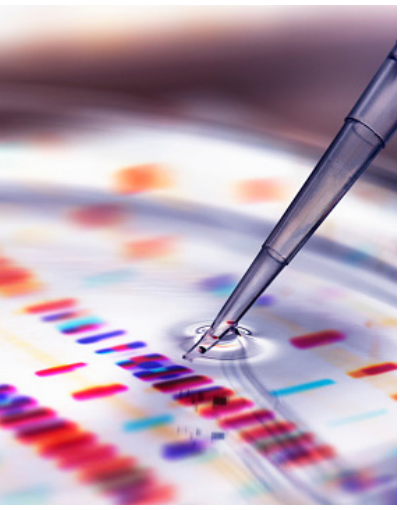


Mike Cooke
Senior Vice President
and Site Head,
Cell and Genetic Therapies

VERTEX

Vertex Cell and Genetic Therapies

Pioneering cutting-edge technologies with the aim of transforming the lives of patients with serious diseases

Cell and genetic therapies represent two rapidly emerging therapeutic modalities with the potential to treat — and even cure — several of the diseases we're focused on at Vertex. Our team at Vertex Cell and Genetic Therapies (VCGT) has assembled some of the industry's top technology and talent to address scientific problems that have eluded traditional treatment modalities. Leveraging the best technologies, manufacturing capabilities and expertise with a patients-first philosophy, we're making significant progress in multiple disease areas with unmet need.

Building on our expertise and history of innovation in small molecules, we are on the leading-edge of exciting new technologies like stem cell differentiation, novel devices for immunoprotection, CRISPR gene editing, and novel delivery technologies including adenoassociated virus (AAV) capsids to target the underlying cause of serious diseases. We're also investing in technologies that will aim to improve the treatment experience for patients, and our cell therapy programs are revolutionizing manufacturing processes. Our work in cell and genetic therapies spans multiple sites and relies on the collaboration of many different teams located across multiple locations.

Our Vertex Cell and Genetic Therapies Sites

Providence

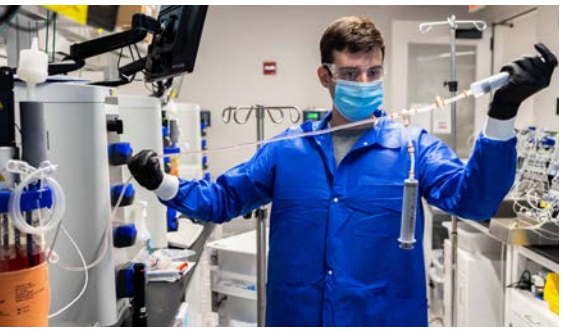
Our research and development (R&D) sites in Providence, Rhode Island joined Vertex in 2019. These 50,000-square-foot and 22,000-square-foot (and growing) facilities are key partners to our type 1 diabetes program. At the intersection of biology, technology and engineering, our team has expertise in device design, tissue engineering, biomechanics, bioenergetics, process development and more. Seventy-five percent of the building is dedicated to lab, manufacturing and research space for our cell and genetic therapy disease areas. Vertex plans to continue expanding Providence's clean room manufacturing capabilities with the addition of a new manufacturing line of equipment and upgraded utilities capabilities.

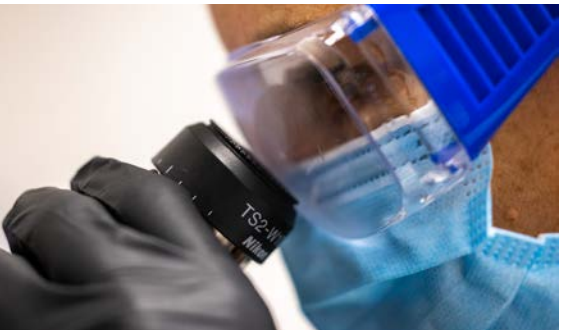
Warwick

Our Warwick, Rhode Island site is a 12,700-square-foot facility that serves as an extension of the Providence R&D site and focuses on design, prototyping, equipment and process support for our programs.

Boston

Home to our global headquarters, our Fan Pier R&D site is home to approximately 3,000 employees, with more than 400 working in research. Thirty-five percent of this space is dedicated to lab and manufacturing space. Our scientists are experts in chemical biology and proteomics, structural biology and biophysics, human disease modeling, functional genomics, chemistry automation and high-throughput information. Our teams at this research site are workong on multiple projects related to cell and gene therapies across our disease areas, including stem cell islet development and CRISPR gene editing. Since the Boston site is our global headquarters, you'll also find additional teams that are crucial for our business, like patient advocacy, government affairs and business development.





Jeffrey Leiden Center for Biologics, Cell & Genetic Therapies

The Leiden Center is a state-of-the-art research and clinical manufacturing site is home to about 350 employees working in research, clinical development and manufacturing for investigational cell and genetic therapies. The facility houses 57,000 square feet of leading-edge R&D lab space for each of our cell and genetic therapy disease areas and 21,000 square feet of manufacturing space for the type 1 diabetes program. Seventy-five percent of the building is dedicated to lab and research space as we work to rapidly advance our therapies.

At the Leiden Center, collaboration is paramount. Our researchers use multiple modalities and look for common methods that can address questions across our cell and gene portfolio. Along with our internal capabilities, we leverage external partnerships to secure capacity and avoid redundancy in order to reach patients around the globe. We have initiated construction on another building (Leiden Center 2) which is expected to be completed by 2026. By 2026 Vertex's Boston footprint will grow to ~1.8M square feet, a ~50% increase from 2019.

Managing Our Environmental Footprint

We made significant efforts to build the Leiden Center to be one of Vertex's most energy efficient buildings. Minimizing the building's environmental footprint and reducing energy consumption and overall carbon emissions contribute to our goal of meeting the U.S. Green Business Council's LEED Platinum Certification for interior design and construction. The Leiden Center became the first Massachusetts-based life sciences facility to be certified LEED Platinum in 2023.

- Over **912.89** tons of construction materials were recycled and reused throughout the construction process of the building
- **50** products with Environmental Product Declarations and 15% of total products used salvaged, reused or recycled materials
- Installation of high efficiency water fixtures to achieve excellence in water efficiency at **11%** higher than the level required

Cambridge

We have a 32,000-square-foot facility in Cambridge, Massachusetts, where we focus on manufacturing clinical materials. This includes materials management, production, quality control testing, batch release and shipping operations.

Collectively, the expertise of the engineers and scientists who work at our VCGT sites, combined with top-of-the-line facilities, allows Vertex to stay at the forefront of innovation and make meaningful contributions to treat the underlying cause of serious diseases. Everything we do begins with our patients, and we go all in to challenge what's possible in cell and genetic therapies.

Learn more