

IT'S A PRIVILEGE TODAY TO CONSIDER USC'S CHANGING PLACE WITHIN THE HIGHER EDUCATION LANDSCAPE. A UNIVERSITY SUCH AS OURS IS THE BRAINCHILD OF THE RENAISSANCE, THAT GOLDEN AGE IN WHICH THE SCHOLARLY WORLD BEGAN TO ASSERT ITS INDEPENDENCE FROM DOCTRINE OR DOGMA. IT ALLOWED FOR A NEW BREATHTAKING UNDERSTANDING OF OURSELVES AND OUR COSMOS.

Today, that mission continues, but within a context that many experts say could change everything—how we work, how we live, and how we educate a new generation of students.

First, let's examine the lay of the land today. Universities have been the most enduring of all social institutions. Great businesses will open and close, and great nations will rise and disappear. Great universities, however, persist through it all. But many observers contend that is about to change in just the next few decades.

For the moment, America's research universities remain a magnet for the best and the brightest from all over the United States and all over the world. Typical colleges and universities exist mainly for teaching. They transfer existing knowledge from one generation to the next.

Leading research universities such as USC, on the other hand, do this too. But we also create new knowledge and provide patient care. We take society to the farthest frontiers of the human imagination—and then we blast those frontiers back for pioneers to explore, innovate, and make a difference in society.

USC is not merely one of these influential schools. It is a leader. It is growing faster than ever and gaining unprecedented attention, at a moment when everything is in a state of flux.

Let us turn our attention to the online education revolution that is getting underway. As with any other technological revolution of the past, we may see old industries disappear, while new ones rise up. Our children are inheriting a world that functions like nothing humanity has ever witnessed before.

In education, new technologies now let us reach out to faraway students where they can be immersed and fully participate in a virtual classroom experience. This, in theory, should change everything.

I'm proud of the fact that USC has not been copying anyone else or chasing anyone else in this area. USC has been experimenting and exploring, and has been leading the way for others.

USC's Institute for Creative Technologies is inventing "virtual humans" and "virtual environments" for educational purposes. Our Viterbi School of Engineering pioneered the first distance education network four decades ago. Now, it ranks as one of the very top online programs in America. The school has also created the iPodia platform, which is revolutionizing global learning. Our USC Rossier School of Education and School of Social Work have been pioneering online programs that have been reaching out to thousands of professionals around the world.

Our online offerings in health-related fields exceeded 18 graduate degree programs this year, thanks to faculty leadership in the Keck School and in Pharmacy, Gerontology, and Dentistry. And our top-ranked School of Cinematic Arts already boasts the most impressive laboratory, which takes state-of-the-art video game concepts to a new level. This makes the educational process more engaging and

it stimulates the curiosity of students in new ways.

These examples just hint at the incredible future of storytelling and the future of teaching and learning. And these virtual experiences are increasingly available by mobile devices, anywhere, anytime. The only limit to all these possibilities is our own imagination.

So, it is no surprise we have seen an explosion of online education enterprises around the nation. Investors and venture capitalists are getting very excited about investing in business startups in this area. Many of these startups are partnering with traditional universities, in order to reach out to hundreds of thousands of students around the world.

But what are the long-term implications? Some say this is the end of the lecture hall as we know it.

Some expect the traditional assessment system to change, due to the emergence of new test-grading technologies. So what a teacher looks like, what a student looks like, what a teaching assistant looks like—all this could be up for grabs.

Most dramatically, some experts are certain that technology will soon wipe traditional universities off the map. They predict that college education will become less expensive, because online education will diminish the need for a costly physical campus. Some predict that only a few super-universities will survive, and they will franchise themselves across the planet, and nearly every other college will shut down.

Some experts go so far as to predict a transformation of elementary and secondary education as

technology makes it easier for families to do their own homeschooling. And of course, many people dream of a way that education can be made available at bargain prices or for free, to anyone, anywhere on the planet. All these developments—and all of these predictions—suggest that all the conditions may be in place for an academic earthquake.

The truth is that we have been thrown into a new era of change, an era in which those who wish to succeed must be willing to experiment with new approaches to learning and teaching.

It is forcing us to debate a number of questions:

- What sort of a university should we be in the future?
- What are our uncompromising academic values?
- How much academic rigor should be demanded in new teaching paradigms?
- How will this affect the historic role of the faculty?

And finally:

• What can change, and what can never change?

I believe we must not be too attached to the old ways. We should sense a societal duty to evolve, but we must also be dedicated to preserving the best of what we do have.

One recent example of new experimentation is what they call "massively open online courses," or MOOCs for short. Many top universities—but not USC—have joined with business startups and other consortia to offer free courses, which can allow one professor to lecture hundreds of thousands of



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Wallis Annenberg Hall, a state-of-the-art building for the USC Annenberg School for Communication and Journalism, stands at the heart of our University Park Campus.

people around the world. The initial popularity of these courses—and the media hype—has led to many of the more fantastic predictions about the future of universities.

But do you remember the Internet's first wave in the 1990s? It resulted in a dot-com bubble. That bubble was inflated by a fixation on the number of users that a company's website could collect, not on the true value that was created through a viable business model.

Online education today similarly lends itself to a focus on large numbers. Yet there is little evidence that free online classes produce worthy educational or career outcomes.

Research shows that, on average, 98% of the students who sign up for a MOOC never complete the course. Most never make it past the first few weeks. We are already seeing a backlash against the MOOC movement. Full-time students on those campuses don't find them academically rigorous, and professors rightly worry that MOOCs could damage their university's academic brand.

Yet, far from the noisy hype about the MOOCs, the word has been spreading rapidly that USC has been building the first online education model that is both academically and financially viable. Quietly and without fanfare, our faculty have developed an online model that expands educational access to more than 40 nations, while maintaining the all-important standards of academic rigor, integrity, and quality.

Total annual revenues for our online master's degree, executive and continuing education programs will reach \$123 million this year, a figure that is unprecedented for a top American research university. Altogether, our programs reach 7,600 students globally.

We expect that all of our schools will have moved in some way into the online space within the next year. We expect to double our enrollments and degree offerings within the next five years. Even though we partner with outside business entities, our faculty still retains sole responsibility for ensuring academic integrity. Our online curriculum is as rigorous as the on-campus curriculum. We use normal admissions standards, and we charge regular tuition rates.

USC does not and will not offer online degrees at the undergraduate level. We believe that the years between 17 and 22, which coincide with the traditional undergraduate experience, represent a corridor of transformation. Within this corridor, much of a student's identity and many of her lifelong affiliations are formed. Face-to-face intellectual and creative encounters, inside and outside the classroom, have the deepest impact. Core academic values and even good old-fashioned school spirit are protected and encouraged. Yes, technology will enhance, but not replace, the traditional USC campus student experience.

So, what can we expect on the horizon of higher education? We can expect to witness the exciting development of new platforms for online education. We can anticipate the evolution of old and new paradigms together for teaching and learning. We

will actually see an enormous emphasis on improving the residential student experience, services, and facilities, especially at the undergraduate level, where students demand value and quality.

We will see many more partnerships between non-profit institutions and for-profit companies. We will see the dramatic expansion of many business startups offering online training programs. There will be more choices, and more competition.

All this will be healthy! We should not be surprised if a plethora of second-rate and third-rate colleges go out of business. It may not be so bad to see the closing of schools that are expensive but do not deliver academic value. Community colleges will be put under enormous pressure to survive.

Also, we will see many of our private competitors begin to accept transfer students on their campuses—students who have taken lower-division online courses for credit. This will open doors for many students to enter elite private universities. It will be a less expensive pathway to earn a quality degree. By the way, USC is actually one of few elite private universities that have been accepting transfer students for the past 60 years. It is already built in our business model.

These are reasonable predictions, based on today's developments. But we know one thing for sure: No one can predict the future perfectly in this area. It is counterproductive even to try. We must be ready to be surprised, and to adjust course, and to capitalize on new pathways. We must not be afraid to take risks and experiment, even more boldly.

A great university for the 21st century will be global and local in its activities. We can exemplify this in

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Distinguished Professor Arieh Warshel received the 2013 Nobel Prize in Chemistry from King Carl XVI Gustaf in Stockholm, Sweden.

a way that no other university on this planet does.

Our faculty is the foundation of all scholarly excellence. They do much of their best work in close collaboration on campus, and the results are gaining international recognition.

In December, my wife Niki and I had the extraordinary privilege to be guests of Professor Arieh Warshel and his wife Tami in Stockholm. Professor Warshel received the Nobel Prize in Chemistry for his many decades of work at USC. It was a very moving and memorable experience, one that we will always cherish.

Additionally, some 50 other faculty colleagues received prestigious national and international honors in the past year alone. And USC's junior faculty received increased mentoring that will help many of them develop soon into superstars in their own right.

This extraordinary faculty community has increasingly become an intellectual magnet for the best talent from other universities. Last year, quite notably, the world-renowned brain sciences researchers Professors Arthur Toga and Paul Thompson moved their entire Laboratory of Neuro Imaging from UCLA to USC. They brought with them a team of 110 faculty, researchers, and talented graduate students.

Later this summer, two world-renowned researchers for breakthroughs in structural genomics and early diagnosis of cancer and cardiovascular disease, Professors Raymond Stevens and Peter Kuhn, will be moving their entire group of 50 people from The Scripps Research Institute in La Jolla to USC.

I thank our provost, Elizabeth Garrett, for her

strong, steady leadership during this dramatic moment in USC's metamorphosis. Because of Provost Garrett's stellar leadership and incredibly hard work and dedication, we are capitalizing on a historic opportunity, to make a decade's worth of academic progress in only a few years.

Consider the context in which we labor. USC is now interwoven into the intellectual, cultural, and economic life of the Pacific Rim, at a moment when the world's center of gravity is shifting from the Atlantic to the Pacific.

USC is now a rising power in medicine, interdisciplinary health, and patient care, during an age in which the biological and medical sciences are moving to the forefront.

USC helped create past waves of the information sciences revolution and is now poised to create the next one.

USC has been refining its strengths in the arts and the humanities in a moment when these have

a special role to play in creating understanding across different cultures.

And, during this moment of unprecedented change, USC has been more successful than any of its peers at creating an online education model that asserts academic values and financial stability.

Yet, still more makes our university distinct. Across the growing expanse of the nation to the west of Chicago and Houston, you will find only two large private, fully independent research universities: USC and Stanford. All other 27 private competitors of ours are east of Chicago.

Did you know that USC's freshman class has about 600 students every year who have received straight A's four years in high school? They have perfect GPAs and almost perfect SAT scores, which means we have about three times the number of Caltech-quality students than Caltech's own freshman class. This is because of the incredible and increasing competition for seats in USC's freshman class. In fact, this year



OTO BY CHRIS SHIN

we received a record 51,000 complete applications for 2,700 slots in this fall's class.

Yes, there are 1,700 freshmen at Stanford every year of very good to excellent caliber. But USC's freshman class has exactly that many of exactly the same academic quality.

However, we have much more than Stanford. We have an additional thousand freshmen in areas that we don't judge by conventional metrics—our star students in the arts and the humanities. Many of them represent the world's best young performing and creative arts talent. These students can't be judged by the usual SAT and GPA rules. That's because they specialize in breaking the rules, and they blast creative artistic energy into our overall academic community.

Our diversity of disciplines paved the way for the establishment of the USC Iovine Young Academy for Arts, Technology and the Business of Innovation. And Glorya Kaufman's exceptionally generous gift for dance has endowed the sixth independent school for the creative and performing arts at USC.

At the same time, our newly established USC Pacific Asia Museum in Pasadena enhances our programs in museum studies and the arts. Indeed, our ability to play in the championship leagues of global higher education has been due to one of our secret weapons—the unusual size and strength of our programs in the arts.

USC's diversity isn't just intellectual. It includes the world's largest contingent of international students, representing 115 nations. It includes ROTC students



Dr. Verna and Peter Dauterive Hall, the university's first interdisciplinary social sciences building, features graceful arches and Gothic flourishes, evocative of USC's most beloved structures.

and veterans in a campus environment that has always been supportive, welcoming, and friendly. Because we aggressively recruit the best high school students from all 50 states, most of our freshmen now come from outside California.

The benefits of this diversity aren't achieved via broadband connections. They're achieved through meaningful encounters, inside and outside the classroom, in a residential academic community. That has placed incredible pressure on us to upgrade every aspect of our facilities and the environment of both campuses.

It is therefore significant that we will finally break ground on the USC Village this summer. Some 20 years ago, USC still had the reputation of a commuter school. But when this majestic and modern Tuscanstyle village, with its dramatic collegiate Gothic architecture, arrives on the scene, we will be able to offer a second-to-none living and learning experience.

The USC Village will take residential life to new levels. Its looks will give us 1,000 years of history we don't have. It will add academic, commercial, and retail space, as well as some 2,500 additional beds for new student residential colleges, including an honors college.

The best undergraduate learning experience is a local one. Laboratory-based research is mostly a local venture too. We are, at our core, a research university, focused on the creation of new knowledge.

I know these are challenging times for our faculty, in terms of obtaining research grants. Nationally, there has not been a tougher funding climate in our lifetimes. Still, funding for USC research is at an all-time high. Over the previous year,

total federal expenditures once again topped \$450 million, and total research expenditures topped \$600 million again.

The Mellon Foundation has awarded USC a major grant in digital humanities that will benefit faculty, Ph.D. students, and postdoctoral fellows. Our funding efforts have been enhanced by our successes in strategically recruiting interdisciplinary faculty. This has injected more than \$120 million in high-profile research grants into USC in just the past three years.

Last month we celebrated a historic \$50 million gift from Dr. Gary Michelson. It establishes the USC Michelson Center for Convergent Bioscience, which will be a state-of-the-art, 190,000 square foot research facility for science and engineering.

Thanks to the generosity of an anonymous donor, we have established the USC Parker Institute for Childhood Cancer in the Keck School of Medicine. It will fund broadly translational research and clinical trials with \$4 million per year.

The provost has also announced an ambitious initiative in informatics that will energize every discipline at the university.

Patient care, another crucial aspect of our mission, is also done largely on a local level. Our Health Sciences Campus already draws one million patients a year, but it has barely scratched the surface of its potential. So we are intensifying our efforts to make it the leading academic medical center of the Pacific Rim. Our Keck Hospital is now truly elite nationally in terms of the difficulty of the cases and illnesses that it treats.

We also reached a significant milestone for

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our future and a beginning of a new era with the appointment of Professor Rohit Varma as the chair of ophthalmology and with Professor Mark Humayun assuming a leadership role in research. USC is now in a position to build a true world leader in eye research, teaching, and clinical care.

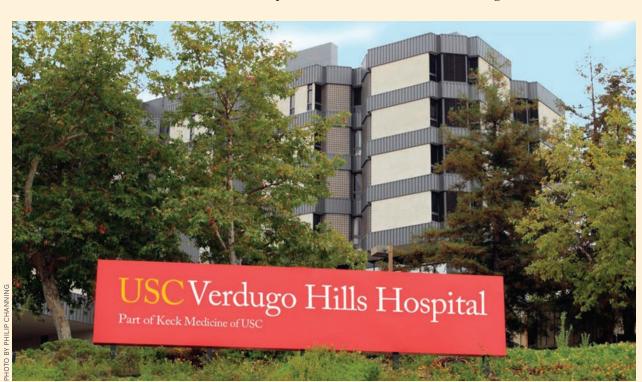
Our health system is also expanding aggressively far beyond the Health Sciences Campus boundaries. We expanded our healthcare footprint strategically with the addition of USC Verdugo Hills Hospital. We have developed the framework for a medical foundation, which is adding community-based physicians and affiliated medical groups to our expanding clinical network. In collaboration with Children's Hospital Los Angeles (CHLA), we established a new Translational Biomedical Imaging Laboratory.

Meanwhile, on the Health Sciences Campus,

we expect to break ground this year on two major buildings: a 420-bed student housing project, which will also offer outstanding childcare, and the Norris Healthcare Consultation Center, which will house predominantly cancer clinic services.

You cannot separate the communal aspects of a great university campus from good old-fashioned school spirit, and USC's school spirit finds its expression in our athletics programs. USC athletics proudly marked its 125<sup>th</sup> anniversary with three new NCAA championships—the most in the nation—in men's water polo, women's water polo, and women's golf.

Last fall our football team surprised the nation by winning 10 games, including its bowl game. These young student-athletes persevered through a lot of adversity placed in their way. We also obtained master-lease control of the Los Angeles Memorial Coliseum



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for the next 98 years. It is now our duty to restore and revitalize this beloved home of Trojan football.

This is what I tell our alumni: Our ambitious vision and audacious goals for USC's academic future by far exceeded our ability to pay for it. That is why we are in the midst of the most ambitious fundraising campaign in American higher education.

Despite a shaky economy, USC announced a lofty goal of \$6 billion. And late last fall, we reached the \$3 billion mark—in just three years! No other university has ever achieved this. Half of that money came from a small group of supporters who made 23 transformative gifts of \$25 million or more, including four above \$100 million. The other half of that money came from our vast Trojan Family, including another 208,000 donations.

Here is an impressive, and humbling, statistic: about \$738 million has come from USC parents. They have chosen to make an investment that goes

far beyond paying tuition. This is a tremendous endorsement of our university.

One of the most notable gifts of the past year came from a Thornton School of Music professor, Alice Schoenfeld, who pledged \$10 million. Hers is the largest faculty gift in USC history.

We are under no illusions about the second half of the campaign, which will be a steeper hill to climb, but we are always optimistic and positive.

Allow me to conclude by suggesting that USC has reached full maturity. There is no one else to chase now. There is no one else to copy. The roads we choose from here on out, we choose based on what we believe to be best for our future and for American higher education.

As we look ahead in the future, we must be guided, each step of the way, by five fundamental principles.

First, our academic programs, including online education, must always show an unwavering

commitment to academic rigor and to student quality and selectivity. This requires a refusal to compromise in any way on academic quality and integrity. We must protect our academic brand and credentials, because that is our essence, without which we are nothing.

Second, we must seek financial viability, in all that we do.

Third, we must strive continuously to be the pacesetters in patient care and experimentation. We must remain nimble, always ready to change directions quickly.

Fourth, we must know when to be global and when to be local. We must preserve and enhance the social and human aspects of the university, as it relates to student life, research, and patient care.

A great and timeless academic model, combined with a viable business model, cutting edge technology, and excellent student and patient experience. That is how we will move forward.

And fifth, we must continue to lead the way nationally in revaluing the humanities and the arts—especially now that the world views itself in increasingly technological terms. Science and technology must remain simply the means to a very human end.

Indeed, our community reflects a humanistic approach that is in full flower at this crucial stage of societal development. This USC community calls to mind the strivings of the original Renaissance humanists, who saw little need to make a distinction between their explorations of the empirical world and their explorations of the creative world. This

gave them an unparalleled ability to see new pathways that were invisible to others.

I believe we at USC make a noble and powerful statement to our peer institutions and to our world, when we reaffirm an unwavering loyalty to our humanistic principles as we explore the newest intellectual frontiers.

I am reminded of a moving scene in Book 17 of Homer's *Odyssey*. Odysseus had returned finally to his home of Ithaca. But he temporarily disguised himself as a stranger, for the safety of his family. As he silently passed by his dog Argos, who lay dying and neglected, Odysseus noticed that Argos immediately recognized him, even after 20 years apart.

Argos wagged his tail, lifted his head, and dropped both ears, but could not drag himself nearer his master. Odysseus quietly wiped a tear that streamed down his cheek. And the shadow of death descended upon Argos, once he had seen Odysseus.

The enduring and unconditional loyalty of Argos to his master symbolizes faithfulness that never ends. It represents love and passion that do not grow cold over the years.

My fellow colleagues, in all that we do together in this technological age, I believe we have a special responsibility to model unconditional loyalty to the humanities and the arts, to those most timeless human principles that nourish us. This will give all of us at USC a rich heritage to call upon and a clear path forward. We must all remain humanists in the great Renaissance tradition.

Thank you, and Fight On!

