

Translating Knowledge to Meet Global and Societal Needs

An interview with Joseph E. Aoun, president of Northeastern University

OSEPH E. AOUN is the seventh president of Northeastern University.

Aoun has enhanced Northeastern's signature co-op program with opportunities around the world and additional flexibility.

Aoun has strategically aligned the university's research enterprise with three global imperatives—heath, security, and sustainability. Northeastern's faculty focus on interdisciplinary research, entrepreneurship, and on transforming research into commercial solutions that address the world's most pressing problems.

During Aoun's presidency, Northeastern has established a network of graduate campuses and has amassed one of the largest libraries of online and hybrid professional masters programs of any university in the U.S.

Aoun came to Northeastern from the University of Southern California's College of Letters, Arts & Sciences where he was the inaugural holder of the Anna H. Bing Dean's Chair. He received his Ph.D. in linguistics and philosophy from the Massachusetts Institute of Technology and advanced degrees from the University of Paris (France) VIII and Saint Joseph University (Beirut, Lebanon).

Aoun has published seven books and written more than 40 articles. In 2006 he was named a Chevalier dans l'Ordre des Palmes Academiques (Knight of the Order of the Academic Palms) by the French government. In 2011 he received the prestigious Robert A. Muh Award from MIT's School of Humanities, Arts, and Social Sciences. He is a member of the American Academy of Arts and Sciences and is the immediate past Chair of the American Council on Education (ACE). In 2013, Aoun was elected a fellow of the American Association for the Advancement of Science (AAAS).

IE: In 2009 you launched the Presidential Global Scholars initiative at Northeastern University. What was the impetus for this initiative, how did you get buy-in from key constituencies at Northeastern, and what have been the results?

AOUN: The Presidential Global Scholars program grew out of our larger strategy to dramatically increase global opportunities for Northeastern students. The heart of the strategy was to focus on the elements of Northeastern that are distinctive and specific to us, and to globalize them.

First, we globalized the campus itself: since 2006, we've increased the percentage of international students at Northeastern by 447 percent. Currently,

students from 140 countries are with us. Next, we globalized our experiential learning model, in which students alternate their classroom learning with "co-ops"—long-term paid internships at companies, non-profits, government agencies and other professional workplaces. When I arrived, few students were doing co-ops in international settings, or taking part in other global experiences. Today our students are learning and working in 114 countries, and on all seven continents, including Antarctica.

We also expanded our global study and service programs to even more countries, drawing more students. For instance, our Dialogue of Civilizations program, in which our faculty lead students





Joseph E. Aoun, president of Northeastern University

in immersive, field-based study, is now in 33 countries. We've built a thriving social entrepreneurship program that is undertaking transformative projects in Africa, Latin America, and many other regions of the world.

We're very happy with the results. Last year 2,600 of our undergraduates had a global learning experience, and the number of undergraduates with global co-op placements increased 20 percent over the previous year. The Presidential Global Scholars program has facilitated this by helping students pay for some of the costs associated with a global co-op, such as travel, housing, and the greater cost of living in certain areas.

IE: Northeastern University's mission aims to "create and translate knowledge to meet global and societal needs." Why is meeting global needs important to the university? How does Northeastern strive to meet global needs?

AOUN: At Northeastern, focusing on global and societal needs is a way for us to bring to

life a key value for our community: being in tune with the world. Thus, rather than separating classroom education from learning in professional environments, we combined the two—creating an even more powerful way to learn. In our research, we reject the dichotomy between fundamental and applied research. Instead, we pursue use-inspired research—in other words, research that can be translated into practical solutions to address the world's most pressing problems.

We also recognize that global issues have local dimensions. For instance, the issues related to providing abundant and clean water in Northern Africa are vastly different from the issues that arise in the Western United States. As such, our researchers not only focus on developing solutions to global problems—they also work to tailor global solutions to local conditions.

Meeting global needs is a reality we live every day at Northeastern, in big and small ways. In many ways, our students are the leaders. To cite one example: through IDEA, our student-run venture accelerator, one group of Northeastern students has launched Njabini, a company that sells handmade accessories made by disadvantaged mothers in rural Kenya. The company then uses the revenue to provide services to Kenyan farmers that enable them to increase the productivity and profitability of their farms. The overall goal is to enable poor families living in rural Kenya to gain employment, earn a good wage, and pursue their dreams.

IE: How have you led Northeastern University in strategically aligning the University's research enterprise with three global imperatives—health, security, and sustainability? Why?

AOUN: We chose these areas precisely for the reason you mention: they're global imperatives. All of these issues are important to people everywhere, all over the world—and they will remain so for the foreseeable future. Within each imperative, we've worked to develop interdisciplinary expertise and best-in-class leadership in specific sub-fields.

Thus, researchers at our state-of-the-art Marine Science Center are developing new technologies and approaches to promote urban coastal sustainability. When you consider that half the world's population lives in coastal areas, the relevance of this research to the world can't be understated. In health, Northeastern researchers—faculty, graduate students, and undergraduates—are discovering new drugs to treat diseases neglected by Big Pharma research. This work could save literally billions of lives. In security, our researchers are advancing breakthroughs in a number of areas, from cybersecurity, to more effective imaging technologies, to new sensing technologies that identify and map infrastructure problems.

IE: Do higher education institutions have a responsibility to prepare students to be global citizens? How can colleges and universities achieve this? **AOUN:** Absolutely, they do. At Northeastern, our mantra is "the world is too interesting to ignore." Thus, we aim to help our students develop a global perspective, through all the ways I've mentioned already: global co-ops, global study experiences, research and social enterprise projects around the world, and more. Ultimately, however, we're aiming to develop *global mobility competence* in our students: in other words, the ability to be at ease in—and function effectively in—vastly different cultural contexts and environments.

As you can see, our strategy has been to infuse a global perspective into every part of Northeastern, without exception. I think that's vital for any college or university seeking to help students become global citizens. Global opportunities can't just be limited to the study abroad office, or any one segment of the university. They have to be everywhere in order to reach all the students—and to enable them to reap the benefits.

IE: What do universities need to do to prepare students to enter a global marketplace after graduation?

AOUN: I sometimes say to our entering freshmen—only partly in jest—that by the time they graduate, half of what they learned will have become obsolete. Thus, preparing students to enter a global marketplace is about more than helping them master a body of knowledge, though that's obviously essential. It's also about equipping graduates with an innate flexibility to adapt to new and changing knowledge, to be informed by colleagues whose experiences are different from their own, and to be able to integrate others' perspectives into their own perspectives. All of these attributes are vital to succeeding in a global marketplace—and all of them are aspects of global mobility competence.

At Northeastern, our approach has been to provide as many opportunities as we can to help students discover the world—and themselves. Through global co-ops, global research, service and study and other global opportunities, our students learn what kind of work and experiences they love, and which ones they don't. They find out what they're good at, and what they're not good at. We give our students options, and

they take advantage of them to build global networks and a global perspective. This approach clearly has been working for us: 90 percent of our graduates are employed full-time or in graduate school within 6 months of graduation, and 51 percent of our most recent graduating class received a job offer from a previous co-op employer.

IE: You've been an international student and scholar on three continents—Lebanon, France, and the United States and you are among a small number of U.S. university presidents who are foreignborn. How has your personal experience influenced your view of higher education?

AOUN: I can say without a doubt that the U.S. higher education system is the best in the world. It's meritocratic, which is not the case with some other systems. It's decentralized, so it's not constrained by the limits—or the whims—of a central government. But the best feature of the U.S. system is its diversity, because no single model suits the needs of every learner. Our diversity allows us in turn to serve an extraordinarily diverse student population.

By some estimates, 85 percent of all undergraduates today are nontraditional learners, meaning they aren't young adults in a four-year residential program. This abundance of nontraditional students is having a tremendous impact on higher education, because these learners are very clear about the outcomes they are seeking from higher education, and want programs that are responsive to their needs. This "rise of the rest," as I call it, will compel higher education institutions—both in the United States and around the world—to be more customer service oriented, deliver strong outcomes, and provide a strong value proposition overall.

IE: What has been the greatest lesson a student has taught you about the global impact of higher education?

AOUN: I've had many Northeastern students tell me how their global co-ops dramatically changed their perspective on the world. In particular, the students often share how their global experiences gave them a new appreciation for aspects of their lives they once took for granted. For

example, two of our students who recently completed a global co-op at a remote hospital in Nepal told me that they loved their experience—and they also loved being able to take their first hot shower in five months after it was over!

Then there's our student who went on co-op to Antarctica—you can imagine what a unique experience that was! It had an impact on us, too—we had to change all our materials to say that instead of co-ops being available on six continents, students now had the opportunity to do them on all seven.

On a more serious note, these experiences speak to the impact of higher education because higher education—in this case, Northeastern—helped make them possible. Now, these students will go forward in the world forever transformed, and with a much deeper perspective and understanding of the world than they had before.

IE: You've championed joint-research platforms between Northeastern University and other international institutions. Are there any joint-research partnerships or other international partnerships that Northeastern University that you take particular pride in?

AOUN: Yes, I'm particularly proud of our bachelor of science in international business program, which educates students to become global managers. As part of the program, students spend a year in one of 10 global locations, including China, Japan, Hong Kong, Germany, and Mexico. They work in the global offices of some of the most well known companies in the world, and study at prestigious partnership universities—both in the language of the country in which the students are located. The BSIB program allows students to develop global mobility competence and practical ability in a foreign language—and graduates of the program are bringing a competitive edge to the global companies at which they go on to work.

I'm also proud of the work our social entrepreneurship students are doing to alleviate poverty all over the world, from sugar cane farms in the Dominican Republic, to the rainforest of Belize, to urban townships in South Africa. Working with global nongovernmental organizations, more than



1,200 Northeastern students have enabled people and families living in extreme poverty to build better lives for themselves by helping them secure micro-loans and start small businesses. In South Africa alone, our MicroVenture Fund has over half a million rands (about \$46,000 in U.S. currency) in seed funding and micro-investments in township communities.

IE: How can joint-degree programs and partnerships further campus internationalization and the future of the United

States as a world leader in higher education?

AOUN: As I mentioned, the future of higher education will be influenced heavily by the "rise of the rest"—nontraditional learners, all over the world, who are looking for educational opportunities that provide strong value, are highly responsive to their needs, and generate strong outcomes. The rise of

the rest presents an enormous opportunity for the United States to reassert its world leadership in higher education, because our system is set up to accommodate the diversity of this group.

At the same time, U.S. institutions won't be able to meet the needs of these learners fully unless they also change. Going forward, college and universities will need to invest in programs and partnerships that promote learning breakthroughs—in other words, approaches that respond to the needs of this new student population, such

as experiential education, adaptive learning models, and competency-based education.

Similarly, U.S. higher education can extend its leadership in research by focusing more on "reverse innovation"—that is, adapting solutions that work in one part of the world to serve the needs of others. For instance, a large and complex medical device may work for health care needs in the U.S., where most people have ready access to doctors and hospitals, but it may not be so effective in India, where millions live in rural villages. University research that can adapt the technology of the former for the needs of the latter will be in the vanguard globally.

In my opinion, U.S. institutions that are attuned to global needs—both in education and research—are much more likely to thrive going forward. Even more importantly, they have the opportunity to make an enormous impact, and change the lives of innumerable people around the world.

ELAINA LOVELAND is the editor-in-chief of *IE*.

