## 11. YALE-NUS COLLEGE - A NEW COMMUNITY OF

## LEARNING IN ASIA

The project of "launching a new college" is daunting, and like the launch of a spacecraft, filled with risk and a sense of adventure. The sense of adventure was in the air as the group of inaugural faculty met at Yale's campus in New Haven to begin the process of designing the curriculum for the new Yale-NUS College in Singapore in July 2012. Charles Bailyn, the inaugural Dean of the new college, had arranged for a dramatic first meeting of his new faculty to introduce themselves. In this meeting, each of the faculty members were to stand and walk to the front of the room, sign their names into a book, and give a brief introduction of themselves and their research interests. The gesture lent a historic feel to the



occasion, and all present felt that their names would some day be read as "founders" of something new and exciting. The eclectic intellectual interests of the group were also on display, as various faculty members described their areas of expertise. Within the room were representatives of nearly every sphere of knowledge, soon to be "exported" to a new country to found a new institution and to teach a new curriculum that they were about to design.

My own role in this historic occasion was as an ACE fellow, but I was also involved in developing the new Curriculum and was fully part of all the working groups of the new College. The faculty interests spanned the entire map of intellectual terrain - Western philosophy, Tamil Oratory, Philosophy of Science, trade in the British empire, migratory workers, spiders, Aristotelean notions of happiness, the sociology of HIV care, Renaissance literature, Thai politics, game theory and graphene. Soon these (mostly) young faculty would find themselves spanning the globe literally, as they moved themselves out to Singapore and would work together to establish a "New Community of Learning in Asia."

The faculty introductions not only were able to span an intellectual universe, but often were interconnected, as was the new Yale-NUS curriculum. For example, one faculty member, Shaffique Adam, whose expertise is in graphene, noted that the electrons in the pen he was using created a sheen much as occurs in graphene. My sign-in was right after his, and so I connected my work on the formation of the first nuclei in the universe with the elements within the pen-

the Carbon of the plastic arising from previous generations of stars in the early universe. Interconnections abounded - Greek and Chinese philosophy were to be joined in the new Humanities curriculum, a new integrated science track would create a unified common core introduction to science that merged, physics, astronomy, mathematics, chemistry, biology and earth science. Social science courses would explore some deep aspects of identity and draw on political theory, anthropology, and neurosciences in their discussions of self and group identities. All of us felt excited and a bit nervous about whether this great experiment would succeed in forging a common collective identity for the new institution, with a viable and successful new model for undergraduate education.

## EARLY HISTORY

The origins of this moment came much earlier, as the culmination of over 8 years of thought, negotiation, setbacks, and eventual triumph of the dream of creating this new College in Singapore. To help place the moment in context, I provide a brief (and necessarily incomplete) history of Yale-NUS College, based on the perspective of one who was involved in nearly all of the activities during the year of curriculum development, and as one who was a co-author of the "curriculum document" that placed the Yale-NUS College in the context of liberal education in the US and Asia. The tireless efforts of many leaders made the moment possible, and a more definitive history of Yale-NUS College will have to be written by one of these principals - Shih Choon Fong and Chor Chuan Tan, Presidents of NUS, Richard Levin, Yale's President, Charles Bailyn, the inaugural Dean of Yale-NUS College, and Pericles Lewis, the first Yale-NUS College President. This "brief history" is presented with apologies to them for any omissions or oversights, as well as with gratitude to them for making the dream of this new college come alive during the year of my ACE fellowship.

The Yale-NUS College is a case study in the convergence of an internationalizing strategy from a major US University (Yale), and a recognized need for a new form of undergraduate education from the partner host country (Singapore). As such, the Yale-NUS College is from the outset a match between needs of both Yale and NUS. A true partnership of these two universities provides the potential for a long-term stability that other "branch campus" initiatives may find harder to achieve.



The Singapore skyline and harbor area, viewed from the Level 33 restaurant in the Marina area.

Richard Levin, President of Yale, had a vision for Yale's "Fourth Century" as a time when Yale would expand internationally, to become a truly global university. In 1996, in a speech entitled "Preparing for Yale's Fourth Century," Levin noted that becoming global was the necessary next step for Yale in its mission to advance undergraduate education, and educate the next generation of leaders:

Yale is one of the very few universities in the world with the tangible assets, human resources, and internal culture to make possible simultaneous dedication to the preservation, transmission, and advancement of knowledge. ... Two such characteristics warrant reaffirmation as we develop a strategy for our fourth century. First, among the nation's finest research universities, Yale is distinctively committed to excellence in undergraduate education. Second, in our graduate and professional schools as well as in Yale College, we are committed to the education of leaders.

Beyond these commitments, we must recognize that the leaders of the twenty-first century, in virtually every calling and profession, will operate in a global environment. To prepare our students for leadership, our curriculum needs to focus increasingly on international concerns; our student populations must have strong international representation, and our students should have ample opportunities for study abroad.

Indeed, we will continue the transformation of Yale, begun in the eighteenth century, from a local to a regional to a national and now to a truly international institution -- international in the composition of its faculty and student body as well as in the objects of its study. [1]

In 2001, as part of the celebrations for its 300th birthday, Yale launched its "Fourth Century Initiative" based on Yale's natural progression toward internationalization. By 2001, the World Fellows Program had already been created to bring students from across the globe to New Haven

to study international issues. A Progress Report on Internationalization of Yale from 2005-2008 reported the rapid expansion of international programs for undergraduates, with the largest growth coming from a combination of new international summer internships (in 28 countries) and summer study at campuses from the International Alliance of Research Universities (IARU), a consortium of leading world universities that includes Yale, Oxford, Cambridge, NUS, ETH Zurich, Peking University, UC Berkeley, University of Copenhagen, University of Tokyo, and the Australian National University [2]. During this period, Yale created many new student exchanges, sent increasing numbers of students abroad, expanded international student enrollments in Yale College, and strategically hired faculty with expertise in international fields. Additional international programs expanded rapidly from 2005-2008, such as training classes for senior government officials in China and India, and extensive research collaborations with China (such as biology research at a Peking-Yale joint center, and nanotechnology at Yale-Beida center), and a proposed Yale Institute of the Arts in Abu Dhabi. The Yale International Framework of 2009 listed some initiatives with Singapore (virtual classrooms, a jointly taught summer course at NUS with Yale and NUS faculty and students, and projects on tropical forestry in Singapore), but the liberal arts college in Singapore was not yet part of Yale's extensive international strategy [3].

Meanwhile, Singapore had been developing its own vision for a liberal arts college, years before approaching Yale with the idea. The NUS President from 2000-2008, Shih Choon Fong was an enthusiastic backer of the liberal arts, and oversaw the launch of a residential interdisciplinary honors college within NUS known as the University Scholars Program in September 2000, and sought partners for a stand-alone liberal arts college that could be based in Singapore. NUS sought a partner to create this new college, and among the potential partners for this college approached were the Claremont Colleges - my home institution - who were approached by President Fong, and invited into negotiations for a partnership to create a sixth Claremont College in Singapore.

Our council of Claremont College presidents, delegations from Singapore, and committees of faculty from both Claremont and NUS discussed the ideas at length in 2008 and 2009. These discussions produced the document entitled "Claremont in Singapore" that described the new college. After hosting a delegation of Presidents from the various Claremont Colleges in 2008, President Shih was excited about the opportunity for a new liberal arts college to develop a "learning and living environment that seeks to catalyze a transformational experience for students." At that March 2008 dinner, President Shih said to the group of assembled leaders from the Claremont Colleges and NUS:

My colleagues and I are fortunate that through this academic outreach, we have enjoyed the opportunity to learn more about the Claremont Colleges and your diverse accomplishments, particularly in the liberal arts, science, business and the arts. Both the Claremont Colleges and the Singapore's universities seek to prepare our students for the global economy, equipping them with a competitive edge in our culturally complex world.[4]

President Shih left NUS a few months later, however, to become the founding Vice Chancellor of King Abdullah University (KAUST). Fortunately, the next NUS President, Tan Chor Chuan, was also a champion for the cause of the liberal arts college, and moved forward into more serious discussions with the Claremont Colleges, and later, Yale University, to work out the finances and governance of the new college.

Our Pomona College president, David Oxtoby, convened a small group of faculty in May of 2008 to discuss the benefits of the new Singapore College. As a participant in those discussions, I was able to see how the act of formulating the new college, creating new courses and sending faculty abroad could be transformative to our campus culture. Building the Singapore College could bring about new interdisciplinary collaborations back in Claremont, as well as a fascinating new component to our student body in the form of Singaporean and other Asian students. The increase in diversity, internationalization, cross-disciplinary work, and the more global outlook would be exhilarating and could lift our Claremont Colleges to a new level on the world stage. It also seemed to me that the intellectual exercise of deciding what "best-practices" we would want to bring to Singapore (as well as what we would want to leave behind!) was liberating and could sharpen how we operate at Pomona College and our other Claremont Colleges.

A separate committee was just as ardently discussing the downsides of this venture. Greg Hess, the Dean of CMC, gave me a copy of the 2009 "Draft Advisory report from the Ad Hoc Faculty Committee on Academic Freedom Issues Related to Claremont-NUS." The three main issues discussed by this committee of faculty and some Deans from all seven Claremont Colleges included academic freedom, freedom of expression, and non-discrimination. The report drew extensively from the AAUP's Committee on Academic Freedom and Tenure, and listed guidelines for what the Claremont faculty thought would be necessary to "form the basis of any negotiations" for forming the new Singapore College. At the end of the document, the committee concluded that establishing a liberal arts college in Singapore is a "commendable ambition," but expressed concerns about freedom of speech within Singapore. While many of the Claremont College Presidents and faculty were enthusiastic about the project, the economic downturn and a realization that the scale of the proposed project may have been too large for the Claremont Colleges, ended the Claremont-NUS College discussions.

## THE ORIGIN OF YALE-NUS COLLEGE

The National University of Singapore, however, was not going to let the idea of a new liberal arts college stop there, and continued to pursue the idea with a new partner - Yale University. The larger scale of Yale, its research-oriented mission, and the personal chemistry between President Tan and Yale's President, Richard Levin, made the partnership with NUS a much better fit. Despite the fact that neither Yale nor NUS were liberal arts colleges, the institutional cultures of the two universities and their joint membership in the prestigious International Alliance of Research Universities (IARU) made forging a cooperative agreement easier. Yale's status as one

of the premier liberal arts universities in the world, with Yale College, its "crown jewel" of residential undergraduate communities, made the project a natural outgrowth of Yale's commitment to undergraduates and its international strategies.

Richard Levin and Tan Chorh Chuan immediately recognized the compatibility of a new global college in Singapore with both of their visions, and quickly agreed to proceed with serious discussions on the idea. A common notion is that this idea was hatched over a cup of tea at the 2009 World Economic Forum in Davos, Switzerland, but both leaders from Yale and NUS had been working for many years on parts of the same problem, which fit together perfectly with the new Yale-NUS College. Yale and NUS had already been collaborating on a number of initiatives through their IARU consortium of leading world universities, including jointly taught courses and research projects in Singapore. Yale had a deep interest in expanding international programs, training global leaders, and liberal arts education for undergraduates, while NUS was eager to create new forms of residential liberal arts for its undergraduates, and was also rapidly growing in both international stature, and partnerships with US institutions.

Richard Levin soon afterwards began discussions about the new Singapore College with Yale faculty, based on a 2010 "prospectus" or letter that was written by Levin and Yale's Provost, Peter Salovey. This prospectus included an outline of the governance and financing of the new Singapore college and was presented to the Yale faculty for review and discussion in September 2010. Levin and Salovey also described the demand for higher education, and Yale's status as one of the world's leading universities as two factors for founding Yale-NUS College. As reported in the Yale Alumni Magazine:

Levin and Salovey mention other motives in their letter, including a growing imperative for universities to invest abroad. 'We do believe it is inevitable that the world's leading universities by the middle of this century will have international campuses,' they write. U.S. and European universities have hundreds of partnerships and joint ventures in Asia and the Middle East, and the demand for higher education in both regions is growing tremendously.[5]

The three distinct elements of the Yale-NUS arrangement - a true partnership between two "great world" universities, a financial model placing all the costs on NUS, and with the Yale-NUS graduates receiving a Bachelor's degree from Yale-NUS College awarded by NUS make the Yale-NUS arrangement unique and distinctly different from other "satellite campuses" like NYU Abu Dhabi, or partnerships offering joint degrees like the Duke-NUS Graduate Medical School. As was later stated in the promotional materials for the new Yale-NUS College, the combination of Yale and NUS, in a truly collaborative partnership, promised to fulfill the equation "1+1=3," a slogan used in admissions to denote the possibility of the Yale-NUS college being more than the sum of its parts. As Richard Levin put it in an interview with the Yale Daily News, "The liberal arts model is not the norm in most of the rest of the world, but there's an increasing feeling in Asia that it's giving the United States an edge in educating creative leaders. This college in Singapore could provide a way to influence all of Asia. [6]"

The unrolling of the concept of Yale-NUS College within the Yale community and in the national press is a case study in press relations, and academic governance. An editorial about Yale-NUS in the Yale Daily News, just days after Salovey's prospectus was released, and was entitled "Something to Talk About." The article nicely summarized the arrangement between Yale and NUS, and also presaged many of the most controversial aspects of the agreement:

Yale has never before operated, even in partnership, a full-fledged overseas campus with its name on it. Even though half the seats on the board of directors of the new college will be Yale appointees, and even though Yale will have say in the admissions criteria for students, faculty searches, tenure appointments and institutional assessments, it will be difficult to ensure the quality of the day-to-day education on a campus nearly 10,000 miles away. It also will be very difficult to ensure that academic freedoms are maintained in a country where public demonstrations and chewing gum are banned.

But Yale officials, led by President Levin and Linda Lorimer, have done a remarkable job negotiating favorable terms with Singaporean officials. Unlike New York University's new campus in Abu Dhabi, where an NYU degree is granted to graduating seniors, no Yale degrees will be awarded in Singapore. Yale will not have to foot any of the cost of the campus. And Singapore has agreed to include language that should put to rest some of those concerns about academic freedom.

Still, the fundamental question is whether Yale should share in the new college's name. This is ultimately a question of what Yale actually is. Is Yale a school rooted in its New England home, defined by its place and architecture in New Haven — a school that can and should only exist here? Or is Yale about education, wherever that may occur, whether in a classroom on Old Campus or on a computer screen in Turkey or at a liberal arts college in Singapore?[7]

Town Hall meetings were scheduled for tenure track or "ladder" faculty to discuss the new idea, to get input into how the Yale-NUS College in Singapore would be governed, staffed, and to determine whether the Yale faculty supported the idea. Haun Saussy, chair of the Yale Council on East Asian studies, and co-chair of the Yale oversight committee, expressed a more nuanced view of why Yale would embark on the project, since it builds on centuries of experimenting in education, in the spirit of Yale's motto - "Lux et veritas." To Saussy, the lux and veritas of a new Yale-NUS College would "incorporate lessons and values from our long experience here and contextualize them in ways that can be partly forseen and remain partly to be discovered. It would be an experiment in intercultural learning" [8].



Yale President Richard Levin with Singapore's Minister of Education, Dr. Ng Eng Hen, touring the Yale Campus in September 2010 (Yale Daily News Photo, 9/13/10).

The results of the first Town Hall Meeting seemed to support the experiment, although with limited "data," as only small numbers of faculty attended. Over 2,000 professors were invited to the first meeting, but only 25 attended, and several of those were from the Yale planning committees, according to news articles. The meeting was closed to press, but the Yale Daily News indicated that all of the 17 professors they interviewed supported the venture, quoting some positive comments from Yale professors about the quality of NUS in its scientific research, and the value of spreading the liberal arts model as part of Yale's mission. In the same article, Richard Levin reported that one faculty member expressed concerns about freedom in Singapore based on a book that was banned in libraries in Singapore [9]. Linda Lorimer, Yale Vice President and Secretary reported that the administration "received 290 e-mails from alumni and 25 from faculty about the plan, with 72 percent of alumni and 64 percent of faculty expressing full support and 11 percent and 8 percent opposed, respectively" [5].

During the academic year of 2010-2011, the excitement about building the new Singapore College was palpable within the ranks of the administrators and faculty involved in planning the campus, but was accompanied by persistent questions about freedom of expression within Singapore, according to press accounts. The Yale Corporation was "enthusiastic" about the new College, "but that the Corporation and the Yale administration are waiting to hear the Singaporean government's offer of a budget" before making "any final decisions" about the college [10]. A visit on October 20, 2010 by Kishore Muhbubani, Dean of the NUS public policy school, pointed out the ascent of Asia, and both indicated the importance of a rapidly rising Asia, and the benefits to Asia and Yale of building the new Yale-NUS College.

A survey of headlines about Yale-NUS College in 2010-2012 shows that press accounts of the new Singapore College were focused on issues related to political rights in Singapore. Editorials and news stories covered the incarceration of British author Alan Shadrake for writing about Singapore's judicial system in an unflattering way, the rights of gays and lesbians in Singapore,

the laws in Singapore against "unlawful" assembly (which can be as few as 5 people demonstrating outside without prior approval from the government), and also questioned the motivations of Yale for opening the new college. Despite some vocal opposition from a small minority on Yale's campus, a larger group of very influential faculty and the Yale administrators moved forward and worked steadily on the project to remove obstacles and iron out agreements on the financing and governance of the new Singapore College. As reported by the Yale Alumni Magazine, Richard Levin felt that the opportunity to "engage" Singapore in the new college could help liberalize its society:

As to the larger question of whether Yale should get involved with Singapore at all, Levin's answer is unsurprising, as he has maintained a similar stance on China for many years. He argues that the best course of action is to 'engage and hope that through conversation and interaction there's going to be some advance in mutual understanding and perhaps some liberalization of the society' [5].

## YALE-NUS CAMPUS AND INAUGURAL DEAN

In March of 2011 a budget was established for the new project that met the approval of the Yale administration. Yale had insisted on sufficient resources for facilities and faculty salaries, as well as lifting the usual requirement that international students receiving heavily subsidized education in Singapore fulfill a "service obligation" by working for a period in the country afterwards for companies based in Singapore. Financial aid would also be offered to international students in the new College, giving a subsidy that made the costs of Yale-NUS significantly less than comparable private liberal arts colleges in the US (The Singaporean tuition for 2014 is S\$15,000, and international students pay \$\$30,000, corresponding to about \$12,000 and \$24,000). The site for the college, a 10.5 acre lot adjacent to the NUS campus in an area known as "University Town," would be developed fully with a campus designed by Pelli-Clark-Pelli and Forum Architects to house the College's 1000 students in three separate residential colleges, and would include all types of instructional space, laboratories, studios for music and art, and classrooms. Additional agreements were reached assuring Yale that academic freedom would be protected on the Yale-NUS Campus. Anthony Kronman, former Dean of Yale Law School and Yale faculty advisory committee member said, "We have been given the strongest possible guarantees by the government of Singapore and by [NUS] that on the campus of the liberal arts college, the principle of freedom of expression will be honored just as on the campus of Yale in New Haven" [11].



An early drawing of the new Yale-NUS Campus architecture, showing the basic structure of the new Singapore College. The most prominent features are the three 24-26 story residential college towers, conceptually like the Yale Colleges with a "living learning community" of students and faculty led by a rector, and a series of buildings in the middle including a gymnasium, a learning commons, and performing art and classroom facilities [12].

The plan was to hire a group of 30-35 "founding faculty members" in 2012, and Charles Bailyn was charged with leading the searches, and coordinating the development of the curriculum. Charles described the "fun" of designing a College from scratch:

We all had way too much fun," says Charles Bailyn '81, an astronomy professor who chaired a committee on faculty development for the college. "We kept going out to dinner and had all these bright ideas. We had to stop ourselves from getting carried away and coming up with the reading lists for the courses, which will be the faculty's job, after all." Bailyn himself was so carried away that he agreed to be the college's dean of faculty and go to Singapore for its first year of operation. "It's because the enthusiasm was so high that Yale is pursuing this," he says [5].

Charles Bailyn was a great choice as the inaugural Dean for many reasons. As the A. Bartlett Giamatti Professor of Astronomy and Physics at Yale, with a B.S. from Yale, and a Ph.D. from Harvard, he has impeccable academic credentials. His Ph.D. thesis on X-ray emitting binary stars won the Trumpler Prize for best North American Ph.D, and he received the 2009 Bruno Rossi Prize for his research on the masses of black holes, giving him a very high level of credibility among both the Yale and NUS faculty as a scholar. Charles had served on the Committee on Yale College Education, the Yale College Teaching and Learning Committee, and the Yale Center for Media Initiatives, giving him good experience with campus governance on curricular matters. A popular and charismatic teacher, he was one of the first professors at Yale to record his very popular astronomy course in the Open Yale online education site, giving him experience with new types of teaching.



(left) Charles Bailyn, inaugural Dean of Yale-NUS College in a pensive moment during the New Haven curriculum workshop, and (right) with Lily Kong, one of the architects of the Yale-NUS College from NUS in Singapore, after planning new degree programs for Yale-NUS College [13].

Bailyn's leadership experience included chairing Astronomy at Yale, and running a complex network of telescopes in Chile known as SMARTS. Perhaps just as important as these traditional credentials are his breadth of interests and talents. Charles has experience co-teaching a course with religious studies professor Ludger Viefhues-Bailey entitled "Religion and the Big Bang," has served as a fellow at the Whitney Humanities center, and has been performing as a singer since his undergraduate Yale days in the leading *a capella* group. All of these talents came together in the form of a charismatic, larger than life character who easily conversed across disciplines and cultures, with humor and unstoppable energy.

Charles Bailyn began a series of "open house" events in Singapore in January of 2012 to attract student interest and explain to parents in Singapore what the new college would mean, and the concept of liberal arts education. Charles gave sample lectures on astronomy, while Jeremiah Quinlan, Admissions Officer, spent more than 11 weeks in Singapore establishing a Yale-NUS Admissions and Financial aid office. The early events were also intended to enable Singaporean male students to apply early before their two year military service terms began. Students from throughout Asia attended the events, and Charles and Jeremiah worked tirelessly promoting the new liberal arts concept to multiple groups of prospective students and parents, some skeptical about the new approach and curriculum, and all curious about what this new Yale-NUS would mean for Singapore.

In January 2012 two new professional joint degrees between Yale-NUS their parent institutions were announced. Yale-NUS students would be able to pursue a joint bachelor's in law from NUS, or a master's degree in environmental studies from Yale. John Wargo, chair of Yale College's environmental studies program, commented that "Yale-NUS College hopefully will provide a gateway for Yale faculty and students at all levels of training to develop research, field and teaching opportunities. The cultural and ecological diversity of the region is enormous. In many ways it is the ideal location to study a suite of the most pressing environmental issues of our time" [14]. Meanwhile, Charles found extremely strong interest in potential faculty for teaching at the new College, with over 2500 faculty applying for the 36 "founding faculty

positions." In this first round of hiring, Charles was looking for "faculty who will play an active role in developing and teaching the common curriculum courses," and "people with experience or potential in developing new undergraduate curricula and pedagogical techniques, and people with strong interdisciplinary interests" [15].

Charles and the Yale-NUS committee also found a brilliant solution to the problem of "cluster hiring" 36 faculty with so many high-quality applicants. Faculty who were considering applying to the Yale-NUS College as well as dozens of Yale-NUS faculty job applicants were invited to a series of workshops at Yale. During the workshops, the candidates were given more information about the new College, asked to work in small groups to discuss the new Common Curriculum, and given a chance to meet high Yale officials such as Richard Levin and Linda Lorimer, to hear directly from them about the new College. The process began in August of 2011, and included over eight separate workshops with groups of 30-40 faculty attending from across the US and beyond. These workshops also served as group interviews, since the faculty could be observed working with others, helping design courses, and discussing teaching, giving a good sense of their potential for the challenging work of designing a new core curriculum in Singapore.

## THE YALE-NUS CURRICULUM TAKES SHAPE

From the early workshops and intense discussions among the Yale faculty, visiting consultants, and candidates for the new "founding faculty" positions came the basic outlines of the new Yale-NUS Curriculum, of which an interdisciplinary common curriculum was the centerpiece. This common curriculum was ambitious in its scope and complexity, requiring teams of faculty to offer 9 interdisciplinary sequences in Humanities, Social Sciences, and Natural Sciences with titles like "Comparative Social Institutions," "Philosophy and Political Thought," "Scientific Inquiry," "Integrated Science," "Quantitative Reasoning," "Foundations of Science," "Current Issues," "Historical Immersion," and "Literature and Humanities." More than a survey course in a single subject, each of these courses was intended to provide a synthesis of Eastern and Western literature, philosophy, political theory and culture, as well as an in-depth immersion into the processes of scientific inquiry that unified the disparate disciplines with themes that emphasized deeper modes of thought common to science and long-term implications of science research for the sustainability of our society and the environment.

The new college was also going to require *all* of the students to take all of these courses together (amounting to all but one of their courses in the first year, and a total of 12 of 32 courses for the undergraduate program). The hope was that by sharing the experience of this common curriculum, a deeper shared understanding would emerge from both faculty and students, enabling Yale-NUS College to build on the interdisciplinary perspective in more advanced courses, and to give students a breadth of shared intellectual experience unmatched in any other liberal arts college.

The unique courses and approach at Yale-NUS College was also intended to impact the home Yale campus in New Haven through a "feedback loop" in which initiatives started in Singapore could be adopted at Yale. As Charles Bailyn described it, "The way the feedback loop would work is we will invent some new things, try them out. Just the process of thinking them through will give people ideas" [16]. The flow of Yale faculty teaching for a semester or a year at Yale-NUS would also potentially bring back courses and teaching methods to New Haven. Anthony Kronman described the project in glowing terms:

It's an opportunity to think about all of this without the baggage and prejudices that hamper curricular reform and liberal education in the United States. We can draw on a relatively blank sheet the outlines of a program that would be Western, Asian, completely free and fresh. [16]

Sample student experience at Yale-NUS		
	Semester One	Semester Two
Year One	Literature & the Humanities 1 Philosophy & Political Thought 1 Scientific Inquiry Comparative Institutions & Modes of Social Analysis	Literature & the Humanities 2 Philosophy & Political Thought 2 Foundations of Science or Integrated Science Elective or Integrated Science
Year Two	Modern Social Thought (either semester) Foundations of Science or Integrated Science Elective or Integrated Science Elective	Quantitative Reasoning (either semester) Elective Elective Elective
Year Three	Historical Immersion (any time in year 3 or 4)  Major  Major  Elective	Current Issues (any time in year 3 or 4)  Major  Major  Elective
Year Four	Capstone project in major Major Major Elective	Capstone project in major Major Major Elective

Sequence of courses within the Yale-NUS Curriculum, showing the common curriculum courses in blue, which amount to 12 of 32 courses within the undergraduate program, electives (green) and courses for the major (orange). The emphasis on the common curriculum is a distinctive feature of the new Yale-NUS College, and is designed to give students a common set of concepts that span disciplines and integrate Asian and Western traditions [17].

By May of 2012, Yale-NUS College had appointed its inaugural President, Pericles Lewis. Pericles himself had long been part of the Yale-NUS College as the chair of the Yale-NUS Humanities Search Committee. His administrative work included being Director of Graduate students and Director of Undergraduate students in Comparative Literature and the Literature major at Yale. His undergraduate degree came from McGill University, and his Ph.D. was from Stanford. His deep roots in the humanities were a great complement to Charles' science

background. Pericles had written extensively on modernism, with three books from Cambridge University Press - *Religious Experience and the Modernist Novel, The Cambridge Introduction to Modernism*, and *Modernism, Nationalism and the Novel*" as well as being the winner of the Heyman Prize for outstanding scholarly work for a junior member of the humanities faculty at Yale in 2002. These impressive scholarly achievements were coupled with experience with new technologies - Pericles maintained an online center for Modernism, known as the Modernism Lab, which is described as a "virtual space for collaborative research on modernism." Pericles also brought a cool, unflappable and presidential sensibility to his new job, which thankfully was joined with a great sense of humor and irony, necessary for any who would contemplate administrative work. It is also mildly ironic to note that Pericles, as an expert in modernism, was himself embarking on a very modernistic enterprise. If modernism in literature is described as the tendency to "break away from traditional verse forms" and "seek new methods of representation appropriate to life in an urban, industrial, mass-oriented age [18]," then Yale-NUS College in its essence is "modernist" as it too seeks to break away from traditional colleges to seek new methods in its curriculum and teaching.





(left) Pericles Lewis (third from left), the newly appointed president of Yale-NUS College in Singapore, meets with staff members including Choy Heng Lai (fourth from left), the Yale-NUS College Vice President of Academic Affairs [19]. (right) Pericles at Yale, from the article announcing his presidency of Yale-NUS College [20].

Soon after the workshops concluded, Lewis, Bailyn, Vice President Choy Heng Lai and their committees hired a group of over 30 faculty, who convened at Yale's New Haven campus in July 2012. After the heady introductory remarks and the sign-in ceremony, the group of these faculty huddled inside various rooms inside the Victorian Betts House for the two-week curriculum design meeting. It was one of those large "blank sheets" that confronted us as we began the process of converting the rhetoric and theory of the new college into a credible outline of topics and sub-units of the Yale-NUS Common Curriculum. I was participating in the science group in my capacity as an ACE fellow.

Over two weeks in Betts House, we had many ideas for courses but not all of them fit onto the walls of the library, let alone in a single common curriculum course! Despite our differences in disciplinary perspective and vocabulary, our group managed to overcome our lack of subject

knowledge in each other's fields and found ways to identify common themes and approaches that would work for all of our disciplines. Eventually the source of agreement came not in subject matter content but in pedagogy - regardless of which discipline was discussed in a course, agreeing to the same teaching approach and a unifying theme for the course would help tie the disparate material together. This meant that we would use a series of two week "case studies" in the Scientific Inquiry course to enable the unifying modes of thought to be carried through the course. Themes of "Complexity and Emergence" and "Reductionism" came up along with "Water" for the Integrated Science course to unify deep scientific principles in biology, chemistry, physics, and other subjects. A theme of "Energy, Environment and Health" was chosen for one of the Foundation of Science units, to enable all the science faculty to contribute to a discussion that drew upon their expertise in an interdisciplinary and socially relevant course.



Scene from the New Haven July 2012 curriculum workshop with the inaugural faculty gathered in Betts House to review the newly developed Yale-NUS Common Curriculum [21].

After the workshop in New Haven came a second two-week workshop in Singapore (all within 5 weeks; just giving participants a chance to change suitcases before flying across the Pacific!). In these workshops, the major themes of all the courses were selected, and the different working groups had credible basic outlines of all the first year courses for the common curriculum, as well as general themes and principles for the second year courses of the common curriculum. Various Yale faculty participated in many of the discussions, and workshops and talks from Yale faculty and visitors helped the group of inaugural faculty learn more about teaching writing, rhetoric, Eastern philosophy, active learning pedagogy, and other topics. The intensity of the Summer 2012 workshops enabled the faculty to bond and in many ways was both a "boot camp" for the new Yale-NUS College, and a second education in how to think broadly about how to teach, and about the unifying principles between the disciplines that underly human inquiry.

Within the Singapore workshop of August 2012 was also a series of events designed to enable the new Yale-NUS faculty to get to know Singapore and NUS better. The workshop included trips to the Sungei Buloh wetlands of Singapore (with biology professor Bill Piel, who found countless spiders and pointed out mudskippers to us), a hike in the nearby wilderness park of Bukit Timah (where the group was greeted by packs of macaque monkeys), explorations of local "hawker centers" (outdoor food courts with incredible Asian food at lowest prices anywhere), and large dinners for the group at NUS and in festive local restaurants such as a seafood center on the East Coast, and at Dempsey Hill, a converted British Army encampment, now home to numerous restaurants, art galleries, and even a microbrewery. The immersion into Singapore's rich ecological and cultural environment was life-changing for the group. Long working sessions were also included, and between course design discussions, leaders from NUS discussed touchy issues like press and religious freedom in Singapore, and helped the group better understand the nuances of working in Singapore.



Our fearless group in the Sungei Buloh wetlands, where we explored the environment of Singapore, and found a rich diversity of animals and plants.

# THE MISSION, VISION AND PRESIDENT OF YALE-NUS COLLEGE

One very exciting part of the Singapore meeting was the development of the mission statement for the new Yale-NUS College. Yale-NUS President Pericles Lewis, along with an outside consultant, guided our entire group of faculty and staff in a collective process of thought about the new College. After a general discussion of the mission statement, we broke into small groups and left for separate rooms in NUS to gather from each of the group members a set of "statements that would be important to me" as part of their thinking about the new College. Each group of about eight faculty and staff put ideas and statements on the board that they liked. Then

everyone in the room got four votes and the four most popular ideas from each group were reported back to the entire gathering of faculty and staff in the main hall.

Our group included Kathleen (part of the design and construction team), Casey (who worked as a high-level presidential assistant at the University of Wisconsin, and was now working with Linda Lorimer at Yale and President Lewis of Yale-NUS), Angela, (who brought to the Yale-NUS College experience in the foreign service and a Bryn Mawr education), Alison, (a long-time employee of NUS working at their Asian Research Institute), and two new Yale-NUS faculty members, Jessica (a historian), and Andrew (a professor of literary criticism). We were in some ways a microcosm of the entire college, with international experience spanning the globe. Many great phrases arose from the group discussion, which itself built upon separate faculty and staff discussions in New Haven and Singapore early in the summer.

Lofty phrases filled boards throughout the building, whiteboards in the main hall, and several pages in my notes. In the end all the discussions were distilled into a very simple 'vision statement in the form of a *haiku* that Pericles Lewis wrote to express the mission of the college:

A community of learning, Founded by two great universities, In Asia, for the world.

Yale-NUS College Vision Statement

The mission statement of Yale-NUS, is to "redefine liberal arts and science education for a complex, interconnected world." Further sentences stated the commitment of the new College to be a community of learning where "living and learning are intertwined and habits of creativity, curiosity, and critical thinking are encouraged." The new college aims to "educate citizens of the world and uphold the principles of free exchange of ideas, pluralism, and respect for diversity" [22]. Many were impressed at how well the few syllables of the vision statement (one more than an actual *haiku*, Pericles pointed out) fit the sensibility of the new Yale-NUS College.

## THE "INCUBATION YEAR"

After the two-week immersion in Singapore, most of the Yale-NUS faculty (and this ACE fellow) were scheduled to be resident at Yale for the academic year of 2012-2013, in what was sometimes called an "incubation year." During the first "incubation" academic year the faculty would be able to work closely for extended periods to further refine the course design, and to continue to learn more with each other about teaching and about other disciplines. Being resident at Yale allowed them to draw on the full resources of the university, and many of the Yale faculty were able to deliver talks at Whitney Humanities Center lunches and mentor and collaborate with the Yale-NUS faculty. With Vassar College geophysicist Brian McAdoo, I co-led the science group in regular weekly meetings to discuss course design, "field trips" to area institutions, such as Vassar College, Olin College, and Wesleyan during the Fall of 2012. We also met with several

Yale faculty and staff involved in Science, Technology, Engineering and Math (STEM) education, and heard from many of the leaders in the early days of the Yale-NUS project as well such as Deborah Davis and Anthony Kronman. Bill Segraves (from Yale College), and Jennifer Frederick (from the Yale Scientific Teaching Group) presented the results from their survey of liberal arts science teaching. In addition to the wonderful mix of academic and intellectual discussions, our group of (mostly) young faculty had a lot of fun with weekly dinners at Mory's (a local eating club with deep roots in Yale tradition), and these dinners served as a great chance to get to know the group personally, enjoy some lively and crazy conversation, and even bounce some interesting ideas for new courses and class topics. Our Mory's discussions also include meetings with Yale faculty - one example was a Mory's dinner with Yale economist Ben Polak (now Yale's Provost) who provided a number of great ideas for the Quantitative Reasoning course. Informal research talks by the Yale-NUS faculty, reading groups centered on the core curriculum texts, and "movie nights" helped create a close-knit group of "founding faculty."



Two of the Yale-NUS Professors working with Claremont College students during our visit to the Claremont Colleges in November 2012. Shaffique Adam, Yale-NUS physics professor, is standing and observing the work of three students while Scot Gould, Keck Science physics professor, and Nicholas Tolwinski, Yale-NUS biology professor observe.

Also during Fall of 2012, I led a group of 6 of the Yale-NUS science faculty on a visit to the Claremont Colleges. During our visit, we presented our new Yale-NUS Science Common Core curriculum to the Pomona College science faculty at a "Science Lunch," sat in on classes in Math, Biology and other subjects, and interviewed many of the leading Claremont science and math faculty about their teaching philosophy. The group visited a number of active learning science classes, including Pomona professor Nina Kornovsky's field biology class, Jo Hardin's statistics course at Pomona and the Keck Science department Accelerated Integrated Science Sequence (AISS) class. Many of the young professors were able to see a small liberal arts college in action for the first time, and interviews with accomplished liberal arts professors gave

us very useful ideas for our Yale-NUS courses. It was a joy to share my Claremont Colleges with the Yale-NUS faculty and also to visit many of my Pomona Colleagues and engage with them in more in-depth conversations about teaching than are typical during a regular semester.

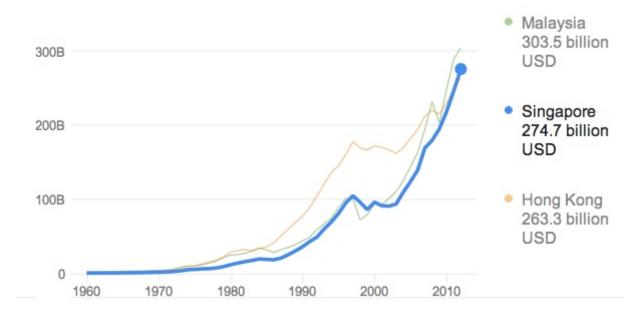
### SINGAPORE AND EDUCATION

The ACE fellowship enabled trips to Singapore in August 2012, and again in January, April and June of 2013 to meet with the NUS faculty and administration, to learn about Singapore, and to see some of the facilities for the new Yale-NUS college in detail. During several weeks in Singapore, I was able to acquire a more nuanced perspective of Singapore as a country, and appreciated the role of the new Yale-NUS College as part of the aggressive and far-thinking strategy Singapore has applied for economic development. In the educational sector, Singapore has been noted for its consistent top rankings in Programme for International Student Assessment (PISA) achievement tests for K-12 students in science and math, a widely respected test for 15 year olds, taken in 65 countries, to assess their performance near the end of their secondary education. Singaporean students are eagerly sought by US colleges and universities, including Pomona and Yale. The K-12 educational success comes from the close integration of government and education and is also helped by the small size of the country. In the book Surpassing Shanghai, author Marc Tucker compared the leading countries in the world for PISA testing and described details of their educational systems to see how they work. China, Finland, Singapore, Japan, Canada all are profiled in Tucker's study, as they consistently out-perform the US in reading and writing tests for their students. Tucker notes that:

Singapore has perhaps a uniquely integrated system of planning. The Economic Development Board plays a central role and coordinates with the Ministry of Manpower. The Ministry of Manpower works with specific industry groups to identify critical manpower needs and project demands for future skills within a work skills framework. These are then fed back both into preemployment training and continuing education and training. In other countries, labor and education markets make these adjustments slowly over time, but the Singaporean government believes its manpower planning approach helps students move faster into growing sectors, reduces oversupply in areas of declining demand more quickly, and targets public funds more efficiently for postsecondary education.[23]

The integration between education and industry has enabled the small country of Singapore, with a population of 5.3 million (including about 1 million ex-pats and foreign workers), to leap into the top ranks in a number of emerging technical industries. Starting in the 1970's with shipping, chemicals and high-tech manufacturing, and continuing today in electronics design, biotechnology, financial services, and materials science, the Singaporean economy has managed to be flexible to shift into new areas. and to grow consistently in areas where there are emerging demands. Singapore's economy has rocketed to new heights in the past decade and is now at \$274 billion in GDP (2012), at parity with its neighbor, Malaysia (a country of over 29 million, nearly six times larger in population and over 450 times more land area), and with Hong Kong (a close rival in economic performance with the benefit of full economic integration with China).

The success of Singapore's K-12 sector shows in its PISA rankings. In 2009, "Singapore students ranked 5th in reading, second in Mathematics, and fourth in Science, and had the second highest proportion (12.3%) of students who are top performers in all three domains," according to the Singapore Ministry of Education [24].



Singapore's GDP levels from 1960 to the present, compared to its neighbor Malaysia, and its rival Hong Kong. All three economies have skyrocketed in the past decade, and for Singapore a leading factor in the growth has been its highly adaptable economy empowered by closely integrated education and economic initiatives [25].

Singapore's higher education sector is also growing in influence and prestige, with its flagship university, NUS, now in the top ranks of world universities, and with several Centres of Excellence that are leaders in niche areas of science and technology, such as Cancer Science, Quantum Technologies, Mechano-biology, and Environmental and Life Science Engineering. Excellence in science and unique initiatives with international partners (such as MIT, JHU and others, as well as Yale) have helped propel NUS to the top ranks of world universities. While no single ranking is definitive, all of them have placed NUS highly, and in all ranks NUS has risen in the past few years. The Times Higher Education Rankings for 2013, for example, placed NUS as 26th in the world, with especially high scores for "international outlook," that arises from over 70 joint concurrent and double degree programmes with prestigious universities around the world. This 26th ranking places NUS among peers like Duke University (23), University of Texas at Austin (25), University of Wisconsin-Madison (31), and McGill University (34). The Shanghai ranking "Academic Ranking of World Universities" places NUS at a lower position, but still in the top 150, and near Texas A&M University and Seoul National University [26]. The QS World University Ranking places NUS at number 24th in the world, between University of California, Berkeley (25), and Duke University (23) [27].



The view of the region around NUS from a nearby research institution named Fusionopolis, which specializes in advanced computing, and has a pair of buildings complete with a roof garden and rooftop swimming pool!

The rise in prestige of NUS, and the emphasis within Singapore on economic growth tied to key industries makes the prospect of a new liberal arts college somewhat paradoxical. What would learning about Plato, Confucius, the origins of the universe, and comparative social institutions (all part of the new Yale-NUS core curriculum) have to do with raising GDP in the coming decades? And why would Singapore, a country well-known for its business-oriented, profitable, and practical outlook, embark on something as seemingly impractical as a small liberal arts college?

To answer this question, I had the privilege of meeting with Tan Chor Chuan, the NUS President, during one of my several visits to Singapore. Chorh Chuan is a singularly creative individual, who enthusiastically treks in high mountain passes, scuba dives with whales, and creates excellent Chinese paintings in his spare time. He is also a distinguished medical doctor and helped lead Singapore's response to the 2003 SARS epidemic. His State of the University Addresses, which summarizes the annual performance of NUS, always includes themes related to his creative endeavors. The past few years featured titles such as "Of Whales and the Campus Tsunami" (2012), which explored the 'tidal wave' of online learning at its penetration of technology to Bhutan, "Sky-pointing and Changes in Global Higher Education" (2011), which used the 'sky pointing' iguanas of the Galapagos Islands as a metaphor for slow learning among higher education institutions, and "Reading the Water Well" (2010), which talked about rubber plantations in Manaus, Brazil, and how they are a cautionary tale for remaining competitive in changing times [28].

Chor Chuan pointed out some of the advantages Singapore has as a small country, such as more "flexibility." Within this smaller community, it is easier to define goals and assess their performance. He described the five year cycles that government programs operate under and how this gives a chance to try new programs. Chor Chuan explained how the Yale-NUS program can help create "differentiated pathways" for higher education, and how it responds to the need for NUS to explore longer-term projects instead of those that are in the "here and now." The Yale-NUS College arises from a strategic positioning of Singapore in "10-15 years time" and perhaps well beyond that, and Chor Chuan stressed how important it is to have these future directed projects in the pipeline. Chor Chuan's list of priorities include developing online education, the "nexus between education and employment" as well as a re-focus on education and teaching. The Yale-NUS College can help move all of these areas forward.

Chor Chuan described how the combination of co-curriculum and curriculum at places like Yale-NUS also will enable a deeper form of education where value assumptions can be discussed and tested. His goal with Yale-NUS is "not to replicate the liberal arts model, but to enhance the value proposition" of its education.



President Tan Chor Chuan of NUS at work (left) and at play (right), snorkeling with his wife Evelyn in Tonga near a pod of humphack whales [29].

The Yale-NUS College as such is a "cross-cultural, and cross-institution collaboration." With the new Yale-NUS College both NUS and Yale are taking a risk, but a risk that could bring long-term benefits to both institutions. The approach that Chor Chuan brings to leadership stresses creativity, and has a sensibility that stresses simplicity and humility. He suggests that academic leaders need intellectual engagement, and need to speak "like a haiku" - with very few words, but maximum meaning.

## BLENDING ACADEMIC CULTURES AND THE INAUGURAL RECTOR

Many aspects of the new College truly were a hybrid of Asian and US sensibilities - the simplicity of its vision statement (literally in the form of a haiku!) and the emphasis on a simple but thorough curriculum that aspires to create a new and deeper form of common inquiry for undergraduates. During the same visit I noticed the ways in which hiring of new faculty were taking place. A mix of Yale and NUS faculty were on hiring committees, and these committees met to discuss the candidates after a round of short research talks, workshops on co-curriculum and common curriculum topics, and numerous social events. The discussion after these events, involving over 10 Yale faculty and equal numbers of NUS faculty, was truly impressive for being interdisciplinary and inclusive of the impressions of the entire group, successfully identifying 5-6 definite hires from the January faculty workshop, with others to be considered carefully.

One other unique aspect of the Yale-NUS College is the way it blended traditions from Yale into the new College. One of the key appointments to the new College was designated in February 2013, that of the Inaugural Rector. The first Rector at Yale, Abraham Pierson, helped found Yale College back in 1701. Brian McAdoo was chosen for the role of Rector at Yale-NUS College, which combined some of the roles of a founding faculty member, and some of the roles present in Yale with the title of College Master. Brian is a geologist and tsunami scientist who studied at Duke University, UC Santa Cruz, and worked as a Fullbright Scholar in New Zealand. His career at Vassar College, where he taught a wide range of interdisciplinary courses in geology, tsunamis, and African American paleohistory, was great preparation for his role as a founding faculty member.

Brian's grounding in liberal arts college traditions gives him a natural sense for what works with undergraduates and how to approach interdisciplinary teaching - this sensibility made him a central force in establishing one of the most exciting traditions of the Yale-NUS College, "Week 7" or "Learning Across Boundaries," where classes stop completely in mid-semester to enable students and faculty explore the region's cultural and natural resources for a week [30]. Perhaps most importantly, Brian is a warm, engaging and fun person, who easily mixes with the entire group of faculty, staff and students, which will make him a very effective Rector. Yale-NUS College is due to have three Rectors when the entire campus is finished in 2015, but Brian will take on the challenge of setting the culture within the college, developing Rector's Teas, and creating community between faculty and students.



(left) Brian McAdoo, inaugural Rector for Yale-NUS College in Singapore, will take on the role of creating campus community between faculty and students as well as being a founding faculty member. (right) Three of Yale's Dean's Fellows (recent graduates from Yale and other colleges who serve as mentors for the incoming class) relaxing with Brian McAdoo [31].

## THE CURRICULUM COMMITTEE REPORT

In New Haven, I was able to work closely with the Yale-NUS Curriculum Committee, a group designed to help oversee the development of the common curriculum, majors and other courses at the new Yale-NUS college during the very intense year of curriculum development. Our Curriculum Committee consisted of Bryan Garsten, lead author of our curriculum document, Charles Bailyn, the Division Chairs for Yale-NUS College (Rajeev Patke from Humanities, Jane Jacobs from Social Science, and Hway Chuan from Natural Science), and myself, in my capacity as an ACE fellow. In the first discussions of the committee that I joined, back in August of 2012, I was impressed again by the quality and thoughtfulness of discourse that guided our meetings. Many of the people had already been involved in the Yale-NUS project for several years (Charles Bailyn, Bryan Garsten, Rajeev Patke and Deborah Davis, who represented Social Sciences in the first meetings), and their wisdom and commitment to the project were inspiring. The first curriculum committee meetings were part of the Summer 2012 workshops in New Haven and Singapore, and were intended to help the "facilitators" of common curriculum courses report back to their committees on how the courses were going and to coordinate the work of the several committees. Hearing the reports from these groups evolve and develop into more refined versions was inspiring, and numerous iterations of these courses (some complete re-writes) occurred during the 2012-13 academic year.



Our inaugural Yale-NUS curriculum committee, featuring (from left) Rajeev Patke, Bryan Garsten, Bryan Penprase, Charles Bailyn, Jane Jacobs, and Pericles Lewis, Yale-NUS President. (not present - Hway Chuan Kang)[32].

The curriculum committee was charged with writing a report about the rationale behind the new Yale-NUS College, and to place the new Singapore College in a context of liberal education and its growing relevance and importance within Asia. Bryan Garsten, a Yale professor of political science and acting chair of Yale Humanities, led in creating our document. His experience as a professor both at Yale and Williams, and as an author of two award-winning books (one on Rosseau and another on "Rhetoric and Judgement") was ample preparation for the task. Our committee met every two weeks for the entire academic year, to examine all aspects of the Yale-NUS curriculum, help develop descriptions of the common curriculum for the web site, review course descriptions and majors. We also helped discussed and helped wrote the various sections for the curriculum document. The meetings proceeded throughout the academic year, with interesting mixes of locales for our participants. Sometimes the group was in New Haven, with 1-2 joining by videoconference from Singapore, at other times the group would be distributed throughout multiple locations across the globe. With input from each of us, we gathered the resources to make the case for the new Singapore College, and also survey the history of liberal arts in the US and in Asia.

The final document, entitled "Yale-NUS College - A New Community of Learning," was finished in April 2013 [33]. The principal author was Bryan Garsten, and in the forward to the document, he and Charles Bailyn noted that the document arose from a multi-year process including deliberations from panels of Yale, NUS and liberal arts professors, from workshops with the inaugural faculty, and from the work of the committee. This document had to summarize those many discussions that arose from years of hard work from literally hundreds of professors. The central question to be answered was "What must a young person learn in order to lead a responsible life in this century?" The report build upon notions deep in the history of higher

education, such as the Yale curriculum report of 1828, with its metaphor of building the "discipline and furniture of the mind."

Some of the themes addressed include the rise of online learning, the historical context of liberal arts education (with its disproportionate production of political, business and science leaders), the growing interest of liberal arts in Asia (with new liberal arts institutions in India, Japan, Korea and other countries), the role of the campus and discussion in education (including architecture to facilitate chance interactions), and the rationale for a broad and deep common curriculum that blends Eastern and Western works and integrates science and quantitative work in the study of all the students. The unique common curriculum, the limited number of course choices in the early years, and the role of new teaching methodologies were also explored in the document.

While many aspects of the Singapore college were new and innovative, the core approach to the Yale-NUS College, like its mission statement, is rooted in simplicity - "a focus on articulate communication," "open, informed and reflective discourse," and "conversation" between individuals is the primary element of the Singapore College, as has been in the best Colleges since ancient times. As the report put it, "Among the goals of a college curriculum is to help students make sense of that experience together, through a set of conversations about some of the most fundamental questions and problems of human existence." The curriculum should facilitate conversation, as would the campus design, with its carefully engineered common spaces. Fundamental questions would be posed within team-taught common courses that transcended East and West and blended individual academic disciplines in new and innovative ways.

The curriculum document was released in a festive reception at the Yale University campus hosted by Marvin Chun, Master of Yale's Berkeley College. The reception included both Richard Levin, Yale's President, and Peter Salovey, Yale's incoming President, dozens of the Yale faculty who have supported the Yale-NUS College since the very early days, and the founding Yale-NUS faculty. The beautifully decorated Master's Hall was packed and filled with excitement as we toasted the document, heard a number of inspiring speeches about the new Yale-NUS College, its curriculum and what it meant to Yale and the larger world. As one of the authors, I was asked to sign copies, and felt extremely grateful for the honor of being part of the group who wrote the document and proud to be friends and close collaborators with the inaugural faculty in their brave experiment in undergraduate education. As a new academic "community of learning," the gathered group of Yale administrators, faculty, and Yale-NUS faculty, were rightly proud of their hard work, and the curriculum document more than anything was a reflection of that community and its collective thought from derived from years of intense conversation and debate about how to build the new Yale-NUS Singapore College.



The celebration of the rollout for the Yale-NUS Curriculum document, featuring Richard Levin (standing, from left), incoming Yale President Peter Salovey, Yale-NUS President Pericles Lewis, and Yale-NUS Vice President for Academic Affairs, Choi Heng Lai, at the Berkeley College Master's House.

#### READY FOR STUDENTS!

A return to Singapore in April 2013 enabled a chance to view the final stages of admissions for the "Pioneer Class" of the new Yale-NUS College. Students and parents were invited to the Experience Yale-NUS Weekend, which included tours of the Singapore campus and sample classes on liberal arts topics from faculty of Yale-NUS and some of us who helped design the curriculum. During the April event, panels of faculty met with parents to answer their questions about the new College, and most importantly, to convince them to commit to sending their kids to an institution that had no alumni, no track record, and a campus that was under construction. Despite these factors, parents and students were both very excited and aware of the historic opportunity that came with being the first entering class. These students would set the tone for the institution, establish its traditions and clubs, and would mentor the entering classes to come. Thankfully Jeremiah Quinlan and the admissions staff had done their job well - the admitted students to this first class represented only 4% of the 10,000 applicants, and many had perfect scores on SATs, or IB tests, or were champions in several sports, and representing countries ranging from Sweden to Swaziland. My experience teaching my 'Multicultural Cosmology' sample class was extraordinary. Star lore and calendars that I had taught for decades in California from India and the Middle East were part of the daily experience of the several students in the sample class, who added additional tales from their grandparents in an Indian village, and fascinating details of viewing stars from a Malaysian beach. I recognized in the group of prospective students a truly multicultural world view that made the experience of teaching them unlike anything I had experienced in 20 years at Pomona College.

The April trip was followed by a return to Singapore in June, for the final meeting of all the Yale-NUS faculty before they began the challenging work "in the trenches" of the first academic year. A new batch of faculty, hired during the the past few months, joined in the now one year-old tradition of "signing the book," with short introductions. A dazzling array of events included a Chinese wedding for one of the young faculty members, social banquets for the entire group, visits to local brew pubs and Little India to "build community" among the faculty, and celebratory lunches and dinners that included the growing Yale-NUS staff. There were also many meetings in small conference rooms to hammer out details of the common curriculum and procedures for the nuts and bolts operations of the new college. By the end of the June meeting, the entire group of faculty and staff were ready (or as ready as they could be) for the opening of the new Yale-NUS College, in just a few weeks.



Building Community in Singapore - the group of Yale-NUS faculty enjoying a relaxing evening at the "Little Red Dot" a Dempsey Hill brew pub named after the nickname for Singapore derived from a nickname first used by an Indonesian President in reference to Singapore's small size on the map.



Pericles Lewis, Yale-NUS President, addresses the complete group of founding faculty during the June 2013 meeting in Singapore, the final meeting of the full faculty before the new Yale-NUS College began. Charles Bailyn, Dean, looks on from the podium (photo by the author).

Yale-NUS College began with its inaugural group of 50 faculty, and its first "pioneer class" of 150 students in July 2013. The entire group of students convened in Singapore for the first week of an orientation cleverly named "Singaporientation." During the first week, they got to know each other, and Singapore better. The incoming class was 2/3 Singaporean, and 1/3 international, and for most of these international students, it was their first thorough introduction to Singapore. After the first week, the entire batch of students flew to New Haven to spend three weeks resident at the Yale campus, where they were treated to guest lectures from high profile Yale professors and leaders, and to tours of US cities such as New York and Boston.

After being steeped in "Yale-ness" these students then flew back to Singapore to begin the regular academic year, which included inaugural ceremonies, a visit from Singapore's Prime Minister, Lee Hsien Loong, and a tea with the three presidents who made the new Yale-NUS College possible, Richard Levin from Yale, Chor Chuan Tan from NUS, and Pericles Lewis from Yale-NUS. The new Yale-NUS College is now more than set of courses, but a true community of learning, building its own traditions and providing its students a new model of liberal arts education in Singapore. Its location in the heart of Asia gives it opportunities to draw on the rich cultures that surround it, and with the new wave of interest in liberal arts education in Asia, it has the opportunity to help lead this new model of higher education and to be one of many new colleges in Asia that can help build creative, socially responsive, and multi-cultural leaders for the new century from its students.



(Top) Artist rendition of the main entry of the Yale-NUS College campus, with a distinctive fountain feature that includes "understated grandeur and subtle fenshui elements" currently under construction and scheduled for opening in 2015 [34]. (Bottom) Richard Levin, Pericles Lewis and Chor Chuan Tan celebrate the inauguration of Yale-NUS College in August of 2013 [35].



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