

Danaher, Jennifer Doudna, and Innovative Genomics Institute Launch Danaher-IGI Beacon for CRISPR Cures with Aim to Address Hundreds of Diseases Using Gene-editing Platform Solution

- *New collaborative research center based at University of California, Berkeley, plans to develop platform approaches that can be easily modified to develop gene-editing medicines for hundreds of devastating illnesses*
- *Innovative model aims to dramatically reduce preclinical and clinical development time and expense for investigational rare disease therapies that currently struggle to attract funding*
- *Nobel laureate Doudna and team to partner with Danaher to oversee center's translational and clinical research*

WASHINGTON, Jan. 9, 2024 /PRNewswire/ -- Danaher Corporation (NYSE: DHR) and the Innovative Genomics Institute (IGI) today launched a collaborative center to develop gene-editing therapies for rare and other diseases, with a goal of creating a new model for future development of a wide range of genomic medicines. The center, known as the Danaher-IGI Beacon for CRISPR Cures, aims to use CRISPR-based gene editing to permanently address hundreds of diseases with a unified research, development and regulatory approach.

Jennifer Doudna – Nobel laureate, CRISPR pioneer and founder of the IGI – will oversee work at the center at the IGI headquarters alongside Fyodor Urnov, IGI's Director of Technology and Translation and Director of the new Beacon. Both are professors at the University of California, Berkeley. Brad Ringeisen, IGI's Executive Director, will also play a key role in the new center. Danaher, a leading global life sciences and diagnostics innovator, will make available an extensive collection of technologies and solutions for the manufacturing of CRISPR-based therapies, and will also work to develop new technologies and approaches intended to simplify and standardize preclinical and clinical development.

The collaboration, which enables a substantial new research program at IGI, is the largest Danaher Beacon to date. The Beacons program funds pioneering academic research with the goal of developing innovative technologies and applications for human health. Focus areas for Beacons include genomic medicines, precision diagnostics, next-generation biomanufacturing, human systems and data sciences.

Rainer Blair, President and CEO, Danaher, said: "CRISPR has enormous therapeutic promise, but there is no standard scientific or regulatory framework for how to get it to patients. To take on a challenge this big, we all need to work together with a sense of urgency across academia, industry, and government. We are thrilled to join forces with some of the finest scientific minds in gene editing at the IGI, bringing R&D and manufacturing talent, technology and expertise from across several of our operating companies in an effort to create transformative solutions for incredibly important but too-often underserved patient communities."

Doudna said: "Combining the strengths of the IGI and Danaher companies in this new center is a uniquely powerful way to deliver on the promise of CRISPR cures. We know how to get CRISPR molecules into the tissues where they need to be. We know the patient communities. And we have the world experts on these diseases on our team. What we need is a blueprint describing all the science and technology required to treat a person using CRISPR. Once that is achieved, I am convinced that CRISPR can become the standard of clinical care for many diseases."

As a first step, the Danaher-IGI Beacon aims to develop gene-editing therapies for two rare genetic disorders called "inborn errors of immunity" (IEIs), hemophagocytic lymphohistiocytosis (HLH) and Artemis-SCID. IEIs have several advantages that the parties believe make them amenable to the combined Danaher/IGI approach, including an extensive patient registry and a transplant-based route of administration that bypasses some key challenges in delivering CRISPR molecules to appropriate tissues.

Collectively, IEIs comprise some 500 distinct diseases that together affect many hundreds of thousands of people worldwide. Yet they are not currently the focus of any major gene-editing trials, largely because designing and testing therapies for each very small IEI patient population would be challenging, slow, and cost-prohibitive. Because of CRISPR's unique ability to be easily reprogrammed to address any gene mutation, the goal of the Beacon for CRISPR Cures is to develop a scalable platform approach that would enable a new medicine to be rapidly built, even for diseases beyond IEIs. The Beacon's goal is for the platform developed at the new center to be expandable across many IEIs, other rare diseases, or more common conditions that could be treated by editing a single specific gene.

Urnov said: "It is imperative that the public health impact of CRISPR expand rapidly beyond the initial, modest-in-size cohort of diseases currently pursued by the biotechnology sector. The unique nature of CRISPR makes it ideal for developing and deploying a platform capability for CRISPR cures on demand. Danaher and the IGI are in a unique position to join our respective strengths, build such a platform, and create a first-of-its-kind CRISPR cures 'cookbook' that can be used by any team wishing to take on other diseases."

Teaming up with leading clinicians focusing on IEIs at the University of California, San Francisco and the University of California-Los Angeles, the IGI will lend its unique expertise in CRISPR engineering, nonclinical models of inborn errors of immunity, manufacture of gene-edited cell products, regulatory interactions with the FDA in this disease space, and the design and execution of clinical trials for patients affected with these severe diseases.

Danaher operating companies will provide tools, reagents, resources, and expertise to simplify preclinical and clinical development and develop new standards for safety and efficacy. Among them is Integrated DNA Technologies (IDT), which will contribute industry-leading capabilities in the synthesis, modification, purification, and quality control of CRISPR nucleases and guide RNA, drawing on its newly opened therapeutic oligonucleotide manufacturing facility. Aldevron, which has [previously worked with IGI](#) to advance the use of CRISPR-based gene editing in the brain, will also play a key role in the

collaboration, alongside other Danaher operating companies including Cytiva, Beckman Coulter Life Sciences, Leica Biosystems, and Leica Microsystems.

ABOUT DANAHER

Danaher is a leading global life sciences and diagnostics innovator, accelerating the power of science and technology to improve human health. Danaher partners closely with biopharmaceutical and healthcare customers to solve critical challenges affecting patients around the world. Powered by scientific excellence, innovation and a culture of continuous improvement, Danaher enables faster, more accurate diagnoses and reduces the time and cost it takes to discover, develop and deliver life-changing therapies sustainably and at scale. Danaher's 65,000 associates worldwide are not just accelerating the patient impact of today's science and technology—they are helping build a healthier, more sustainable tomorrow. Explore more at www.danaher.com.

ABOUT THE INNOVATIVE GENOMICS INSTITUTE

The Innovative Genomics Institute is a joint effort between the Bay Area's leading scientific research institutions, UC Berkeley and UC San Francisco, with affiliates at UC Davis, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Gladstone Institutes, and other institutions. The IGI's diverse group of leading scientists have powerful interdisciplinary expertise. They conduct world-class research, driven by the real possibility of using genome engineering to treat human diseases, end hunger, and respond to climate change. In addition to our scientific efforts, the IGI is committed to advancing public understanding of genome engineering, providing resources for the broader community, and guiding the ethical use of these technologies.

FORWARD-LOOKING STATEMENTS

Statements in this release that are not strictly historical, including any statements regarding events or developments that Danaher believes or anticipates will or may occur in the future are "forward-looking" statements within the meaning of the federal securities laws. There are a number of important factors that could cause actual results, developments and business decisions to differ materially from those suggested or indicated by such forward-looking statements and you should not place undue reliance on any such forward-looking statements. These factors include, among other things, potential future, adverse impacts on Danaher's business, results of operations and financial condition related to the COVID-19 pandemic, the impact of our debt obligations on our operations and liquidity, deterioration of or instability in the economy, the markets we serve and the financial markets, uncertainties relating to national laws or policies, including laws or policies to protect or promote domestic interests and/or address foreign competition, contractions or growth rates and cyclicity of markets we serve, competition, our ability to develop and successfully market new products and technologies and expand into new markets, the potential for improper conduct by our employees, agents or business partners, our compliance with applicable laws and regulations (including rules relating to off-label marketing and other regulations relating to medical devices and the health care industry), the results of our clinical trials and perceptions thereof, our ability to effectively address cost reductions and other changes in the health care industry, our ability to successfully identify and consummate appropriate acquisitions (including the pending acquisition of Abcam) and strategic

investments and successfully complete divestitures and other dispositions, our ability to integrate the businesses we acquire and achieve the anticipated growth, synergies and other benefits of such acquisitions, contingent liabilities and other risks relating to acquisitions, investments, strategic relationships and divestitures (including tax-related and other contingent liabilities relating to past and future IPOs, split-offs or spin-offs), security breaches or other disruptions of our information technology systems or violations of data privacy laws, the impact of our restructuring activities on our ability to grow, risks relating to potential impairment of goodwill and other intangible assets, currency exchange rates, tax audits and changes in our tax rate and income tax liabilities, changes in tax laws applicable to multinational companies, litigation and other contingent liabilities including intellectual property and environmental, health and safety matters, the rights of the United States government with respect to our production capacity in times of national emergency or with respect to intellectual property/production capacity developed using government funding, risks relating to product, service or software defects, product liability and recalls, risks relating to fluctuations in the cost and availability of the supplies we use (including commodities) and labor we need for our operations, our relationships with and the performance of our channel partners, uncertainties relating to collaboration arrangements with third-parties, the impact of deregulation on demand for our products and services, the impact of climate change, legal or regulatory measures to address climate change and our ability to address stakeholder expectations relating to climate change, labor matters and our ability to recruit, retain and motivate talented employees representing diverse backgrounds, experiences and skill sets, non-U.S. economic, political, legal, compliance, social and business factors (including the impact of military conflicts), disruptions relating to man-made and natural disasters, pension plan and healthcare costs, inflation and the impact of our By-law exclusive forum provisions. Additional information regarding the factors that may cause actual results to differ materially from these forward-looking statements is available in Danaher's SEC filings, including our 2022 Annual Report on Form 10-K and Quarterly Report on Form 10-Q for the third quarter of 2023. These forward-looking statements speak only as of the date of this release and except to the extent required by applicable law, Danaher does not assume any obligation to update or revise any forward-looking statement, whether as a result of new information, future events and developments or otherwise.

Sources:

- ["Introducing the CDC Rare Diseases Genomics and Precision Health Knowledge Base."](#) April 4, 2019 by Muin J. Khoury and Wei Yu, Office of Public Health Genomics. Centers for Disease Control and Prevention.

SOURCE Danaher Corporation

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<https://investors.danaher.com/2024-01-09-Danaher,-Jennifer-Doudna,-and-Innovative-Genomics-Institute-Launch-Danaher-IGI-Beacon-for-CRISPR-Cures-with-Aim-to-Address-Hundreds-of-Diseases-Using-Gene-editing-Platform-Solution>