Duke-Kunshan Planning Guide

Prepared by Office of the Provost Office of Global Strategy and Programs

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"A strategic international Duke would be one that decided where in the world it is of highest institutional value for us to be active and presented our strengths not separately but together, as collaborative contributors in the work of complex problem-solving—teams of Duke partners that could help partners in other countries form the communities of trained intelligence our world increasingly needs." —President Richard H. Brodhead, Address to the Faculty, October 2007.

Preface

In Duke's current strategic plan, *Making a Difference*, the University identified the increased globalization of research and education as both an opportunity and a challenge for Duke. As stated in the strategic plan: "Duke has long recognized that we cannot be a great university without being an international university. . . . We operate in an interdependent world, where what were once hard and fast borders are now permeable, where individuals are part of an increasingly global community, and where problems transcend traditional boundaries."

Duke has long been an internationally engaged university. However, the strategic focus President Brodhead discussed in his address to the faculty in 2007 is new. Over the last decades, we have emphasized bringing the world into Duke through our curriculum and research interests, in the diversity of our faculty and students and the breadth and depth of colloquia and cultural programming. But we have entered a new phase of taking Duke to the world, consistent with our mission to develop and communicate new knowledge and to put knowledge in the service of society, understood not just regionally or nationally but also globally.

This planning guide provides an executive summary of planning for Duke's joint-venture campus in Kunshan, China – the most significant embodiment to date of this new global strategy. The goal is both to synthesize prior planning documents in articulating the rationale for Duke's engagement with China and Kunshan and to provide up-to-date information about key elements of the endeavor that are still coming into focus. These include formal partnership arrangements and financial plans. Thus, this guide is meant to be a living document, to be updated in subsequent versions as current understandings become even more sharply focused. Accordingly, this document is titled not as a plan set in stone, but as a guide to a planning process still underway.

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Overview: Duke's Global Strategy

Duke is one of many colleges and universities with substantial ambitions to increase its international relationships and presence. The trends identified in *Making a Difference* are now recognized by many other colleges and universities, and have led to what Ben Wildavsky calls "the great brain race" (in a book by that title). Governments increasingly recognize that knowledge-based economies require both the development of new research capabilities and increased access to education and training. As a result, there are new investments in higher education globally, leading both to a global increase in student interest/enrollment and creating new institutions around the globe. This expansion dramatically increases the potential for research collaboration and the challenges for a university of attracting and retaining the highest level of talent in faculty and students.

Universities are responding in myriad ways to the challenges and opportunities of internationalization. Some universities have responded at the institutional level (e.g., NYU in Abu Dhabi and with recently announced plans in Shanghai), while in other cases, specific schools or disciplines have established joint or collaborative educational initiatives (e.g., Georgia Tech's Engineering in Singapore and India; INSEAD Business School in Singapore, Abu Dhabi, and China). This is particularly true for disciplines that have already cultivated a distinctly global perspective, such as business, engineering and medicine.

Duke's vision for its role in the international arena not only responds to current trends in higher education, but also re-shapes our imagination of what is possible by preparing students, scholars, and citizens to lead in the global context of the 21st century. This is as important for what Duke does on its campus in Durham as it is for any international engagements. Duke is exceedingly well-positioned to articulate, embody, and execute a powerful and distinctive vision of a Global

Research University. If we are visionary, bold, and strategic, we can become one of the most important global leaders in higher education in the 21st century.

Duke's strategy is to become a globally-networked university of embedded and connected relationships and institutions, rooted in physical presence in key locations, rather than to be a Durham-based University that establishes a few "branches." Hence we do not start with a fixed set of assumptions about what it means to be physically present in a particular region. Nor do we presume that all levels (graduate, professional, undergraduate) or schools and units of Duke need to be in each site, nor that we will typically offer the full range of academic programs we offer in Durham. We are and ought to be ready to establish a Duke strategic presence wherever at least two or three schools/units are prepared to work together in a significant way.

In developing the network of embedded relationships that define Duke's global strategy, Duke must be guided by a set of fundamental core principles: we will ensure that Duke's engagements –

- Meet all measures of Duke academic quality for Duke global sites, ensuring the key ingredients of academic freedom as the foundation of academic quality.
- Preserve Duke's integrity and enhance Duke's reputation.
- Engage local partners with clearly shared goals.
- Focus on regions that maximize opportunities for learning for faculty and students.
- Emphasize Duke's multidisciplinary strengths and dexterity in implementing cross-school programs.
- Create and cultivate significant opportunities for faculty and schools/units in the region in research, teaching and addressing global problems.
- Complement and enhance Durham programs.
- Prioritize programs with strongest intellectual rationale and prospects for financial sustainability.
- Enable us to be a good citizen of the region, develop connections, and build assets.
- Minimize encumbrances/risks and maximize freedom for Duke, given specific cultural contexts.

The Opportunity in China

The advantages of engaging with China as part of our strategy of a network of embedded relationships are fairly obvious – it is the world's largest nation, with the most rapidly growing economy, a deep respect for higher education, and a relatively recent willingness to develop

mutually beneficial partnerships with foreign institutions. It is also critical to our wider global strategy of developing networks of embedded and connected relationships and institutions. We believe the best universities of the 21st century will be intrinsically global in their teaching, research, and engagement, and China will be an important node in any global university's network.

Further, there are significant opportunity costs to Duke not being in China. As the Education Advisory Board report, "Operations of American Institutions in China", indicates, many of our peer institutions are already ahead of Duke in establishing operations in China. We believe that our model, both by establishing a joint-venture with Kunshan and Wuhan University and more broadly by envisioning ourselves as a globally-networked university, offers an opportunity to both catch up and become a leader as a 21st century global university.

Even though we believe that China is a crucial opportunity for Duke, it may be less clear why we chose the Municipality of Kunshan as one of our principal partners in this engagement. As Duke began to develop the strategy of embedded relationships, with the Fuqua School of Business in the lead, we enlisted the help of the Boston Consulting Group (BCG) to assess prospects for Duke engagement in China. Since partnership is essential to working in China, BCG evaluated the pros and cons of partnering with other universities, with government entities, and with other types of organizations. In the course of these conversations, the advantages of being sponsored by a government entity, in close collaboration with an academic partner, became increasingly clear. A government sponsor will have interests that are compatible and not competitive, can tap substantial economic resources, provide an imprimatur of legitimacy, and navigate the various layers of government approval and regulation that are part and parcel of doing business in China.

Of the potential government partners Duke considered, the Municipality of Kunshan was chosen based on its proximity to the major metropolitan area of Shanghai. Kunshan is 34 miles from the Hungqiao airport and 65 miles from the Pudong airport. A new high speed train connects Shanghai to Kunshan in about 15 minutes. High speed rail also connects Kunshan with the industrial and cultural center of Suzhou and with the provincial capital of Nanjing.

Kunshan's long-term vision is to have a major university located within the city limits. Kunshan would like to be for Shanghai what Palo Alto is for San Francisco and Princeton is for New York. Thus their objective is that Duke's presence will serve as a magnet for young professionals, service industries and entrepreneurs from China and the world. Kunshan has twice before used education to restructure its economy, first by providing excellent high school technical training when it entered the furniture and textiles businesses, and second when it developed strong community colleges to support the electronics industries. Now Kunshan wants to use the presence of a world-class university to launch a third economic transformation.

A Three Way Partnership: Duke – Kunshan – Wuhan

In China, a foreign educational venture must be undertaken in partnership with a recognized Chinese educational institution. The Chinese partner sponsors the application to the Ministry of Education for the approvals necessary to offer educational programs in China. Duke recently completed an agreement in principle with Wuhan University to serve as our educational partner. Established in 1893, Wuhan is the oldest comprehensive university in China and is one of

China's top ten universities. Located in the city of Wuhan, a population center of over 10 million people in the Yangtze River valley about an hour's flight from Shanghai, the university enrolls over 50,000 students in a full spectrum of programs of humanities, social sciences, business, engineering, law, public health and medicine. Wuhan has high ambitions and a long history of international partnerships. They will sponsor our application to the Ministry of Education, facilitate joint programs and student and faculty exchanges as are mutually agreeable. They will not contribute financially to the new institution. Their primary interest is expanding opportunities for their students and faculty and the opportunity to learn from Duke about world-class educational and research practices; already, collaborations are developing in the Global Health arena. As a final note, the Ministry of Education has told Duke that it views us as a premier Western university that is crucial to the innovation and reform that China is seeking to implement in terms of quality higher education; this is especially true since we plan to partner with a top-tier university like Wuhan.

At this point in the development of the project, we have several formal agreements:

- The January 2010 Agreement with Kunshan in which Kunshan committed 200 acres to a campus and to build the initial campus facilities and Duke committed to establish a Chinese Joint Venture University and to carry out an educational program with a limited set of initial graduate level programs leading to Duke degrees and limited pilot programs of non-degree undergraduate education. Kunshan has begun construction of the campus. We expect academic programs to begin in the late summer of 2012.
- A January 2011 agreement with Kunshan in which Duke and Kunshan agree to share responsibility for providing operating subsidies to supplement campus-generated income during the first six years of operation. This agreement is renewable in principle.
- A January 2011 agreement with Wuhan University, which has agreed to serve, as required by Chinese law, as our "education partner" in forming the new Joint Venture University. Wuhan has agreed to the name Duke Kunshan University (DKU). As currently envisioned, Wuhan will not have a financial interest in the new university but will have seats on its Board.

Nearing completion are:

- Legally binding agreement(s) which, based on and incorporating details from the earlier agreements, will establish the scope, authorities and operational powers of the new Joint Venture University, the commitments of Duke, Wuhan and Kunshan to it, and the means by which it can be dissolved ("Joint Venture Agreement").
- An application to the Chinese Ministry of Education asking it to legally charter a new Chinese Joint Venture University based on the agreements reached between Duke, Wuhan and Kunshan.

With the assistance of the Office of General Counsel and expert outside legal counsel in the area of Chinese law and business practices, Duke drafted the Joint Venture Agreement with input from Kunshan and Wuhan. The Joint Venture Agreement will:

- Create a Chinese legal entity, Duke Kunshan University (DKU).
- Give Duke the sole authority to propose to the DKU Board all policies and procedures by which DKU will operate.
- Give Duke 3 of 7 seats on the Board of DKU, and establish a 5 vote requirement for all significant DKU decisions, thereby requiring at least one Duke vote for all Board decisions. Kunshan and Wuhan will each name two members of the Board.
- Give Duke the authority to name the Duke members of the Board and to nominate the DKU President for approval by the DKU Board.
- Adopt or recognize as exemplars a number of Duke policies and procedures for the
 operation of DKU in areas of key importance, including adoption of statement of
 "Fundamental Principles of Academic Quality" which establishes Duke's lead role in
 faculty affairs, admissions, curriculum and provides basic guarantees of academic
 freedom, including open access to library and internet resources.
- Commit Duke to developing the campus's educational programs at world-class standards and sharing the responsibility for annual operating support with Kunshan for at least the first six years of operation. Educational programs are to be developed in several phases, eventually culminating in the development of a comprehensive research university, including both undergraduate and graduate programs. The document allows Duke to develop partnerships with other institutions to offer particular programs. Thus Duke per se is not committed to offering any particular future program, e.g. programs leading to undergraduate degrees.
- Commit Kunshan to a zero cost lease of land and facilities to DKU for at least 10 years and to provide annual operating subsidies, in partnership with Duke, for at least six years.
- Insulate Duke from the liabilities and obligations of DKU except as Duke shall choose to provide annual operating support.
- Give Duke the right to withdraw from involvement in DKU and remove the Duke name from the University in the event of a fundamental disagreement.

The principles of the proposed Joint Venture agreement were discussed with the Duke Board of Trustees in late February along with other aspects of the Kunshan project. The Trustees unanimously approved Duke's participation in DKU and authorized the Executive Committee of the Board to approve submission of documentation necessary for the creation of DKU, including an application to the China Ministry of Education.

Market Research and The Higher Education Environment in China

In December, Duke Theater Studies faculty member Claire Conceison invited noted Harvard University China scholar William C. Kirby to present a public lecture at Duke on Higher Education in China. At the request of Greg Jones, Kirby subsequently prepared a document summarizing prospects for engagement with Higher Education in China; Kirby states that "this is a time of great expansion, outreach, and experimentation in Chinese higher education," and further that there are both significant opportunities and risks to this engagement.

As part of the initial decision to pursue development of the Kunshan initiative, we commissioned studies of the opportunities and risks in the China market by the Boston Consulting Group (2008) and the Huron Consulting Group (2009). The Boston Consulting Group study, commissioned by the Fuqua School of Business, affirmed opportunities for business education in China, assessed the pros and cons of a variety of potential partnership arrangements, gauged consumer receptivity to program design, and identified the initial Duke price point as a source of concern. The Huron Consulting Group study examined the potential for offering non-Fuqua programs in China, and noted that US-style educational programs would not be self-supporting and would require identified subsidy sources. These studies were of great value to Duke as we moved to finalize our partnership with Kunshan and designed initial program offerings.

A follow-up study that we commissioned with China Market Research in late 2010 asked recent graduates, parents of recent graduates, and potential employers, to respond to various aspects of program design for the proposed FSB and non-FSB programs in Kunshan. Brand recognition for Duke was high among students and employers, and overall receptivity to program elements was strong. Some interviewees expressed concern about price points, wondering if Duke Kunshan University programs would have the same price point as Duke main campus programs. This study has given us better understanding of what students and parents expect from premiumpriced overseas education- not only high quality training, but also a significant international and cultural experience that may give them an edge in the job market. The Duke programs, which will offer world-class training, will also need to provide a significant "international experience", either on the Kunshan campus by having a significant number of international students, and/or by having the programs spend time in the US. As a further follow-up, we are designing a conjoint analysis on various aspects of proposed programs and costs to further refine our understanding of student and parent "willingness to pay" for specific program design options, including spending some part of the program in the US. This study also points out the need for providing scholarships that reduce what in-country students actually pay.

In addition to gathering information on Duke's possible niche in China, over the past year, we are making a concerted effort to compile information on higher education activities in China by other international institutions, in particular activities by our peer institutions in the United States. A report that we commissioned the University Leadership Council of the Education Advisory Board indicates that many of our peer institutions have chosen to focus their activities on or near major cities, including Beijing, Hong Kong, Nanjing, and Shanghai. Duke's peer US institutions typically partner with multiple Chinese institutions rather than with a single institution, and few of our peers report having a formally codified strategic plan that guides long-term growth in China. Programs include both degree and non-degree programs, with most

degree programs enrolling a combination of Chinese and US home institution students. Most of our peers report operating programs in China 1) in order to expand the university's presence and prestige in China, 2) to recruit international students and faculty, 3) to engage with Chinese scholarship and professionals, and 4) to facilitate an intellectual and cultural exchange between American and Chinese students. Among our peer institutions, short-term revenue enhancement is not reported as a primary goal of engagement in China.

A second study on peer activity has been conducted by the Chinese Market Research Company in Shanghai. This study profiled 10 educational programs in China involving international partnerships, including tuition levels, student enrollment details, etc., as well as "lessons learned." The study has provided insight into pricing practices, issues in working with partner institutions and government agencies, and the competitive environment. The report concluded that "most programs set tuition based on own consideration of cost and student willingness to pay" but prices must be approved by government agencies.

What is distinctive about Duke's approach in China? Considering Duke's plans in China in the light of peer institutions' efforts, we conclude that Duke's initiative in relative terms is ambitious and with a large potential future impact. We are the only top-10 US institution actively pursuing the joint venture approach to eventually establish a comprehensive university in China at this time. Duke Kunshan University is also envisioned to become an important node on Duke's overall strategy to become a global networked university. Only one other US institution that we are aware of (New York University) is in the process of developing a proposal for a joint venture university that will eventually include graduate and undergraduate programs. The two proposals differ from one another, however, in that NYU has partnered with East China Normal University, which is a mid-range institution in China, and is scheduled to expand rapidly in order to meet its ambitious enrollment targets, particularly with regard to undergraduates. In contrast, by leading with graduate/professional programs, Duke plans to move cautiously with enrollment, to ensure maintenance of high quality.

The Duke Kunshan University Campus

The Duke Kunshan campus is a 200 acre site within the 1,700+ acre Kunshan Science, Technology and Education Park (K-STEP) located about 37 miles west of Shanghai. A master plan for the campus, developed by the Gensler global consulting firm in partnership with teams from Duke and the Municipality of Kunshan, calls for phased construction and occupancy.

Phase One of the campus, scheduled to open in summer 2012, is designed to accommodate up to 700 students. Six buildings on the western side of the site will comprise the initial phase of construction: the Fuqua School of Business building, a conference center, an academic incubatory/laboratory building, a dormitory, a faculty residence building, and a service building. Planning and design meet very high international standards. Duke University controls the design and is helping to supervise construction. The Phase One site plan is presented below:



Campus Operations

As a separate legal entity, DKU will have its own administration responsible to the DKU Board, with a de facto reporting relationship to senior Duke administrators. In terms of financial scale and operational scale, DKU will be similar to our Law School or the Nicholas School of the Environment but with its own conference center, student housing and faculty apartments. The campus will require the full range of academic and administrative support functions necessary to support a world-class educational institution.

We currently expect that campus administrative functions will be met through a combination of resources, including services provided by Duke University (with appropriate cost allocations to DKU), services provided by employees of DKU, and services that are outsourced to firms operating on the ground in China. The mix will likely change over time; as the DKU campus grows in scale, it is likely that more and more functions will be provided locally. The table below summarizes the Phase One operating plan, the X marks indicating how particular services will be provided. The Duke administrators named have all been involved for many months in planning for Duke's engagement with the Kunshan campus.

Function	Responsible for	Service Provided	Service Provided	Service Provided
C :	Duke Oversight	by Duke	by DKU	by Vendor
Senior	Peter Lange	X	X	
Management	Greg Jones			
D. I. (DI.)	Tallman Trask	***	***	
Budget Planning	Jim Roberts	X	X	
and Management	Tim Walsh			
Financial Services	Tim Walsh		X	X
- Accounting,				
Audit, Banking,				
Purchasing				
HR and Payroll	Kyle Cavanaugh		X	X
Facilities	John Noonan			X
Maintenance,				
Housekeeping,				
Grounds				
Campus Security	Kyle Cavanaugh			X
Registrar/Student	Jim Roberts	X		
Administrative				
Services				
Information	Tracy Futhey	X	X	
Technology				
Library Resources	Deborah Jakubs	X	X	
Food Service	Scott Selig			X
	Larry Moneta			
Conference Center	Scott Selig			X
Operations				
Student	Larry Moneta		X	
Housing/Campus				
Life				
Research	Jim Siedow	X	X	
Administration				
Public Relations	Mike Schoenfeld	X		
Gov't Relations				
Program	John Simon	X		
Assessment	David Jamieson-			
	Drake			
Development	Bob Shepard	X	X	

Choosing Lead Programs

Program development for Phase One has been guided by the insight in President Brodhead's 2007 address to the faculty. The goal is to present "our strengths not separately but together, as collaborative contributors in the work of complex problem-solving." We have regarded programs of the Fuqua School of Business as foundational not only because there is a strong

demand in China for management skills but also because those skills are foundational to many other fields. Hence the envisioned Master of Management Studies (MMS) tracks offered cooperatively with Fuqua eventually in partnership with Sanford, Nicholas and Global Health. The approach is multi-disciplinary and oriented towards equipping students for productive engagement in their chosen fields. Similarly, the programs envisioned for Global Health, apart from the Fuqua partnership, are inherently interdisciplinary and action oriented. At the Ministry of Education's request, we are also developing pilot programs in undergraduate education. The plan for these pilots is still evolving. We know that they will be thematic (e.g. Global Health, Entrepreneurship or perhaps American Studies), short-term (a summer or a semester), and will not be degree granting programs. Current financial planning is based on the Global Health and Entrepreneurship themes for purposes of illustration. The rationale for each program and the major assumptions we are making in financial planning are highlighted below.

Fuqua School of Business

The initial phase of Kunshan campus development is led by programs of the Fuqua School of Business. Fuqua plans to offer three distinctive programs – the Master of Management Studies (MMS) degree, the Executive MBA degree, and a small set of non-degree executive education programs – that address a range of local needs while offering opportunities to enrich the experience and expand the expertise of Fuqua faculty.

It is widely known that China is one of the world's largest and most dynamic economies. Over the last two decades, Chinese policy makers have opened China to be full participants in the global economy, seeking to raise the material standard of living of Chinese citizens and encouraging entrepreneurship and innovation. Though Communist Party and government authorities continue to set policy directions and exercise various forms of state, provincial and municipal control, all the skills necessary to run businesses competitively in the global economy are in high demand. Leaders in both the government and business sectors recognize that Chinese institutions of higher education cannot now supply this need. Hence they are very interested in innovative partnerships to bring Western style business education to China. This is an opportunity for Duke and Fuqua to take a leadership role and to further establish itself as a global university.

Fuqua's planned programs will address this opportunity on the Kunshan campus through several programmatic initiatives we expect to have in place within the first two to three years of campus operations. Over time, we expect these programs to attract not only Chinese students but also other talented students from other Asian nations and beyond. These initiatives include:

• The Master of Management Studies (MMS) Degree Program: This year-long degree program is designed to teach recent college graduates with little or no work experience the basic concepts and analytical tools of business management. The degree prepares students for entry level technical and management positions in complex organizations operating at national and international scale. We envision several potential tracks to this program, so that students interested in fields other than business can acquire basic management skills applicable to other sectors. Tracks in environmental management (joint with the Nicholas School), in health care management (joint with the Duke Global Health Institute), and in public management

(joint with the Sanford School of Public Policy) are in advanced planning, with Fuqua's partners in the program offering the specialized electives to complement core management skills. Students will take one Fuqua term in Durham to broaden their international perspectives and interact with Fuqua faculty and students.

The Executive MBA Program: Modeled on the Durham weekend executive MBA program, this program provides an opportunity for high potential managers with five to seven years of work experience to acquire an internationally recognized MBA degree while maintaining their current employment.

While these specific programs based on the Kunshan campus are critical to our strategy, there are other important elements of the Fuqua-China relationship. Duke's existing Cross-Continent and Global Executive MBA programs, which hold residencies at sites around the world, will conduct their China residencies in Kunshan, close to the Shanghai commercial center. These programs, more advanced than either the MMS or Executive MBA programs, will no doubt continue to attract Chinese and other Asian nationals to our Durham-based global education programs.

Fuqua programs in China will be worthy of Duke's standards. Admissions to Duke Kunshan University programs will be based on criteria set by Duke. Faculty will be selected by Duke and will include regular rank Fuqua faculty as well as Chinese and other international faculty hired specifically for Kunshan teaching and research assignments. A member of the Fuqua faculty will serve as the on-site academic dean to coordinate all aspects of the student experience, from admissions to career counseling.

Fuqua degree programs will be priced at competitive international levels. This tuition strategy provides the opportunity for price discrimination, allowing us to shape the class through scholarship funding while still charging those willing and able to pay something close to the full cost of their education. The conjoint analysis discussed above should allow us to further refine the tuition point, keeping in mind the following:

- International price levels reflect the true costs of offering programs at international quality levels.
- In the minds of many Chinese, high price signals high quality, and it is important that Duke-Kunshan programs be seen as operating at the highest international standards.
- Programs will draw students not just from China, but also from other developing and developed countries in Asia and other regions of the world. We should not charge just for the Chinese market.
- We anticipate that many students will have corporate, government or other sponsorship to help defray the costs of their education. We should charge these thirdparty payers full cost.
- As we do on the Durham campus, we can provide scholarships to help ensure that we attract the diverse and talented student body we seek, selectively reducing economic

barriers to meet our strategic goals while also offering an important honorific designation.

Our enrollment planning calls for a phased increase in Fuqua program enrollments over the first five years of campus operations. While particular enrollment levels cannot of course be guaranteed, we believe there are good indications that the enrollment levels we are targeting will be achievable. Our programs are oriented to quality, not quantity. Relative to aggregate demand for international quality business education, we will aim to meet a very small, quality oriented market segment. The MMS program has a maximally efficient enrollment level of 90 students, which is considered a "section." We expect to enroll a full section within two years, and to fill out a second section within four years. Any further expansion will be considered based on experience. For the executive MBA program, the efficient enrollment level is 70 students, which defines a section. We expect to begin the MBA program in year two of campus operations, and to reach the optimum section size with the fourth enrolling cohort. We believe these expectations are reasonable based on the following considerations:

- The structural convergence of Chinese economic growth, engagement with the global economy, and respect for higher education.
- Specific endorsement for our programs and strategy from municipal, provincial and national officials.
- Conversations with business leaders in Shanghai and elsewhere who are dissatisfied with the business education currently available in China and committed to supporting Duke's endeavors.
- Existing demand by Chinese nationals for FSB programs, and US programs generally.

Duke Global Health Institute

Due to its current demographic and economic transformation, China faces a number of pressing health challenges. Thus, global health is a key academic field through which Duke can establish its presence on the Kunshan campus. The Duke Global Health Institute (DGHI) plans to offer or jointly offer three education programs on the Kunshan campus, a Master of Science in Environment and Global Health, an Undergraduate Global Health Module, and a Global Health track in Fuqua's MMS degree. Additionally, DGHI will develop a Global Health Research Center (GHRC). These education programs will attract students in China, other parts of Asia, and the U.S. The GHRC will attract international scholars and serve as an Asian research hub for the Institute. The education programs and the GHRC are described below.

• It is anticipated that DGHI and NSOE will eventually jointly offer a Master of Science in Environment and Global Health. The degree program will define "environment" broadly and inclusively so as to include the impact of built environments on health (e.g. studying the impact of residential density on cardiovascular disease, diabetes and obesity; linking urban sprawl with incidence of fatal road accident), as well as occupational health. This will be a unique,

interdisciplinary degree drawing on Duke's environmental science and global health strengths, and we anticipate it will be an attractive alternative to existing environmental and public health masters programs in China. The one-year degree program will include a fieldwork component.

- DGHI will also offer an Undergraduate Global Health Module (UGHM), a selection of global health courses. Duke students from main campus may enroll in these courses for credit toward the Global Health Certificate (GHC). Students enrolled at Duke Kunshan University, along with international students or students from other US universities may enroll in a designated set of courses that comprise an UGHM. Upon completion, students will receive a certificate of completion. The program will take place during eight weeks over the summer and be comprised of three core courses and one elective offered at Duke Kunshan University in Kunshan.
- DGHI will also take the lead on a global health track in Fuqua's Master of Management Studies program. Students in the global health track will gain a theoretical foundation and practical understanding of management in the context of global health. Four global health courses will build on and complement the eight foundational courses of the MMS. All the courses will have a focus on the Chinese health system, but will use examples from other countries to illustrate differences in approaches to various challenges in the management of health systems.
- Finally, DGHI will establish a Global Health Research Center (GHRC) on the Kunshan campus to address health issues in China and the region. China, a country of 1.3 billion people and an economy ranked in the world's top five, faces a number of challenges in meeting its citizens' health needs. The population is undergoing rapid changes that include growing rates of obesity, diabetes, hypertension, cardiovascular disease and stroke. The country is also facing an array of significant health problems related to the quality of the environment, especially air and water pollution. There are increasing disparities in health care access between rural and urban areas, and the Chinese government is addressing these disparities and other challenges with sweeping health systems reform. The GHRC will build a program tied closely to research priorities relevant to the future health of the Chinese population and focus its efforts in the following three areas: (1) chronic disease, including obesity, diabetes, cardiovascular disease and stroke, (2) environmental health; and (3) health systems.

DGHI is planning conservatively to ensure quality and sustainability. DGHI assumes the undergraduate program will enroll 25 students in the first year, and the class size will grow to 100 after four years. It is expected that half of the students will come from China and half from other locations. Tuition will be set at \$10,800 or \$2,700 per course and scholarships will be provided.

DGHI assumes the same composition among participants in the Master of Science in Environment and Global Health. The program will begin with 20 students enrolled in the program and grow to 70 students over a three year period. Tuition will be set at \$46,200 (the

Duke Graduate School tuition level) and scholarships will be provided. DGHI and Duke University will aggressively market the program in order to recruit the highest quality applicants.

The diversity of faculty and of students at Kunshan will produce a rich learning environment. Programs will be taught by a variety of regular rank or adjunct Duke faculty. These faculty will be either Duke-Durham faculty based in Kunshan, faculty appointed to DKU, and Duke-Durham faculty who travel to Kunshan to deliver a course, or faculty at international partner institution who have been approved for an adjunct faculty appointment at Duke to teach in the program.

The Global Health Research Center will require laboratory and research start up funds for faculty based in Kunshan. Faculty will compete for external research grants, which will cover a portion of their salaries. The Center will sponsor an annual research conference attracting scholars from throughout China and across Asia.

Prospects for Philanthropic Support

We are optimistic that we will be able to raise significant external financial support for Duke's activities in China in general, and in Kunshan in particular. We have appointed Bob Markley, an experienced development professional with extensive experience at Duke in development, as Director of Development for Global Strategy (his appointment is shared between the Office of Global Strategy and Programs and the Fuqua School of Business, which was his original home). To be sure, there is much we need to learn about philanthropy in China. It is critical that Duke, or other western universities, insist on upholding our well-developed principles, boundaries, and ground-rules of fund-raising in China as we would in the United States. But we are optimistic about raising significant financial support for these reasons:

- There is a strong tradition of corporate financial support for student scholarships for private higher education, both at the undergraduate level and especially for graduate and professional education.
- Duke-affiliated people in China who are willing to make commitments to support Duke in China. We have already received a \$5M commitment over five years to build Duke's development capacity for further fund-raising in China.
- International Duke alumni are more likely to be willing to give for local initiatives than to give for projects for Duke in Durham, and so this will likely increase our ability to raise money from Duke-affiliated alumni and friends in China.
- Wealthy Chinese individuals and foundations interested in education are intrigued by Duke Kunshan University because of the innovative character of our model. Conversations are underway with several such individuals.
- There is keen interest in philanthropy among individuals and companies committed to Kunshan. This is particularly apparent among the more than 4500 Taiwanese companies operating in Kunshan.

• Finally, we believe that there are Duke alumni outside of China who will be interested in supporting Duke University's strategy in Kunshan as a part of our overall global strategy.

All of Duke's fund-raising acumen, systems, disciplines and accountabilities will be applied to fund-raising for Duke's China project. Detailed planning is underway. Our financial planning projections for Phase One include very conservative estimates for philanthropic support. If gifts are given to DKU, the revenue is shared both by Kunshan and Duke in relation to our 50/50 sharing of subsidies. If gifts are given to Duke University in support of our overall China initiatives or our global strategy more generally, then those gifts contribute toward Duke's 50% contribution of the shared subsidy. Our early focus will be on expendable gifts rather than building endowment. Financial projections assume that gifts to both DKU and to Duke will increase by \$500,000 each year to a level of \$2.5M annually. We anticipate that our actual fundraising will significantly exceed our projections, but we believe it is more prudent at this point to be cautious in our projections until we learn more about the culture of fund-raising in China and develop a stronger track-record of success.

Financial Plan

Details of the financial plan for DKU continue to evolve but the fundamental commitments are clear.

Initial Capital Investment

The initial capital investment necessary to build and operate DKU breaks down as follows:

- Land: 200 acres provided by Kunshan.
- Master Plan, Design and Construction Oversight: Provided by Duke (\$5.5M approved by Board of Trustees, December 2010)
- Construction: Provided by Kunshan (\$260M estimated US value for equivalent square footage) and leased to DKU at no cost for at least 10 years.
- Initial Furnishings and Equipment: Provided jointly by Duke and Kunshan. The total currently estimated upfit requirement for all Phase One buildings at full occupancy is \$13M. The final \$1M of the \$13M estimate is for laboratory upfit for the Incubator Building that will likely occur outside the current planning horizon. Though additional phasing is possible, for planning purposes we assume that, with the exception of Incubator lab space, all buildings will be upfit at opening, an outlay of approximately \$12M. Initial furnishings and equipment will be financed through a loan to DKU in China with repapyment from DKU operations, jointly supported by Duke and Kunshan.

Annual Operating Support

As much as possible, DKU will operate on the revenue it generates. Students enrolled at DKU will pay tuition and other fees to DKU in RMB and associated expenses will be paid from DKU accounts. However, world-class education is always subsidized, by government or by the

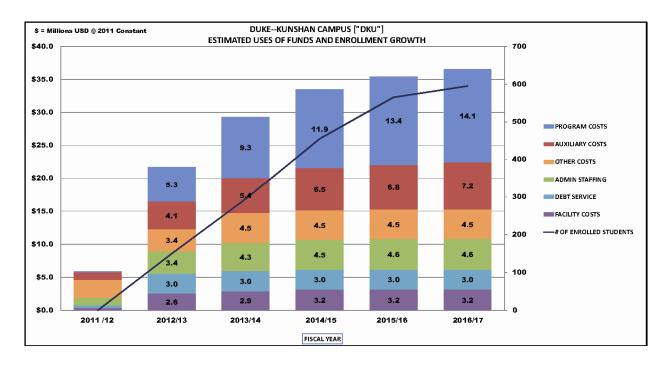
donations of individuals or the historic wealth of the institution. We cannot hope to have world class education in Kunshan without similar subsidy sources, and for a young university not yet achieving economies of scale, without historic wealth, and without a broad donor base, the founding partners must play a substantial role. The Municipality of Kunshan has formally agreed with Duke on principles for sharing the necessary operating subsidy during the first six years of campus operations. This agreement is renewable in principle, and similar agreements must be struck before any new programs are offered.

Based on this conceptual and practical understanding of the need to provide subsidies to DKU, Duke's financial planning has focused on estimating the scale of subsidy required. Our incentives are to maximize local revenues to DKU while minimizing expenses *consistent with* the goal of creating high-quality, sustainable programs of growing quality and reputation. These incentives are aligned well with those of our primary financial partner, the Municipality of Kunshan. We have tried to be reasonably conservative in our cost estimates, and we continue to engage vendors, consulting resources and our partners to determine cost-effective operating strategies that will meet our quality objectives. Revenue estimates will be refined though continuing market studies, and ultimately by the market itself. Our financial projections will evolve accordingly. Our financial projections have been reviewed and tested by a variety of internal constituents. We have also reviewed key assumptions with the Business & Finance Committee of the Board of Trustees. With support from Fuqua faculty with relevant expertise, we have developed Monte Carlo simulations to better understand the risks in our projections and the key levers for managing risks.

The financial plan for the Duke Kunshan campus is summarized in the two graphs below (all figures are in constant 2011 US dollars). Note that Duke will have lead responsibility for developing DKU budgets and has no obligation to support DKU beyond levels it freely chooses. Duke subsidies will come from a combination of existing resources, fund-raising for Duke's engagement with China and DKU, and initial support from strategic investment funds (SIP).

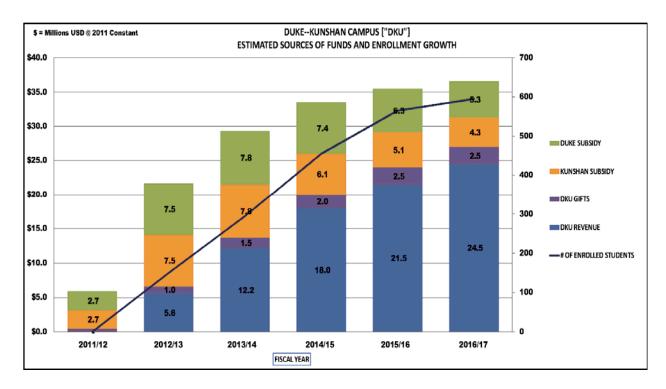
Expenditures

The financing plan begins with an estimate of the funds necessary to operate the DKU campus and its academic programs. The first graph shows anticipated uses of funds for DKU through FY 2016/17, including one start-up year and five years of operations, displayed by major expenditure categories. The growth of student enrollments is shown in the line keyed to the right hand axis. Total expenditures in this graph are equal to the total resources in the second graph. Expenditures are shown in the following categories: a) program costs, including faculty salaries, b) auxiliary costs, which are expenses of operating the conference center, dining operations, student housing and faculty housing, c) other costs, primarily in the form of costs to secure third party services necessary to operate the campus, including administrative services supplied by Duke, d) personnel costs for DKU administration, e) debt service on the initial investment in fixtures, furnishings and equipment, and f) costs associated with operating campus facilities and grounds.



Resources to Fund DKU Operations

The second graph shows the anticipated sources of financial support for DKU through FY 2016/17, again including one start-up year and five years of operations. As much as possible, DKU will operate with tuition, conference center fees and other revenues generated through campus operations. However, both Duke and Kunshan have recognized that world-class educational endeavors are not self-supporting from operating income alone and require sources of subsidy. Accordingly, Duke and Kunshan have agreed to jointly subsidize DKU operations. Estimated subsidies from Duke and Kunshan respectively are included in the graph of funding sources below. The total estimated subsidy is the amount necessary to supplement revenues generated by DKU (both operating income and philanthropic support) to ensure that estimated operating expense requirements are fully funded. The Financing Plan assumes \$10M of total gift income to DKU though FY 2016/17.



Duke and Kunshan Operating Subsidy Investments

The estimated subsidy from Duke and Kunshan is the amount necessary to supplement revenues generated by DKU (both operating income and philantropic support) to ensure that estimated operating expense requirements are fully funded. The subsidy proportions are subject to change based on the financial performance of the particular programs (Fuqua Excecutive MBA and Fuqua Executive Education) which are not eligible for Kunshan subsidy after the FY 2014/15 fiscal period. The estimated Duke subsidy commitment over the six year planning period is \$37M. Details of the subsidy calculation thru FY 2016/17 can be seen in the table below:

	Estimated Subsidy Requirements Millions/USD Constant 2011 Dollars				
	Total \$ Subsidy Requirement	Kunshan % Share	Duke % Share	Kunshan \$ Amount	Duke \$ Amount
FY 2011/12 (Year 0)	5.4	50%	50%	2.7	2.7
FY 2012/13 (Year 1)	15.0	50%	50%	7.5	7.5
FY 2013/14 (Year 2)	15.6	50%	50%	7.8	7.8
FY 2014/15 (Year 3)	13.5	45%	55%	6.1	7.4
FY 2015/16 (Year 4)	11.4	45%	55%	5.1	6.3
FY 2016/17 (Year 5)	9.6	45%	55%	4.3	5.3
Total Estimated Subsidy	70.5	48%	52%	33.5	37.0

The Funding of Duke's Subsidy

A crucial component of our planning is the Duke subsidy commitment. We expect to meet our subsidy commitment through a combination of sources whose proportions will change over time. First, the Fuqua School of Business is committed to continued support at the \$1.8 level based on current funding levels and anticipated synergies resulting from the schools increased engagement

in China. Second, we expect to recover administrative costs currently funded at Duke from DKU; this Durham savings can be redirected as a subsidy source. Third, we anticipate an increasing level of fund-raising support, directed to Duke, to support our global programs and engagement with China. As indicated in the development discussion, we believe the figures shown here are very conservative. Finally, we will rely on SIP support to complete our subsidy package, with declining investments overtime. Our projections include \$9.1M in SIP support over the six year period, with all support phased out by the sixth year. These estimates are subject to change, but the picture is very much consistent with our intention that SIP support is transitional and not permanent. Six year subsidy expectations calculations are shown in the table below.

Duke Subsidy Sources Millions/USD Constant 2011 Dollars				
FSB	Admin Cost Recovery	Gifts	SIP	Total
10.4	7.5	10.0	9.1	37.0

In summary, Duke is investing in both the physical campus and its operations. The Board of Trustees approved a \$5.5M commitment in December 2010 to fund the campus master plan, building design and construction oversight to ensure that the campus is built to Duke standards. (Kunshan is providing land and funding all construction costs.) Duke is also responsible jointly with Kunshan for supplementing campus-generated revenue to support program expenditures and campus operating costs at Duke quality levels. The current projection for Duke's subsidy commitment is \$37.0M over the next six years. Duke plans to meet its subsidy commitment through four roughly equal sources:

•	Fuqua School of Business	\$10.4M (redirection of currently budgeted funds)
•	Durham cost allocation	\$ 7.5M (redirection of currently budgeted funds)
•	Philanthropic support	\$10.0M (new fund-raising)
•	Central Funds (SIP)	\$ 9.1M

Thus the total anticipated Duke investment is \$5.5M (facilities) +\$ 37.0 M (operations) = \$42.5M.

Of this amount \$5.5M (facilities) + \$9.1M (operations) = \$14.6 M comes from central strategic funds (SIP)

The balance comes from the redirection of currently budgeted funds or anticipated fund-raising.

Risk Assessment and Risk Management Strategies

Duke has the opportunity to expand its global reach as a university, creating new opportunities for our students and faculty while reinforcing our reputation for innovation, excellence, engagement and leadership. Seizing this opportunity entails risks. We believe we understand the principal strategic and operational risks, though we acknowledge that there is always the risk of the unknown and the unanticipated. The principal strategic risks include:

• *Risks to Duke's Reputation*: While Duke's reputation can be enhanced by developing successful programs in China, it can be tarnished if we compromise our

academic standards, if we are unable to operate the campus effectively, or if we become embroiled in wide-ranging public controversy. This overarching risk subsumes all others and will take a prominent place in Duke's enterprise risk management monitoring system at the senior officer level.

- *Risks to Duke's Finances*: Once committed, Duke will have a strong interest in ensuring the success of its investment. The level of investment necessary for success is not known with certainty. Duke will need to monitor and adjust its investment in accordance with expected programmatic and financial returns on its investments. Duke will need to hold its partners accountable for their commitments and work cooperatively with them to ensure that partnership commitments extend beyond the first six years. Duke will also need to work with the partners to bring outside philanthropic support to the venture.
- *Risks to Duke's Standards of Academic Quality*: We are committed to world-class quality in education and research, and this is the aspiration of our partners. Yet we do not know at the outset what the qualifications and capabilities of our students will be or what financial commitments will be necessary to ensure that Duke-Kunshan becomes a center of research excellence. Duke will need to manage its commitments to sustaining particular programs based on results, and it will need to assess future program opportunities carefully before making further commitments.
- *Risks to Academic Freedom*: Academic freedom in teaching, research, scholarly communication and access to information is a key ingredient of academic quality. Duke is committed to these principles as a foundational part of the Joint Venture agreement. Duke will need to take the lead in ensuring that these principles are woven into the fabric of daily life at Duke Kunshan University.
- Risks to Political, Social and Economic Stability in China: There is a risk in a political and economic system such as China's that a significant change in regime could lead to a rapid deterioration of the economic and/or political climate supportive of our DKU endeavor. In such an eventuality, we would either need to adjust our strategy or invoke our exit strategy. While we do not think there is a significant likelihood of such an eventuality and not all regime change would have negative consequences we must remain aware of this possibility in our planning.

In addition to continuing management oversight, the following provisions, included in the Joint Venture agreement, will protect Duke's interests and mitigate these risks:

• The Joint Venture agreement gives Duke a leadership role in ensuring academic quality, establishing operating policies and procedures, and proposing annual budgets. In the event of a fundamental dispute, Duke can withdraw from the agreement.

- Duke will have a limited fixed investment and thus limited sunk costs. If all goes according to current plans, Duke will have invested \$5.5M in campus design and construction oversight. Kunshan is providing land and buildings through a no cost lease for at least 10 years.
- As an independent non-profit corporation, Duke Kunshan University will be a separate legal entity. Neither DKU nor its creditors will have recourse to Duke University's assets.
- Use of the Duke University name, logo and trademarks will be specifically licensed and revocable.
- Duke University may withhold awarding of Duke degrees at any time.

In addition to these strategic risks, which assume that Duke Kunshan University is successfully launched, we face operational risks in getting out of the starting gate. Duke can only proceed with its plans provided that:

- The parties reach agreement on terms of the Joint Venture agreement.
- The Duke Board of Trustees, the Municipality of Kunshan and the governing body of Wuhan University all agree to proceed.
- The Municipal Education Authority of Jiangsu Province and the Chinese Ministry of Education approve the application of the Joint Venture to offer educational programs in China.
- The appropriate faculty bodies, the Academic Council and the Board of Trustees approves the offering of specific Duke University degree programs through Duke Kunshan University.
- The Southern Association of Colleges and Schools (SACS), Duke's primary accrediting body, approves Duke's plan to award Duke University degrees to students of Duke Kunshan University.

Oversight of the Duke University Board of Trustees and Faculty Governance Committees

We anticipate that the Duke University Board of Trustees will exercise foundational and continuing oversight of DKU through at least the following ways; significant matters to be brought to the Board will first be brought for review to the appropriate faculty governance bodies:

• Approval of the three-party Joint Venture and Ministry of Education application creating the new legal entity and educational institution in China and naming the three Duke members of the DKU Board.

- Approval of Duke's capital and operating budget commitments through regular University budget processes.
- Approval of the specific degree programs offered at DKU and the awarding of the individual degrees earned there.
- Monitoring of the overall progress of DKU through reports from the Senior Officers and the Vice President and Vice Provost for Global Strategy and Programs.

Preparing the Duke Campus for Effective Support and Oversight of the Kunshan Campus

Three years ago, the administration initiated a process to improve institutional capacity to provide efficient and effective support to global programs. This is a pervasive effort, with no single office responsible for global administrative support. The Global Administrative Support Steering Committee includes senior campus leaders from the Provost's Office, Global Strategy, Financial Services, Human Resources, Information Technology and University Counsel. The Steering Committee has helped set the planning agenda for various workstreams, preparing campus administrators to support global programs generally and Duke in Kunshan in particular. The International Business Operations Group is a standing committee that includes both global program administrators and campus service providers to develop policies and procedures to support program needs and to help solve problems as they arise. These efforts to enhance our administrative support for global programs are ongoing, with no targeted sunset timeline.

The Office of Global Strategy includes the position of Senior Manager, Global Administrative Policies and Procedures, which is responsible for coordinating global support activities and for maintaining the global administrative support website

(http://www.global.duke.edu/admin/international_project/index.php), which provides planning guidance, policy information, and single-points-of-contact for international issues in Duke's administrative offices. Duke is participating actively in Ivy-Plus information sharing networks and in a project of the National Association of College and University Business Officers (NACUBO) to develop and disseminate best-practice information for higher education.

More particularly, with respect to oversight of the DKU campus, lead responsibility will fall to the Office of the Provost, with substantial reliance on the Office of Global Strategy and Programs. Notwithstanding its formal legal independence, DKU will be treated like another school within the Provost's Area Management Center. Accordingly, the Provost will be responsible for academic and administrative supervision with support and guidance from the Executive Vice President. We expect all administrators on the ground in Kunshan to work closely with, and take direction from, their counterparts on the Durham campus. This applies in every domain, including accounting, banking, communications, facilities management, fundraising, human resources, information technology, library resources and security.