

# CHOOSE THE MOST TRUSTED LONG-READ TECHNOLOGY



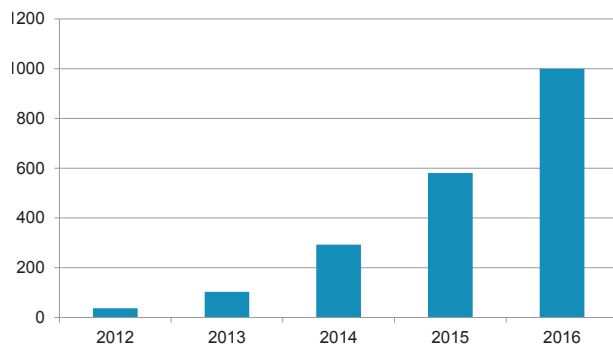
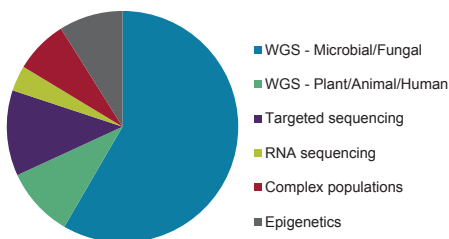
## SMRT® Sequencing Is Smart Business

Scientists are relying on long-read sequencing for generating high-quality reference genomes, more accurate gene and transcript models, and an integrated view of the epigenome for their organisms of interest. Single Molecule, Real-Time (SMRT) Sequencing from PacBio is the most established and trusted long-read sequencing solution available today, delivering the most complete genomic information for microbes, complex plant and animal genomes, and human biomedical research challenges. Sequencing providers are rapidly adding SMRT Sequencing to their portfolios in order to meet their customers' demand for long reads.

### MEET THE GROWING DEMAND FOR LONG READS WITH SMRT SEQUENCING

- Scientists in microbial and infectious disease, plant and animal, and human biomedical sciences are rapidly adopting long-read sequencing
- 2,000+ publications with SMRT Sequencing, over 1,000 in 2016 alone
- SMRT Sequencing is proven advantageous in a variety of applications, including small and large genome assembly, metagenomics, targeted sequencing, and RNA sequencing

2015 Publications: Breakdown by Application

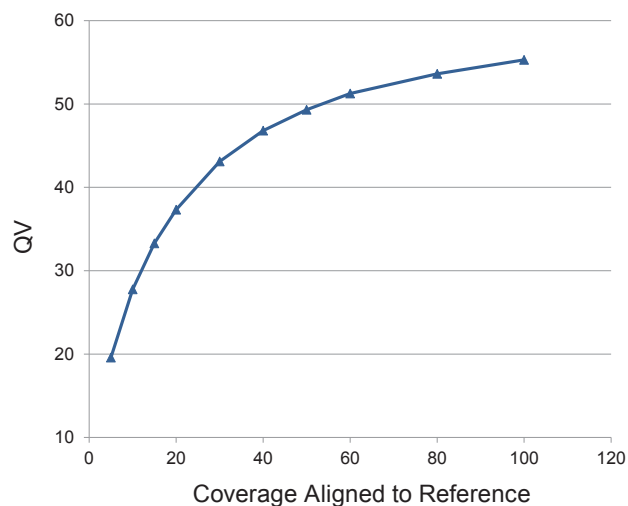


Number of research publications over the past 5 years with SMRT Sequencing-enabled discoveries.

### DELIVER MORE THAN JUST LONG READS WITH PACBIO® SMRT SEQUENCING

The Sequel™ System delivers long, continuous read lengths >20 kb that span difficult repetitive regions and full-length transcripts. But, your customers require more than just long reads for their genomic, transcriptomic, and epigenetic studies. SMRT Sequencing also delivers:

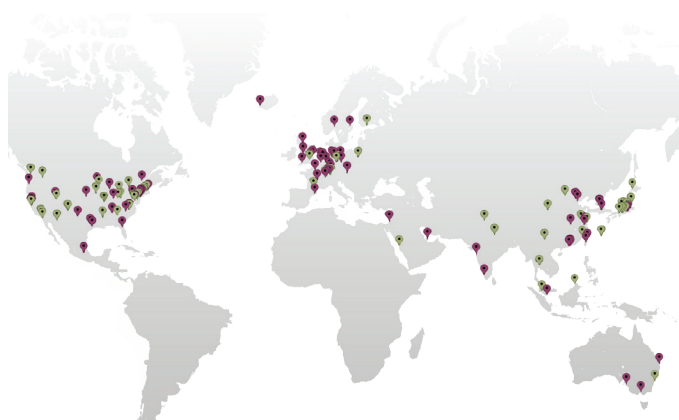
- High consensus accuracy, achieving >99.999% accurate (QV50), for confident variant detection
- No amplification required means uniform coverage across high or low GC content, which increases contiguity of genome assemblies
- Simultaneous epigenetic characterization delivers added value to your customer without a need for additional experimental design



Consensus accuracy is a function of coverage and chemistry. The graph above shows the results of a bacterial genome run on the Sequel System with 2.0 chemistry (Jan 2017).

## CHOOSE THE LEADING LONG-READ TECHNOLOGY WITH WORLD-CLASS SUPPORT

- World-wide service and support team with 70+ field personnel, distributor networks, and on-line tech support
- >270 PacBio Systems installed worldwide, including >100 Sequel Systems
- Academic cores with a PacBio System keep more research dollars at their home institute
- Join a group of leading service providers and gain a competitive edge



PacBio System install base, >270 units worldwide.

## ENJOY IMPROVED ECONOMICS AND EASE OF USE WITH THE SEQUEL™ SYSTEM

- Operators break even on 3-year depreciation and operating costs at only 15% of capacity, or the equivalent of 6-7 human genomes (3.2 Gb) at 50-fold coverage per year
- Easy installation, comprehensive training, and a variety of supported applications and software solutions
- Aggressive roadmap to further increase throughput, reduce cost, and improve scalability

### SEQUEL SYSTEM PAYBACK PERIOD

CAPACITY	2X MARKUP	2.5X MARKUP	3X MARKUP
30% (31 cells/month)	29 months	19 months	14 months
50% (52 cells/month)	17 months	11 months	9 months
70% (73 cells/month)	12 months	8 months	6 months

Months of operation required at various capacity levels and consumables markup rates to recoup Sequel System cost, 1 FTE for 3 years at \$75k/yr., and service contracts required over 3 years (first year included in purchase cost and 2 years at \$30k each).

**"IT'S FAIRLY WELL KNOWN THAT FOR GENOME ASSEMBLY, THE PACBIO PLATFORM IS SUPERIOR."**

— MICHEL VAN EIJK, CSO OF KEYGENE N.V.

**"WE'RE DOING MORE AND MORE DE NOVO TRANSCRIPTOMES AND EPIGENOMIC STUDIES — [PACBIO] IS THE ONLY PLATFORM THAT ALLOWS US TO DO ALL OF THAT REALLY WELL."**

— LUKE TALLON, DIRECTOR OF THE GENOMICS RESOURCE CENTER AT UNIVERSITY OF MARYLAND

**"PACBIO IS REVOLUTIONIZING OUR APPROACH FOR WHOLE-GENOME SHOTGUN, BAC, AND TARGETED SEQUENCING."**

— ROD WING, DIRECTOR OF THE ARIZONA GENOMICS INSTITUTE

**"WE FIGURED THERE WOULD BE MORE DEMAND FOR LONG READS, SO WE WANTED TO HAVE MORE EXPERIENCE WITH PACBIO THAN OTHER VENDORS."**

— GUN-EUI LEE, COFOUNDER OF DNA LINK

## THE LEADER IN LONG READ SEQUENCING

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