Girton150 Symposium 13th April 2019, Arts House, Singapore

Changing Lives: the collegiate University panel session

Dr Simone Maghenzani : The future of a Collegiate University. What a fantastic topic, and how odd to ask an historian to kick off the conversation about it…

And so, my job is to talk about the past of the future.

What is a College. In the liberal-arts tradition of the Anglophone world, Colleges are as much about teaching content as forming character. Of course, they are not the only way to think about higher education. The French idea of Grandes Écoles, tied University education to the formation of the bureaucrat and the statesman. The Humboldtian German model of the research university, built on seminars and laboratories, was very different from the original Oxbridge tuition way, albeit the two system have since influcenced each other a lot.

And if Universities which emerge in the 1100s are about teachers' rights, degrees, academic freedom, and the professions (the original higher Faculties of Divinity, Law, and Medicine), Colleges start around a project, an idea, and sometimes an ideal. A bit like Emily Davies' 'great campaign' for a 'College for Women', Girton. Colleges have an ambition, and often try to punch above their weight. 'We strongly object to the proposal that there should be a beginning made on a small scale', Emily Davies writes to Marian Lewis, better known as George Eliot, in 1867.

So, what is the point of a college? I would like to offer three suggestions.

1) A college is like a medieval guild or 'corporation'. It is intergenerational, and a constant training from apprenticeship to mastership. A community of purpose, a body of equals with different roles and vocations, a society of mutual support in a common endevour, in the assumption that no intellectual achievement happens in isolation. Now this has its challenges, suffice to think about the complexity of the communal decision-making process, or to the difficult interaction between the nature of a self-governing community of scholars with modern employement and charity-status laws. But nevertheless, a challenge that a College has the resources to meet.
2) The point of a college is that it can make a point. It can raise an issue, take a stance. When in 1869 'The College for Women' was founded, it was the first British college to offer residential, university-level courses and examinations for women on the same basis as those offered to men.
3) A college is a flexible entity. It is generated by an idea, but it can re-signify its mandate for the present more easily than an entire university. What does excellent inclusivity means today is the question that Girton trys to tackle everyday, and not just in the nineteenth-century.

And so, from the past to the future. What would I retain for it? Again three points. The first two are eminently on the radar of modern global academia. I would contend that these are things we have always done, and we should keep doing, and even better. The third perhaps is less universally loved, but I believe it strongly.

1) Interdisciplinarity. Colleges are by nature places where people from a variety of disciplines meet and work. What I mean is that a college interdisciplinarity is not 'only' the collaboration across subjects that can tackle the big issues of the world, and attract big grants. And it is not even 'just' bridging the CP Snow's two cultures divide. It is the assumption that I, a scholar of the Renaissance, will spend some time listening to my colleague that works in a completely different area. And, simply, that will make me a better person, and a more rounded intellectual.
2) Pastoral Support. We live in a time of great challenge regarding students' mental health. The close interaction between academics and students that Colleges present is an extraordinry tool in offering help, guidance, and support. We can do more, but I am sure we are well placed in this enterprise
3) And finally, the perhaps more contentious point. Colleges, at least in the Oxbridge model, are self-governing community of scholars. They are a place where academics can be free from heavy dirigism, and top to bottom neo-liberal managerial frenzy. In their 'early modernity', they can be a strong place of resistance against academic post-modern precariat, and meaningless marketisation of education. But the bond of fellowship means committment. It requires that academics engage with their institution more than if it was just a Departmental employer. Self-governing is active engagement.The history of academic freedom is the history of a fight, and if we don't work for it, we are going to loose it badly.

So, in conclusion, what is the future of a Collegiate University I don't know. I'm just an historian, after all. And I can surely say that Colleges are far from perfect, and often have contributed to social discrimination and pointless elitism. But I am also sure that in these troubled times Colleges are also the solution.

Professor Lily Kong

Universities that function largely as commuter campuses invariably find it more difficult to build communities with a sense of identity and belonging. This is in contrast to those with residential opportunities. Residential living can take a variety of forms, from simply roofs over students' heads, to hostel living with organised sports and social activities, to residential colleges which deliver all or part of the academic curriculum, alongside extra- and co-curricular activities.

In Singapore, residential colleges are a late addition to the university landscape. The benefits are plentiful but so too are the challenges of delivering such a system. Besides the cost to a university, the additional residential fees for students may be prohibitive for some. The possibility of exacerbating the distance between those who can afford and those who can't is real. Further, students living in a small city-state may not always see the value of being in residence when commutes are easy and home comforts beckon. Finding suitable spaces for universities to build residences in the city is also a challenge. Yet, the experiment of introducing residential colleges has been very successful, and the experience is well sought after the early challenges.

At SMU, we have converted heritage buildings in the city centre, restoring them for use as residences for students, with integrated programming and pastoral care. At the same time, an experiment is afoot, a response to the realities of land scarcity and the changing nature of interpersonal communications wrought by social media. The experiment involves providing short-term co-living and co-working opportunities in new-design 'pods' that interweave short-term offline arrangements for project groups with online communities. Other curated activities and systems support the holistic development of students, from peer helpers in pastoral care to co-educators in student life offices. Time-tested residential colleges now face the test of times, and without giving them up entirely, must perhaps sit alongside other models, all focused at the end of the day on nurturing young people.

The Future of Global Healthcare panel session

Welcome from Josh Slater

Mistress, alumni, honoured guests, friends it is my privilege to welcome you to this panel discussion on the future of global health. World population expansion, urbanisation, climate change, and the global economy have had profound effects on healthcare: what started as national approaches to research and delivery have become international and now global.

This global focus has changed the way scientists operate with the formation of large international consortia working not just in a cross disciplinary but in interdisciplinary or transdisciplinary ways. The One Health concept captures this new approach by recognising that animals, humans and the environment are all interconnected and that effective healthcare solutions lie at the intersection between agricultural, environmental, veterinary and medical sciences.

Successful scientists now need to be able to work collaboratively, in large teams, to be imaginative, to break down barriers and to be inclusive. These are skills that have their origin in the Collegiate University and begin in the undergraduate college – an environment that fosters open mindedness, collaboration and communication.

The challenges we face in healthcare are significant, not only because of established diseases but the emergence of new diseases, disease spill-over from animals to humans, antimicrobial resistance; we are living for longer creating a new spectrum of degenerative and age-related diseases; new technologies present new ethical dilemmas; and the cost of research and new treatment creates tough prioritisation choices. These are some of the challenges that this discussion will explore with our distinguished international panel of speakers.

Professor David Price highlighted the future of medical research in terms of using real life data through observational studies (observing real-life) and pragmatic clinical trials (randomised studies but more real-life in setting, types of patients included), such as the ELEVATE trial which showed that a once daily pill whilst technically inferior to standard preventative asthma inhalers produced equally good outcomes in real-life because of greater patient adherence and better outcomes in some sub-groups of patients with asthma usually excluded from asthma studies.

He also shared the value of big data using large UK databases such as the Optimum Patient Care Research Database (OPCRD; https://opcrd.co.uk/), which collect de-identified data from over 7 million patients respectively, from a network of GP practices across the UK.

This data can be used to generate epidemiological type research. Professor Price has for example conducted research on the side-effects of oral steroids used for repeated flare up of asthma, risk prediction in chronic diseases like asthma and COPD.

Most healthcare systems and places in the world with data privacy regulations make it difficult to have access to real life data. It is particularly challenging in Asia to access information, for example in Singapore where there are specific issues in terms of data privacy and breaches. Professor Price highlighted the complex medical ethical issues surrounding the use of such data, the challenge of accessibility, and discussed how such issues can be managed. The most exciting of these is the advent of the concept of patients having complete access to their own health care data and then choosing for themselves to share it for research.

Associate Professor Han Chong Toh

The rise and access to medical technology and innovation

The remarkable growth in medical advances and cutting edge medical technology should not be out of reach to the masses and even those who from the bottom of the pyramid - the most in need. Twenty years ago, the cost of sequencing the entire whole genome for an individual would cost USD$100 million. Today it costs less than USD$1000 and can be performed on a desktop machine. This opens up a huge potential to understand diseases better including in developing countries. In the 1940's, the early years of the development of antibiotics, 1 kg of penicillin cost about USD$1 million dollars. Today, a course of antibiotics can cost USD$10. I am a big believer in the use of good biosimilar and generic drugs – which can be offered to as many patients as possible. In the 20th century, we have seen the eradication of deadly diseases such as polio and smallpox, and the control of previously rampant conditions such as cholera, typhoid and dysentery. In the 21st century, we look forward to the conquest of so many more diseases.

Proactive versus reactive Healthcare in the 21st century

We have to be careful of consumer health screening programmes that are unvalidated and can only cause confusion. Still, simple preventive health measures can be very powerful and certainly proactive healthcare than reactive healthcare must. Physician-writer-advocate Atul Gawande is building a public health programme across India that includes simple yet important measure like handwashing in homes and hospitals that will reduce infection

transmission. In the 1980's, when I was a medical student in England, the doctors' and medical students' common rooms would be filled with many smokers. Today that scene is much less common and the incidence of smoking in so many countries has been dramatically reduced. The Australian Government has implemented free preventive cervical cancer vaccine for females and males in their reproductive years.

Cancer Care in the 21st century

It's not just about drugs, surgery, radiation and such, cancer care must be holistic and total care. This can include music therapy and other forms of psychosocial therapies. Even in the doctor-patient relationship, healthcare IT must be enablers of a better doctor-patient dynamic than a hindrance. Even as we doctors enter data on a PC in a clinic consult and spend more time staring at the computer screen than talking to the patient, we need new and innovative systems – perhaps no keyboard – that can make seeing patients much more seamless and efficient.

Big data is becoming more and more important in Medicine and Healthcare. While we should safeguard patient confidentiality with proper yet enlightened regulation, there needs to be flexibility to allow medical information to be analysed towards better patient care and the benefit of humankind. Real world evidence will become a very powerful way to assess treatments for patients – in addition to clinical trials.

What should be the key ingredients of a medical school education in the 21st century:

Empathy – arguably the most essential ingredient for a future doctor

Resilience – the road is long and sometimes arduous and challenging. The student must be able to stay in the long game.

Teamwork – No doctor works as an island and teamwork is critical in delivering the best healthcare.

Professor Vikki Entwistle introduced some key concerns about ethical aspects of the pursuit of human health. Starting from questions of who gets access to particular new and expensive therapies, she drew attention to the opportunity costs that attach to investment in any particular kind of research or service provision (resources allocated to one are usually not available for another). This opened up questions about priorities in the pursuit of health. Vikki highlighted two broad themes for critical reflection. First, socially structured inequalities in health and healthcare provision, both within and between countries. Vikki used the case of Tuberculosis to raise questions about the obligations of the better off to help the worse off, and noted interest within bioethics in the development of ways of thinking about solidarity that can strengthen a case for more collaborative efforts in the pursuit of health. Second, the multiple aspects of 'health' and the different perspectives that can reasonably be taken on the relative priority of different kinds of health need and benefit. Vikki suggested that ethical inquiry around the pursuit of health should draw on public debate and the best of learning from humanities and social sciences as well as from biomedical science and statistics.

“An Anatomical whodunnit ? Michelangelo- Sculptor in Bronze “ Professor Peter Abrahams

Two nude male figures riding panthers known as the “Rothschild Tiger Bronzes “exhibited at the Fitzwilliam Museum in Cambridge have been dated by Prof. Joannides the Rijksmuseum and numerous bronze experts to the years 1506-1508. As a clinical anatomist I would like to share with you some of my conclusions following very close examination of their detailed anatomy over the last 3 years.

The accuracy in proportion and position of detailed musculature is uncanny and the sculptor’s knowledge of the body shines through every aspect -resulting in a “hyper-anatomised “male beauty, in all its anatomical glory. Anatomical features that are not readily visible unless the body is actually dissected are the sartorius muscle the triangle of auscultation and the shape of the gastrocnemius. These features on the bronzes led me to the conclusion that this sculptor had done regular dissection prior to modelling their bodies. The only artists of the late 1400s and early 1500 who had more than a passing exposure to dissection as revealed by research of all primary sources were Leonardo da Vinci and Michelangelo. In my talk I show how certain Morellian details and minute anatomical features that appear on the bronzes are also found in autograph drawings and sculptures of Michelangelo such as the abducted elongated second toe, the “ 8 “ pack rectus abdominis and the triangle of auscultation. In fact all previous attributions are anatomically completely without foundation as they have so many inaccuracies whereas these bronzes are near perfect anatomically.


GIRTON
COLLEGE
Pathways to Excellence
Symposium
13 April 2019
WHERE
EXCELLENCE
THRIVES


WHERE
EXCELLENCE
THRIVES