State of the University Address 2013
by NUS President, Professor Tan Chorh Chuan
Friday, 11 October, 11.10am, University Cultural Centre

Mount Kailash and the Paths Beyond

NUS Pro-chancellors,
Chairman and members of the NUS Board of Trustees,
Distinguished guests,
Colleagues, students, alumni and friends

In 1985, while travelling in Nepal, I spent a few days in Kathmandu.

Kathmandu was truly fascinating and I tried to capture in drawings, the way the city bustled and seethed against the backdrop of ancient monuments and statues. For example, here is a sketch of residents fetching water at the stone water bath at Patan.

In May this year, I was back in Nepal, this time with my wife Evelyn. Much had changed, but when I came to the water bath at Patan, I had a powerful sense of déjà vu. It felt really strange to realize that I had stood at exactly the same spot twenty eight years ago, watching the same scene of people collecting jars of water.
The sense of déjà vu persisted when we embarked on a six day trek in far West Nepal, starting from the small village of Simikot. There were just so many things which were familiar:

- the convenient stone platforms to rest your back;
- debating whether to get out of the sleeping bag and go out into the freezing cold, when nature calls at an inconvenient hour at night;
- and rediscovering that trekking can be really tough!
This morning, I must confess, is yet another déjà vu moment. It seemed a short time ago when I was here in this very auditorium delivering my first State of the University Address as President-designate of NUS. It caused me to reflect on what has happened at NUS since 2008, and to think about the road that lies ahead.

Five years ago, we had defined together the goals, strategies and major thrusts for NUS, encapsulated in our vision: “to be a leading global university, centred in Asia, influencing the future”.

How much have we achieved in moving towards this vision? How has NUS performed as a Singaporean university which is also global and Asian?

I think it is safe to say that we have done well.

Many would point to our international rankings, which have continued to rise. In its 2013 report, the Times Higher Education ranked NUS 22nd in the world by reputation, 26th in the world overall and second in Asia after The University of Tokyo. This year’s QS World University Rankings placed NUS at number 24 in the world and number one in Asia.

Given that the comparisons are with universities from far bigger countries with much larger populations, this is a remarkable achievement. It reflects our unrelenting pursuit of excellence and the talent and extraordinary commitment of our faculty, staff, students and alumni. I salute all of you – “thank you” and “well done”!

Looking beyond rankings, however, there are at least six reasons why we can conclude that NUS is making very good progress.

First, our talent pool has grown substantially, in size and impact.

We have not just recruited and retained top talent from overseas, but also nurtured our own “home-grown” talent. We have not just gathered talent but have created the conditions for them to thrive and excel.
One indicator is the number of the world’s highly cited researchers in NUS, which has risen from two to 12. In many fields from science and medicine to engineering and computing, from business and law to the humanities and social sciences, the number of our faculty with outstanding global reputations is much larger today.

The NUS Teaching Academy which only admits the most exceptional teachers has grown from 18 to 29 Fellows in the last three years. Our faculty have also won prestigious teaching awards, such as Business School Dean, Prof Bernard Yeung who received the 2013 Irwin Outstanding Educator Award from the US Academy of Management.

Second, our student quality is high and our students are excelling in so many different areas.

Take, for example, Fan Lupeng, a fresh Engineering graduate who had his final year project – a robotic carp - featured in a major International Conference on Intelligent Robots and Systems. His robotic carp is more manoeuvrable, uses less energy and is capable of autonomous 3-D motion. In other words, it functions and swims like a real fish, except you can’t actually eat it.

The engineering student team of Ngyuen Anh Tuan, Wang Siqi and Xu Yang, won first prize at the Intel Cup Electronic Design Contest for Embedded System Design held in Shanghai last year. They built a system which provides precise navigation in buildings where GPS signals are blocked.
Another recent computer science graduate, Travis Ho developed Autumn Dynasty, a Chinese war strategy game where ancient archers, catapults and Chinese landscapes come to life on the iPad. It reached Number 1 position in Apple’s App Store in 28 countries, a first for a Singapore product. Autumn Dynasty’s reviews even topped Angry Birds and Travis received the Singapore Infocomm Technology Federation’s Gold Award in 2012.

In the arts, Azariah Tan is a hearing impaired pianist who recently graduated from our Yong Siew Toh Conservatory of Music. In the American Prize, a contest for emerging musicians, he won first prize for both solo and concerto performances.
Third, NUS research has climbed steeply in terms of its quality and impact.

The quality of our research has increased dramatically over a broad range of fields. Our Research Centres of Excellence, under the direction of outstanding academic leaders – Professors Artur Ekert, Michael Sheetz and Daniel Tenen, are at the very frontiers of their fields.

Several NUS research centres and programmes are international leaders in areas ranging from graphene and new materials to finance and databases, from water research to lipidomics and medicine.

They comprise a thriving community of both home-grown stars and top talent from overseas who are making their mark here at NUS – the list is long and I am able to mention just a few colleagues such as Professors Antonio Castro Neto, Loh Kian Ping, Barbaros Ozyilmaz, Andrew Wee, Ho Teck Hua, Deng Yongheng, Duan Jin-Chuan, Ooi Beng Chin, Neal Chung, Markus Wenk, David Virshup, Prasenjit Duara, Yeoh Khay Guan, Paul Matsudaira, Yu Hao, Qiu Cheng Wei, Phillip Moore and Barry Halliwell.

Fourth, the NUS University Town has been a roaring success.

UTown has truly transformed our campus by creating a vibrant new hub for the entire NUS community. In addition, the pioneering UTown Residential Colleges are doing very well.

Tembusu College seminars (left) and Supernova 2013 (right)
Fifth, our enterprise ecosystem is taking shape nicely.

Over 1,300 students have completed the unique NUS Overseas College (NOC) programme, doing internships in start-ups in major entrepreneurial hubs such as Silicon Valley. The returning students and alumni have themselves started more than 150 companies. Next year, we will add even more buzz by launching a new NOC in New York which will focus on creative industries.

In 2011, we converted a block at our Prince George’s Park residences for returning NOC students to stay and interact. The N-House has evolved into a vibrant entrepreneurial community closely linked with the start-up incubators nearby.

Sixth, the Yale-NUS College, our ground-breaking partnership with Yale to establish a new model of liberal arts education, has gotten off to a terrific start.
The first class of students is truly “first class”, the inaugural faculty are superb and the new curriculum is as exciting as we had envisioned that it would be.

In short, several lines of evidence converge to indicate that our university is doing very well. Today, NUS is in a very good position, highly regarded and well poised for the future. For this, beyond the achievements of our NUS community, we owe much to the commitment and wise counsel of Chairman Mr Wong Ngit Liong and members of the NUS Board.

I would like to particularly acknowledge the pivotal roles played by Provost Tan Eng Chye, Deputy President for Research and Technology Professor Barry Halliwell, Deputy President for Administration, Joe Mullinix, and CEO of NUS Enterprise, Dr Lily Chan. In keeping with our mountaineering theme, we are deeply indebted to them as they are truly the four Master Trek Leaders of NUS. With superb trek leaders and a great team, we have indeed made strong progress.

But we should realize that the journey ahead will be even more demanding.

On the sixth day of our Nepal trek, we found ourselves plodding up the steep path to the 4,400 m Nara La pass that would take us into Tibet.
We saw in the distance, a snowy section that looked like the pass.

Encouraged, we worked our way towards it, but soon realised there was a higher slope that was previously hidden.

After much effort, we got to the top – or so we thought, because we discovered there was an even higher and steeper incline beyond.

When walking in the mountains, “false summits” are common. A false summit is a peak that appears to be the top of the mountain but upon reaching it, you find that the summit lies higher up.

False summits can be very problematic. For one thing, they can lead to premature celebration. But once you stop to rest thinking you have reached the top, it is really hard to start ascending again. Your rhythm is lost and it takes a long time to regain your pace and motivation.
Team NUS has done well in scaling some pretty demanding slopes. The temptation would be for us to stay as we are, safely on familiar paths that have served us well.

This would be a mistake. If we become too comfortable with the status quo, our drive for excellence and differentiation will be lost and our decline will follow. It is very important for each and every one of us to continually strive to do things even better and to reach for much higher levels of attainment.

As an institution, we must look intently at the way ahead as it unwinds into distant mists, and discern the important pathways up the new summits that we must scale.

In education, our journey in the past 15 years, has taken us over three progressively higher passes.

The first was the introduction of much greater educational breadth and flexibility, including special initiatives like the University Scholars Programme (USP).

The second centred around our distinctive Global Education programmes.

For the third, we pioneered strategic partnerships to create unique cutting-edge educational innovations, such as the Duke-NUS Graduate Medical School and most recently, the Yale-NUS College.
Perhaps the best way to appreciate the impact of all these is to see what is possible in NUS today, for students who take full advantage of the opportunities.

Marvin Kang is a PSC scholar who graduated from our Business School and USP in 2012. He studied for a semester at HEC in Paris, and spent two weeks on the SINO-Singapore Student Exchange. He also interned at the UN, took part in the Harvard Project in Asia and the Princeton Interactive Crisis Simulation Conference, as well as co-founded an immersion programme with an NGO in the Philippines. He graduated with first class honours, and is currently pursuing a Master in Public Policy at the Harvard Kennedy School of Government.

Marvin has done very well. What is particularly heartening is the fact that stories similar to his are not infrequent at NUS. We can take great pride in providing our students with such a rich set of academic and global pathways and options, from which they can choose.

In research, service and our enterprise ecosystem too, similar transformations have taken place over the past 15 years. Most notably, NUS’ research strengths today are truly broad-based, multi-disciplinary collaborations are the norm, and our research peaks are world-class. We are hence better able to contribute insights, ideas and solutions to major issues in Singapore and the world.
As we look forward, however, the key question for us is this:

- Where should we go from here in education, research and service?
- What are the new and higher passes that we must scale to create a further upward inflection in the trajectory of our growth that will enable us to respond to and anticipate the needs and challenges of the future?

These thoughts were very much on my mind when we did the next segment of our trek in May, which was a four-day circumambulation, or kora, of Mount Kailash in Tibet. Mount Kailash is regarded as the “heart of the world” by both Buddhists and Hindus, one of the most sacred and revered of sites.

Its striking ice-covered dome soars 6,700m into the bright blue sky. Before it, lie two lakes shaped like the sun and the moon which are regarded by the Tibetans to be linked to forces of light and dark. From Mount Kailash, four of the great rivers of Asia flow out in the four cardinal directions bringing life to a vast territory.

It is a place of immense but harsh beauty, still but with a special intensity that has attracted pilgrims for centuries.

The high point, literally, of the kora is the crossing of the 5,600 meter Dolma La pass. At a site on the way up, pilgrims leave a garment or possession behind because crossing the Dolma La pass represents the leaving behind of old ways, to allow for rejuvenation and new beginnings.
At the Dolma la pass itself, tangled strings of multi-coloured flags fluttered in the wind, bearing the hopes and prayers of the pilgrims skywards.

It is a special and most impressive place, but sadly, I did not have any sudden flashes of inspiration when I crossed the kora.

However, after the sharp descent on the other side, there were many hours of mechanical trudging on the long and dusty path to complete the kora. There was plenty of time to think, and in the days that followed, the seeds of some key ideas for NUS, started to come to mind.

Building on these, I believe that NUS must intensify our efforts around three major goals, in the years ahead.

First, helping our students develop the strong personal qualities and character crucial for their effectiveness and success in the future.

NUS’ education is well known for its rigour and focus on critical thinking. Our graduates are very well prepared academically, but we do know that their ability to contribute and lead in the future will not just depend on this, but also on their character and personal qualities. This is particularly so in today’s complex, volatile and uncertain world.

We must therefore give even higher priority at NUS, to helping our students develop as well-rounded individuals, with the crucial personal qualities of: Inquisitiveness; Initiative; Inner Resilience; Imagination; Inclusiveness and Integrity. As these attributes, quite coincidentally, all start with “I”, I will refer to them collectively as \textit{i-NUS} qualities.
Our vibrant student life, arts, sports and community engagement activities on campus already provide many opportunities for developing these, but going forward, we will place a strong systematic institutional spotlight on nurturing \textit{i-NUS} qualities in our students. This may sound simple to do, but it is not; in fact, it would be a major challenge which would need considerable time, planning and effort.

As the centre-piece of this thrust, we will significantly expand residential college learning, particularly for students in their first year. Staying on campus has been a feature of our university since its early days and many of us have fond memories of life in our Halls of Residence. For myself, having been a resident, then later, a Fellow at King Edward VII Hall, I am very proud of our Halls. They have rich traditions and their active co-curricular programmes have allowed many students to discover themselves and develop \textit{i-NUS} qualities.

Residential Colleges such as those in our UTown, however, are different from our Halls in at least one key respect, that is, they purposefully create settings that maximise student peer-to-peer learning within the classroom through residential college learning, and also outside of it.

Each College is designed to have a highly diverse student body, in terms of disciplines and backgrounds. When these students take their courses together in small interactive
groups within the College, they are automatically exposed to many different approaches, perspectives and ideas.

Like our Halls, the Colleges actively encourage students to self-initiate projects or to pursue interests that stretch them personally. In the process, they gain initiative, exercise their imagination, and discover their own strengths and weaknesses. They learn how to work with people from varied backgrounds and cultures, and to deal with obstacles, set-backs and failure.

Our experience with the UTown Residential Colleges shows that studying and living thus with students from diverse backgrounds, can stimulate a richer and much more multi-dimensional intellectual and personal development. In short, the Residential College provides a powerful and scalable platform for students to develop their intellectual as well as i-NUS qualities.

In line with this, we will start by transforming the Ridge View Residences into the Ridge View Residential College (or RVRC) offering a set of programmes similar to the UTown Residential Colleges.

We will pilot this next year and expect that in two years’ time, RVRC will house 700 students including some 600 Year One students from different Schools. Students will do three, small-group multidisciplinary modules in the College, over the course of one year. The College will have a frequent external speaker series and a myriad of co-curricular activities. In addition, we will explore the feasibility of introducing Residential College learning programmes in one or two blocks at the Prince George’s Park Residence.

Coming to our Halls of Residence, in the past six months, we have been consulting with the leadership and key groups in all six Halls on their vision for the future. Our Halls are doing very well and have exciting plans to build on their unique histories and traditions. I am glad they also have the desire to try new approaches to benefit the resident student community. As part of this, we will work closely together to innovate and support new programmes that will further enhance peer-to-peer and experiential learning among the Halls’ residents.
When all these initiatives are fully implemented, we estimate that more than two-thirds of Year One undergraduates will be able to derive strong intellectual and personal development benefits from Residential College programmes in NUS, alongside more senior students.

This will put us in a very good position to consider the eventual extension of these programmes to all Year One undergraduates in the longer-term.

In parallel, for students who are unable to stay on campus or who elect not to do so, we will create a new fund under the Vice Provost of Student Life, Prof Tan Tai Yong to promote and support worthy student-initiated projects that are closely aligned to the goal of nurturing i-NUS qualities. We will seek additional philanthropic support to build up this fund, but to launch it, the university will inject $1 million from our endowment, with a focus on supporting student-led programmes that involve significant community engagement.
To supplement these thrusts, we will also develop additional courses on effective communications. This is because, being able to express oneself clearly is crucial for knowledge sharing, peer-to-peer learning and for the working world.

This year, our critical thinking and writing programmes covered about 3,000 students and we are on track to have nearly 5,000 students take the module each year, by 2015. The new courses that will be created will complement this with a mix of interactive online and face-to-face programmes that will reach out to the whole NUS student body.

If we can implement these well, we will hopefully avoid some of the problems associated with unclear communication that are common here and around the world. Here is an example from the UK, a letter to a customer which read:

“Thank you for your Tax Returns ended 5th April 2006 & 2007 which we received on 20th December. I will treat your Tax Return for all purposes as though you sent it in response to a notice from us which required you to deliver it to us by the day we received it.”

This real letter won the UK Golden Bull award for confusing prose.

As Confucius said:

“If language is not correct, then what is said is not what is meant; if what is said is not what is meant, then what ought to be done remains undone.”

I think you get his point although I fear that Confucius himself might be close to winning an award for this too.

The second Kailash-inspired goal is to work towards greater personalisation of learning for our students, to recognise the varied educational needs and goals of individuals in our large student body.

To illustrate this point, here is a photo of me on the Nepal trek in May with my ultra-light titanium trekking poles, ergonomically designed backpack and gortex mountain boots.
By comparison, this is one of our Nepali porters, Dhanmal. He wore sneakers, had 25 kg of kit strung around his shoulders with ropes, and for good measure, in his left hand, he carried two dozen eggs.

No prizes will be given for guessing who walked twice as fast and reached the campsite first every day without breaking any eggs!

The point is that there will be some who like me, look good but walk rather slowly and have modest goals, and will benefit from encouragement to work harder and aim higher. There will also be others who appear perhaps less stylish, and yet have the raw talent and aspirations that if properly nurtured, can realize high potential.

It is therefore important that NUS has a range of approaches which cater to the varied learning needs and goals of our students, particularly for courses with large enrolments. For these, we will scale up the use of technology-enhanced programmes to provide greater personalisation of learning.

In 2014, as previously announced by Provost Tan Eng Chye, we will launch an additional set of six Foundation and two bridging modules as new Online Courses which are integrated with re-designed face-to-face learning in a flipped classroom format. I will call these “internal Blended Learning Online Courses” or i-BLOCs.
The interactive online component will personalize learning for the large number of NUS students involved, allowing them to study at their own pace. Online assessments ensure that all students have mastered the foundational materials, allowing them to engage fully in the face-to-face tutorials which focus on inquiry, argumentation, and problem solving. The online assessments will also identify students who are having difficulties, so that additional help can be offered early. We will progressively extend this approach to cover the courses with large class sizes which are suited to i-BLOCs.

But our goal is not to churn out large numbers of on-line modules which merely mirror lectures as they occur today. Instead, our focus will be on developing innovative and high quality i-BLOCs, assessing what works well, and incorporating the elements that improve student motivation and learning into new courses.

Technology can also substantially facilitate peer learning across disciplines. For example, I imagine that if we have students in philosophy, physics, and engineering working together in a group on say, the challenges of liveable high-density cities, their ability to appreciate the complexities of the issues from different perspectives can be greatly enhanced by technology platforms that can simulate and provide graphical visualisation of complex data such as traffic flows, energy utilisation, and the use of public amenities by the community. If all of these were available in an online course, significant numbers of students could be involved in the cross disciplinary, peer-learning experience.

There is also no reason why peer-to-peer learning should only be confined to students physically on the NUS campus. We could enable NUS students to also interact with students in partner universities overseas, by sharing some components of co-designed i-BLOCs.

To do all this more effectively, we will be setting up strategic partnerships with key universities which have a similar vision to us, for the use of technology-enhanced learning.

i-BLOCs can also allow greater personalisation in a different way. As explained by Provost earlier this year. The eight i-BLOCs we will be offering next year to NUS-admitted students who have completed National Service but not matriculated yet, could
help ease their transition into university or if they choose, to accelerate their university education.

The third goal linked to my reflections at Kailash is to sustain NUS’ excellence by strategically investing to build upon our research strengths.

The Bibliotheca Orientalis on Chinese Weapons, first published in 1932, has a fascinating description about the design and production of arrows in ancient China. In one schema, the arrow was divided into three parts and the Bibliotheca Orientalis advises:

“…were the upper part of the arrow light, it would sink on being shot; were the lower end of it light, the arrow would rise in its progress, if the centre of the shaft were light the motion would be unsteady …”

If the parts were well balanced, “although there may be a high wind, the progress of the arrow… would not be impeded”.

Using this as a metaphor, for NUS to fly fast, far and true to our research goals, we will maintain the balance of continuing to support broader-based talent development and curiosity-driven research, even as we take steps which I will describe to build further in a number of defined research areas.

Given the intense competition, we will garner additional resources to sustain the major research areas where NUS is already one of the leaders in the world, including programmes in our Research Centres of Excellence. In other words, where we are already strong we will make ourselves stronger.

There are also rich opportunities for us to pioneer new research areas and develop new strengths at the interfaces between some of our leading-edge programmes. This will also be highly relevant to Singapore’s longer-term competitiveness as a knowledge-based economy and society.

For example, NUS is a world-leader in research in materials science including graphene. Under the leadership of Professors Antonio Castro Neto, Loh Kian Ping and Venky Venkatesan, our work in next generation materials in relation to fields as wide-ranging as medicine, engineering, and renewable energy, is creating exciting
possibilities for novel and high-impact applications. One example is ongoing work on the use of graphene to coat new medical devices to improve their biocompatibility and to reduce the risk of infections. By bringing together our relevant strengths, we can stay at the forefront of this truly exciting field, and maximise the chances of breakthrough applications.

At the intersections of our strengths in finance and risk management, logistics and supply chain management, engineering systems, public policy, ageing, medicine and public health, we have very fertile ground for creative new collaborations that can lead to pioneering work in the broad area of risk resilience and mitigation. I believe this is one of the critical research themes of the future given the world’s recent experiences with the global financial crisis and natural disaster-linked system failures, as well as the greatly increased volatility that confronts us all. It therefore makes great sense for NUS to invest to become a leader in this research theme, which is also highly strategic for Singapore and plays to our country’s strengths.

Another critically important research frontier of the future is in the brain and neurosciences. Due to the foresight of our Engineering, Medicine and Business Schools, we have strong and gathering momentum in research in this subject and exciting opportunities at the interfaces of our key programmes. A good example is our neuro-engineering centre led by Prof Nitish Thakor which brings together cutting-edge engineering and medical research. This centre is developing interesting linkages to our growing clinical neuroscience programmes led by Professors Edward Koo and Christopher Chen, and our behavioural science research strengths under the leadership of Prof Ho Teck Hua.

To stimulate the development of such fresh thinking, original research approaches and collaborations within our university, NUS will create a new internal competitive research funding scheme under Deputy President for Research and Technology, Prof Barry Halliwell. The examples of research themes I have cited are not meant to be exhaustive, and proposals will be welcomed in any research area.

As part of this thrust, we also plan to create 50 new named posts, through philanthropic gifts, to recruit and support exciting young and mid-career faculty who are doing truly
creative work. We will launch this new scheme by advancing funding for up to 20 such posts under the Provost, to commence from the next Financial Year.

In 2015, when A*STAR returns two buildings on our campus, currently housing the Institute of Materials Research and Engineering (IMRE) and the Data Storage Institute (DSI), we will have valuable new space to house some of these programmes, bringing together relevant faculty from different schools.

We believe that by seeding new strengths in frontier or emerging areas, we will be able to garner the additional external research funding needed to grow major research peaks of the future, which will also be of great value to Singapore in the longer-term.

Finally, we will further intensify our strategic partnerships to amplify the impact of our work. NUS already has extensive collaborations with global research leaders, with local institutions especially A*STAR, and significant partnerships with industry.

For example, working with Agilent Technologies in life sciences and chemical analyses, has enabled the NUS Environmental Research Institute to offer state-of-the art, one-stop facilities for faculty from different schools to work on inter-disciplinary environmental science and engineering projects. In turn, together with Agilent engineers, NUS researchers have created many new applications for this equipment.
Going forward, we will actively expand our collaborations with industry in areas that are strategically important to Singapore and with significant academic and practical value. Good examples of such areas include offshore marine engineering, computer science, and the biomedical sciences.

We will also build further on our existing, extensive research partnerships with public agencies and Ministries to address major issues of interest to Singapore such as ageing and energy resilience.

Finally, we will leverage on the NUS Research Institute in Suzhou to intensify our research partnerships with Chinese institutions and industry, to further increase the impact of our research, and its potential application in China.

![NUS Research Institute building in Suzhou](image)

**Creating New Hubs**

To successfully make the large positive changes that I have outlined in education, research and service, we must further raise the vibrancy and dynamism of our NUS community. To achieve this, a key element is the presence of enabling physical spaces and hubs on our campus.

In this regard, my mind is drawn back to Kathmandu, the heart of which is the Durbar Square. The Durbar Square reflects the diversity and the wide range of interactions which shaped the kingdom of Nepal in the 12th to 18th centuries. The ancient trade
route between India and Tibet passed through Kathmandu and resulted in a melding of their artistic, cultural and architectural influences with local traditions.

Kathmandu thrived as a rich melting pot and centre of innovation, which contributed to the historical success of Nepal, and the unmatched architectural and cultural legacy that persists to the present time.

In the case of NUS, UTown clearly shows how well-designed spaces and buildings that bring different groups of people together and strongly facilitate interactions, can really increase the vibrancy of the campus, spark new ideas and collaborations, and enhance experiential learning.

Over the next few years, we will be creating similar hubs at different sites on the main Kent Ridge Campus.

The Forum at the Central Library is one of the best used spaces on campus. Work is about to begin to demolish the old ADM block which adjoins the Forum and is not cost-effective to regularise. In its place will be a new seven storey building housing new teaching spaces, the Asian studies departments of the Faculty of Arts and Social Sciences, and the Asia Research Institute.

The ground and lower floors of the new building will have ample air-conditioned and covered open-air spaces for students, and will seamlessly connect the Forum and the
surrounding walkways and green areas. The Forum will also be revitalised to make it more pleasant and conducive for students’ activities.

I had earlier outlined our plans to convert the Ridge View Residence into a Residential College. We have embarked on the upgrading of the sports facilities opposite RVRC. By 2016, we will have a new University Sports Centre – a spacious 9,000m² facility with a covered Olympic-sized swimming pool, sports halls, squash courts, fitness lab and eateries. Together with RVRC and the nearby Yusof Ishak House, this will create another bustling hub for our students and community.

A little way down the road, the new Academic Green at the Faculty of Science, will also be done in two years’ time.
By 2016, when all these are completed, we will have bustling hubs on the main NUS campus centred around the Forum, the sports complex and the Academic Green@Science. They will enliven our campus, increase interaction, and provide wonderful settings for an even more vibrant and energising NUS community.

**Closing**

2016 may seem a long way away but the time will pass quickly. My trek in Nepal this year brought back vivid memories, which seemed very fresh even though the events had happened 28 years ago. They also led me to reflect on my own personal journey as a traveller.

The trek I did in Nepal in 1985 was my very first. As you can see from this old photo, I was wearing running shoes, my backpack was borrowed, and because I had no raincoat, I had to use a large plastic sheet for the heavy rain on trek. Being so unprepared made the going tough, but it forced me to be resourceful, tested my resilience, and helped shape me for the better.
Learning from this, I do believe that helping our students to develop strong inUS qualities will be critical to preparing them well for the future. The extension of Residential College programmes in NUS will provide a powerful platform for us to do this well and at scale, and will also contribute to the richer, more multi-dimensional intellectual development of our students. In an analogous way, there are important lessons for us on institutional culture and character.

On the final two days of my Nepal trek this year, the weather turned cold and the walking became harder. As we camped for the last time before the ascent of the Nara La pass, it started snowing heavily. Evelyn and I were well prepared with warm jackets, waterproofs and trekking poles but we looked with concern at our thinly clad porters.

I was struck though by their attitude, best summarised by our most experienced porter, Biru Sing, who said, “don’t worry, sir, there is no slope too tough for us to climb”.

Colleagues, friends and supporters of NUS, we have done much climbing together. We have covered a good distance and crossed some difficult terrain. Along the way, we have become stronger, better equipped and better prepared. Crucially, the teamNUS spirit has flourished and our work has helped contribute to the advancement of Singapore and of society.

Looking into the future, the road ahead will be more challenging. But with the collective will, talent and creativity of the entire NUS community, we are well placed to move steadily up. Energised by a deep sense of shared purpose, we can forge ahead successfully, to even higher planes of excellence.

Biru Sing had said, “There is no slope too tough for us to climb”.

This too must be our attitude as we strive forward together in our journey to make NUS a leading global university centred in Asia influencing the future.

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