

BROWN'S NEW LIFE SCIENCES RESEARCH FACILITY WILL BRING TOGETHER BIOLOGISTS, ENGINEERS, PHYSICIANS, STUDENTS AND OTHERS TO ADDRESS COMPLEX HUMAN HEALTH CHALLENGES.

"This building meets a critical infrastructure need that ensures our [life sciences] research and discovery will continue to thrive and benefit communities near and far in meaningful ways."
– Dr. Mukesh K. Jain

critical progress: studying the biological causes of aging and age-related disorders; probing genetic and environmental risks for cancer and reducing cancer burden in Rhode Island; developing vaccines to thwart global infectious diseases; and conducting brain science to better understand conditions such as Alzheimer's disease, autism, addiction and depression.

The new facility will provide expanded laboratory space and cutting-edge technology for those programs, along with cross-cutting areas such as biomedical engineering and research on RNA, the genetic material that holds promise for treating or preventing serious illnesses.

The seven-story, 300,000-square-foot structure, located on Richmond Street and designed by the architecture firms TenBerke and Ballinger, will be within walking distance of Brown's Warren Alpert Medical School, Laboratories for Molecular Medicine and School of Professional Studies, as well as other buildings housing research, health and public health activities.

"This project will increase our division's capacity to engage in world-class biomedical research, collaborate with colleagues across campus, and forge partnerships with biotech and pharma companies to turn discoveries into treatments more quickly," Jain says. "It will also give Brown students more opportunities to conduct patient-focused research."

Providing more life sciences research space is a long-time strategic priority that's central to the University's aim to expand research activities across all academic departments. Brown continues active fundraising for the project. Once construction begins, it's expected to take three to four years.

Sustainable Design

Planning for the project has involved approvals by the Corporation of Brown University, coordination with the city, and community meetings with residents and elected officials. It has also meant designing a fully electric structure to align with the University's commitment to reducing campus greenhouse gas emissions to net-zero by 2040.

"This will be one of the first all-electric laboratory buildings in New England operating on 100 percent renewable electricity, with backup for resiliency," says Stephen Porder, associate provost for sustainability and Acacia Professor of Ecology, Evolution, and Organismal Biology and Environment and Society.

For temperature control during normal operations, Brown will use electric heat pumps that move heat from one space to another. Integrating heat pump technology into a large, ventilated laboratory facility "requires intentionality to eliminate onsite combustion for daily heating and minimize greenhouse gas emissions that cause climate change," Porder explains.

Sustainable design is one of many ways the life sciences facility is expected to improve lives.

"Brown scientists, physicians and scholars are at the leading edge of work toward new discoveries and solutions that impact lives here in Rhode Island and across the globe," President Christina H. Paxson notes. "Our goal is to advance that positive impact even further."



THE NEW STRUCTURE WILL FEATURE MODERN LABS, COLLABORATIVE SPACES AND AN ENVIRONMENTALLY SUSTAINABLE DESIGN.

A model of environmental sustainability, the facility is expected to continue spurring growth in the revitalized Jewelry District and help propel Rhode Island forward as a center for biotechnology innovation, according to Carey.

Dr. Mukesh K. Jain, senior vice president for health affairs and dean of medicine and biological sciences, says the life sciences ecosystem will support research ranging from molecular-level science to the latest developments in patient therapies, interventions and diagnostics.

A Vibrant Ecosystem for Life Sciences Innovation

By Debra Bradley Ruder '80

Brown will propel collaboration across academic specialties to tackle formidable human health challenges, fueled by a state-of-the-art life sciences research facility.

Brown is developing a comprehensive biomedical ecosystem where the ingenuity and passion of faculty, students and staff from across scientific fields of study will translate pioneering research into solutions for daunting human health problems, from cancer to dementia.

At the core of this vision is a new, state-of-the-art integrated life sciences research facility planned for Providence's Jewelry District. Building on Brown's hallmark collaborative culture, the facility will bring together biomedical investigators, engineers, physicians, computer scientists, applied mathematicians and entrepreneurs to work together to improve patient outcomes, in partnership with Brown's three closely affiliated health systems.

The University is well positioned to translate laboratory discoveries into treatments to benefit patients and communities locally and globally, with what Brown leaders describe as a distinctive approach to creating a home for integrated life sciences. They say it is the most ambitious project in the University's history.

"This will be the largest academic laboratory facility in Rhode Island," says Russell Carey, executive vice president for planning and policy. "It's a signature project in Brown's commitment to advancing research for impact."

Leaders expect the investment will enable Brown investigators to accelerate breakthroughs in four key areas where they've already made

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