Illuminating a New Vision for Liberal Education

Now in his third year at the helm of Rollins College, President Lewis Duncan is on a mission to prepare students for global citizenship and responsible leadership.
“I am not looking for a broken college to fix. I want to lead an institution that is already at the top, one that will challenge me to take it to even greater heights.” —Lewis Duncan

LEWIS DUNCAN

set the tone for his administration long before his selection to be Rollins College’s 14th president. In my experience, a college president must have a clear vision for the institution’s future, one that aligns with the values and priorities of the community. This was evident in his decision to focus on expanding the college’s research capabilities and enhancing its academic programs.

As dean of the Thayer School of Engineering at Dartmouth College, Duncan was already running a renowned operation, a semi-autonomous school within a university, with its own faculty, fundraising, and trustees. He entertained a virtual smorgasbord of presidential opportunities, including some at respected schools of science and technology, where he would have been a natural. Other calls came from schools in financial or academic crisis.

But Rollins was just the type of college he was looking for, and through his aim to take the reins of an already-revered institution was a bold one, it was wholly in character for someone used to taking calculated risks—a defining personality trait of leaders.

To some, Duncan’s background made him an unusual choice to lead a private liberal arts college, known for teaching, not research. A space physicist, he had developed satellite sensors and rocket payloads at New Mexico’s Los Alamos National Laboratory for the Department of Energy, the Department of Defense, and NASA, before returning to academia as a Carnegie Science Fellow at Stanford University and then associate dean of the College of Sciences and associate professor of physics and astronomy at Clemson University. He still conducts research, most recently this past summer in Alaska with two Rollins students and 23 others from around the country (see story, page 13).

In the spirit of Hamilton Holt, Thomas Jefferson, and John Dewey, Duncan believes that, far from occupying separate cogs on the educational wheel, science and the arts are not just compatible, but interdependent. Art, after all, was 600 years ahead of physics in understanding the apparent difference in the sizes of things caused by perspective. Pythagoras, discovering a relationship between musical harmony and mathematics, learned that the world of sound is governed by exact numbers.

“Taking on the future challenges of science and technology should begin from a liberal arts foundation,” Duncan said, the goal being “to liberate your mind.”

He proselytizes with quiet, yet firm, conviction on the importance of the practical application of liberal education. “I’ve been almost evangelical on this need to have liberal education applied,” he said. “Dewey, in philosophical terms, described it as pragmatic, active citizenship,” not just reflective thought as practiced by ancient Greeks, purist scholars who adamantly opposed any practical use of higher education. “There has to be a connection between the life of the mind and the life we lead. Wisdom is knowledge applied.”

Dewey, who helped inspire the shift in American higher education from a teacher-based to a student-centered curriculum, chaired the first Rollins College curriculum colloquy in 1931. It was here that he infused Rollins with the ideas of active citizenship and strong bonds between teacher and student. From that came Hamilton Holt’s Conference Plan, which turned the classroom into a forum for the exploration and exchange of intellectual ideas.
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President Duncan and his wife, Dr. Paula Hammer

“Holt rejected the idea of the lecture format,” Duncan said. “He wanted Rollins College classes to have intellectual vitality.” A look through the windows of Orlando Hall, with its deep-grained, oval tables in intimate classrooms that hold no more than about 15 students and their professor, gives evidence of the Conference Plan’s endurance. This is what Dewey and Holt had in mind 75 years ago.

For his part, Duncan aims to preserve the richness of the liberal arts in a new application for the future. “If we’re thinking about designing an educational system for the 21st century,” he asked, “shouldn’t we be thinking about the 21st century?”

This spring, in commemoration of the national conference held at Rollins 75 years ago, and continuing the tradition of the 1997 Rollins Colloquy, Toward a Pragmatic Liberal Education: The Curriculum of the 21st Century, some of the world’s most interesting thinkers will converge on campus for a fresh look at the role of liberal education in the new millennium. From author Salman Rushdie to poet Maya Angelou, astronaut Sally Ride to biologist E.O. Wilson, an esteemed group of thought leaders will consider Liberal Education and Social Responsibility in a Global Community. It will do so, Duncan expects, in the spirit of those whose imprints on Rollins College are so deep and with the appreciation that the results will similarly inform Rollins’ curriculum in the future.

Evaluating for Global Citizenship and Responsible Leadership

Once he accepted stewardship of the rich Rollins legacy, Duncan collaborated with faculty and administrators to assure that the strategic-planning efforts began at the turn of the 21st century were distilled into a dynamic framework for institutional decision making. The theme that emerged—educating for global citizenship and responsible leadership—has also become the theme of Duncan’s presidency.

Internationalization of the College received a tremendous boost in the form of a $12-million gift from Thomas J. Petters, CEO and chairman of Petters Group Worldwide, Rollins trustee, and parent of Jennifer Petters ’06 ‘08 MBA. Part of the gift is establishing a Rollins presence in China that will include participation in an educational leadership facility—a campus, really—in Shanghai, making Rollins one of only 13 colleges and universities with such sophisticated China studies programs. Duncan sees Rollins on the forefront of making education a transglobal affair: professors in Shanghai teaching classes via digital technology to students in Winter Park, professors here teaching Chinese students in Shanghai.

International studies go far beyond China, of course. Duncan wants to send Rollins students and faculty abroad in a wide program that crosses all disciplines. In addition to endowing two faculty chairs, the Petters gift will finance international travel—for students and faculty. “At least every three years, we want every faculty member and many of our staff to have an international scholarly experience,” Duncan said. “Our only condition, unless it’s for exceptional circumstances, is that we need to focus on education for the 21st century, not the 18th.”

This attitude, more than anything else, defines Duncan’s commitment to the pursuit of what he calls practical, or applied, liberal arts. It is a bold statement, as well, coming from the chief executive of a college whose traditions are deeply rooted in Athens, London, Paris, and Rome. Rollins won’t ignore the birthplace of Western thought by any means, Duncan said. He just wants to make sure that Rollins extends its horizons beyond our Western-heritage foundations, outward to the 21st-century hotspots—Latin America, the Middle East, India, and China.

In the past year, groups of faculty have traveled to the Galapagos and China, and a group is currently preparing to spend 12 days in Morocco in January. An unexpected dividend of these trips has been development of new, inter-disciplinary connections. “Colleges everywhere struggle to promote cross-disciplinary critical thinking,” Duncan observed, “but college department structures don’t easily promote such communication. You cannot take 25 colleagues on a shared research journey without their forming friendships and intellectual relationships.”

As Rollins trots the globe, Duncan hasn’t ignored the home front. He sees the College’s Student Life Initiative as bringing synergy to the overall educational experience—how students learn and how they live. One example is the introduction of the College’s first Academic Honor Code, where “students take responsibility for the academic honor of our institution. In coming years, we will work on developing similar shared principles for social conduct.”

It’s more than conduct, however. Duncan and his wife, psychologist Paula Hammer, have been so struck by living on campus that he wants to share the experience. Over the years, college and university faculty gradually drifted away from the quaint lifestyle of Faculty Row in favor of less costly housing in the suburbs. It was the evening strolls around campus, the casual mingling with students, that sparked a revelation in the new Rollins president. “We need to bring more of our faculty back to campus at night,” he said. “Fifty years ago, people lived near campus.”

Today, he observed, “It is an exceptional effort to work all day and then come back again at night.” One idea the College is exploring is to
build faculty apartments in and among the residence halls.

Another major role in the Student Life Initiative is played by the Cornell Scholars. Each year, this elite group, named in honor of Rollins benefactor George D. Cornell '35 '50 '85H, is selected from the 50 to 60 best and brightest Rollins applicants. They and their parents are invited for a weekend on campus where the students engage in discussions, write essays, interview with faculty, and get a taste of the Rollins experience. Of the dozen offered full scholarship and room-and-board packages last year, nine completed the 2004-2005 year as the College's first Cornell Scholars. Eight more Cornell Scholars entered the College this fall. In four years, Rollins expects to have 35 to 45 Cornell Scholars on campus, plus a significant number of other students invited to participate in the competition also enroll. "We will challenge them to define the intellectual climate of the campus," Duncan said. "They have already had an influence."

Creating Swagger

"When I interviewed here," Duncan said, "I was struck by how seldom I saw anyone wearing anything with the Rollins College name on it." One of his early acts as president was to hand out Rollins T-shirts to incoming students. It's not exactly a return to the old freshman beanie days, but it does help display the Rollins identity. He also gave all employees polo shirts bearing the Rollins logo, now the standard for dress on Fridays. "I want us to be more visible," Duncan said. "We need to begin acting with the pride of institution that we deserve—to show who we are intellectually. We need to have swagger."

With repeated No. 1 U.S. News & World Report rankings, increasing numbers of applicants, renewed commitment to the integration of classroom and campus life, and a high-energy curricular review, Rollins has reasons to show its pride. Duncan concludes College ceremonies with reference to Rollins' motto, Fiat Lux. "Let there be light." Rollins' light has never been brighter.

Rollins College President Lewis Duncan does not ponder scholarship from high atop an ivory tower. He lives it—in the classroom, at the lab, and even high atop the world at a defense department research facility. This summer, two Rollins students, Kyle Wilkerson '09 (left) and Nick Horton '09 (center), attended a radio science "summer school" at the prestigious Geophysical Institute at the University of Alaska Fairbanks. Duncan then joined the students for continued radio wave research and educational lectures at the Department of Defense research facility known as HAARP, in Gakona, Alaska.

Two of only 23 students selected to participate at the Polar Aeronautics and Radio Science (PARS) Summer School program, Horton and Wilkerson were the youngest scientists at PARS, and certainly the only pair groomed by their college's president. To prepare for the rigors of the program, the students met frequently throughout the spring and summer with Duncan for intensive physics Q&A sessions. They studied up on ionospheric science, solar flares, radio waves, space plasma, and high-power radar. They became proficient with the equipment in the physics labs. And they depended on Duncan's assertions that they were as ready as the other students, many of whom were graduate students from MIT and Stanford.

"President Duncan was very reassuring that we were not behind on the learning curve, even though we were only entering our sophomore year," Wilkerson said. "The other students may have had more experience, but we had really concentrated on the material that relates to this particular project, so we were not intimidated."

Duncan, who also teaches a Rollins College Conference (RCC) course for entering students, said continuing his own scholarship in the field of physics is just as important as mentoring new physicists. "If our faculty were teaching physics based on the physics of when we were in college, most of what we would be presenting would be obsolete," he said. "If I were not a lifelong learner, I would be a very poor teacher."

HAARP (High frequency Active Auroral Research Program) is a $100-million radio transmitting and diagnostic facility under the auspices of the Air Force Research Laboratory and the Office of Naval Research. Still a year away from completion, HAARP is expected not only to be 10 times more powerful than any other facility in the world, it is also anticipated to be the site of unexpected discoveries in the interaction of high-powered radio waves and the ionosphere.

"This is a very fertile area for discovery, with a fairly low threshold of advanced learning required to participate," Duncan said. "It is an ideal experience for undergraduates."

But, he said, don't mistake this for "junior varsity" research. This is the science big leagues. It is rare for an undergraduate to be invited to participate at such a level. Even if Horton and Wilkerson decide to enter another field after graduation, Duncan said their experience of true scholarship and pure research at HAARP will be invaluable. "It's a rigorous experimental science environment," he said. "They're learning the skills and techniques of the scientific method, and those same disciplined problem-solving skills can be translated into any other field of science or even the business world."

It was the opportunity to conduct cutting-edge research—and have it published—that originally drew Horton, a Cornell Scholar, to the physics program at Rollins. "I was interested in participating in peer-reviewed journals before graduating and I would not have been able to do that at a large university," he said. "I knew right away I wanted to make this trip with Dr. Duncan." It was, in fact, already his second trip to HAARP with Duncan.

The president and the two physics majors are now analyzing their data and will present their results at a national scientific workshop in Santa Fe this spring. And, the growing research group is looking for more eager and hard-working Rollins students to join their team, as opportunities for such space research continue to grow.