

# 11th Annual SVB Leerink Global Healthcare Conference

Christian Henry | Chief Executive Officer and President

# Safe harbor statement

All statements in this presentation (and any accompanying oral presentation) that are not historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, Section 21E of the Securities Exchange Act of 1934, as amended, and the U.S. Private Securities Litigation Reform Act of 1995, including statements that generally relate to future events or our future financial or operating performance, future applications and availability, release dates, uses, accuracy, advantages, or quality or performance of, or benefits or expected benefits of using, our products or technologies, and the suitability or utility of our products or technologies for particular applications or projects. Such statements are based on management's current beliefs, estimates, assumptions and projections and on information available to management as of the date of this presentation. Forward-looking statements include, among other things, statements regarding predictions, estimates, plans, expectations, guidance, expectations for, including accuracy and completion, and other advantages in connection with, new product, technology and software development and launches, and the anticipated timing of such development and launches, such as methylation calling and other anticipated Sequel Ile-related improvements; expectations with respect to our products; expectations resulting from continued building of a HiFi ecosystem; expectations with respect to our partnerships and collaborations, and other information; ability of HiFi Viral products to sequence viral genomes, including all circulating variants of SARS-CoV2; sequencing completeness and accuracy of our products and technology, including our HiFi and SBB technologies; estimates regarding our being the only company with both leading long read and short read technologies; expected purchases by certain customers upon future product release; attributes and sequencing advantages of, and potential upgrades and improvements to, our products and technology, including potential research and diagnostic benefits; strategic plans and priorities; research and development plans, including expected improvements and updates; commercial collaborations and partnerships; estimates regarding potential market sizes and opportunities; 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 the Company's control and could cause actual results to differ materially from the information expressed or implied by forward-looking statements made in the presentation. Factors that could materially affect actual results can be found in our filings with the Securities and Exchange Commission, including our most recent reports on Forms 8-K, 10-K and 10-Q, and include those listed under the caption "Risk Factors." The Company undertakes no obligation to revise or update information in this presentation to reflect events or circumstances in the future, even if new information becomes available.

A faint, grayscale background image showing a microscopic view of a cell or tissue structure, possibly a cross-section of a biological specimen, with various circular and elongated features.

# **ENABLING THE PROMISE OF GENOMICS TO BETTER HUMAN HEALTH**

**We create some of the world's most advanced sequencing technologies.**

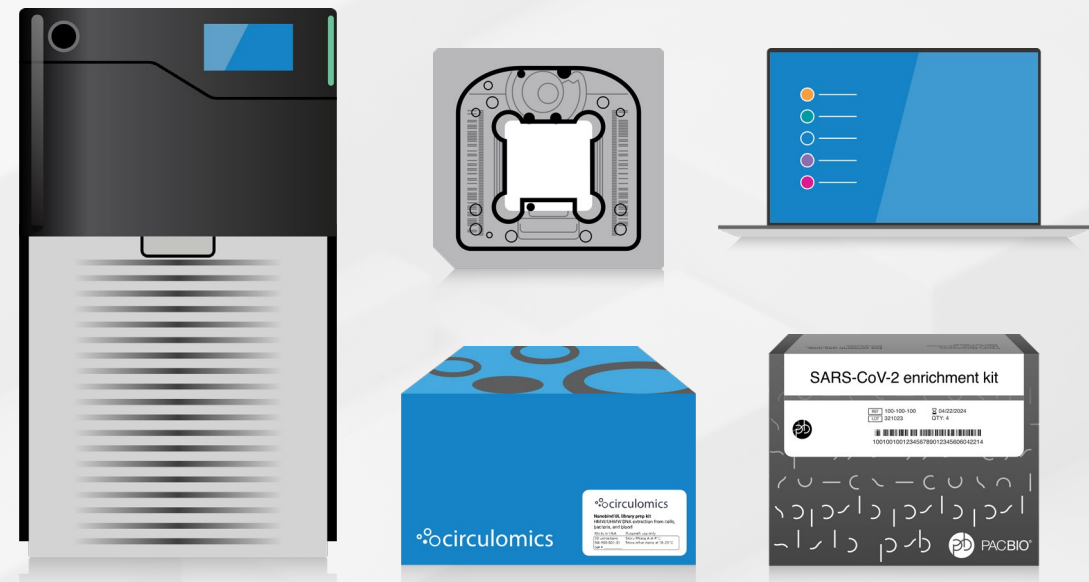
# Only company with both leading long-read *and* highly accurate short-read tech<sup>1</sup>

Three highly differentiated core technologies focused on accuracy, quality + completeness:  
HiFi, Nanobind, and SBB

**50+** Products spanning  
entire genomics workflow

**700+** Global employees

**\$40B+** Total addressable market<sup>2</sup>





# PacBio HiFi technology recognized as the **most accurate + complete**

## Association of Biomolecular Resource Facilities

nature biotechnology

Article | Published: 09 September 2021

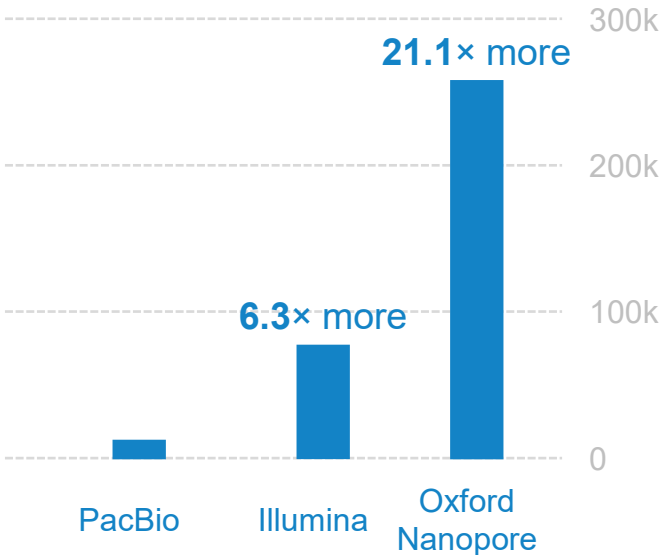
### Performance assessment of DNA sequencing platforms in the ABRF Next-Generation Sequencing Study

Jonathan Foox, Scott W. Tighe, [...] Christopher E. Mason  
Nature Biotechnology 39, 1129–1140 (2021)

#### Abstract

Assessing the reproducibility, accuracy and utility of massively parallel DNA sequencing platforms remains an ongoing challenge. Here the Association of Biomolecular Resource Facilities (ABRF) Next-Generation Sequencing Study benchmarks the performance of a set of sequencing instruments (HiSeq/TruSeq/paired-end/100 bp chimeric) on

precisionFDA



Total errors  
(SNV + indel + SV)<sup>2</sup>

## Telomere-to-telomere Consortium

The complete sequence of a human genome

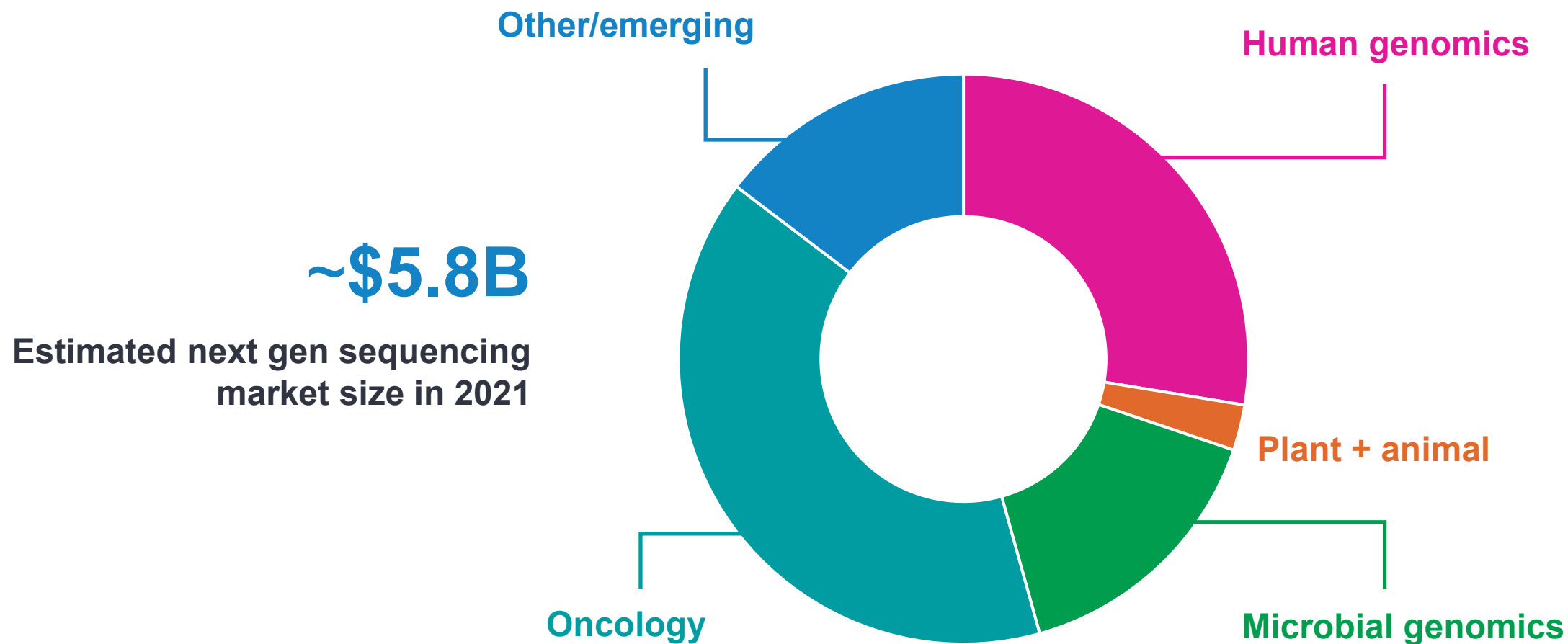
Sergey Nurk<sup>1,2</sup>, Sergey Koren<sup>1,2</sup>, Arang Rhie<sup>1,2</sup>, Mikko Rautiainen<sup>1,2</sup>, Andrey V. Bzikadze<sup>2</sup>, Alla Mikhchenko<sup>3</sup>, Mitchell R. Vollger<sup>4</sup>, Nicolas Altomonte<sup>5</sup>, Lev Uralsky<sup>6,7</sup>, Ariel Gershman<sup>8</sup>, Sergey Aganezov<sup>9</sup>, Savannah J. Hoyt<sup>10</sup>, Mark Diekhans<sup>11</sup>, Glennis A. Logsdon<sup>12</sup>, Michael Alonge<sup>13</sup>, Stylianos E. Antonarakis<sup>14</sup>, Matthew Borchers<sup>15</sup>, Gerard G. Bouffard<sup>16</sup>, Shellee Y. Brooks<sup>17</sup>, Gina V. Caldas<sup>18</sup>, Haoyu Cheng<sup>16,17</sup>, Chen-Shan Chin<sup>19</sup>, William Chow<sup>19</sup>, Leonardo G. de Lima<sup>19</sup>, Philip C. Dishuck<sup>4</sup>, Richard Durbin<sup>21</sup>, Tatiana Dvorkina<sup>22</sup>, Ian T. Fiddes<sup>23</sup>, Giulio Formenti<sup>23,24</sup>, Robert S. Fulton<sup>25</sup>, Arkarachai Fungtammasan<sup>18</sup>, Erik Garrison<sup>11,26</sup>, Patrick G.S. Grady<sup>19</sup>, Tina A. Graves-Lindsay<sup>27</sup>, Ira M. Hall<sup>28</sup>, Nancy F. Hansen<sup>29</sup>, Gabrielle A. Hartley<sup>10</sup>, Marina Haukness<sup>11</sup>, Kerstin Howe<sup>19</sup>, Michael W. Hunkapiller<sup>30</sup>, Chirag Jain<sup>1,31</sup>, Miten Jain<sup>11</sup>, Erich D. Jarvis<sup>23,24</sup>, Peter Kerpedjiev<sup>32</sup>, Melanie Kirsche<sup>9</sup>, Mikhail Kolmogorov<sup>33</sup>, Jonas Koriach<sup>30</sup>, Milinn Kremitzki<sup>27</sup>, Heng Li<sup>16,17</sup>, Valerie V. Maduro<sup>34</sup>, Tobias Marshall<sup>35</sup>, Ann M. McCartney<sup>1</sup>, Jennifer McDaniel<sup>36</sup>, Danny E. Miller<sup>3,37</sup>, James C. Mullikin<sup>14,29</sup>, Eugene W. Myers<sup>38</sup>, Nathan D. Olson<sup>39</sup>, Benedict Paten<sup>11</sup>, Paul Peluso<sup>30</sup>, Pavel A. Pevzner<sup>33</sup>, David Porubsky<sup>4</sup>, Tamara Potapova<sup>13</sup>, Evgeny I. Rogae<sup>6,7,39,40</sup>, Jeffrey A. Rosenfeld<sup>41</sup>, Steven L. Salzberg<sup>42</sup>, Valerie A. Schneider<sup>43</sup>, Fritz J. Sedlazeck<sup>44</sup>, Kishwar Shafin<sup>11</sup>, Colin J. Shew<sup>20</sup>, Alaina Shumate<sup>42</sup>, Yumi Sims<sup>19</sup>, Arian F. A. Smit<sup>45</sup>, Daniela C. Soto<sup>20</sup>, Ivan Sovic<sup>30,46</sup>, Jessica M. Storer<sup>45</sup>, Aaron Streets<sup>4,47</sup>, Beth A. Sullivan<sup>48</sup>, Françoise Thibaud-Nissen<sup>13</sup>, James Torrance<sup>19</sup>, Justin Wagner<sup>36</sup>, Brian P. Walenz<sup>1</sup>, Aaron Wenger<sup>30</sup>, Jonathan M. D. Wood<sup>19</sup>, Chunlin Xiao<sup>43</sup>, Stephanie M. Yan<sup>49</sup>, Alice C. Young<sup>14</sup>, Samantha Zarate<sup>9</sup>, Urvasi Surti<sup>50</sup>, Rajiv C. McCoy<sup>19</sup>, Megan Y. Dennis<sup>50</sup>, Ivan A. Alexandrov<sup>3,7,51</sup>, Jennifer L. Gerton<sup>13</sup>, Rachel J. O'Neill<sup>19</sup>, Winston Timp<sup>4,42</sup>, Justin M. Zook<sup>38</sup>, Michael C. Schatz<sup>2,49</sup>, Evan E. Eichler<sup>24,1</sup>, Karen H. Miga<sup>11,1</sup>, Adam M. Phillippy<sup>1,1</sup>

“PacBio [HiFi] provides the **lowest error rate** out of all technologies.”<sup>1</sup>

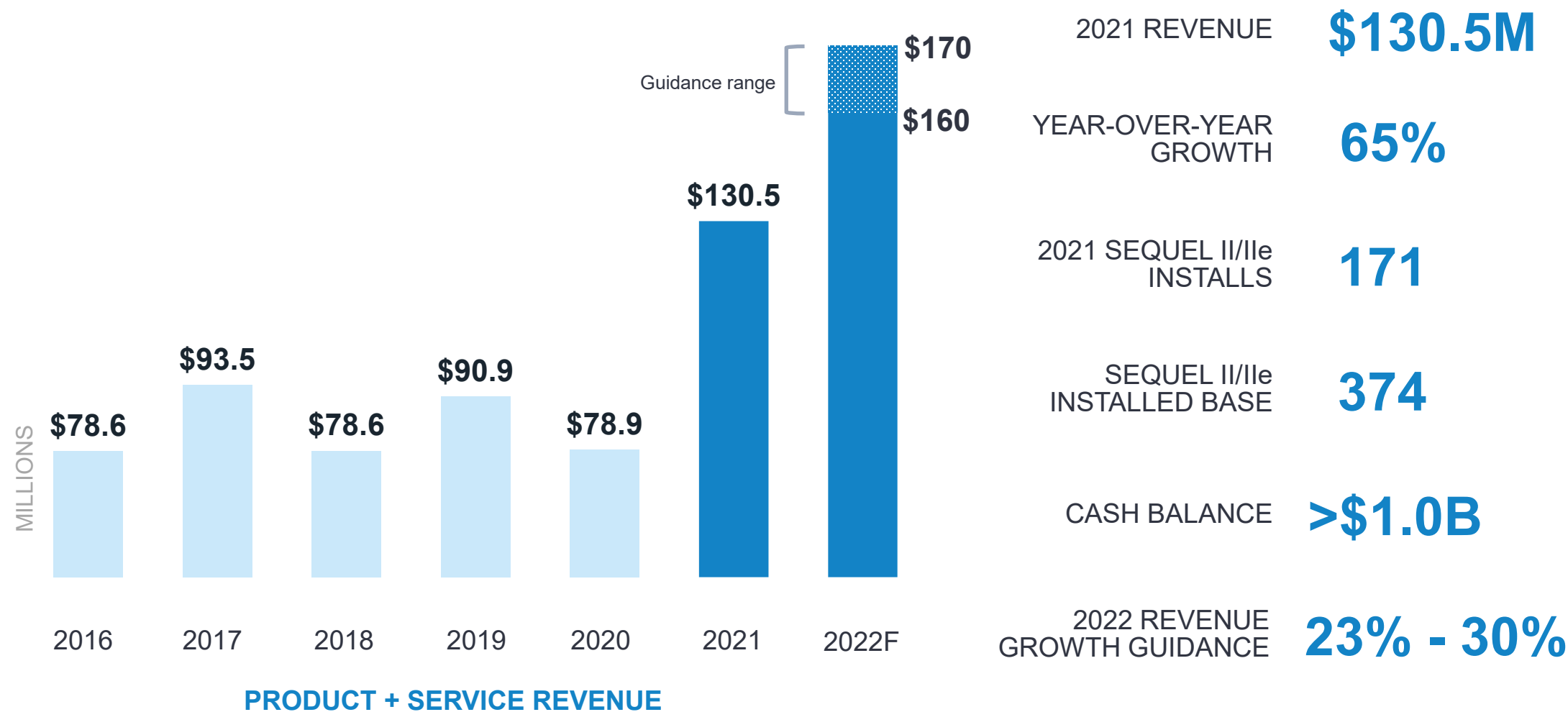
“PacBio’s recent HiFi circular consensus sequencing...has resulted in **unprecedented assembly accuracy**...”<sup>3</sup>

1. <https://doi.org/10.1038/s41587-021-01049-5>  
2. <https://doi.org/10.1101/2020.11.13.380741>  
3. <https://doi.org/10.1101/2021.05.26.445798>

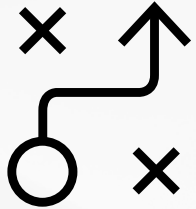
# Sequencing is multi-billion-dollar opportunity across diverse set of markets



# Commercial focus and new products drove breakout performance in 2021

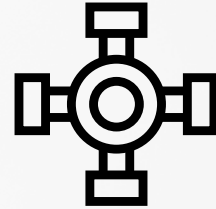


# 2022 strategic priorities build on our 2021 successes



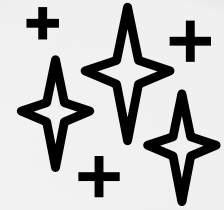
## Execution matters

Leverage commercial investment to drive continued HiFi and Sequel II/IIe adoption



## Progress product pipeline

Demonstrate SBB as differentiated short-read offering + drive future HiFi platform development



## Delight our customers

Deepen customer collaboration in clinical and a growing list of new applications



# Significant improvements in efficiency + usability to Sequel IIe in 1H 2022



**SMRTbell  
prep kit 3.0**

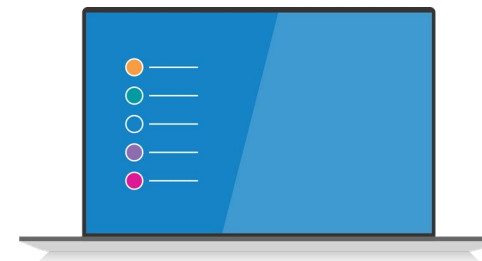


**Template binding  
kits 3.1/3.2**

**40%** less DNA required

**>60%** reduction in hands-on time

**>30%** fewer tubes required



**SMRT Link  
v11.0**



**5-methylcytosine  
detection**

**Methylation** calling on instrument

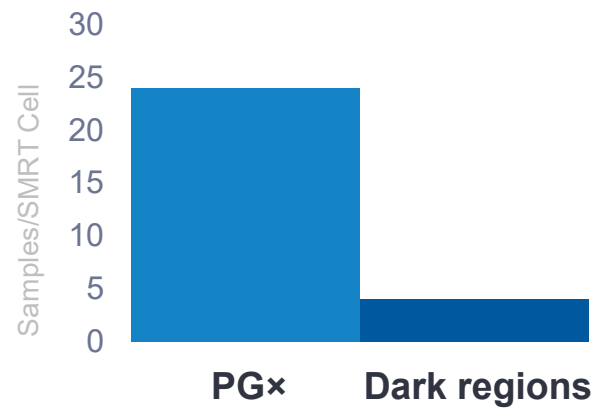
**Gene editing QC** workflow

**High-throughput** sample setup

# Expanding ecosystem enables customers to achieve more with Sequel II/IIe

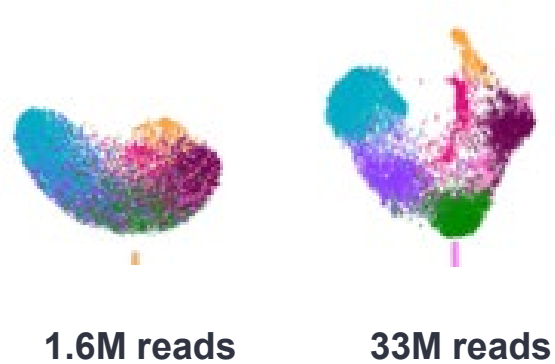
## More samples

Community panels



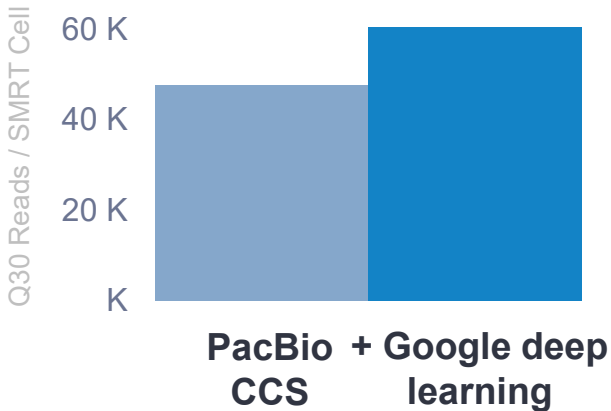
## More reads

Single-cell Iso-Seq



## More data

Deep learning technologies



# Partnership to help the 75%<sup>1</sup> of families with unexplained rare disease cases after short-read sequencing



***“This study represents our continued commitment to the 100,000 Genomes Project participants, and also to our quest to seek out the benefits of new disruptive technologies.”***

**Parker Moss**

Chief Ecosystem & Partnership Officer, Genomics England



1. <https://www.genomicsengland.co.uk/about-genomics-england/the-100000-genomes-project/>

# Berry Genomics partnership to purchase 50+ desktop systems at launch



Announcing development of first **desktop HiFi-based** sequencing platform



Makes HiFi sequencing **more accessible** to new labs for targeted assays and panels



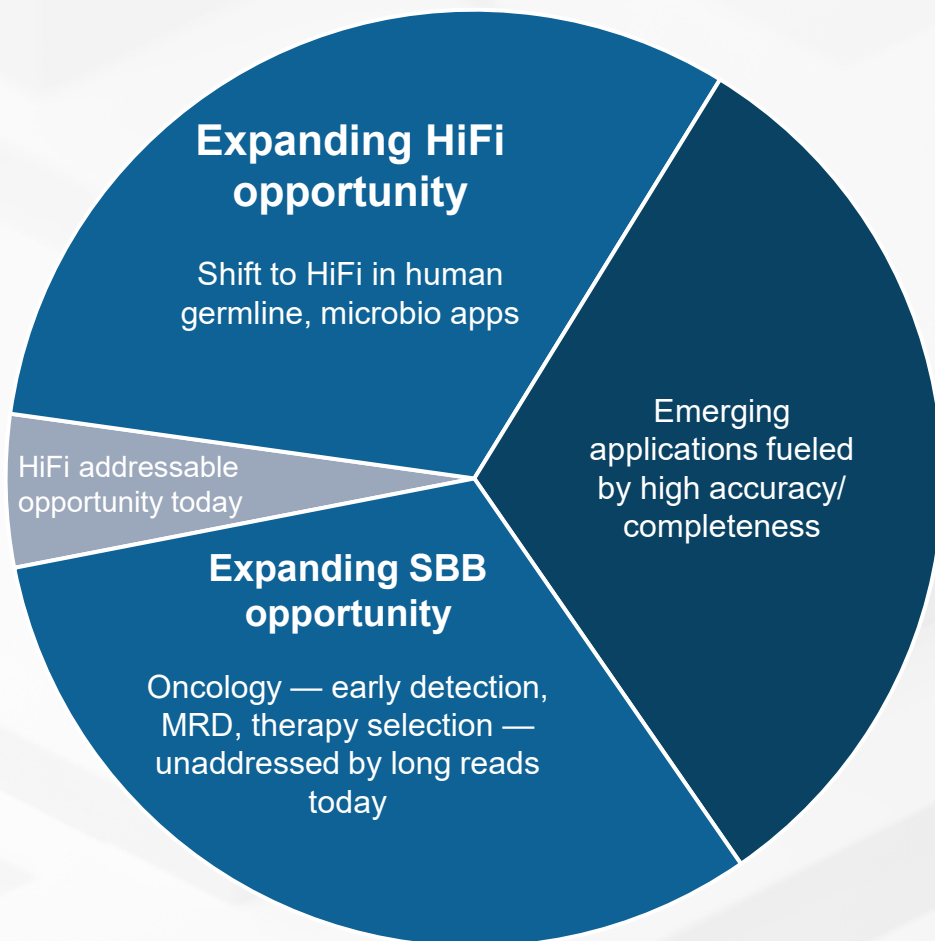
Initial focus on **Chinese distributed market** through NMPA but will be **commercialized globally**



**BerryGenomics**  
**贝瑞基因**

# Short-read sequencing is a multi-billion-dollar revenue opportunity for PacBio

## SEQUENCING OPPORTUNITY



A more accurate short-read technology gives customers **flexibility**



A more diversified product portfolio drives PacBio **scale**



Ultimately allows PacBio to participate in highest growth short-read **clinical** applications like oncology



**We create some of the world's most  
advanced sequencing technologies.**

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