



PacBio HiFi Adopted as First-Line Sequencing Approach to Investigate Sudden Unexplained Death in Childhood (SUDC)

Trios from 200 families who have lost a child to SUDC to be sequenced on PacBio's Revio system with SPRQ-Nx chemistry, enabling increased diagnostic yield for grieving families

MENLO PARK, Calif., [DATE] - PacBio (NASDAQ: PACB), developer of the world's most advanced sequencing technologies, today announced that a UW Medicine and Seattle Children's research effort led by Danny Miller, MD, PhD, and Alexandra Keefe, MD, PhD, will employ PacBio HiFi whole-genome sequencing as the first-line approach to investigate Sudden Unexplained Death in Childhood (SUDC). Backed by the SUDC Foundation and with in-kind support from PacBio, the project will sequence each child and their parents, prioritizing long-read HiFi data for comprehensive variant detection. Additionally, the University of Washington team will join the HiFi Solves Global Consortium, which brings together institutions around the world to study the value HiFi-based human genome sequencing may have in clinical research applications and to further our understanding of genetic diseases.

Applying HiFi sequencing as a first-tier assay is designed to consolidate and simplify the laboratory workflow especially in the context of post-mortem tissue and newborn dried blood spots as challenging sample inputs. The researchers hope to increase diagnostic yield by resolving complex variants like structural variants and tandem repeats and by including parents to elucidate de novo and inherited contributors to risk.

"Selecting HiFi sequencing as our first-line whole-genome assay allows us to search for answers with the accuracy and breadth these families deserve," said Danny Miller, MD, PhD, Assistant Professor of Pediatrics and of Laboratory Medicine & Pathology at the University of Washington School of Medicine, and physician-scientist at Seattle Children's. "By starting with long reads and incorporating parental data we can better resolve difficult variants, phase them accurately, and offer appropriate recommendations to families relevant to SUDC."

"We're honored to support this essential SUDC research," said David Miller, Global Vice President of Marketing at PacBio. "Making highly accurate long-read whole genomes the starting point can accelerate discovery and, ultimately, the path to better answers for families."

"The SUDC Foundation is proud to fund research that prioritizes actionable answers for families," said Tina Yun Lee, CEO, SUDC Foundation. "Adopting HiFi sequencing as a first-line tool reflects a commitment to scientific rigor and compassion, two values that guide our mission to understand, predict, and one day prevent SUDC."

For background on the award and team, see the [SUDC Foundation announcement](#) and [UW Medicine newsroom](#) posts.

About PacBio

PacBio (NASDAQ: PACB) is a premier life science technology company that designs, develops, and manufactures advanced sequencing solutions to help scientists and clinical researchers resolve genetically complex problems. Our products and technologies, which include our HiFi long-read sequencing, address solutions across a broad set of research applications including human germline sequencing, plant and animal sciences, infectious disease and microbiology, oncology, and other emerging applications. For more information, please visit www.pacb.com and follow @PacBio.

PacBio products are provided for Research Use Only. Not for use in diagnostic procedures.

Forward-Looking Statements

This press release may contain “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the U.S. Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact are forward-looking statements, including statements relating to: the uses, advantages, or quality or performance of, or benefits or expected benefits of using, PacBio products or technologies; certain researchers from UW Medicine and Seattle Children’s employing PacBio HiFi to investigate SUDC; the University of Washington joining the HiFi Solves Global Consortium; use of HiFi sequencing to consolidate and simplify laboratory workflow; increasing diagnostic yield; use of HiFi sequencing to increase sequencing accuracy and breadth; use of HiFi sequencing to resolve and phase difficult variants, and benefits related thereto; accelerating discovery; and other future events. You should not place undue reliance on forward-looking statements because they are subject to assumptions, risks, and uncertainties and could cause actual outcomes and results to differ materially from currently anticipated results, including, challenges inherent in sequencing a large number of genomes, the difficulty of generating discoveries in new areas of research; potential product performance and quality issues; third-party claims alleging infringement of patents and proprietary rights or seeking to invalidate PacBio’s patents or proprietary rights, among others. Additional factors that could materially affect actual results can be found in PacBio’s most recent filings with the Securities and Exchange Commission, including PacBio’s most recent reports on Forms 8-K, 10-K, and 10-Q, and include those listed under the caption “Risk Factors.” These forward-looking statements are based on current expectations and speak only as of the date hereof; except as required by law, PacBio disclaims any obligation to revise or update these forward-looking statements to reflect events or circumstances in the future, even if new information becomes available.

About SUDC

The SUDC Foundation is the only organization worldwide whose purpose is to raise awareness, fund research, and serve those affected by Sudden Unexplained Death in Childhood (SUDC). The SUDC Foundation provides all trauma informed services and supports at no cost to the people it serves. www.sudc.org.

About UW Miller Lab

The Miller Lab at the University of Washington focuses on advancing genomics in clinical diagnostics, particularly in the context of rare diseases. The lab is committed to developing tools and resources that democratize access to cutting-edge genomic technologies.

Contacts (University of Washington Miller Lab)

Danny Miller
dm1@uw.edu

Contacts (SUDC Foundation)

Tina Yun Lee
Tina.Lee@sudc.org

Media: info@sudc.org

Contacts (PacBio)

Investors: ir@pacificbiosciences.com

Media: pr@pacificbiosciences.com

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