kloss gibbon (Hylobates klossii), explains that all gibbons sing loud, sex-specific songs that advertise their presence and avoid confrontations with neighbours unlikely to trespass on occupied territory. Song is also used to attract a mate and the monogamous pairs co-ordinate their songs as a duet.

“The Kloss are one of only two species that don’t duet – the males vocalise first, then the females – so I’ve been examining factors that influence their use of song,” says Helen.

Helen says the nearby Siberut National Park is ‘a national park on paper only’ with hunter-gatherer communities subsisting on the forest’s resources. An agreement with locals ensures they don’t hunt in the research area and some are employed as field staff. However, the fact that a logging concession covers the area – the study area being exempt as a conservation area confirmed by the Indonesian Ministry of Forestry – highlights a perhaps precarious future.

“The Mentawai chain separated from the mainland a long time ago, making the flora and fauna unique,” says Helen. “Three islands have lost a lot of forest, with logging and hunting the main threats to primates. Siberut National Park is the last refuge for a high-density population of four endangered primates including the highly endangered snub-nosed monkey (Simias concolor) and the gibbons. It would be a tragedy if it suffered the same fate as its sister islands,” says the UWA student.
Conserving the Coral Triangle

**Julian Clifton's research** in the Coral Triangle began when he was a newly qualified academic in the United Kingdom. The Coral Triangle regional conservation initiative encompasses some of the world’s richest (but least studied) oceanic reaches, including waters girdling Sulawesi that contain two-thirds of the world’s coral species and twice the number of reef fish found anywhere else.

The catch from these waters is vital to coastal communities and to Indonesia’s food security, so it is little wonder the conservation initiative is backed by the Asian Development Bank and the United States and Australian governments.

The aim is to create no-take protected areas and to make local communities (some facing dwindling stocks) aware of the dangers of overfishing, destructive fishing practices and pollution.

Over several years, much of Dr Clifton’s research focused on Wakatobi National Park, the first major park to adopt a zoning system. Some 100,000 people live in the park.

“Unfortunately, designated no-fishing zones tend to be the richest fishing areas and alternatives may be further away for outrigger canoes, meaning more fuel, a more hazardous journey. Some zones are also prime tourism dive sites, so inevitably there are conflicts of interest,” says the UWA researcher.

Dr Clifton also works with Operation Wallacea, a global academic partnership that has produced more than 90 scientific papers and the discovery of several species new to science. A further area of study centres on the Bajau people who live on boats. “They’re a nomadic ethnic minority living in stilt villages connected by bridges and they face considerable discrimination,” he says.

This year Dr Clifton (School of Earth and Environment) will run a field trip to Bali in partnership with Bogor Agricultural Institute, with participants from both universities. He believes UWA’s Oceans Institute is making this University increasingly attractive to regional students wanting to study marine science and natural resource management.
Cultural partnerships

The music, dance, and arts intricately woven into Balinese rituals are enriching the lives of UWA students as a result of a cultural partnership that sees Indonesian musicians giving master classes on campus, while design students enjoy ‘cultural immersion’ in Bali.

The Bali Overseas Studio is organised by the School of Architecture, Landscape and Visual Arts (ALVA) in concert with the Indonesian Seni Institute (ISI) in Denpasar as a comprehensive cultural exchange.

“We join a network of artists and academics in Indonesia, with our students studying alongside Indonesian students who mentor within the culture and language studies,” says Assistant Professor Paul Trinidad of ALVA.

“Indonesian artists and lecturers, including some of the island’s most highly respected traditional and contemporary practitioners, participate in a program that includes drawing, painting, digital photography and graphic work. We visit architectural and cultural sites as well as villages where centuries-old traditional art and cultural practices are continuing, so it is very enriching.”

ISI musicians are also involved in the School of Music’s World Music program. The School is the proud possessor of its own gamelan orchestra, purchased in 2011 with the help of the Irene Jackson Music Fund, and ISI lecturer I Gade Made Indra Sadguna has made good use of it during a two-week residency program. While he hosted gamelan master classes, a small ISI ensemble provided a lunchtime concerts for staff and students (see photo on page 22).

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Charting democratic change

Having charted the flowering of democracy since the demise of the repressive Suharto regime, UWA’s Dean of Arts Krishna Sen, an internationally recognised scholar in contemporary Indonesian culture and media studies, describes the nation’s media today as “unbelievably free, bordering on feral!”

“It is very demanding in terms of government transparency, so there has been an amazing transformation since the 1998 fall of Suharto,” she says. “Today, it’s almost impossible to keep up with the number of new newspapers, websites and local TV and radio stations. In terms of investment, the media has grown perhaps five-fold since the 1997 financial down-turn. Indonesia today is the world’s third biggest democracy and a highly tolerant society.”

Professor Sen has acted as a consultant to major international agencies on human rights in Indonesia and has written extensively on Indonesia, including several books published by Oxford University Press and Routledge.

The Arts faculty has a growing relationship with several Indonesian universities, including UI in Jakarta. Like academics around the world, young Indonesian academics are under pressure to publish in English, in internationally recognised journals and books produced by well-known publishers, Professor Sen says, and co-publications can be a mutually beneficial activity for Indonesian and Australian academics.

In December, recent UWA PhD graduate Danau Tanu along with Inaya Rahmani, a Murdoch graduate (now at UI) ran a workshop in Jakarta designed to help young Indonesian scholars to get published. The workshop was funded by the UI and the Indonesian Department of Education (DIKTI).
The language ‘ambassador’

“Majoring in Asian Studies at UWA, I was exposed not only to the language but to the culture, history, politics and economics of Indonesia. And when you learn the language you tend to fall in love with the culture,” says graduate Oliver Rogers.

Appreciating the value of in-country ‘immersion’, Oliver completed a journalism practicum with the high-profile magazine *Tempo*. This placement was organised by the Australian Consortium for In-Country Indonesian Studies (ACICIS), a non-profit, national educational consortium established in 1994 to facilitate Australian students undertaking credited study in Indonesia.

Based at Atma Jaya University in Jakarta, Oliver’s practicum gave him an insight into the current affairs, politics and economy of his host country.

“Under Suharto there was little press freedom, but now magazines like Tempo can be highly critical of the government,” says the graduate. “Perhaps because of that earlier repression, everyone I met in Indonesia – from students to taxi drivers – had an opinion on politics and they’re so passionate. It was one of things I instantly loved about the country.”

In 2012, Oliver represented Australia in the Australia-Indonesia Youth Exchange Program run by the Department of Foreign Affairs and Trade. This saw him living amongst plantation workers and farmers in a small rural village in Sumatra and then experiencing city life with a well-heeled family – giving him a good appreciation of socio-economic disparities.

Partnership tackles HIV

HIV has been labelled ‘an epidemic’ in parts of Asia and researchers at UWA and UI are working together to understand the responses of patients with advanced disease to treatment with antiretroviral drugs.

Rates of HIV infection continue to rise in Indonesia, with the disease centred on intravenous drug users. UWA immunologist Professor Patricia Price says it is fuelled both by denial of the extent of the problem and the ongoing death penalty for drug offences.

“From drug users, the disease has spread into the general population, and while this continues in rural areas, it has changed a little in population centres such as Jakarta. The changes include the increased availability of antiretroviral therapy (ART).”

Professor Patricia Price has established a series of collaborations with researchers and clinicians at UI to investigate the pathology of HIV in patients beginning ART with co-infections, and toxicities arising directly from their ART.

The UWA researcher says in much of the developing world patients are younger and sicker when starting treatment, so HIV has already depleted the CD4 T-cells from their blood, robbing them of the ability to fight a range of infections normally kept in check by T-cells.

The UWA team has been involved in HIV research since in Indonesia since 2007, initially focussing on the impact of HIV disease on peripheral nerves. HIV neuropathy is a debilitating condition and the incidence is increasing worldwide as more patients survive on ART.

Further research collaborations related to ART will support both PhD projects at UI, and graduate students enrolled through UWA.

“The traffic of students between Indonesia and Australia is two-way,” says Professor Price. “We bring Indonesian students to Perth and send UWA students to help with technical training so that techniques in Indonesian laboratories mirror those at the UWA lab in Royal Perth Hospital.”

Professor Price, a key member of the School of Pathology and Laboratory Medicine, says the Australasian Society for HIV Medicine has been supportive of her projects, along with the NHMRC and The Goodeve Foundation. UI also provides funds for clinical and laboratory studies.
A resource worth tapping

With abundant resources playing a key role in its expanding economy, the Indonesian Government is tapping Australia’s experience in all areas of mining development, taking advantage of expertise on offer at the International Mining for Development Centre (IM4DC), a collaboration with the University of Queensland.

Given Indonesia’s current emphasis on health and safety, environmental protection and sustainability, the government was quick to appreciate training opportunities offered by the UWA-based Centre. The Ministry of Energy and Mineral Resources has already signed an agreement with IM4DC for training geared to building capacity in mining, oil, gas and geology, with courses being delivered both in Australia and in Indonesia.

The current centrepiece of the partnership is collaboration in training programs for mines inspectors, the front-line mining supervisors for national and regional governments. In addition, government officials and university academics participate in global short courses.

“Working with universities and other training institutes, we aim not only to collaborate on research but also to improve curriculum, teaching and learning,” says Centre director Ian Satchwell. “The partnerships are already proving to be rewarding, and there’s much potential for greater collaboration to achieve our shared goals of lifting the capacity of people and institutions.”

IM4DC is supported by both the Australian Government though the Department of Foreign Affairs and Trade. For more information, visit: www.im4dc.org

Working with our sister state

While a sister state relationship strengthens trade, education and cultural links between WA and East Java, it is health links that interest audiologist Helen Goulios, Clinical Coordinator of the Master of Clinical Audiology Program (School of Anatomy, Physiology and Human Biology).

The UWA graduate has witnessed the strengthening of this relationship established more than two decades ago, and she hopes the next collaborative initiative will see Indonesian students studying as clinicians in WA.

“We have great support both from both the WA and East Java governments,” says Dr Goulios. “After being approached by the charity, we did an assessment of needs and costs across the board: for clinics, for audiologists, teachers and those able to identify problems and organise intervention services.

“A child with a hearing loss may only be identified when starting school. However, now there’s a drive across Indonesia for inclusive education and the government is keen to improve services for children born with hearing loss. We have a Memorandum of Agreement between UWA and Airlangga University in Surabaya to help establish Indonesia’s first audiology education program.”

Dr Goulios supervises students whose research will make a difference for children in East Java: developing a speech test for preschool children (with the help of the Indonesian Consulate that encouraged Indonesian children in Perth to be part of a pilot project); gathering baseline data on the prevalence of hearing loss; providing a training resource package for teachers supporting hearing-impaired children and a mentoring program for nurses trained to perform basic hearing testing.

For more information on the Master of Clinical Audiology Program, visit: www.studyat.uwa.edu.au/courses/master-of-clinical-audiology

Dr Helen Goulios and Audiology Masters student Nicole Stagoll take Ahmad Haziq through the speech test they developed for screening hearing children.
From waste to fertiliser

UWA research in the School of Earth and Environment could soon benefit Indonesian farmers, reducing fertiliser costs and utilising polluting refuse from markets.

Dr Emieldsa Yushiharni, who divides her time between her UWA research and lecturing at the University of Mataram on Lombok, has completed Masters and PhD studies looking at properties of plant ash and exploring ways of turning mining and agricultural waste into fertiliser.

Emeritus Professor Bob Gilkes of UWA’s School of Earth and Environment supervised her research, and contributes to the research of Indonesian scientists exploring ways of turning ground rocks, wood ash, mining slag, along with agricultural waste, into fertilisers for nutrient-poor soils in Indonesia.

“We want to highlight the beneficial uses of agricultural and mining by-products, so the benefits of this research go far beyond our region,” says Professor Gilkes.

“It has been a great opportunity coming to UWA because I’ve met so many great scientists and have learnt so many advanced techniques,” says Dr Yushiharni whose UWA research is supported by an International Postgraduate Research Scholarship.

And the benefits of this UWA research are apparent in her home island of Lombok, where UWA graduate Dr Joko Priyono (at Mataram University) is forming a company to market fertilisers from agricultural/mineral wastes.

Also putting UWA research to good use at Padjadjaran University, is Dr Annisa whose PhD was supervised by Winthrop Professor Wallace Cowling of the UWA’s Institute of Agriculture. Their research explored genetic variation for heat tolerance in Brassica rapa (which includes leafy vegetables such as bok choi). The research (supported by an Australian Research Council Linkage grant) found that a type of Brassica rapa from Indonesia was the most tolerant of high temperatures during flowering.

Taking advantage of adat

Assistant Professor Greg Acciaioli has spent three decades investigating issues from the social impacts of rice intensification to the indigenous peoples movement.

After studying at Cornell University in the US, a Fulbright Fellowship took him to Sulawesi where his PhD (through ANU) focussed on settler/indigenous interactions in Central Sulawesi. An additional fascination for the anthropologist was the backdrop of dramatic change, for these decades saw Indonesia move from military dictatorship to democracy, from one of the world’s most centralised governments to one of its most decentralised.

In an article in Indonesia (No 72, 2001) published by Cornell University, Professor Acciaioli notes that regional autonomy was granted following the collapse of the Suharto regime and in response to demands from various provinces. One of the aims of decentralisation, he says, was to allow reincorporation into village governance of local customs and traditions (adat).

Dr Acciaioli’s research has given him a great insight into how the people of the Lindu Plain have used adat as “a badge of ethnicity and a ‘weapon’ in political battles over control of land and resources”.

“Whereas Bugis migrants threatened to take up arms to defend rice fields and coffee stands, the To Lindu pursued legal avenues for asserting their rights, as advised by a number of NGOs,” he says. Their success gained them national recognition and owed much to the blossoming NGO movement in Indonesia.

When the government later gazetted a national park surrounding the Lindu Plain, effectively prohibiting the gathering of rattan or extending wet-rice fields and coffee gardens, the To Lindu successfully argued for recognition of their adat as a community resource management system – and park authorities compromised, allowing access to coffee gardens within park boundaries.

“The flip side of regional autonomy has been the proliferation of new administrative units and sub-districts that have to stand on their own financially. Some are giving out logging and other concessions left and right to bring in money for infrastructure and administration. There are complaints that in some areas corruption and crony capitalism have migrated from Jakarta down to a district level,” says the UWA researcher.

Greg Acciaioli lectures in Anthropology and Sociology at UWA, and guest lectures at numerous Indonesian and Malaysian universities. He has co-edited Biodiversity and Human Livelihoods in Protected Areas: Case Studies from the Malay Archipelago (Cambridge University Press, 2008).

Uniview The University of Western Australia | 31
The big picture of chemistry

Award-winning UWA Associate Professor Keith Stubbs is passionate about the importance of chemistry and its ability to develop therapies for a range of diseases.

UWA’s Associate Professor Keith Stubbs was the 2011 WA Young Tall Poppy Science Award winner and has gone on to receive other awards. The 2012 Rennie Memorial Medal from the Royal Australian Chemical Institute acknowledged his development of a branch of chemical science while the Institute’s 2013 Athel Beckwith Lectureship allows him to tour the nation’s leading universities sharing his research findings.

The UWA graduate is passionate about his discipline – and it was a Trinity College teacher and UWA lecturers who spurred his interest. “Those first year UWA lecturers were so enthusiastic – they really made me see the bigger picture of chemistry,” he recalls.

“No matter which area of science a student chooses – agriculture, geology, marine science, environmental science – chemistry will be there, whether in the form of a reaction to climate change or a reaction that produces a mineral. So I tell students, do as much chemistry as you can – it’s a building block for so many disciplines,” says Professor Stubbs.

As an ARC Future Fellow, Professor Stubbs’ research focus is carbohydrate chemistry and today he leads a research team comprising postdoctoral fellows, PhD and Honours students.

“As an ARC Future Fellow, Professor Stubbs’ research focus is carbohydrate chemistry and today he leads a research team comprising postdoctoral fellows, PhD and Honours students.

“Historically, carbohydrates have always been associated with energy, plants, cellulose and such, but over the past half century, and particularly with exploration of the human genome, scientists have begun to appreciate that carbohydrates are fundamental to just about every biological process – from metabolism to the growth of cancers – so we need to develop tools to study them,” he explains.

“Many diseases have some carbohydrate link and so to study these diseases we first need to identify and understand the proteins that process the carbohydrates involved. The ultimate aim of our research is to develop new drug therapies – and the torch-bearer in this regard is the antiviral known as Relenza which is used to treat influenza. This drug was based on research conducted in Australia which looked at understanding the chemistry of the target protein. This discovery reflected what could be done if you know and understand the enzyme that processes the carbohydrate.

“As a postdoc, I learned how important it was to try to be multi-disciplinary in your approach. It allows you to answer questions quickly because you’re able to make the compounds in-house and evaluate them straight away.”

With this in mind, Professor Stubbs has built his laboratory with researchers focussing on projects involving chemistry, biochemistry and biology.

“I also collaborate with X-ray crystallographers and microbiologists at UWA and at international institutions so we can look at the crystal structure of the proteins we’re interested in and test the compounds we’ve made in biological systems,” he says.

“The fact that we do all this on campus is great for students because they’re learning about chemistry and biology and engaging with other scientists. Multi-disciplinary research is increasingly important but you can’t do everything – you must work collaboratively. It doesn’t matter what scientific discipline you’re in, you need people with complementary expertise. That’s the way of the future.”

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Shaping the future – UWA and BHP Billiton

For more than half a century The University of Western Australia and BHP Billiton have enjoyed a rich and successful relationship.

Since its initial investment in the UWA Engineering School in 1961, BHP Billiton – originally Broken Hill Proprietary Limited – has supported University-wide collaborative projects and activities, including scholarships, infrastructure and the 2013 UWA Gives Back Pilbara Tour outreach program.

In late 2013 the global resources giant reinforced its commitment to a University-wide partnership by providing $17 million to help fund UWA's revolutionary Engineering Zone and foster ongoing engagement with the Business School to support students and strengthen research.

The Engineering Zone and student support are priority areas of the University’s $400 million New Century Campaign, launched in October last year.

Announcing the partnership in December 2013, Jimmy Wilson, President, Iron Ore at BHP Billiton, reflected on the company’s original investment.

“Since this time, we have recognised the importance of investing in Education to provide opportunities for individuals to pursue meaningful careers.”

“We are very proud of this history, and I’m pleased that we have chosen to strengthen our commitment to Education,” he said.

Together UWA and BHP Billiton are providing a legacy that ensures young domestic and international students have greater access to quality education.

“We are incredibly confident that our investment will provide a legacy for future generations, and develop leaders with the skills and talent to ensure the continued success of our industry and our State,” said Mr Wilson.

The mining giant takes its responsibility to support communities very seriously. Through its Community Development Program, BHP Billiton voluntarily invests one per cent of its pre-tax profits in initiatives that support the communities in which it operates.

BHP Billiton’s recent investment in education and research at UWA includes $12 million to the Faculty of Engineering, Computing and Mathematics, the majority of which will support the innovative Engineering Zone.

It will also create a BHP Billiton Fellow in Engineering for Remote Operations and BHP Billiton Remote Operations Scholarships, helping the Faculty build its reputation as a global leader in Engineering for Remote Operations.

UWA is already internationally recognised in the field of remote operations. This focus guarantees that companies like BHP Billiton have access to the world’s top experts in automation and robotics and that their business can operate safely and sustainably.

An additional $5 million follows on from an existing major commitment to the Business School and will support scholarships, a research fellowship, engagement opportunities between scholarship recipients and alumni, and a program featuring high-profile visiting professors. Importantly, funds will also be dedicated to increasing the numbers of high-achieving female engineers through better business acumen.

One million dollars of the funding will be invested in scholarships to encourage the highest calibre domestic and international candidates to undertake an innovative new Master of Business Administration degree that the Business School will launch in 2015. This degree will join the Business School’s existing family of Master of Business Administration programs.

The partnership contributes to UWA’s vision of Perth as a global centre of excellence for energy and minerals and represents a major step towards the University’s $250 million Engineering Zone, which aims to confront the world’s most complex problems of infrastructure and sustainability.

The Engineering Zone – which will see engineers work hand in hand with the best minds from other disciplines including the UWA Business School – represents the largest single investment in engineering education in Western Australia’s history. Its impact will be felt across both the State and Australia, as Perth’s importance in the global resources sector grows.

“At UWA we have already developed world-class expertise. Through the New Century Campaign and BHP Billiton’s commitment we will build on this expertise and take the next big step in collaborative learning and research,” said UWA Chancellor, Dr Michael Chaney AO CWA.