PRESS RELEASE

Pacific Biosciences Powers SARS-CoV-2 Research at Commercial, Academic and Government Labs

LabCorp, UC San Diego and the National Institute of Allergy and Infectious Diseases are among the organizations utilizing PacBio's highly accurate long-read sequencing technology to study SARS-CoV-2 and the related immune response to COVID-19

MENLO PARK, Calif., April 8, 2020 — Pacific Biosciences of California, Inc. (Nasdaq:PACB), a leading provider of high-quality sequencing of genomes, transcriptomes and epigenomes, today announced that it is working with commercial, academic and government research teams that are investigating SARS-CoV-2, the coronavirus responsible for the COVID-19 pandemic. The highly accurate long reads produced by the company's Single Molecule, Real-Time (SMRT®) Sequencing technology can be used to resolve variants of the virus that exist within one individual or across a population of patients, which is critical to developing and maintaining effective diagnostics, vaccines and medicines.

LabCorp is actively supporting the response to COVID-19 in the United States and globally through its diagnostics and drug development businesses, launching its internally developed molecular test for COVID-19 in the U.S. on March 5, and applying its deep expertise in support of clinical studies into antivirals, vaccines and immune response modifying therapies. LabCorp will work closely with PacBio to sequence a large number of SARS-CoV-2 viruses from de-identified positive samples. LabCorp's scientific teams will use this information to shed light on virus evolution, mutations found in different geographic regions, and implications for disease severity and outcomes, helping to support more informed patient treatment decisions.

"As we strive to rapidly learn as much as possible about the biology of this novel coronavirus to help deal with the current pandemic and also to look ahead to future outbreaks, SMRT Sequencing will give us an accurate, high-resolution view of the pathogen," said Marcia Eisenberg, PhD, Chief Scientific Officer of LabCorp Diagnostics. "This information will be valuable to the work that is already underway on vaccines and treatments for COVID-19, and as we continue to refine our testing and develop new tests. The combination of LabCorp's diagnostic and drug development expertise will allow us to approach the virus from a unique 360-degree perspective. By working closely with the PacBio team, we will gain new, deeper insights into this virus with the opportunity to deliver innovative responses."

PacBio's SMRT Sequencing technology is uniquely able to generate HiFi reads, which are both highly accurate and long. These paired qualities are well-suited for applications like viral sequencing which requires the ability to distinguish variants that may differ by only a handful of single nucleotide variants (SNVs) across an entire viral genome or viral gene. HiFi reads allow the

phasing of all variants across entire viral genes with resolution of quasispecies within complex populations of closely related virions. For example, in order to develop a broadly efficacious therapeutic or vaccine, scientists will need to understand how SARS-CoV-2 evolves within a host, over time in a community, and across geographic regions.

Scientists at the Vaccine Research Center at the National Institute of Allergy and Infectious Diseases (NIAID) are planning to use the Sequel® II System to study virus population diversity and minor variants in samples collected from infected individuals. The information could ultimately be used to support the design of effective vaccines and antibody-based therapies.

At the University of California, San Diego, scientists are using SMRT Sequencing data to analyze SARS-CoV-2 samples. They will utilize targeted sequencing data to study the viral genome as well as shotgun metagenomics to characterize the microbiome of nasal tissues responding to a COVID-19 infection.

"While the biomedical research community has already made great strides in learning about this new virus, there is still much we do not yet understand about its biology as well as its interaction with the human host and its microbiome environment," said Rob Knight, PhD, Director of the Center for Microbiome Innovation at UC San Diego. "We anticipate that the insights we will gain from HiFi sequencing on the Sequel II System will contribute significantly to our knowledge about SARS-CoV-2 and how it operates in people."

At the Research Center Borstel, a member of the German Leibniz Association, scientists who focus on lung diseases will be sequencing SARS-CoV-2 samples and other lung pathogens collected from routine diagnostic samples to foster genomic diagnostic applications and study their spread and evolution.

PacBio HiFi reads also enable full-length B-Cell Receptor (BCR) sequencing to support investigations into host response and immune function. Sequencing full-length BCR transcripts allows researchers to not only see variants in the CDR3 domain, but also mutations that arise during somatic hypermutation, which can occur anywhere within the variable domain.

Researchers at the Vanderbilt Vaccine Center have used PacBio sequencing technology to study the human B-cell response to the virus, with the goal of identifying therapeutics or protective antibodies from patient samples.

"It is truly astounding how quickly the global scientific community has come together to fight this massive threat to human health," said Jonas Korlach, PhD, Chief Scientific Officer of Pacific Biosciences. "We are proud to support the rapidly expanding group of our customers who are engaged in this essential work and believe that the unique nature of SMRT Sequencing will allow them to delve into virus biology and host response research in a way that directly supports the development of much-needed diagnostic tests, vaccines and medicines for managing COVID-19."

For more information about how PacBio sequencing is being used to understand SARS-CoV-2 and the immune response to COVID-19 please visit: www.pacb.com/COVID-19.

About Pacific Biosciences

Pacific Biosciences of California, Inc. (Nasdaq:PACB) offers sequencing systems to help scientists resolve genetically complex problems. Based on its novel Single Molecule, Real-Time (SMRT®) technology, Pacific Biosciences' products enable: de novo genome assembly to finish genomes in order to more fully identify, annotate and decipher genomic structures; full-length transcript analysis to improve annotations in reference genomes, characterize alternatively spliced isoforms in important gene families, and find novel genes; targeted sequencing to more comprehensively characterize genetic variations; and real-time kinetic information for epigenome characterization. Pacific Biosciences' technology provides high accuracy, ultra-long reads, uniform coverage, and the ability to simultaneously detect epigenetic changes. PacBio® sequencing systems, including consumables and software, provide a simple, fast, end-to-end workflow for SMRT Sequencing. More information is available at www.pacb.com.

Forward-Looking Statements

All statements in this press release that are not historical are forward-looking statements, including, among other things, statements relating to future availability, uses, accuracy, quality or performance of, or benefits of using, our products or technologies, including SMRT Sequencing, the suitability or utility of our methods, products or technologies for particular applications or projects, the expected benefits, or insights to be gained, by government, academic, and commercial research teams who are using our products or technologies to study SARS-CoV-2 or COVID-19, the importance of SMRT Sequencing to develop and maintain effective diagnostics, vaccines, and medicines, and other future events. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties, changes in circumstances and other factors that are, in some cases, beyond Pacific Biosciences' control and could cause actual results to differ materially from the information expressed or implied by forward-looking statements made in this press release. Factors that could materially affect actual results can be found in Pacific Biosciences' most recent filings with the Securities and Exchange Commission, including Pacific Biosciences' most recent reports on Forms 8-K, 10-K and 10-Q, and include those listed under the caption "Risk Factors." Pacific Biosciences undertakes no obligation to revise or update information in this press release to reflect events or circumstances in the future, even if new information becomes available.

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