

# 2018 JP Morgan Healthcare Conference

Francis deSouza | President & CEO | January 8, 2018



illumina®

# Safe Harbor Statement

This communication may contain statements that are forward-looking. Forward-looking statements are subject to known and unknown risks and uncertainties and are based on potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements. Among the important factors that could cause actual results to differ materially from those in any forward-looking statements are (i) our ability to further develop and commercialize our instruments and consumables and to deploy new products, services, and applications, and expand the markets, for our technology platforms; (ii) our ability to manufacture robust instrumentation and consumables; (iii) our ability to successfully identify and integrate acquired technologies, products, or businesses; (iv) our expectations and beliefs regarding future conduct and growth of the business and the markets in which we operate; (v) challenges inherent in developing, manufacturing, and launching new products and services; and (vi) the application of generally accepted accounting principles, which are highly complex and involve many subjective assumptions, estimates, and judgments, together with other factors detailed in our filings with the Securities and Exchange Commission, including our most recent filings on Forms 10-K and 10-Q, or in information disclosed in public conference calls, the date and time of which are released beforehand. We undertake no obligation, and do not intend, to update these forward-looking statements, to review or confirm analysts' expectations, or to provide interim reports or updates on the progress of the current quarter.

# Strong Finish to 2017

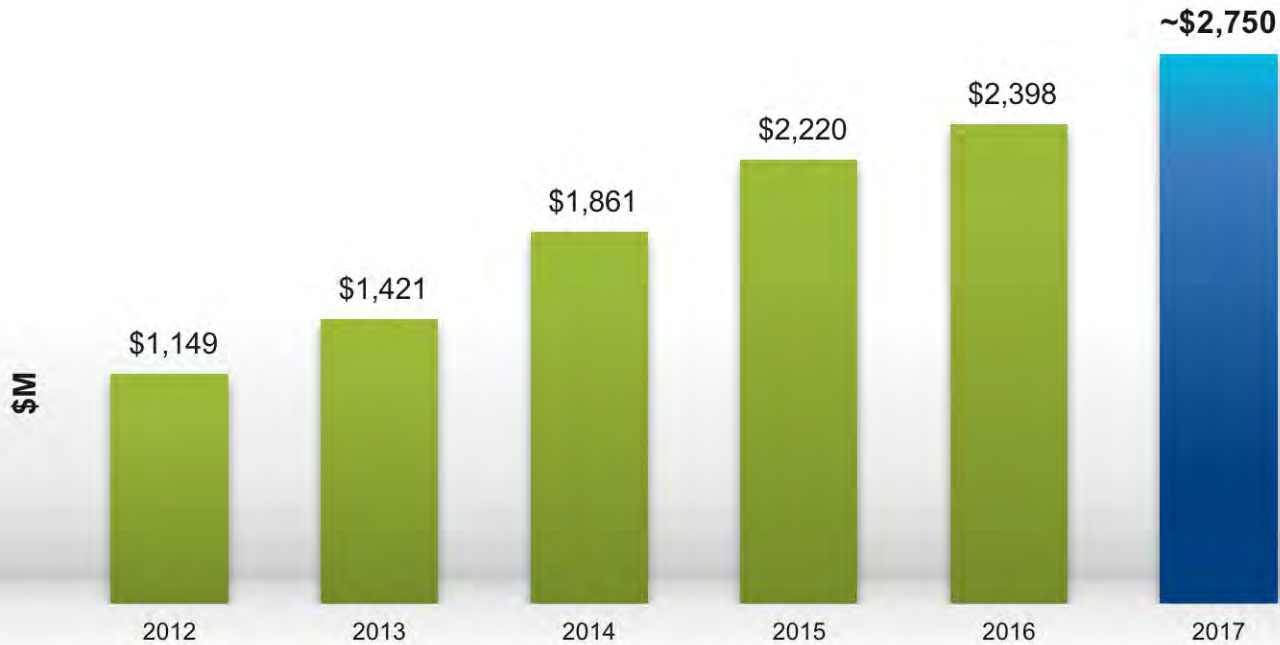
**~\$775M**

Q4 2017 Revenue

**25%**

YoY Growth

# 2017 Revenue



**15%**  
YoY Growth

# Installed Base Exceeds 11,000

BaseSpace<sup>®</sup>



~285  
NovaSeq<sup>™</sup>



~2,300  
HiSeq<sup>™</sup>



~6,000  
MiSeq<sup>™</sup>

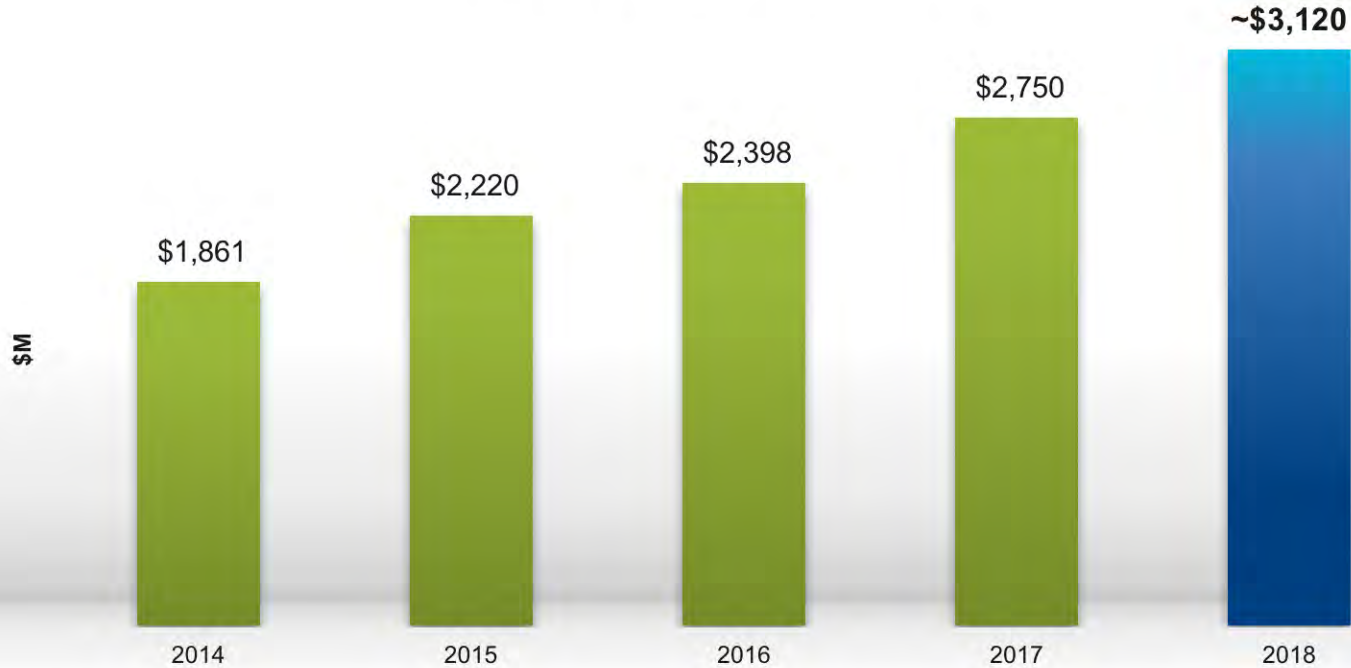


~600  
MiniSeq<sup>™</sup>



~2,400  
NextSeq<sup>™</sup>

# 2018 Guidance

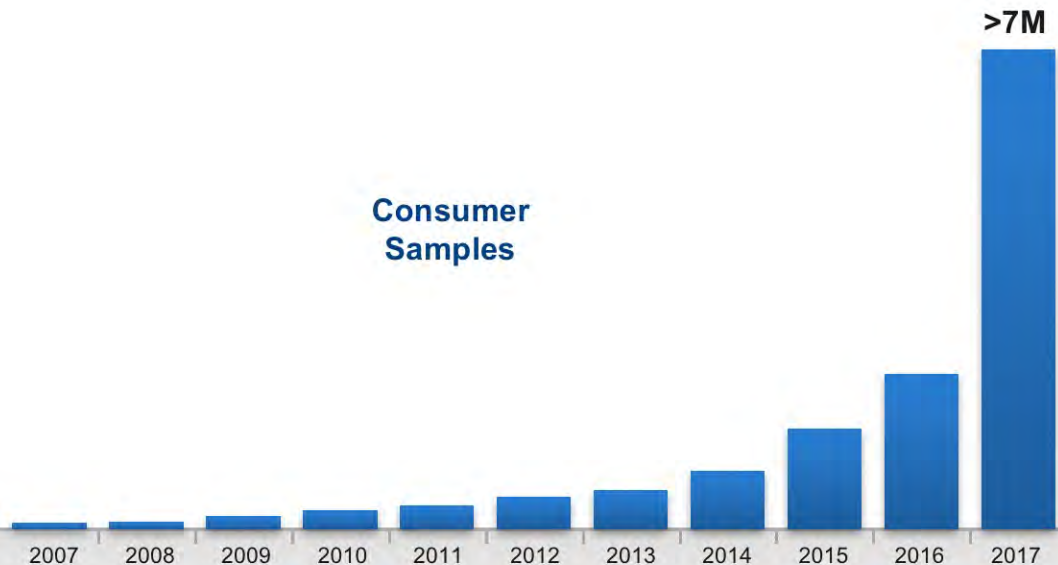


**13% -14%**  
YoY Growth

**\$4.14 - \$4.24**  
2018 GAAP EPS

**\$4.50 - \$4.60**  
2018 Non-GAAP EPS

# Consumer Genomics Inflecting



**>12M Samples**  
Genotyped or Sequenced to Date

# Watershed Year for Clinical Genomics

**Regulatory Approval**

**Keytruda™**

**FoundationOne™**

**MSK-IMPACT™**

**Extended RAS Panel**

**Reimbursement**

**WGS in NHS**

**RUGD Coverage**

**NIPT**



# Broadest and Deepest Genomics Clinical Portfolio



Clinical Grade Instruments and Consumables, and Sample-to-Answer Solutions

**GRAIL**



New Model of  
Translational Research



**Adaptive**  
biotechnologies®

**CooperGenomics™**  
a CooperSurgical company

Enabling New  
Clinical Opportunities

**AMGEN**

**REGENERON**

Enabling Drug  
Development

# Clinical Market Growth



## Population Sequencing

>70K genomes in '18

14 countries

NHS move to clinical WGS



## NIPT

VeriSeq™ NIPT

Broadening regulatory approvals

Expanding coverage



## RUGD

Clinical WGS Dx yield

Early transitions to clinical WGS

Expanding WES coverage

# Promising Immuno-Oncology Opportunity

Deliver a Turn-Key Solution to Pharma Partners and Customers

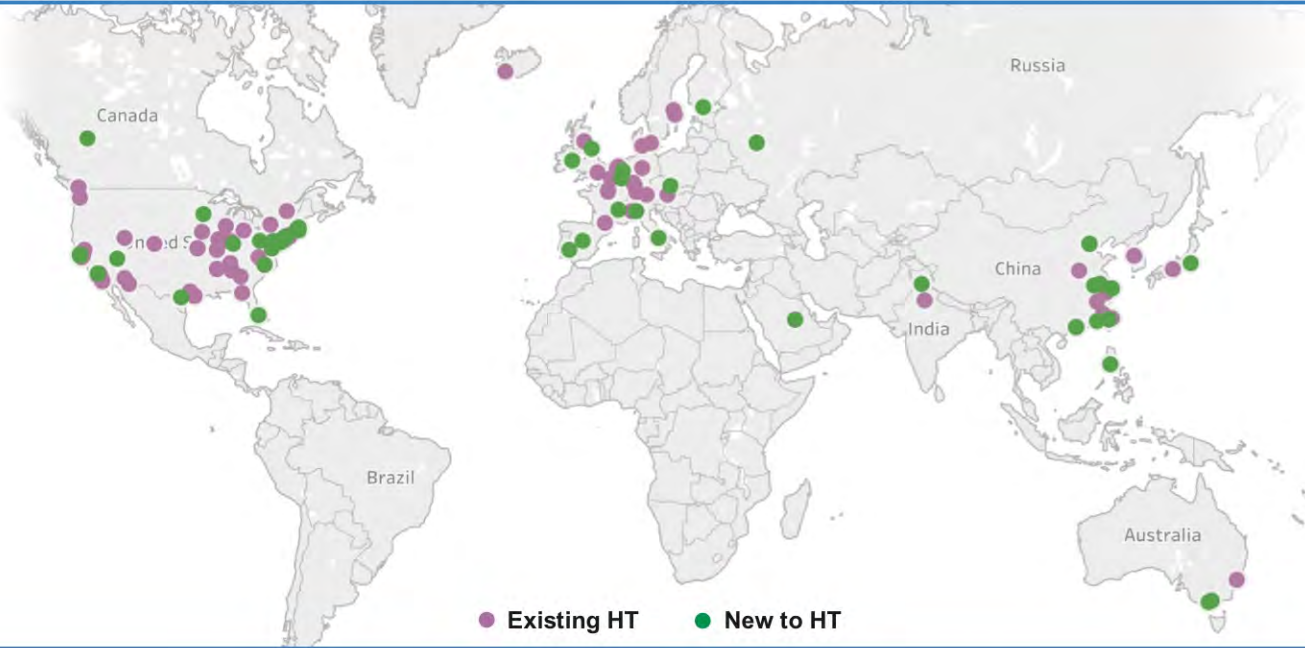
**IO requires broad, deep sequencing**

**Uniquely suited to build a distributable IVD solution**

**Pharma partners to enable clinical evidence**



# NovaSeq Exceeded Expectations



**~150**

Customers  
Purchased

**~285**

Units  
Shipped

**~25%**

New-to-Illumina and  
Desktop Conversions

# Multi-Year Adoption Cycle



**Conversion of ~850 HiSeq™  
System Customers**

**Population Genomics**

**Capacity Adds**

**New Flow Cells,  
Technologies**

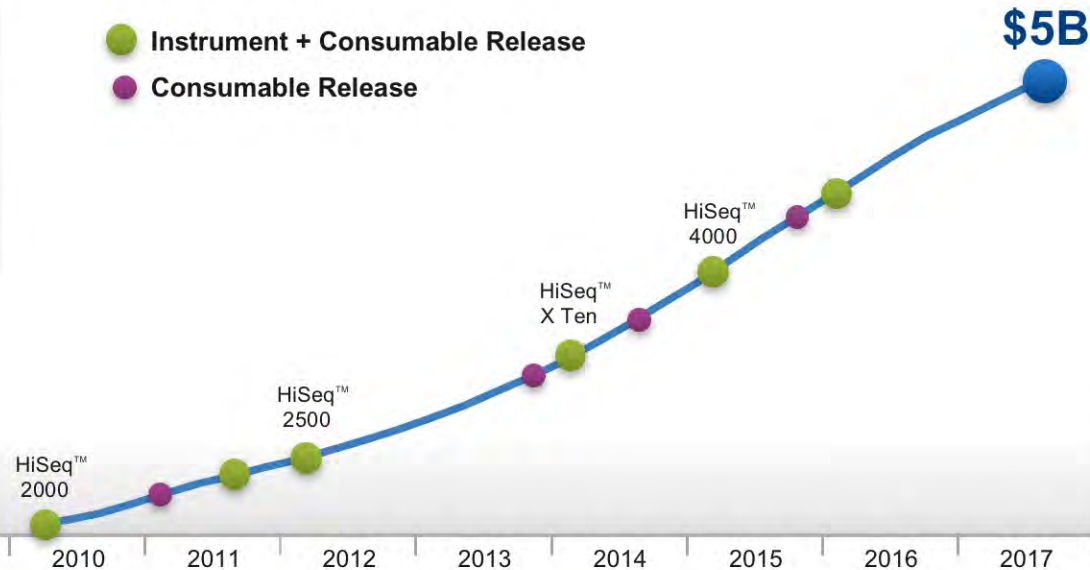
**New to High Throughput  
and New to Illumina**

**\$100 Genome**

**2017**

**2018 and Beyond – Drivers of Growth**

# HiSeq: Multi-Year, Multi-Billion Dollar Cycle



**8+ year life cycle – 10+ launches**

**>2,700 units shipped**

# NovaSeq Market Impact

Larger  
Cohorts



Deeper  
Coverage

Broader  
Sequencing

# NovaSeq Market Impact

Larger  
Cohorts

**REGENERON**



Deeper  
Coverage

Broader  
Sequencing



# NovaSeq Market Impact

Larger  
Cohorts

GRAIL

GUARDANT HEALTH



Deeper  
Coverage

Broader  
Sequencing

# NovaSeq Market Impact

Larger  
Cohorts



Deeper  
Coverage



Broader  
Sequencing



# iSeq System

**\$19,900**

System Price

**\$25 - \$150**

Per Sample

**Q1**

Shipping

**4M**

Reads

**1.2**

Gb

**9h - 18h**

Run Time



12" wide

# Industry-Leading Accuracy for <\$20K

**99.8%**

MiniSeq™ | iSeq™ | MiSeq™



**Enables applications where accuracy matters**

Raw read accuracy of 99.8% based on a 265 amplicon BRCA panel spanning across all exon regions of the BRCA1 and BRCA2 genes

# Industry-Leading Accuracy for <\$20K



**Christopher Mason**  
@mason\_lab

Follow

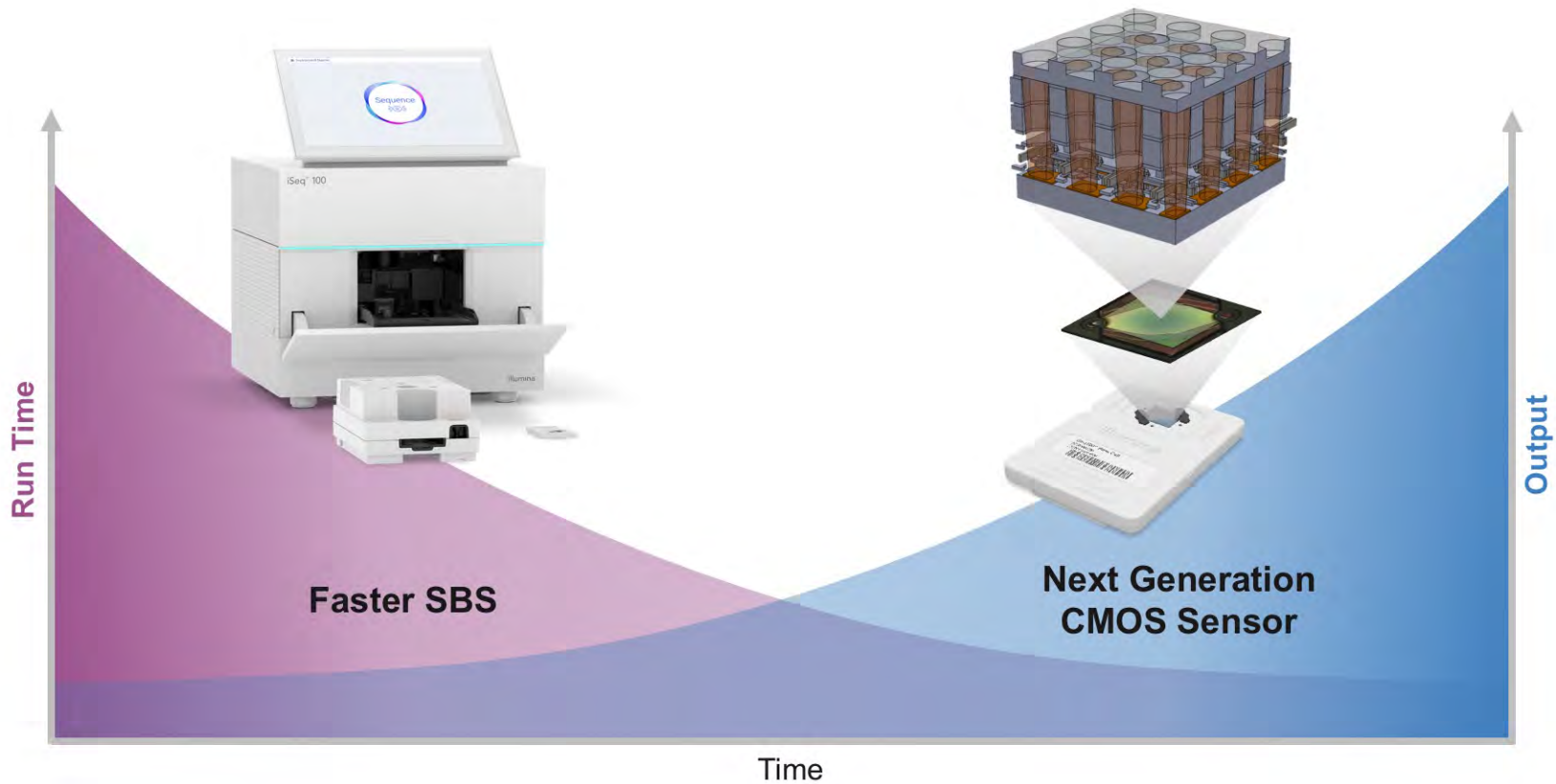


First run on the new @illumina Firefly sequencer looks great! 6M 151x151 PF reads, 1.8GBases, >99.8% accuracy in 16 hours. Santa came with SBS candy in a CMOS wrapper this year.



4:29 PM - 20 Dec 2017

# Extensible Architecture



# Enabling Market Expansion



**>50K**

Potential Customers

**6K**  
NGS Owners

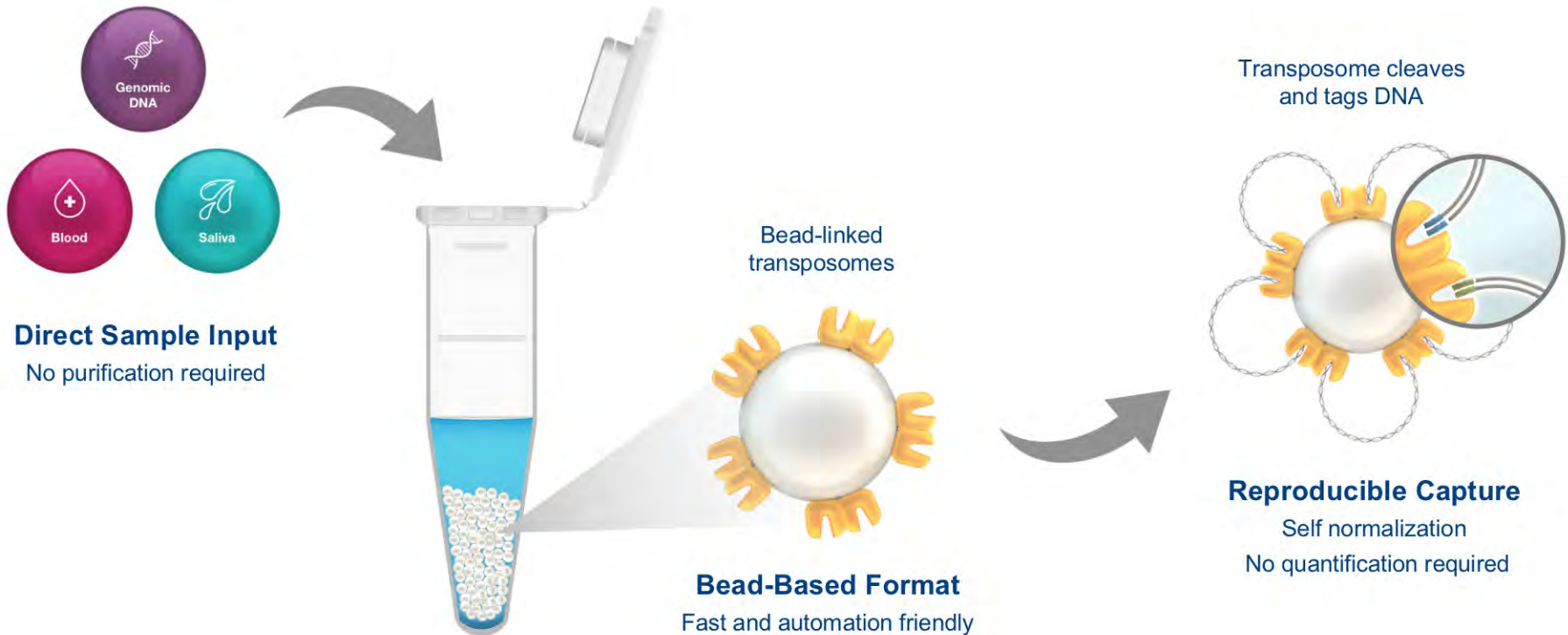
**15K**  
Outsourcers

**35K**  
New to NGS



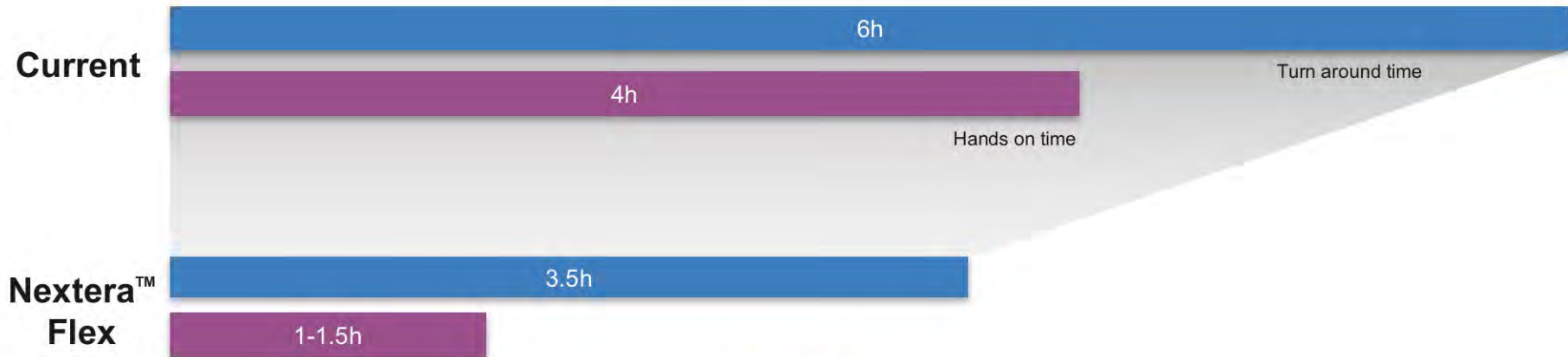
# Nextera Flex – Reinventing Library Prep

Simple workflow, high quality, fast turn around



# Nextera Flex Roadmap

Whole Genomes



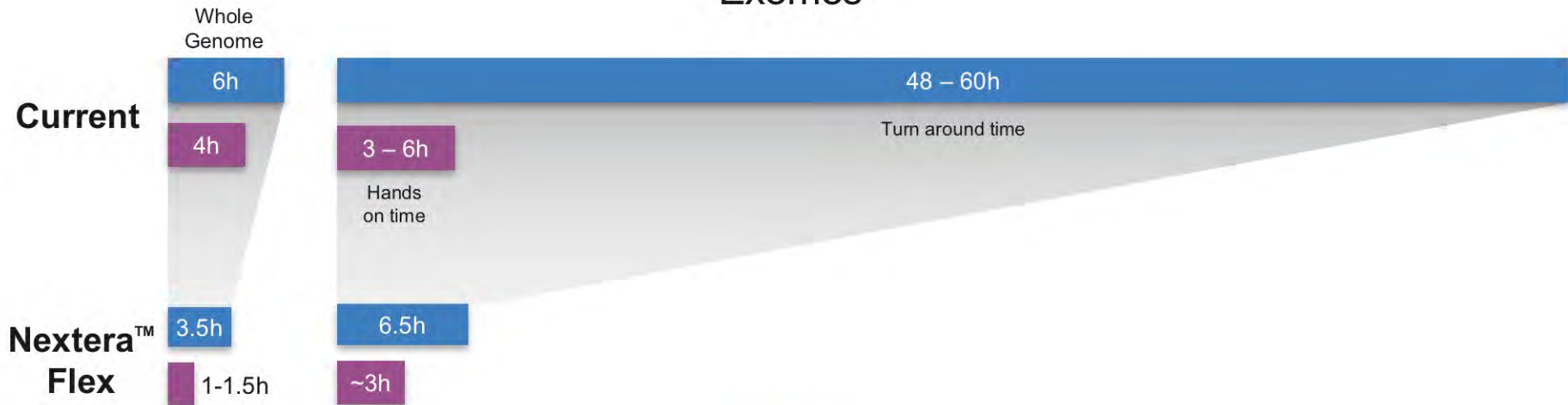
**40%**  
Faster

**Nextera DNA Flex**

**Now Available**

# Nextera Flex Roadmap

## Exomes



**85%**  
Faster

**Exome and Enrichment**

**Available 2H'18**

# Best-in-Class Sequencing + Best-in-Class Amplicon Assay

illumina®

ThermoFisher  
SCIENTIFIC



# AmpliSeq For Illumina

DNA to data in 24 hours



Library Prep



Sequence



Analysis

Low sample input

Robust FFPE performance

Up to 96 samples and 300,000 targets

Fast and flexible

# AmpliSeq For Illumina

Accelerating growth in desktop sequencing



Library Prep



Sequence



Analysis

**Greater versatility**

**Enables 'New to NGS'**

**Complete panel solutions**

**Commitment to expanded capabilities**

**THANK YOU**



# Illumina, Inc.

## Reconciliation of Non-GAAP Financial Guidance

The company's future performance and financial results are subject to risks and uncertainties, and actual results could differ materially from the guidance set forth below. Potential factors that could affect the company's financial results are included from time to time in the company's public reports filed with the Securities and Exchange Commission, including the company's Form 10-K for the fiscal year ended January 1, 2017, and the company's Form 10-Q for the fiscal quarters ended April 2, 2017, July 2, 2017, and October 1, 2017. The Company assumes no obligation to update any forward-looking statements or information.

	<b>Fiscal Year 2018</b>
GAAP diluted earnings per share attributable to Illumina stockholders	\$4.14 - \$4.24
Amortization of acquired intangible assets	0.24
Non-cash interest expense (a)	0.21
Restructuring (b)	0.02
Incremental non-GAAP tax expense (c)	(0.11)
Non-GAAP diluted earnings per share attributable to Illumina stockholders	<u>\$4.50 - \$4.60</u>

**(a)** Non-cash interest expense is calculated in accordance with the authoritative accounting guidance for convertible debt instruments that may be settled in cash.

**(b)** Amount consists primarily of employee severance and retention costs related to the restructuring event that occurred in Q4 2017.

**(c)** Incremental non-GAAP tax expense reflects the tax impact related to the non-GAAP adjustments listed above.