Hey!

THE NTU MAGAZINE JAN-FEB 2019 NO.40

10 REASONS WHY YOU NEED TO BE ON NTU’S SMART CAMPUS

WIN! OVER 200 GREAT PRIZES, INCLUDING HAIR STUDIO VOUCHERS. FLIP TO PG 20 NOW!

KNOW-IT-HALL
AN INSIDER’S GUIDE TO NTU RESIDENCES

“IT’S NOT EASY BEING TALL!”
LADIES WITH AN ALTITUDE

LYON’S ON TELEGRAM
MAKE A SMART CHOICE FOR YOUR FUTURE.

The Wave, The Hive and The Arc are iconic buildings that have placed NTU among the World’s Top 15 Most Beautiful Campuses.

Start your experience with a 360-degree view of The Hive at NTUsg.

“Living on campus has broadened my horizons as I get to interact with friends from different schools and countries.”

- Students are guaranteed residential places in their first two years.

CALEB WU
ACCOUNTANCY, NTU-UNIVERSITY SCHOLARS PROGRAMME

SEREENJIT KAUR
HUMANITIES

“I’d love to have my exchange in the UK because it’s the birthplace of English literature.”

From US and UK to Canada and South Korea, 8 in 10 NTU students get an opportunity for overseas exposure.

At NTU, a university ranked among the best in the world, you will be immersed in a Smart Campus brimming with exciting new technologies. Benefit from innovative flipped classroom learning as you move from digital lessons to lively discussions in smart classrooms. With global exposure and internships at leading companies, lay a firm foundation for your future career, even for jobs that don’t yet exist.

Make a smart choice for your future. ntu.edu.sg/admissions

NTU. SMART CAMPUS, SMARTER THINKING
GET MORE FROM Hey!
When you see the EXTRA! icon, you can enjoy exclusive stories, videos or photos on HEY's digital platforms at www.hey.ntu.edu.sg
This one’s for all the tech-rrific artists out there. NTU has launched a global digital art prize which awards a top prize of $25,000 to a professional artist and $10,000 to a student winner. In keeping with the theme of the fourth industrial revolution, all genres of art are eligible, as long as more than half of your entry involves some form of digital technology. Winning works will premiere at a major event organised by the NTU Institute of Science & Technology for Humanity in October. Find out more at NTUdigitalartprize.ntu.edu.sg.
NO SUGAR-COATING IT
Read this before you pop that sugar-free soda. Researchers from NTU and Ben-Gurion University of the Negev have found such drinks could be toxic to your gut. The scientists looked at six artificial sweeteners approved by the US Food and Drug Administration and warned they could cause health issues. Sports supplements containing these sweeteners had the same toxic effects on human gut bacteria. Not just harmful to our bodies, artificial sweeteners were also identified as an emerging environmental pollutant.

SMART SOLUTIONS
Let’s hope these winning designs — a device that helps the visually impaired learn Braille and a smart bracelet to improve hospital care for dementia patients — get translated into reality soon. The School of Mechanical & Aerospace Engineering students behind them nabbed the gold and bronze awards at a global design challenge for students in South Korea.

LIFE-SAVING IDEAS
At an innovation challenge presented by the Singapore Civil Defence Force, ideas to help cut response time and increase awareness of the importance of CPR netted the top and third prizes for students from the Renaissance Engineering Programme and School of Electrical & Electronic Engineering. Well done!

CONGRATULATIONS...

VICTORY LAP
Eight silvers and 11 bronzes — that’s what NTU students clinched at the ASEAN University Games in December in sports such as rowing, tennis and volleyball, making a significant contribution to Singapore’s medal tally. Kudos to Shawn Tay, Nicole Low and Ang Wan Qi for their individual victories in archery, athletics and table tennis.

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COMMIT TO MEMORY
It pays to do good. School of Art, Design & Media alumna Cassandra Seah snagged a bronze at the United States’ International Design Excellence Awards for her multi-sensory game, MatchLink, which helps seniors with dementia. That puts her in the same league as the creators of the Oculus Rift and the Apple iPhone, past winners of the award.

THE REEL THING
The film critic is in the house. Communication undergrad Ryan Lim bagged the Singapore International Film Festival’s Youth Critic Award for his original writing on cinema and contributions to cinematic discussions in the region. Read his writing in the festival’s film journal, Youth Meets Film.

Write of passage
Not all books are created equal. Sitting on top of the local bestsellers list in 2018, with more than 20,000 copies sold, is Assoc Prof Teo You Yenn’s non-fictional work, This Is What Inequality Looks Like, which highlights the disparity in opportunities between the wealthy and low-income community in Singapore. For igniting a national discussion on inequality, Assoc Prof Teo, who heads NTU’s Sociology department, has also been nominated for The Straits Times’ Singaporean of the Year award.

AI-MING FOR THE FUTURE
The smart money’s on data science and artificial intelligence. Starting from the next academic year, NTU’s $4 million joint lab with tech giant AMD will nurture undergrads and expose them to real-world challenges so they’re prepared for jobs that do not exist today. The collaboration is the latest in a string of joint AI labs at NTU with companies like Alibaba and PayPal, and will provide students with invaluable exposure to the industry giants.

PHOTO: ETHOS BOOKS
PHOTO: SGIFF
MAKE A SMART CHOICE FOR YOUR FUTURE.

“IT IS SUCH A GREAT LEARNING ENVIRONMENT AND I HAVE NEVER HAD SO MUCH FUN IN A CLASSROOM.”
Innovative approaches such as the flipped classroom are designed for students in the digital age.

“At a sportsman, I love the excellent training facilities at NTU, such as The Wave.”
Students lead a vibrant campus life with guaranteed accommodation in the first two years.

At NTU, a university ranked among the best in the world, you will be immersed in a Smart Campus brimming with exciting new technologies. Benefit from innovative flipped classroom learning as you move from digital lessons to lively discussions in smart classrooms. With global exposure and internships at leading companies, lay a firm foundation for your future career, even for jobs that don’t yet exist. Make a smart choice for your future. ntu.edu.sg/admissions

NTU, SMART CAMPUS, SMARTER THINKING
Ranked the world’s top young university for five consecutive years, NTU continues to rise in recent global league tables in many areas shaping the fourth industrial revolution.
I’ll get to...

- land a dream job
- live in cool digs
- preview the future
- see the world
- study at a world-class uni

NTU is brimming with exciting choice for your future, say NTU
Son to be on the smart campus

new ways to live, learn, work and play, which makes it a smart
undergrads who spoke to Chrystal Chan and Peter Yeo

- intern with the biggies
- have fun learning
- take unique courses
- have good student perks
- be on a gorgeous campus

NTU is brimming with exciting new ways to live, learn, work and play, which makes it a smart choice for your future, say NTU undergrads who spoke to Chrystal Chan and Peter Yeo.

LIVING THE LIFE NTU undergraduates (from left) Odelia Cheong, Raymond Harion, Julie-Sophie Schenker, Jasmin Yante, Stephen, Guei Tian, Nick Adnan Kori, Nizar, Maximilian Huchterlein, Ang Wei Qi, Bryan Betzler and Casuarina d/o Abdul Karim.
YOU’RE HIRED!

Game designer, scientist, the next Jack Ma... whatever your aspirations, you can plan your way to your dream vocation at NTU. Nine in 10 NTU graduates land jobs within six months of graduation and it all starts in your first year with career preparation classes, from resume writing to personal branding, and helpful one-on-one career advice.

You can also do an internship or two... or three or four, as some of your seniors have done, at sought-after companies such as Google, Unilever, JP Morgan, Goldman Sachs and Singapore Airlines. And, like your seniors, you could end up with multiple job offers even before your final exams. Better yet, all undergraduates will be future-ready, since being conversant with digital technologies is something all NTU students become, whatever their discipline.

“Multiple internship opportunities are open to me as a student of international trading. I have interned with Wilmar International and Lobb Heng Group, fruitful stints that have given me a leg up over my competitors, helping me clinch a job with a leading energy trading company based in Europe.

NTU’s friendly career consultants helped me to review my resume and I learnt how to use key words to catch the attention of companies, as well as picked up useful interview pointers. I was even alerted to companies who are hiring.”

— BRYAN ONG, FINAL-YEAR AEROSPACE ENGINEERING & BUSINESS STUDENT

THE FUTURE IS HERE

At NTU, you can get on board technologies of the future such as driverless vehicles and new ways of learning. A dedicated circuit for testing autonomous vehicles is just down the road, and you can hop on eco-friendly electric shuttle buses or watch a hybrid BMW sports car zip by with a researcher at the wheel.

Interested in robotics? Meet EDGAR, who hosted a National Day Parade, and Nadine, possibly the first social robot in Singapore to be hired by a multinational company as a customer service officer. And who would have thought robots can put together flat-pack IKEA furniture in minutes? NTU’s dynamic duo did just that and made headlines around the world. Flipped classrooms and other innovative digital communication and education, NTU has also been placed number one across various rankings in Asia and the world, so you’ll certainly be making a smart decision to head here.

“NTU’s top ranking as a university and in various fields made an impression on me. Ultimately, I want to secure a good job for myself and NTU graduates are seen in a good light by employers. My mum, who is in the retail business and involved in the hiring process, told me that NTU graduates are known for their strong work ethic.”

— LINDSEY FISK, FIRST-YEAR BUSINESS STUDENT

BE AMONG THE TOP RANKED

You’ll have bragging rights as a student of NTU. For the past five years, NTU has been named the world’s top young university by Quacquarelli Symonds (QS), which comes up with annual global and regional university rankings (see pg 3). NTU is placed 12th in QS’s latest ranking of almost 1,000 universities worldwide.

In subjects like materials science, chemistry, electrical & electronic engineering,
study tools, such as 3D-printed anatomical specimens and lectures on iPads, give students a more immersive learning experience.

“As a student at NTU’s Lee Kong Chian School of Medicine, I not only study at my own pace, but also learn on the go with my iPad provided by the school. Learning in teams in a flipped classroom format encourages us to raise questions, clarify doubts, debate our answers and pick the brains of renowned doctors and professors in various fields. Classes are never mundane when you are always in intense discussion with your classmates, which also helps you to remember what you’ve learnt better.”

— GABRIELLE KOH, SECOND-YEAR MEDICINE STUDENT

“Hall life feels like an extended slumber party. I love that after a tiring day in school, I can just swing back ‘home’ and chill. My roomie and I like to keep our hall room door open so friends can drop by anytime. Everything I need is within reach – the biggest gym on campus, my favourite hall canteen and the bus stop, where I can either take the campus shuttle to class or board the public bus to go out of campus.”

— WENDY NG, SECOND-YEAR BIOLOGICAL SCIENCES STUDENT

GATEWAY TO THE WORLD

Going overseas as an undergrad isn’t an opportunity just for a lucky handful. Eight in 10 NTU undergraduates get a taste of overseas adventures through exchange, internships, field trips, competitions and more.

NTU has over 540 university and industry partners, which means the options are plentiful. Students in the Renaissance Engineering Programme head to top varsities such as Imperial College London and University of Berkeley, California, for an entire year. Over at the Asian School of the Environment, you can embark on field trips to destinations like Bali and Canada.

Students are also opting to go on exchange in “exotic” locales like South Africa and Russia. Those who dream of becoming entrepreneurs can dip their toes into the start-up culture through the Overseas Entrepreneurship Programme (see pg 24), whether in Silicon Valley, Shanghai or Berlin.

Schools, clubs and halls also organise overseas leadership and community involvement projects. Apart from the chance to help communities in need, you’ll return a better version of yourself.

“I spent a year at the University of California, Berkeley, where I met people from all over the world and learnt about their cultures. I also did my internship in the US with Boeing in Washington. It was eye-opening to see full-size planes being assembled and this has piqued my interest in a career in the aerospace industry. Exposure to the American work culture has changed me – I grew comfortable with vocalising my opinions as an intern in a big company. The best part is, work ended at 3.30pm daily, giving me plenty of time to explore the beautiful city in summer!”

— OO GUOLIN, FOURTH-YEAR RENAISSANCE ENGINEERING PROGRAMME STUDENT
DEVELOP A RANGE OF SKILL SETS

As an NTU undergrad, you’ll develop skill sets and knowledge beyond your specialisation and be prepared for jobs that don’t yet exist. The curriculum and pedagogies are designed to help you acquire soft skills such as communication skills, critical thinking ability and teamwork.

Anticipating the changes brought forth by the fourth industrial revolution, you’ll gain digital literacy and learn about developments that are changing the world, whether in business, technology or the environment. Techies love the innovation garages on campus. In

“IT’S GREAT THAT I GET TO EXPLORE DISCIPLINES OUTSIDE OF MY MAJOR. I’M STUDYING COMMUNICATION, BUT I ALSO TAKE MODULES LIKE YOGA, WATERCOLOUR AND PHILOSOPHY. THIS VARIETY IS DIFFICULT TO FIND ELSEWHERE. NTU’S MULTIDISCIPLINARY EMPHASIS IS FANTASTIC BECAUSE WE GET TO SAMPLE DIFFERENT FIELDS, OFTEN IN UNEXPECTED WAYS, AND EVEN ABROAD. ANYONE OF US CAN START A PROJECT WITH MANPOWER AND FINANCIAL ASSISTANCE. A GROUP OF US KICKSTARTED THE ANNUAL THEATRE PRODUCTION, USPRESENTS, BACK IN 2017. IT’S BEEN SUCH FUN!”

— ELYSE YAP, FINAL-YEAR COMMUNICATION STUDENT

GET THE BEST FOR LESS

Attractive scholarships, especially bond-free ones like the Nanyang Scholarship, sweeten the deal for any aspiring NTU student. The research-centric CN Yang Scholars Programme lets you work with top scientists, while the University Scholars Programme is a good fit for those with interdisciplinary interests.

The Renaissance Engineering Programme is the most sought after engineering programme among top A-level students, and puts you on the path towards management. There are also college and school-based scholarships, as well as scholarships funded by government agencies and private organisations that typically come with a bond and job upon graduation.

Depending on which scholarship you pick or qualify for, you can get perks beyond fully subsidised tuition fees, such as sponsored overseas learning and a guaranteed hall stay throughout your undergraduate studies. A number of scholarships also come with generous living, book and computer allowances.

“The CN Yang Scholars Programme has given me a head start as an aspiring researcher, and I look forward to visiting top research institutes overseas. The living allowance I receive covers my day-to-day expenses, and I’m saving the rest for future overseas community service projects or learning trips. I have also used the computer allowance for a new laptop for school. Most importantly, I’m not bonded to any future employer, which means I can explore all my options during my four years before choosing which industry to enter.”

— GRACE TAY, FIRST-YEAR ENVIRONMENTAL EARTH SYSTEMS SCIENCE STUDENT
It’s easy to forget you’re in school when you’re here. After all, NTU frequently features in lists of the world’s most beautiful varsities, thanks to “wow” buildings like The Hive and the iconic grass-roofed School of Art, Design & Media.

The forests nearby are a haven for flora and fauna, so don’t be surprised if you spot a beautiful hornbill flying overhead at dusk. Lush greenery and magnificent architecture aside, NTU has a firm commitment to sustainability, clinching the highest accolade in Singapore for sustainable building design.

“Green” buildings such as The Wave, NTU’s sports hall, and The Arc, the newest learning hub, use the latest technologies to reduce electricity and waste.

**Courses for the Future**

Take your pick from an extensive range of double-degree and double-major programmes you’d be hard pressed to find outside of NTU. For example, get the best of both worlds with a degree from the College of Science and another one from the College of Humanities, Arts, & Social Sciences, or opt for the popular Accountancy and Business combination.

Students pursuing science and engineering courses can consider doing a second major in Food Science and Technology under a joint programme with Wageningen University in the Netherlands. New this year is the Bachelor of Science in Data Science and Artificial Intelligence, a programme designed to train leaders for the new digital economy.

“Many of NTU’s programmes cover more than a single field of study. I grabbed the opportunity to pursue a double degree in Aerospace Engineering and Economics as I knew that I would not be able to get this combination elsewhere. With this, I can stand out from the crowd when applying for internships and jobs. During my internship at the Defence Science and Technology Agency, my knowledge of economics came in handy as I could approach my projects from various angles.”

— Avion Lim, Final-Year Aerospace Engineering & Economics Student

**A Lush Environment Like No Other**

“As a nature lover, I am fortunate to be surrounded by lush forests housing so much wildlife. I still get a thrill every time I spot these campus beauties. We’re privileged to share this space with them and I hope that NTU can remain a thriving home for wildlife as much as it is a home for us. Hearing the sounds of nature in the midst of my busy day reminds me to slow down and appreciate the greenery around me. The foliage plus animal and bird sightings make the campus even more aesthetically pleasing than it already is.”

— Chua Kai Ting, Third-Year Environmental Earth Systems Science Student
Get a holistic education at NTU.
Start your experience with a 360-degree view of The Hive at NTU 📹
Hear from the Provost and professors how an NTU education prepares you for the workplace of the future.

Learn more about our innovative programmes that include mentoring by world-class professors, internships, overseas exchange and exposure to industry leaders and entrepreneurs.

Tour the NTU Smart Campus and see for yourself why it is frequently named one of the world’s Top 15 most beautiful campuses, with first-class learning, recreational and residential facilities.

Join us at the NTU Open House.
And make a smart choice for your future.

ntu.edu.sg/admissions
**BEST FOR MAKERS & TINKERERS**
Big ideas are brewed in the innovation garage at the interlinked Crescent and Pioneer Halls, where you might take inspiration from living in a tree-like abode surrounded by water features that remind you of being in a rainforest. Students with engineering projects in mind can submit proposals to a panel. And if their concepts are judged to have potential, they are provided with funding and are given access to the garage and the set of tools inside, including a 3D printer.

Hands-on workshops are also conducted regularly as part of the Residential Education programme at Crescent and Pioneer Halls. Some classes that have been held include woodworking, bike salvation and clay craft.

**BEST FOR SOCIAL SPIRITS**
The first halls built in NTU, Halls 1 and 2, are oldies but goodies. All rooms come with ensuite toilets, meaning you don’t have to stumble down the corridor if you have the runs in the middle of the night. And you won’t notice the lack of lifts, with Hall 1 having only three floors and Hall 2 just two. The layout of the halls facilitates interactions between hall residents and gives them a certain kampung spirit, note past and present residents.

The halls’ canteens make great social spots as well, and boast some of NTU’s most well-known food stalls, such as the ones selling mala hotpot in Canteen 1, and cjom penyet and Xiaolongbao in Canteen 2. The well-stocked Giant supermarket and 7-Eleven at Hall 2 make it a popular place to visit too. And if you and your roomie need a quick haircut to sharpen up for the block party, just nip down to the hair salon at this hall.

Derek Rodriguez highlights the strengths of each of NTU’s 24 halls of residence
BEST FOR NATURE LOVERS

Extensive refurbishments, including upgrading of safety systems and the installation of air-conditioning in all rooms, have given Halls 4 and 5 a new lease of life. And by the end of this year, these halls will overlook what will be a botanical dreamland. Yunnan Garden and Nanyang Lake are primed to be a hotspot for nature lovers when they reopen following a major makeover that will connect the two sizeable landmarks with a waterfall, fitness areas and thematic walking paths and boardwalks, all with Wi-Fi connectivity.

On the opposite end of campus, residents of Halls 12 to 15 wake up to the sounds of the forest every morning. Birds such as kingfishers, woodpeckers, bee-eaters and even hornbills have been spotted by the NTU community in the area. And NTU’s blue rubberised jogging track, which runs between the halls and the forest, are perfect for working up a sweat at sunrise.

BEST FOR ATHLETES

If you’re staying in Hall 6, you won’t have to dribble far to get to the Sports & Recreation Centre, which houses an Olympic-size swimming pool, a gym and other sports facilities. Next to the recently refurbished hall is NTU’s football field and running track, a hive of activity on most nights. Slightly further afield is NTU’s new state-of-the-art sports hall, The Wave, a multifunctional sports hall that is used for a variety of indoor sports, including badminton, basketball and table tennis. Three full-length basketball courts and six tennis courts are also nearby.

BEST FOR LIFELONG LEARNERS

Some of the most interesting Residential Education programmes are conducted in Halls 9 to 11. For example, the edible gardens in these halls see students growing and tending a variety of plants under the guidance of an urban farming consultant. The astrophotography programme from Hall 10 allows amateur stargazers rare glimpses of the stars using powerful telescopes from the rooftop garden at the neighbouring Nanyang Crescent halls. Through the lenses of the telescopes, budding photographers can also capture great photos of the cosmos. The family-like vibes of these halls make learning together all the more fun.
BEST FOR LATE RISERS
If you snooze on accepting an offer from Halls 3 and 16, you definitely lose more sleep. With the National Institute of Education and the North Spine just minutes’ walk away, you can skip the wait for the bus if you want. Lifts in all blocks and air-conditioning in all rooms also hit the sweet spot. Also great for sleep-ins, Hall 7 is a stone’s throw away from the School of Physical & Mathematical Sciences, the School of Electrical & Electronic Engineering and the Wee Kim Wee School of Communication & Information. Creative minds from the School of Art, Design & Media will find their ideal home in Hall 8, which is less than 50 metres away from the iconic grass-roofed building.

BEST FOR HEALTHY LIVING
The Nanyang Crescent Halls and the North Hill Halls, the newest halls on campus, are home to the largest gyms on campus. The North Hill gym stands out with the Queenax Functional Trainer, a modular system that can be used for weights and resistance training, and can even accommodate an anti-gravity yoga class for 12 people. The gym at the Nanyang Crescent Halls is also impressively rigged with rows of treadmills, strength training machines and a free weights section.

In the North Hill Halls, lessons held in fully-equipped kitchens teach NTU’s next MasterChefs how to concoct and enjoy healthy and delicious food from around the world, including Indian, Burmese, Turkish and western dishes.

GET A ROOM!
We tell you how

Getting a hall room as a freshman is easy. As a matter of fact, you are guaranteed a residential place on campus in your first two years of study.

Sign up for dorm life by submitting an application online during the hall application period. You can make any number of changes to your application within this period, but only the last submission will be considered. Don’t miss this window of opportunity as late applications won’t get processed.

You can indicate your preference for either a single or double room, and an air-conditioned or a non-air-conditioned room. Prices for double rooms range from $255 to $330 a month. For single rooms, it costs $355 to $580 monthly. The rental rates are subject to revision annually. If you have a roomie in mind who is also a first- or second-year undergrad, you can indicate each other’s particulars in separate applications.

Those with siblings of the same gender who are seniors in NTU can choose to stay with their sibling if he or she has already been assigned a room (NTU seniors are allocated rooms before freshmen and on floors housing students of the same gender).

After the application deadline has passed, your application will be processed and you will receive an email informing you which hall you have been assigned to and instructions on how to accept the offer.
Telegram users, here’s a new sticker pack you’ll want to download. Featuring NTU’s mascot Lyon, the pack includes 38 scenarios and expressions you can send to your friends. Whether you’re pounding the track at The Wave or taking a selfie, Lyon is there with you.

Computer science student Wong Yung Shen says he’ll use the “Lyon at The Wave” sticker whenever he wants to let his friends know he’s out playing a game, while engineering student Tan Fu Long plans to send “Lyon with flowers” to his crush on Valentine’s Day.

Keen Telegram user Tan Dyi Perng, a final-year student at the School of Mechanical & Aerospace Engineering, looks forward to sending “Lyon saying HEY!” to every new friend he meets. Hey, good call!

Ready to download the stickers? Follow this URL: bit.ly/NTUtelegramstickers from your smartphone or scan this QR code.
3 Japanese Movies for Young Hearts

28 FEBRUARY

ROMANCE BLOOMS AT CATHAY CINEPLEXES

True Love in 30 Days

Coming-of-Age Love Story

Blue Summer

My Teacher, My Love

Wacky School Romance

Before The Coffee Gets Cold

Heartwarming Time-Travel Fantasy

WIN FREE TICKETS TO WATCH ONE OF THESE MOVIES! SIMPLY FOLLOW US ON @MM2SINGAPORE AND DIRECT MESSAGE US WITH A PHOTO OF THIS PAGE

20 WINNERS WILL BE RANDOMLY SELECTED. CLOSING DATE: 14 FEB 2019

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How NTU technologies are changing our future

**EASY ON THE EYE**

**NOW** A tiny gel patch measuring 2mm by 2mm is packed with dozens of dissolving microneedles that slowly deliver drugs when embedded in the eye’s cornea.

**FUTURE** When the contact lens-like microneedle patch is loaded with different drugs, it can be used to treat eye diseases such as glaucoma, as the drugs can be painlessly released over time without the need for eye drops.

**SMART STETHOSCOPE**

**NOW** Using a stethoscope connected to a smartphone and an app that draws on artificial intelligence, NTU scientists and doctors from Tan Tock Seng Hospital have devised a test for fluid in the lungs, one of the main symptoms of congestive heart failure.

**FUTURE** Instead of going to the hospital for checkups, people can use these smart stethoscopes on themselves at home to check for fluid in the lungs, and get a diagnosis remotely from their doctors and nurses.

**MIGHTY MOLECULE**

**NOW** A new type of biomolecule developed by NTU scientists can kill the Zika virus easily. The new molecule works by poking holes in the viral membrane, causing it to rupture and thus kill the virus.

**FUTURE** NTU’s newly created peptide holds great promise in becoming a future antiviral drug that can act directly on viral infections in the brain, including Dengue and Chikungunya.

**GLUED TO THE SPOT**

**NOW** A new biocompatible glue invented by NTU’s material scientists could be applied to soft human tissue, such as during surgery, to fix tears or wounds in just minutes. A small voltage applied to the glue helps the tissues “join up” in a jiffy.

**FUTURE** Used in hospitals and operating theatres, the biogel could be activated on demand with a zap, replacing the tedious stitching that used to be done by skilled surgeons, thus reducing operation times significantly with no removal of stitches needed. Nurses could also be trained to glue external wounds easily.
Complete this questionnaire by 24 February 2019. To do the survey online, visit hey.ntu.edu.sg, or return your form by fax (6791-8494), email (hey@ntu.edu.sg) or mail (Corporate Communications Office, Administration Building, Level 1, 50 Nanyang Avenue, Singapore 639798). Each person should complete the survey only once, and all prizes must be collected personally at NTU. Incomplete entries will not be eligible for the lucky draw.

NAME: ____________________________
AGE: ______ GENDER: M/F CONTACT NUMBER: ____________________________ EMAIL: ____________________________
CURRENT STATUS:  ○ JUNIOR COLLEGE/POLYTECHNIC/IB STUDENT (STATE NAME OF INSTITUTION: ____________________________ )
○ NTU UNDERGRADUATE (STATE SCHOOL: ____________________________ ) ○ NTU GRADUATE STUDENT (STATE SCHOOL: ____________________________ )
○ NTU ALUMNUS (STATE SCHOOL AND YEAR OF GRADUATION: ____________________________ ) ○ OTHERS (PLEASE STATE: ____________________________ )

○ TICK THE CIRCLES TO INDICATE WHICH ISSUES OF HEY! YOU READ IN THE LAST YEAR.
○ TICK THE HEARTS TO SHOW WHICH 3 COVERS YOU LIKE BEST.

ON A SCALE OF 1 TO 5, WHERE 5 IS THE BEST, RATE THE FOLLOWING FEATURES OF HEY!

- Overall editorial style
  5 4 3 2 1
- Design and layout (print)
  5 4 3 2 1
- Design and layout (digital)
  5 4 3 2 1
- Photos
  5 4 3 2 1
- Comics and illustrations
  5 4 3 2 1
- Video clips
  5 4 3 2 1
- Reader promos
  5 4 3 2 1

ON A SCALE OF 1 TO 5, WHERE 5 IS THE BEST, RATE THE FOLLOWING COLUMNS IN HEY!

- Big Bang: NTU folks in the global big league
  5 4 3 2 1
- Face to Face: A heart-to-heart talk between two
  5 4 3 2 1
- Tomorrowland: How new technologies will change lives
  5 4 3 2 1
- Blips in My Life: Life-changing mistakes
  5 4 3 2 1
- #seeingthings: The buzz about NTU on social media
  5 4 3 2 1
- The Back Page: A face from NTU
  5 4 3 2 1

Win great prizes!

Tell us what you think
How much of each issue of Hey! do you usually read? Tick one option.
- All or most of it
- Whatever interests me
- I only look at the headlines and pictures

How are you usually alerted to read Hey!? Tick all that apply.
- Hey! magazine stands
- Facebook
- Twitter
- Instagram
- LinkedIn
- Hey! TV screens on campus
- NTU website
- When it arrives in my letterbox
- Others (please state: ________________)

Tick all the platforms that you have read Hey! on.
- Print magazine
- Smartphone
- Tablet
- Computer/laptop

Tick the platform that you would most like to read Hey! on.
- Print magazine
- Smartphone
- Tablet
- Computer/laptop

Would you be interested in being alerted to read a new issue of Hey! via WhatsApp or Telegram?
- Yes
- No

On a scale of 1 to 5, where 5 is the best, rate your overall impression of the magazine on each platform.
- Print magazine
  - 5
  - 4
  - 3
  - 2
  - 1
- Smartphone
  - 5
  - 4
  - 3
  - 2
  - 1
- Tablet
  - 5
  - 4
  - 3
  - 2
  - 1
- Computer/laptop
  - 5
  - 4
  - 3
  - 2
  - 1

Have you shared your print copy of Hey!, and if yes, with how many people?
- Yes (please state how many: ____________)
- No, I have not shared it

How does reading Hey! help you learn more about NTU, such as its students, programmes and achievements?
- My knowledge of NTU has improved a lot
- My knowledge of NTU has improved somewhat
- My knowledge of NTU has not improved

How do you feel when you read about the success stories of NTU students, alumni or professors? You may tick more than one option.
- Inspired
- Proud
- Impressed
- Interested to know more about NTU
- Others (please state: ________________)

On a scale of 1 to 5, where 5 is the best, rate your impression of NTU before you started reading Hey!.

On a scale of 1 to 5, where 5 is the best, rate your impression of NTU after you read Hey!.

After reading Hey!, please rate NTU according to the following attributes.

Any feedback or suggestions on how we can improve the next issue of Hey! magazine?
All 14-year-old Yuolmae Ang (right) wanted to do was fit in with her peers, but at 1.72m, she towered over her classmates, earning her the nickname “Yuolbeanpole”.

“Back then, I was very conscious about my height, especially because everyone else was a head and a half shorter than me. For most of my teens, I hunched my shoulders and desperately wished that I was shorter,” says the second-year art, design & media student.

By the time she was 16, she hit 1.79m, and kept growing for another two years until she eventually reached 1.81m.

First-year accountancy and business student Choo Jie Ying’s (left) experience as a tall teenager was similar. At 13, she was a lanky 1.72m. As a secondary three student, she stood at 1.8m, way above the heads of her classmates.

“I was quite self-conscious because I was taller than most of my friends, even the boys! Strangers would come up to me and bombard me with questions like why I am so tall,” says Jie Ying.

TALL-PeOPLE PROBLEMS
With their awkward teenage years behind them, both Yuolmae and Jie Ying have come to terms with their height.

Yuolmae, with her 106-cm legs, was one of the top 15 finalists in The New Paper New Face 2018 competition and is currently represented by a modelling agency. Jie Ying’s stature helps her excel in the Singapore National Youth Basketball team, where she plays the centre position. However, they admit to their share of tall-people problems, which range from clothing to boyfriend issues.

“Many people ask me if I will ever date a guy shorter than me. I am not sure I will, but there may be exceptions,” says Jie Ying. “I do wish I can wear heels more often, though. I love wearing them but most people discourage me from doing it,” she adds.

Yuolmae, who has no qualms about having shorter boyfriends, is in a good place now with her current boyfriend who is 1.85m tall. The leggy model says: “Having a boyfriend who is taller helps me feel more normal and less like a pole. It’s great!”

Both agree that when it comes to taking pictures, being tall is no fun. Not only does Yuolmae have to stoop or stand

“IT’S NOT EASY BEING TALL!”
In a world where it’s easier to fit in than stand out, how tough is it for two NTU female undergrads who are more than 1.8m tall? Chrystal Chan hears them out and investigates how height is determined

PHOTOS: KOH BOON PIN

In a world where it’s easier to fit in than stand out, how tough is it for two NTU female undergrads who are more than 1.8m tall? Chrystal Chan hears them out and investigates how height is determined.

“MANY PEOPLE ASK ME IF I WILL EVER DATE A GUY SHORTER THAN ME. I AM NOT SURE I WILL, BUT THERE MAY BE EXCEPTIONS.” — Jie Ying
with her legs apart when she’s posing for photos with friends, she was once on the receiving end of someone’s ire. “I used to be the photographer for school events. Once, I got an official complaint for being too tall and blocking the view of the spectators behind me,” recalls Yuolmae. “What I dread most about taking photos is ending up as the human selfie stick. My face always appears the largest,” says Jie Ying.

**HOW DO YOU GROW?**

Yuolmae and Jie Ying have their parents to thank for their stature. According to Assoc Prof Eric Yap, a medical geneticist from NTU’s Lee Kong Chian School of Medicine, height is determined by genetic and environmental factors. He cites a 2016 study on human height done in collaboration with the World Health Organisation, which found that people across the world have grown taller over the past century, especially women in parts of Asia like Japan and Korea. South Korean women have grown 20cm taller over the last 100 years, while Singaporean women have increased in average height from 1.47m to 1.6m, thanks to reasons like economic prosperity and better nutrition.

“What’s interesting is that both girls have even surpassed the heights of their tall fathers. Yuolmae’s dad stands at 1.8m, while Jie Ying’s is 1.78m. Their mothers are both under 1.7m tall. The girls’ respective siblings, too, have some catching up to do in the height department. Could diet have played a part in their extraordinary growth spurt? As children, Yuolmae and Jie Ying drank a lot of milk. “I chugged a few bottles every day until I was about 10,” Jie Ying recalls. “Diet and nutrition play a particularly important role in childhood growth,” concedes Assoc Prof Yap. “However, height does not continually increase with improved nutrition. It plateaus off, so over-nutrition results in weight gain without height gain.”

Then, does playing sports spur height growth? As children, Yuolmae enjoyed dancing and jumping rope, while Jie Ying played basketball and other ball games. Assoc Prof Yap believes the opposite to be true: “Height influences the types of sports or skills one picks up, not the other way around. I wouldn’t say playing basketball from young makes one taller. Basketball teams pick tall and, of course, skilful and athletic players.”

“No food has been scientifically proven to increase height,” he adds. Whether Hobbit-esque or sky-scraping, perhaps the key to height happiness is in seeing the lighter side of things, as the two have. Jie Ying says: “I’m a friendly giant loved by kids who want to see the view from up here. Plus, at home, standing on a chair, I’m the only one in my family who can reach and clean the ceiling fans.”

“I’ve found my confidence from being on the catwalk and modelling,” says Yuolmae.
Taking a year-long break (or two) from your studies to pursue a passion could mean scrambling to catch up with schoolwork or graduating later than your peers. Peter Yeo meets three intrepid students to find out why they took that gap year.

**GAP**

**3.5 years**

**WHY** I’ve been balancing studies and badminton since I started competing with the National Junior Squad at the age of nine. The lifespan of a shuttler is quite short with most retiring by 28. I wanted to see how far I could go if I gave all my time to the sport. I had also set my sights on competing at the Commonwealth Games in 2018. I’m happy we were placed fourth at the mixed team event.

**AHAMOMENT** I had been considering taking a gap year since secondary school. The aha moment came during a tournament held in the week my International Baccalaureate examinations ended. I did surprisingly well for the games. It made me think that if I could do well while having to prepare for examinations, what more if I committed to it full-time?

**PROS & CONS**

I’ve had many great experiences that you can’t get in school. I was able to travel to different countries for competitions, including Mongolia, Russia and Iran, and I made friends all over the world during my matches. However, taking a three-and-a-half-year break before joining NTU means I’m studying with much younger peers now. The guys disrupted their national service for medicine, so they are younger than me too. I also had to catch up academically.

**BIGGEST TAKEAWAYS** My journey has made me stronger. I’ve learnt to accept failures, pick myself up and try again. I’ve learnt that nothing in life comes easy, but when you work hard, overcome obstacles and eventually succeed, it makes the journey so much sweeter. Travelling to countries I normally wouldn’t go to has enabled me to experience different cultures and meet new people. When I retire and look back on my life, it wouldn’t matter if I’d worked 40 years or 37 years as long as the time spent was worth it.

**WHAT’S NEXT** I’m still training with the national team and representing Singapore in international competitions.

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**GRACE CHUA**

MEDICINE, YEAR 1

Chasing my dream
CHALLENGES
I had to convince my family that the gap year would benefit me. My parents didn’t think I needed to travel halfway across the globe to gain experience in the start-up field since there were Singaporeans doing start-ups as well. They also didn’t agree with the decision to delay my graduation.

PROS & CONS
As I was working for a year, as opposed to doing a regular internship, I was given more responsibilities and took charge of many projects. It was a steep but satisfying learning curve. The drawback is being far from loved ones, and the 15-hour time difference made communication with people back home more difficult.

HOW
I applied for NTU’s Overseas Entrepreneurship Programme through NTUitive. I sat through two interviews before being accepted. NTU’s programme sourced for start-ups we could work at. After receiving an offer from one of the companies, I applied for leave of absence. The process wasn’t difficult. NTU even gave me a visa sponsor who outlined all the steps I had to complete.

TO GAP OR NOT TO GAP
Your first few years in university are probably the most crucial in helping you decide your direction in life. If you take a gap year during rather than before university to refine your passion, you can make informed decisions on where to go after you graduate and prep yourself for an unconventional journey ahead.
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OVERSEAS EXCHANGE:

EXPECTATIONS VS REALITY

A semester abroad is a journey of self-discovery, as communication student Jayne Ong finds out.

Exchange has always been touted as the “best semester” of university life. There is so much to look forward to, like a new environment and fresh faces, without the stress of scoring high marks since the modules you take come with just a “pass” or “fail” grade. On the flip side, some of these “perks” can turn into stressors, especially if you are an introvert like me.

Before I went on exchange in the United Kingdom (UK) last year, I had many expectations shaped by the stories of friends. Many of these did not pan out in reality. Here’s what I’ve learnt during my studies abroad at King’s College London.

DIFFERENT LANDSCAPE My NTU friends and I on exchange at King’s College London.

Social Life

Expectation It will be difficult to make new friends due to cultural differences. I might not be able to understand new accents and vice versa. It will be tough to strike up a conversation.

Reality Most of the students at my host university were far friendlier than I had anticipated. Sure, I encountered a few “pardon me?” and “excuse me?” moments before managing to get a conversation going, but it got better as we became accustomed to each other’s accents.

Also, just as you’d feel safer walking in the dark with a friend, socialising with my newfound international friends was somehow more enjoyable when there were a couple of NTU pals around. Indeed, on exchange, you’re unlikely to be the only Singaporean at the host university.

I vividly remember the first social event of the semester—a pizza party organised by my hall as part of Welcome Week. We had to push our way through the throng in the lounge to get our hands on the pizza before finding a place to sit. An international student suddenly approached us and introduced himself. I remember being amazed at how easily my friends slipped into conversation with him while I could only listen and occasionally nod or smile. As he moved away and we were joined by another group, I found that I had warmed up and was more ready to interact.

When there was a lull in the conversation, I would be “saved” by my more outspoken friends. As for the times when I was alone with strangers, such as during tutorials, those were when I was forced to step out of my comfort zone. On hindsight, I think that learning to socialise is definitely one of my most valuable takeaways from exchange.
ACADEMICS

Expectation

The modules are just pass/fail, so they should be manageable. I don’t have to study as hard.

Reality

Don’t expect learning to be a walk in the park. Since grades did not matter for the semester, I selected my modules in King’s based on interest instead of whether I could score well in them (while also making sure the ones I took could be matched to my modules in NTU). In addition to film studies, my home course, I took modules in theology and geography, which I have no background in. However, I soon realised this meant I had to put in more effort to understand the content taught in class. Nonetheless, I was happy with my choice of modules. The engaging teachers kept me motivated, and by the end of the semester, I felt that I had ventured into and learnt many new things.

Always remember that everyone’s experience of exchange is unique. The wonderful and scary stories you hear of exchange may not be yardsticks of this once-in-a-lifetime experience. I, for one, would not exchange my exchange experience for the world.

FINANCE

Expectation

Exchange will cost a bomb, around S$13,000 to S$15,000 or even more if you are based in the United States, the UK or Scandinavian countries where living expenses are high.

Reality

During my exchange, I spent the most on food. In London, the simplest way to penny-pinch is to cook your own meals. A home-cooked meal costs £3 ($5.20) on average, while eating out could be three times more expensive.

Visits to street markets tend to burn a big hole in your pocket as it is easy to go overboard enjoying small bites from the different food stalls. And making payments with your card makes it even harder to keep track of your expenditure.

Thankfully, there are some ways to enjoy the pleasures of life within your means. First, exploit your status as a student. Other than the restaurants that offer discounts to students, I used apps like UNiDAYS to enjoy platform-exclusive offers for students. The discounts extend beyond food to beauty products and sports apparel.

I also found that it helped my budget to record my expenditure in the phone app on the move instead of doing a single stocktake at the end of the day. It was easy for me to inculcate this habit since I tend to use my phone to take pictures of the food before eating it.

Lastly, like me, you can consider using a pre-paid debit card that sends a notification after each purchase you make, which helps you track how much you are spending.

TIME MANAGEMENT

Expectation

There would be more than enough time to study while exploring London and travelling to other nearby countries. I can easily pick up new hobbies while on exchange.

Reality

Time and tide wait for no man. At the start of the semester, I took my time settling into my dorm instead of stepping outside to explore London. It only struck me how little I had seen of the city when I was halfway through the semester. By then, assignment deadlines were looming and coupled with my travel plans to other countries, I was left with little time to explore the great capital. This is definitely one of my greatest regrets, and it is also a reminder that, perhaps, back in Singapore, I should also get out of my home more often.
They say a child’s brain is like a sponge, eager to absorb information. Growing up, mine was more like a sieve – I was the child who lost the information rather than retained it. As a result, I struggled with languages and rote learning in primary school, failing my tests frequently. In Primary 3 and 4, I was assigned to the worst class. In my first two years of secondary school, I was among the bottom five to 10% in the cohort. Tackling my poor academic performance felt like staring at a Rubik’s cube – I didn’t know where to begin.

I put it down to a lack of academic inclination, but a diagnosis in Primary 5 showed otherwise. My parents sat me down and told me about my dyslexia, which explained why I was good at logical reasoning, but could never grasp a mathematical formula or remember the strokes of a Chinese character as well as my peers, no matter how hard I tried. It also accounted for the way I saw and understood things in images, rather than in words.

What really helped was having a supportive family who never gave up on me. My grandmother would take me to the library and borrow books for me. Gradually, I developed a love for reading, which I believe helped me to better grasp the English language.

In the months leading up to the Primary School Leaving Examination, my father even took leave to, quite literally, add colour to my revision. He taught me how to mark my notes in colours to learn better, a technique that I still use. Red, for example, denotes a very important point, while green is for definitions or questions. The coaching helped me to pass the exam, but the most important lesson I learnt from this process was the importance of having a growth mindset – that talent can be developed through hard work and good strategies.

Looking back, I now know that dyslexia may seem like a frustrating puzzle at first. But once you find the solution, progress can come in unexpected leaps. For me, that first leap came when I joined the Integrated Programme at National Junior College. Studies have shown that dyslexic brains are organised in a way that maximises strength in making big picture connections at the expense of the ability to process fine details.
EDWARD YEE, 24, a final-year Nanyang Business School student, is Singapore’s first Rhodes Scholar in 14 years, coming a long way since failing test after test in primary school as a dyslexic child. He beat 90 applicants to secure the prestigious award to further his studies at the University of Oxford later this year.

“LIKE SOLVING A RUBIK’S CUBE, THE WAY TO GO ABOUT ACCOMPLISHING SOMETHING BIG IS TO BREAK IT INTO SMALL, MANAGEABLE CHUNKS, SO YOU END UP CREATING SOMETHING THAT IS BIGGER THAN ITS PARTS.”

Perhaps it is this passion for making an impact in this world that earned me the Rhodes Scholarship, considered the granddaddy of international postgraduate scholarships. It is both an honour and daunting to be Singapore’s first Rhodes Scholar in 14 years. I know I have huge shoes to fill.

I was drawn to the scholarship not by its prestige, but the idea of coming together with other Rhodes scholars to fight the world’s fight. It takes me back to Jagriti Yatra, where I joined some 400 young leaders from all over India on a 15-day train ride, meeting social and business entrepreneurs who have changed the lives of millions. It is in the smaller towns and villages that the impact of social enterprises becomes real, and I remember returning home with a renewed conviction to give back to society in my own way.

At the University of Oxford, I will be doing a double Masters in Social Data Science and Evidence-based Social Intervention and Policy Evaluation, which I believe will help me take Givfunds to the next level. I want to measure and evaluate the effectiveness of social intervention programmes, and use data to better allocate resources in a way that will impact communities. With that, I hope I can leave the world a slightly better place.

In junior college, I challenged myself to spend more time finding connections and patterns, instead of memorising facts. This allowed me to work around my dyslexia, and embrace my different way of thinking as a strength.

Of course, I am also fortunate to be born in the digital age, where critical thinking and analytical skills are prized over the ability to retain information. There has never been a time, with the technology we have, when we have had more need to be thinking outside the box.

I was challenged again when I started my undergraduate studies in accountancy and business at NTU, where I was exposed to multiple disciplines under the University Scholars Programme, and had to think nimbly and flexibly to navigate the course work. A philosophy module offered as part of the curriculum played a huge part in shaping my thinking. It introduced me to the concept of effective altruism, which looks at solutions that balance emotion and practicality to make the biggest impact.

At NTU, I also had the opportunity to chalk up overseas experiences, which was a great way to meet people, collect stories and broaden my horizons. One such example is the the Overseas Entrepreneurship Programme run by NTUitive, the innovation and enterprise arm of NTU. I spent six months at a data analytics start-up in Silicon Valley, USA, where I saw how talented people tried to make a positive impact in the world.

The drive to change the world for the better was palpable and contagious, and it further convinced me that impact investing was the way to go.

In 2017, I co-founded Givfunds, a start-up that provides low-cost loans to social enterprises. We are now focused on helping communities in India. During my backpacking stints in Bangladesh and other parts of Southeast Asia, I saw how social enterprises that made a real difference to communities were hampered by a lack of resources. Like solving a Rubik’s cube, the way to go about accomplishing something big is to break it into small, manageable chunks, so you end up creating something that is bigger than its parts. That is what I hope for Givfunds. By making funds available to social enterprises to help them scale up, they can collectively make a difference beyond the communities they directly help.
The NTUitive Innovation Photo Competition 2018 had everyone in NTU angling to capture the best shots of our campus. Derek Rodriguez shares his perspective on the winning shots and a few other entries.

**DOUBLE VISION**
The gorgeous interior of The Hive, NTU’s first learning hub, is always worth a second look.

*PHOTO: TAY GUANG YUAN, COMPUTER SCIENCE UNDERGRADUATE*
IN SYNCH
This maintenance team rappelling from the top of the Tan Chin Tuan Lecture Theatre paints a picture of teamwork.
PHOTO: DR ZHANG PENG, CHEMICAL & BIOMEDICAL ENGINEERING RESEARCH FELLOW

PRETTY IN PINK
Looking at the campus in a romantic new light.
PHOTO: KEVIN LEE, ELECTRICAL & ELECTRONIC ENGINEERING UNDERGRADUATE

FROM MY POINT OF VIEW
Inspiration comes in many shapes and forms. If this image of Graduate Hall 1 doesn’t capture your imagination, you’re missing the point.
PHOTO: MICHAEL OTT, POSTGRADUATE EXCHANGE STUDENT FROM TECHNICAL UNIVERSITY OF MUNICH

IN SYNCH
This maintenance team rappelling from the top of the Tan Chin Tuan Lecture Theatre paints a picture of teamwork.
PHOTO: DR ZHANG PENG, CHEMICAL & BIOMEDICAL ENGINEERING RESEARCH FELLOW

BREATHE OF FRESH AIR
Find sanctuary at every corner of our beautiful garden campus, including this oasis at Hall 6.
PHOTO: AVION LIM, AEROSPACE ENGINEERING & ECONOMICS UNDERGRADUATE

GOLDEN GLOW
The North Spine Gleams enchantingly at sundown in this long exposure shot.
PHOTO: KELLY YUEN, CENTRE FOR IT SERVICES STAFF

POETRY IN MOTION
The graceful curves of the School of Art, Design & Media allude to the ingenuity that flows beneath its grass roofs.
PHOTO: ASSOC PROF ZHAO YANG, MATERIALS SCIENCE & ENGINEERING FACULTY

CRADLE THE FUTURE
The next generation belongs to artificial intelligence and augmented reality, though man remains the guardian of science.
PHOTO: RAMAMOORTHY LUXMAN, MECHANICAL & AEROSPACE ENGINEERING RESEARCH ENGINEER

IT’S A SNAP
Feeling the crunch? Kick back and relax with your favourite hobby. Just don’t go overboard.
PHOTO: JEREMY SCHEE, ELECTRICAL & ELECTRONIC ENGINEERING UNDERGRADUATE
Curiosity, which fuels innovation and insight, is an important trait to have in these complex and challenging times

BY ASSOC PROF TAN JOO SENG

Whether you are a student choosing a university or subject area to specialise in, or someone building a career and trying to improve the world, remember one thing: Being curious will put you on the path to success.

Curiosity is one of my research areas of interest and it’s a topic I teach and cover in my modules. You could call me the Professor of Curiosity! I’m inherently curious, reading at least one book a week.

In the course of living what I hope to be a life of curiosity and meaning, I have drawn inspiration from other inquisitive people around me.

Jack Ma and his friends were once googling for beer when he realised how difficult it was to find Chinese beer on the Internet. It prompted him to create a homepage in Chinese. Within hours of posting the page, he received emails from people across the world, including in the US and Germany. The power of the Internet surprised him – one which he harnessed towards building Alibaba, now a Chinese giant specialising in e-commerce, retail, Internet, AI and technology.

On 17 December 1903, the Wright brothers, with no formal training in engineering, defied gravity with their manned airplane flights, ushering in the era of flight.

After observing how apples always fell straight to the ground, Isaac Newton spent several years working on the mathematics showing that the force of gravity decreased as the inverse square of the distance.

If we look at similar moments of breakthrough, insight and innovation in life or in business, one characteristic stands out. Curiosity is at the core of all of them. These curious achievers did not start out with an end goal in mind. They were just curious. Once piqued, they kept exploring things...
that intrigued them. Often these were unrelated topics. When the pieces came together and bore fruit, you could say that curiosity connected the dots.

In today’s VUCA (Volatile, Uncertain, Complex and Ambiguous) environment, where nobody knows what might be around the corner and what the next big thing could be, curiosity is a key quality we need to have to stay ahead of the curve.

Curiosity knits the lattice. Louis Mobley, founder of the IBM Executive School in 1956, says curious people share one trait: an inexhaustible curiosity about everything from “NATO to Plato”. The more they learned, the more connections they saw, from history, psychology, philosophy, science, literature and poetry, that produced their greatest creative business insights. What we might dismiss as irrelevant and therefore uninteresting, a genius like Steve Jobs sees as pieces of an unfolding interwoven jigsaw puzzle that are sifted until the piece that fits the problem emerges. In the world of business, people like Ma and Jobs cobbled bits of information they had chased and pieced them all together to create breakthroughs.

In a 2015 survey of more than 1,000 CEOs, a number of them cited “curiosity” and “open-mindedness” as leadership traits that are becoming increasingly critical in these challenging times. Curious leaders are more open to new experiences, more tolerant of ambiguity and are more likely to nurture curiosity in their organisations.

Yet, curiosity is lacking and not given due attention. According to MERCK’s 2016 State of Curiosity Report, while 80% of workers agree that curious colleagues are most likely to bring ideas to life, only 20% of workers actually self-identify as being curious.

Not much has been written on curiosity, which has to start from the top. This critical capability – leadership curiosity – has three components: self-curiosity, interpersonal curiosity and environmental curiosity.

Self-curiosity starts with a deep-seated interest – even obsession – to find out more. At 13, Ma regularly woke up at 5am to go to a nearby hotel to chat with tourists and take them sightseeing. That was how he learnt to speak English. He did this for nine years, picking up Western ways of doing things. When Jobs started studying calligraphy and the practice of Zen Buddhism, he had no idea it would lead to the design simplicity of Apple computers. He was only being curious.

Personal curiosity is crucial to success because a naturally curious person is more likely to learn from mistakes, try new things, explore new ideas, engage more deeply, be more adaptable, take risks and embrace change. In today’s digital age and Industry 4.0, where technological change is happening at an unprecedented speed and scale, curiosity is a key quality we need to stay ahead of the curve and the exponential change in technology.

A leader must also be curious about others. This interpersonal curiosity is the desire to learn about other people, including their life experiences, thoughts and motives. If you are a student leader curious about your group mates’ experience with your club or society, you develop greater empathy and a deeper understanding of what they actually take away from joining the group. You learn how to improve everyone’s experience, understand what value needs to be created to meet their needs, and even find new ways to connect in today’s digital age. Curiosity, in this case, leads to deeper engagement, and possibly stronger trust and collaboration that could lead to better things.

Unfortunately, what often happens to leaders once they’ve attained a position of leadership is that they may feel the need to project confident expertise. They are afraid of being seen as incompetent. A truly curious leader is humble enough to acknowledge that he doesn’t have all the answers. When the leader is curious and starts asking questions, others will take the cue and follow suit.

A truly curious person is curious about the environment and ecosystem in which he or she operates. For example, being curious about what else goes on in university or what your friends are researching drives learning and thinking out of the box. Staying curious about new trends or new ideas that are at the edge or periphery helps you seek out new oceans of opportunities.

An example of an exceptionally curious leader is the late Mr Lee Kuan Yew of Singapore, who embodies all three components of leadership.

When Jobs Started Studying Calligraphy and the Practice of Zen Buddhism, He Had No Idea It Would Lead to the Design Simplicity of Apple Computers. He Was Only Being Curious.

Winner of several university awards for teaching, Assoc Prof Tan Joo Seng conducts courses on strategy, leadership and management, with a focus on leadership in Industry 4.0. He introduced a mobile gaming app in his teaching last semester to make learning more immersive and engaging for his students.
人不彪悍枉少年
WHEN WE WERE YOUNG
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The Best of Chinese Dramas in HD
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Download on the App Store
My goals really took a turn during my time in NTU. I tried many things and discovered what I liked and didn’t, such as my passion for film photography. Tell us more...

I did a black-and-white film photography elective at the School of Art, Design & Media, which changed my life. I love the entire process of loading a camera with film and developing the photos in the darkroom with chemicals. It changed the way I view art and image-making, and the film camera became an extension of my hand. I continue to make images this way today.

You had some plum work opportunities abroad as a student. How did these come about?

I had a part-time job as a project executive with Makansutra before starting my undergraduate studies. I wrote food reviews and picked up food photography. It was pure luck that I managed to head to New York with the team for Singapore Day 2012, as a colleague’s visa application was rejected and I managed to fill the role. I also attended a Paris Fashion Week event in my second year at NTU while doing an internship with a local jewellery designer. My boss said being hired was no guarantee that I could be there with the team, so I worked extra hard and eventually managed to convince her to let me go along!

You’ve done several art installations to date, including a few during your time as a student (right) and an interactive light installation trail at Sentosa Island Lights 2018. What installation would you like to create for NTU?

I would call it “Best Days of Your Life” and as with all my other pieces, there will be an ironic twist to it!

Communication alumna Tan Yang Er, 25, wears many hats – from art director to businesswoman to photographer and visual artist. Chrystal Chan finds out more

You were named Best Visual Art Director at the 2017 Mnet Asian Music Awards for your work on The Sam Willows’ ‘Keep Me Jealous’ music video. How did that feel?

I remember asking myself if the judges had awarded it to the wrong person. I was waiting for an email to tell me that it was all a mix-up! I didn’t know what I was getting myself into when my final-year project group mate and close friend, Narelle Kheng of The Sam Willows, suggested I take on the role. It was my first time art directing a music video and building a set from scratch, and it changed the course of my work.

Has your path diverged from your aspirations as a freshman?

I started out wanting to be a fashion journalist. The Wee Kim Wee School of Communication & Information stood out for its reputation as a media and journalism school. I had heard from friends about the “hands-on” curriculum, and this appealed to me.

My goals really took a turn during my time in NTU. I tried many things and discovered what I liked and didn’t, such as my passion for film photography.

What would you say is the best thing about your time in NTU?

The close-knit community of seniors and juniors. I’d meet new and old friends in school every day. We all enjoyed hanging out at the benches at our school.

Speaking of friends, how did your co-working space for creatives, 21 Moonstone, come about?

I started it with three other friends. My classmate, Jeremy Lim, played a huge role in it. He saw a vacant office space and roped me, Narelle and another friend into this venture. We loved the idea of a shared space where creative millennials can come together to work and also have fun. It’s been one-and-a-half years since we started, and it’s still going strong. I’m glad that I’ve managed to run a business about people, built on people.
## Contiki vs Free & Easy

<table>
<thead>
<tr>
<th>With Contiki</th>
<th>Free &amp; Easy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Included</strong></td>
<td><strong>Included</strong></td>
</tr>
<tr>
<td>Loving the hotel! Super central, great facilities &amp; free WiFi in my comfy room.</td>
<td>Ouch, hotel accommodation in Europe is super expensive!</td>
</tr>
<tr>
<td>Waking up to breakfast just downstairs is so easy &amp; delicious!</td>
<td>Now... where can I find decent breakfast?</td>
</tr>
<tr>
<td>Coach right outside – yes please! Love being shown around this city in comfort and style!</td>
<td>How? Where? How long will that take me? Ugh I'm lost!</td>
</tr>
<tr>
<td>Contiki Trip Manager's history talk and a walking / bike tour with a Local Guide are amazing!</td>
<td>Where do I start? How do I get there? OMG the queue to get in is insane!</td>
</tr>
</tbody>
</table>

**Contiki Trips**

<table>
<thead>
<tr>
<th>Total</th>
<th>Free &amp; Easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$70 per day</td>
<td>US$220 per day</td>
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