

New Kilachand Center Links Key Research Disciplines

Discoveries will be fueled
by collaboration and a
record \$115 million gift

With a powerful boost from the largest gift in its history, Boston University on September 14, 2017, officially opened the Rajen Kilachand Center for Integrated Life Sciences & Engineering, a state-of-the-art research facility that brings together life scientists, engineers, and physicians from the Medical Campus and Charles River Campus and promises to speed life-changing developments in the fields of human health, environment, and energy.





The nine-story, 170,000-square-foot building at 610 Commonwealth Avenue represents an investment of a quarter of a billion dollars—a \$135 million construction commitment from BU and a \$115 million gift from Rajen Kilachand (Questrom’74, Hon.’14). The BU trustee designated \$15 million to support construction of the center and \$100 million for an endowment to support research at the intersection of engineering and the life sciences. Kilachand, the University’s most generous donor, pledged \$25 million in 2011 to establish Kilachand Honors College and \$10 million in 2012 for renovations to Kilachand Hall, at 91 Bay State Road.

University President Robert A. Brown says Kilachand’s latest contribution will fund research that could change the future of health care. “Rajen Kilachand’s gift establishes an endowment that will support research in perpetuity,” says Brown. “It will support hundreds of scientists, researchers, and graduate students working on research that

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will affect the human condition through research as varied as direct applications to human health, sustainable methods for producing organic materials, food security, and understanding the impact of climate change on all life. The Kilachand Center and the Research Fund will influence all the ways that life sciences and engineering come together to affect our future.”

Kilachand says he believes the new center’s combination of researchers from medicine, engineering, and neuroscience will be the model for future life sciences research, in both academia and industry. “I’m very excited about that collaboration,” he says. “I’m convinced that this research center is going to be the front-runner. I believe from the bottom of my heart that this will become one of the leading research institutes on the planet.”

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will work in shared, flexible work spaces, meeting rooms, and other common areas designed to encourage collaboration. The center will include researchers from the Biological Design Center, where, under the leadership of Christopher Chen, a College of Engineering Distinguished Professor and a professor of biomedical engineering, researchers will use technologies like DNA sequencing and synthesis, 3-D printers, and robotics to deepen their understanding of synthetic biology and tissue engineering. At the Center for Systems Neuroscience, led by Michael Hasselmo, a College of Arts & Sciences professor of psychological and brain sciences, researchers will explore the ways nerve cells in different brain regions interact to guide functions such as learning, memory, speech, perception, and attention. And at the Center for Research in Sensory Communication & Emerging Neural Technology, directed by Barbara Shinn-Cunningham, an ENG professor of biomedical engineering, neuroscientists and sensory physiologists will study hearing, speech, and language.

“Each of these centers incorporates faculty from a wide range of disciplines,” says Gloria Waters, BU vice president and associate provost for research. “We have faculty who are taking computational approaches to these areas, faculty who are involved in basic science, basic biochemistry. And we have faculty doing behavioral testing of various sorts. Those are really nice combinations of faculty from a variety of schools and colleges, a variety of departments, and a variety of disciplines.”

Those faculty, says Waters, are among the most innovative researchers in their fields, and the Kilachand Center will be home to one of academia’s largest and most highly regarded clusters of researchers working in neuroscience. In addition, the ENG biomedical engineering department is routinely ranked among the top 10 in the country and is the only biomedical engineering department to have received both a Whitaker Foundation Leadership Award and a Coulter Foundation Translational Research Award.

Waters says recent decades have seen a revolution in the ways we solve problems at the nexus of life sciences and engineering. “Researchers have done an amazing job of bringing ideas and technology from engineering, as well as from the physical sciences and computational sciences, to the field of life sciences,” she says. They are working on technologies that will help such things as drug delivery to specific targets and on tissue engineering,

ONLINE:
Read more about the Rajen Kilachand Center for Integrated Life Sciences & Engineering at bu.edu/bostonia.

Research includes targeted drug delivery, tissue engineering, and Alzheimer’s disease.



JANICE CHECCHIO



Alzheimer’s disease, and new hearing aids. “There is tremendous potential for faculty at the Kilachand Center to make significant impacts in areas of disease and disability.”

Robert A. Knox (CAS’74, Questrom’75, Hon.’17), a current trustee, former Board of Trustees chair, and a longtime investor in health care companies, has spent decades observing two things he cares deeply about: new developments in health care technologies and the steady upward journey of Boston University. In the Kilachand Center, he says, he is seeing the potential for both to reach new heights.

“This kind of collaboration between different groups of scientists has been common in the commercial world,” says Knox. “What’s going to happen at the Kilachand Center is it will be institutionalized within the academic world. That is an incredibly powerful positioning, for BU to have this kind of interdisciplinary activity going on. This is a huge reputation boost for the University.”

Knox sees the Kilachand Center as a magnet that will attract high-caliber students, “who want to



Trustee Robert A. Knox says the Kilachand Center will attract high-caliber students who will “pursue research or find and fund new companies that will commercialize these ideas.”

come into these kinds of interdisciplinary situations and get an education that will be very distinctive. And it will allow them to graduate and pursue research or find and fund new companies that will commercialize some of these ideas.”

“When you think about great research universities,” Brown says, “many have been built on tremendous strength in traditional disciplines. We believe that a differentiator for Boston University, both educationally for our students and in our impact on society through our research and scholarship, is to be very, very good at bringing those people together across those boundaries to work on the grand challenges—the very important problems the world has today. If we can be an institution that is known as having both the disciplinary strength and one that is singularly good at bringing those people together in unique combinations that solve the problems of the time, that will be a rare environment for our students to study and do research in. That’s the university we’re trying to create, and I think step-by-step, piece by piece, we’re doing this.”