Welcome to this Budget edition of the Go8 newsletter.

Before I tackle (which is the operative word) the Federal Budget, it is far preferable to first concentrate on the positives that so define the Go8, and which are included in this issue.

Our Facts of Distinction publication (go8.edu.au/sites/default/files/docs/page/facts-of-distinction_web.pdf) sets out the Go8’s significant contribution to Australia’s economy, to global research, and to producing future leaders both national and international.

What we contribute, the margin by which the Go8 punches above its weight in global rankings with six of our members ranked within the world’s top 100, is why I so appreciate the opportunity to produce this newsletter.

The newsletter enables the Go8 to showcase research that may not have made international headlines – yet – but which will. It enables us to showcase how diverse our quality research skills-base is (one including researchers of multiple nationalities) and by how much our researchers are committed daily to changing lives for the better, at all times benefiting the global community.

This edition comes with the bonus of a comprehensive and fascinating interview with one of the world’s leading medical researchers; one who happens to be the deputy Chair of the Go8 and Vice-Chancellor of UNSW Sydney, Professor Ian Jacobs.

Ovarian cancer, the silent killer as it is known, strikes fear in women around the world. Typically with no obvious symptoms for some time, early diagnosis is not the norm. It therefore kills a high percentage of those who are eventually diagnosed. Professor Jacobs and his global team have recently published research results that could lead to a simple blood test being available to screen for the disease by 2025 in the same way mammograms are for breast cancer.

Why this work has so driven Professor Jacobs for so many years, what led him to concentrate on such research, and why he determined to also manage a world-leading research-intensive university through one of the most major restructurings undertaken by such a university, is the story of a man with a strong value system, and a commitment to excellence.

The Go8 interview also mentions the volunteer medical work Professor Jacobs continues to carry out in Uganda. There he and his teams save lives by ensuring women have screening and treatment for cervical cancer; in a nation where neither the skills nor equipment are available without this voluntary intervention. In total, it is an inspiring read, and it encompasses the Go8 ethos.

All of the above positives are what make the 2017 Federal Budget so frustrating. It is at odds with the Prime Minister’s much-welcomed public commitment – less than two years ago – to economic growth through innovation, an educated workforce and research. It is disappointing to be presented with yet another year’s Budget decisions that do not address the sector’s fundamental issues – namely that the sector must continue to work within a distorted funding model that relies on the fee-paying international student market, external support and philanthropy to cross-subsidise domestic teaching and research – all to make up for funding short-falls.

The rhetoric suggests a Government which understands. The reality is something quite different as we are forced to attempt, futilely, to absorb further Budget cuts on top of some $4 billion in Budget cuts that have come the sector’s way since 2011. As a result, the quality of the student experience at university is bound to suffer. In addition, our students too are targeted directly in this Budget, something the Go8 would have preferred not occur, especially in the current difficult economic climate.

As we continue to crunch the data that will give us a deeper picture of the outcomes for our financial positions, and even our business models, on pages 3–5 Go8 Vice-Chancellors contribute a high-level comment on the Budget. If I could sum up the collective view, it is one of being let down by a Government that claimed to value the sector.

This is a segue that takes me back to the highly successful visit the Go8 undertook alongside the Prime Minister and Minister for Education in April. This visit has already been the subject of a dedicated newsletter (go8.edu.au/article/go8-april-2017-newsletter).

But we returned to Australia, (after our Government had indicated its support in our desire to attract more quality Indian PhD students to the Go8, and to strengthen the already established two-way movement of senior researchers and academics between the two countries) to be blind-sided by a suddenly announced range of Visa changes.

With more contradictory policy we risk being on a pathway which damages PhD, senior researcher and academic movement between Australia and the world. We are working with Government to resolve what can only be described as unintended consequences but...
It is disappointing to be presented with yet another year’s Budget decisions that do not address the sector’s fundamental issues – namely that the sector must continue to work within a distorted funding model that relies on the fee-paying international student market, external support and philanthropy to cross-subsidise domestic teaching and research – all to make up for funding short-falls.

Unfortunately, in many ways, the damage is done with the messaging it sends to our international counterparts – unintended or not.

So, as we issue this post Budget edition, we urge all of our Federal MPs, and in particular the Australian Senate to carefully consider the consequences of its decisions on a sector that contributes some $22 billion to the nation’s export income each year.

The comment by University of Melbourne Vice Chancellor Professor Glyn Davis in this issue suggests there is more to the Budget direction than has been set out, and importantly he mentions the need to consult. He says: “If there is a larger agenda at play, consultation will be important to avoid unintended calamities. Present regulations impose complexity and encourage trade-offs within institutions, such as cross-subsidies across teaching programs to allow all to remain viable. If we are moving to a new era of regulation, it will be important the Commonwealth understand the system it hopes to change. Talking with those you intend to shape, and explaining the thinking that informs new proposals, is always a good investment”.

As we work our way through the Budget ramifications, we know we are fortunate that we have so many positive outcomes in the Go8, from our students, our graduates and our researchers. Our focus is that they not be so undermined by poor public policy.
With the disappearance of the $3.9 billion EIF fund and in the absence of other capital funding schemes for teaching, we are increasingly unable to expand our teaching volumes significantly.

Speaking more broadly, the intellectual fabric and innovative capacity of Australia is dependent on the extensive research activities of the Group of Eight universities. Six of our members are in the world’s top 100 research universities and this places Australia third in the world after the USA and the UK but ahead of large countries Germany, France and Japan.

This is a phenomenal boost to the reputation of Australian universities and plays a key role in the underpinning of Australia’s third largest export, the $22 billion education exports with universities in the lead. We have long argued that the funding of teaching and research is distorted with Australian government funding for research inducing deficit operations.

This budget was a chance to have corrected this unhealthy situation, but alas, this opportunity was not acted upon. In order to continue provision of great research for Australia we will increasingly have to rely on more international student income. In the past, we have recruited international students additional to domestic students. With the disappearance of the $3.9 billion EIF fund and in the absence of other capital funding schemes for teaching, we are increasingly unable to expand our teaching volumes significantly. The sad consequence for our domestic students is not only that the current cuts will increase their debt, but also that we may no longer be able to educate as many as we would have liked.

Our global competitors, notably China, are investing heavily in higher education for just this reason, with millions of students enrolled in subjects like mathematics, sciences, computing and engineering. They understand that education and the major institutions providing it are generational assets, embedded deeply in the social, cultural, and economic machinery of the nation. The government needs to recognise this, and invest in the economic benefit that outstanding research can deliver, instead of cutting funding to the sector.
Consequently, research-intensive universities will continue to be overly reliant on international student fees.

years now, more must be done to support the living costs of students for whom university is a financial struggle.

In addition, I am concerned these measures do little to provide a long-term solution to the chronic funding problems of the sector, particularly for research-intensive universities. Even if these measures pass parliament, we will still be faced with a situation where government funding falls well short of meeting the full costs of research. Consequently, research-intensive universities will continue to be overly reliant on international student fees. This is an issue that needs addressing for the good of the country.

Professor Glyn Davis AC
Vice Chancellor
and Principal,
University of Melbourne

The 2017 higher education statement in the federal budget looks like the first step of a longer strategy. On the surface, the 2017 measures in themselves are predictable, alas the latest in a long line of federal governments which cut per student funding and raise the costs of participation in university study. The statement is also silent on research, as though the role of universities ended with teaching.

Yet on closer examination some details in the statement look over-engineered. They likely signal broader ambitions. The introduction of voucher-based funding for postgraduate Commonwealth supported places, for example, will be expensive to implement and would be a challenge to administer for the Department of Education. However, if this is a trial for moving to a voucher based system for undergraduate education, there would be some logic to the move.

Likewise, new requirements around reporting teaching costs, and a review of TEQSA provider categories, suggest the government is keen to introduce teaching only institutions.

If there is a larger agenda at play, consultation will be important to avoid unintended calamities. Present regulations impose complexity and encourage trade-offs within institutions, such as cross-subsidies across teaching programs to allow all to remain viable. If we are moving to a new era of regulation, it will be important the Commonwealth understand the system it hopes to change. Talking with those you intend to shape, and explaining the thinking that informs new proposals, is always a good investment.

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It is clear there is little appreciating the contribution of universities to the nation’s future. A study conducted of Monash’s economic impact notes that the University:

- directly accounts for $3.9 billion worth of economic activity annually;
- contributes $1.5 billion annually from international education to the economy;
- directly employs nearly 18,000 staff;
- spends over $640m per year in external works from food trucks to construction firms;
- contributes indirectly to some 2,800 jobs through its capital expenditure;
- even if there was no concern for the future of innovation and Australia’s ability to meet and shape a response to the profound shifts in the global economy, universities’ contribution to jobs and growth should be enough to suggest that cuts are counterproductive to the government’s goals.

These cuts reveal a belief that cuts to higher education can be made without consequence. This is so short-sighted that Australia runs the risk we will squander and undermine the quality, impact and innovation that our universities have promised and delivered for Australia’s future.

Professor Margaret Gardner AO
President and
Vice-Chancellor,
Monash University

The impact of the cuts to higher education will be felt for years to come. They compound the $3.9 billion in cuts previously inflicted on the sector from 2007 to 2011. There has been no direct funding for buildings since 2013, and we now know that the $3.7 billion remaining in the Education Investment Fund will be diverted to non-higher education purposes.

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- generates $5.10 for every dollar of government funding;
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We have six universities ranked in the top 100 in the world. That makes us the third strongest university sector in the world, despite being the twelfth largest economy. We generated $22.4 billion last year in export income, which is more than the actual money spent by the Federal Government. Our export income is unique by world standards. We are doing extraordinarily well. But there comes a point at which you can no longer make further cuts without putting quality and core functions at risk.

We regularly consider the needs of our current and future students and what skills they will need to participate meaningfully in a global economy. I am confident we giving our students a world class education that represents great value for their investment. However, when you look at how much students are paying for their education in this country, they're actually paying more than most of the OECD. The proposed increase to student fees is probably affordable, but I think the question is – is it fair and just?

I am pleased that in his efforts to reform the allocation of PG CSPs the Minister recognises the importance of assuring our current and future students that they'll still have a Commonwealth supported pathway to our professional masters degrees.

UWA is committed to broadening access and to high success rates for low SES and Indigenous students, so I am also pleased that HEPPP funding is to be legislated and will include a performance-related element.

As the cost to Government of HE continues to rise it is logical that the Minister will look at ways of delivering efficiency and ROI through elements of performance-linked funding and through a better understanding of the cost of delivery. In doing this, however, it is important that the analysis isn’t just based on measures of cost and a race to the bottom, but also on quality. UWA intends to engage fully with the Government as it develops these measures.

The foreshadowed increases in student HELP/HECS contributions planned for the coming years are less severe than feared, but are disappointing given that Australian students already make higher contributions than most of our global counterparts. Perhaps of greater concern is the significant decrease in the salary level at which repayments must be made.

The efficiency dividends imposed on the sector for each of 2018 and 2019 are also regrettable given that universities have already contributed almost $4 billion in savings over the past few years. Further, the rationale for levying the efficiency dividend is curious. The government withdrew capital grant schemes some years ago, and so now universities themselves must fund their own capital needs via surpluses produced by ever-increasing operational efficiencies. To hear claims that the surpluses are evidence of excess funding is therefore puzzling. In all of this, it is important not to undermine the nation’s third largest export – the education of international students, which brings in $22 billion a year in income for Australia.

Meanwhile, still unresolved, is the means by which we are to meet the costs of hosting university research and innovation.

On a positive note, it is good to see the announcement that the HEPPP will be retained. It also hard to argue with the need for greater admission transparency, a journey the Go8 signed up to some time ago. The increase in funding in the areas of dentistry and veterinary science is also welcomed.
Surprising research shows sophisticated plant sensory capacity

A study led by The University of Western Australia has found plants have far more complex and developed senses than we thought with the ability to detect and respond to sounds to find water, and ultimately survive.

In the study “Tuned in: plant roots use sound to locate water” published in Oecologia, UWA researchers found that plants can sense sound vibrations from running water moving through pipes or in the soil, to help their roots move towards the source of water. The study also revealed that plants do not like certain noises and will move away from particular sounds.

Lead researcher Dr Monica Gagliano from UWA’s Centre of Evolutionary Biology at the School of Animal Biology said water was a basic need for a plant’s survival, and the study showed that sound plays a significant role in helping plants cater to this need.

“We used the common garden pea plant (Pisum sativum) as the model for our study and put the plant into a container which had two tubes at the base, giving it a choice of two directions for the growth of its roots.

“We then exposed the plant to a series of sounds, including white noise, running water and then a recording of running water under each tube, and observed its behaviour.

The scientists found that the plants could tell where the source of the water was and their root systems grew towards that source based on sensing the sound of running water alone.

“It also was surprising and extraordinary to see that the plant could actually tell when the sound of running water was a recording and when it was real and that the plant did not like the recorded sound.”

Dr Gagliano said when moisture was readily available in the soil, the plant did not respond to the sound of running water.

“So from this we begin to see the complexity of plant interactions with sound in using it to make behavioural decisions;” Dr Gagliano said.

The research has important implications for understanding the behaviour of plants and how it affects their survival.

“It indicates that the invasion of sewer pipes by tree roots may be based on the plants ‘hearing’ water and shows that their perception of their surroundings is much greater and far more complex than we previously thought.”

“In the animal world there is a strong call to understand how acoustic pollution adversely affects populations, but now we know plants also need to be part of these studies.”
Understanding this gold biogeochemical cycle could help mineral exploration by finding undiscovered gold deposits or developing innovative processing techniques...

Special ‘nugget-producing’ bacteria may hold the key to more efficient processing of gold ore, mine tailings and recycled electronics, as well as aid in exploration for new deposits, University of Adelaide research has shown.

For more than 10 years, University of Adelaide researchers have been investigating the role of microorganisms in gold transformation.

In the Earth’s surface, gold can be dissolved, dispersed and re-concentrated into nuggets. This epic ‘journey’ is called the biogeochemical cycle of gold. Now they have shown for the first time, just how long this biogeochemical cycle takes and they hope to make it even faster in the future.

“Primary gold is produced under high pressures and temperatures deep below the Earth’s surface and is mined, nowadays, from very large primary deposits, such as at the Superpit in Kalgoorlie,” says Dr Frank Reith, Australian Research Council Future Fellow in the University of Adelaide’s School of Biological Sciences, and Visiting Fellow at CSIRO Land and Water at Waite.

“In the natural environment, primary gold makes its way into soils, sediments and waterways through biogeochemical weathering and eventually ends up in the ocean. On the way bacteria can dissolve and re-concentrate gold – this process removes most of the silver and forms gold nuggets.

“We’ve known that this process takes place, but for the first time we’ve been able to show that this transformation takes place in just years to decades – that’s a blink of an eye in terms of geological time. “These results have surprised us, and lead the way for many interesting applications such as optimising the processes for gold extraction from ore and re-processing old tailings or recycled electronics, which isn’t currently economically viable.”

Working with John and Johno Parsons (Prophet Gold Mine, Queensland), Professor Gordon Southam (University of Queensland) and Dr Geert Cornelis (formerly of the CSIRO), Dr Reith and postdoctoral researcher Dr Jeremiah Shuster analysed numerous gold grains collected from West Coast Creek using high-resolution electron-microscopy. Published in the journal Chemical Geology, they showed that five ‘episodes’ of gold biogeochemical cycling had occurred on each gold grain. Each episode was estimated to take between 3.5 and 11.7 years – a total of under 18 to almost 60 years to form the secondary gold.

“Understanding this gold biogeochemical cycle could help mineral exploration by finding undiscovered gold deposits or developing innovative processing techniques,” says Dr Shuster, University of Adelaide. “If we can make this process faster, then the potential for re-processing tailings and improving ore-processing would be game-changing. Initial attempts to speed up these reactions are looking promising.”

The researchers say that this new understanding of the gold biogeochemical process and transformation may also help verify the authenticity of archaeological gold artefacts and distinguish them from fraudulent copies.
Gut bacteria appears to induce some metabolic change that acts directly on the brain and the body, which mimics a state of protein satiety...

The research, published in PLOS Biology, and led by Portugal’s Champalimaud Centre for the Unknown, also identified two species of bacteria that have an impact on animal dietary decisions.

“We’ve known for some time a combination of nutrients and the microbiome — the community of bacteria that resides in the gut — impact health,” Monash School of Biological Sciences’ Dr Mathew Piper said.

“But our research takes this concept further, suggesting that microbes might also be able to control behaviour.

The research team conducted experiments on the fruit fly Drosophila melanogaster in order to dissect the complex interaction of diet and microbes and its effect on food preference.

The scientists initially showed that flies deprived of amino acids showed decreased fertility and increased preference for protein-rich food. They found that the removal of any single essential amino acid was sufficient to increase the flies’ appetite for protein-rich food.

“We tested the impact on food choices of five different species of bacteria that are naturally present in the guts of fruit flies in the wild,” Dr Piper said.

“The results surprised us: two specific bacterial species could abolish the increased appetite for protein in flies that were fed food lacking essential amino acids.

With the right microbiome, fruit flies are able to face these unfavourable nutritional situations.

“Gut bacteria appears to induce some metabolic change that acts directly on the brain and the body, which mimics a state of protein satiety,” Dr Piper said.
A globally renowned researcher into ovarian cancer keen to keep succeeding

Professor Ian Jacobs is Vice Chancellor of UNSW Sydney and Deputy Chair of the Go8. UNSW is one of Australia’s leading research intensive universities and ranked in the world’s top 100 universities.

As UNSW Vice Chancellor, Professor Jacobs is currently driving a cultural and operational change-process so ambitious and profound in content and timeframe, that it is considered one of the most wide-reaching ‘restructures’ ever undertaken by such an institution in the western world.

www.2025.unsw.edu.au

Due for delivery by 2025, the plan has at its heart equity of opportunity, a personalisation of the student experience, an expansion of the university’s already world-class research capability...

When the Go8 interviewed Professor Jacobs in 2015 he had recently arrived from the UK. He said then that he had a strong feel for what he wanted to accomplish. It has been mentioned since, that it was his quiet sense of purpose, and his calm, considered yet determined communication about how he envisaged a future UNSW, that delivered him the much sought-after position as Vice Chancellor.

That UNSW 2025 Strategy implementation process has begun in earnest. At its core is a commitment to be the first university globally to declare itself as both ‘research and teaching intensive’ as one of a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale.

It involves a strategic investment by UNSW of $3 billion over the next eight years, in achieving academic excellence but importantly also, equality and diversity, thought leadership, knowledge transfer and global development.

Staff numbers will increase eight per cent through this major change programme, which will provide exciting and career-affirming opportunities for many, but it is also visibly life-changing and uncomfortable for a small proportion of academics and staff who are to lose their positions or move to a new role.

Professor Jacobs stresses the wide and meaningful consultation that occurred in 2015, with his academics, staff and importantly students, to help develop the strategy, and he was buoyed along the way to find so many academics had the same ethos as he did about the role of a university as a servant of society.

“They had wanted to achieve excellence whilst working with explicit idealistic and altruistic objectives, and this strategy has provided the opportunity for them to now do it,” he says.

Due for delivery by 2025, the plan has at its heart equity of opportunity, a personalisation of the student experience, an expansion of the university’s already world-class research capability, innovation in knowledge transfer for social and economic benefit and academic excellence that ensures higher quality teaching, and teaching delivery that meets the demands of today’s student cohort.

Professor Jacobs says he is well aware that the eyes of not only the Australian higher education sector, but universities around the world, are on him. His has confidence in the plan but is clear and excited about the challenge of delivering change on this scale. It is driven by the same value system that drives his research – giving something back while enabling the most to benefit.

“Universities are there to be servants of society,” he says by way of simple explanation. He does add that too many universities in recent history have seen their role through the prism of building their own reputations. “I see the history and the future of UNSW as always rooted in the power of higher education to deliver change for the good of society. That requires a rebalancing, with a focus on education, social responsibility and global impact to equal the priority that most universities have given to research for many years”.

Since launching the strategy formally in October 2016, progress has been rapid, with the university kick-starting a range of transformational projects, not least the recruitment of over 900 academics at all grades and across all UNSW faculties.

UNSW also secured commitment from the Chinese and Australian Governments to transplant the ‘Torch model’ of innovation to Sydney, to build a cutting edge UNSW Innovation Precinct (the first outside of China) underpinned by $100 million in new research funding.

UNSW has joined forces with Arizona State University in Phoenix and Kings College London to form the PLuS Alliance which seeks to break new ground through innovative research and education linkages across three globally-focused universities, contributing to a sustainable future by collaborating in the areas of sustainability, global health, social justice, technology and innovation.

The New South Wales medical landscape has changed radically in the last 12 months via the creation of the SPHERE partnership (the Sydney Partnership for
Health, Education, Research
and Enterprise) with the aim
of speeding up the adoption of
potentially lifesaving research
in medicine and science by
bringing some of Australia’s
leading minds in health,
education and research together
to share their ideas, knowledge,
expensive equipment and staff
to deliver solutions to major
health challenges. While similar
partnerships in Australia have
tended to focus on research and
science, SPHERE is focused on
translating research and science
into real outcomes for patients
and their communities.

In the learning and teaching
arena, UNSW will move to a
trimester-based system in
2019 with a new calendar and
a major review of curricula and
program portfolios to support
the change. Importantly a new
Education Academy has been
established to create a cadre of
leading educationalists at UNSW
and ‘education focused’ roles
introduced with clear career
pathways to full professorship.
Grand Challenges have been
launched to drive thought
leadership on the topics of
Climate Change, Refugees
and Migration and Inequality,
a new Equity and Diversity
Board is driving change and an
Institute of Global Development
has been created.

All this and many other
initiatives demonstrate that the
2025 Strategy is more than
words on a page; a blueprint
that will see UNSW strengthen
and emerge as Australia’s truly
Global University and firmly
ranked in the top 50 in the
world, serving it’s community
locally, nationally and globally.

Professor Jacobs is at pains
to say that there was never
an epiphany in his life, more
a gradual awareness of what
needed to be done, to use
the opportunities he has had,
to make the most difference,
first through medicine, then
by moving to research, then
through roles in leadership in
health and higher education.

When you hear his ‘back story’
you can begin to draw together
the threads, the experiences,
and the ingrained value system
that now drives the person as
both a Vice Chancellor and a
revered researcher; no epiphany,
but a devout social conscience
that avoids being pious. Instead
it uses research, education,
and the other benefits and
successes a great university
can deliver, as the methodology
to ‘make a difference’ and as
Professor Jacobs makes calmly
and clearly, that methodology should
brook no debate.

Professor Jacobs’ family were
tailors and shop keepers in
London “My grandparents
were refugees to the UK,
escaping with their parents
from persecution in Russia
and Poland; “My parents had
no education beyond school
but education was incredibly
important to them,” he says.

“When their support and
encouragement I had the
opportunity of an education
at a top quality school by way
of the UK’s direct grant system,
where you sat an exam to get in,
and then paid according to your
income – sadly that system no
longer exists.”

Jacobs excelled, and then,
the first in his family to attend
university, he studied medicine
at Cambridge and University
College London. He never
forgot what equity of access
and opportunity enabled him
to achieve. “It also gradually
dawned on me that I was seeing
patients struggling with every
aspect of life and that much of
the ill health they experienced
was attributable to socio-
economic challenges. It made
me increasingly passionate
about using the opportunities
available to me to have a
positive impact,” he says.

He quickly saw the potential
of research to help far more people
through research than he could
by trying to assist one patient
at a time as a doctor. “There
was a constant flow, a river of
patients, of illness. Stemming
or reducing that flow meant
intervention and prevention.
I could try to help more people
by seeking answers, solutions”. And so began a research career
that has continued, and a
process that, unlike the UNSW
change process, too rarely
bubbles to the surface in
the Australian media.

Professor Jacobs’ research
into ovarian cancer “my lifelong
passion is tackling ovarian
cancer” could be life-changing
for women around the world. He
is global lead of a team that has
developed the world’s first “early
warning” blood test for the
pervasive cancer that is known
as the “silent killer”.

It is the world’s fifth most
common cancer of women
(fourth in the developed world).
Two of every three women
diagnosed with it will die from
A globally renowned researcher into ovarian cancer keen to keep succeeding continued

The screening was estimated to pick up nine out of every 10 cancers.

The disease. “That is appalling,” says Professor Jacobs. Only 44 per cent of those diagnosed survive five years. With ovaries so small and set so deep in the pelvis, the cancer is hard to detect and has few, or even any, specific symptoms until such a late stage that it is rarely diagnosed early enough to deliver a positive prognosis for the future.

In 1985 as a junior doctor Professor Jacobs began researching if a connection between rising levels of a blood protein CA 125 and the presence of ovarian cancer could be used for early detection of the disease. Funding and building a research team to prove up this link to the stage of a blood test interpreted by an algorithm (now known as the ROCA test) followed. “I see the different parts of my career collectively as efforts at social entrepreneurship,” he says. “And I rely primarily on my ability to bring teams of talented people together to add value, whether in health care, business, philanthropy, research or university leadership,” he says.

In February, another incremental advance was announced in the more than 30-year research effort of Professor Jacobs’ team in ovarian cancer screening. They reported that in a study of more than 4000 women at high risk of developing ovarian cancer, who had been screened every four months, they could detect most women with the cancer and that screening appeared to reduce the likelihood of diagnosis with advanced cancer. Over the three years of ROCA test screening, and in a year since their last ROCA test, nineteen women were diagnosed before they had any symptoms. The screening was estimated to pick up nine out of every 10 cancers.

A further 18 women were diagnosed in the five-year period that followed after the end of screening. 17 of those had advanced cancer compared with seven of the 19 diagnosed during the screening phase. [www.medicalnewstoday.com/releases/316116.php]

Professor Jacobs’ hope and aim is that, by 2025, an effective ovarian cancer screening test will be available for population screening alongside mammograms for breast cancer screening and tests for cervical cancer screening. This is the same “goal” year he intends to have delivered the UNSW strategy. Along the way he won’t be taking a back step from his work in Uganda with the “Uganda Women’s Health Initiative”.

There he initiated and now continues to work with and support the screening of some 30,000 women for cervical cancer. “Cervical cancer is entirely preventable by vaccination and screening. These women have had no access to the screening that could save their lives, and which we expect to be available in the developed world. Even worse if they develop the cancer they do not have access to treatment or care. There is much entirely preventable suffering.”

Professor Jacobs’ frustration is clear about the inequities of cervical cancer screening. He doesn’t intend to have any such frustration about either UNSW or the availability or ovarian cancer screening come 2025.