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For any throughput, for any application, the Fragment Analyzer™ is the premier instrument for simultaneously automating the qualification and quantification of nucleic acid fragments and smears.



Soar Above. Discover More.

# Expand Your Epigenetics Discovery by Sequencing More of the Methylome

## Accel-NGS® Methyl-Seq Library Kit

- Simple 2-hour protocol
- DNA inputs from 100 pg to 100 ng
- Low bias library preparation
- Compatible with WGBS, RRBS,  
and other enrichment methods



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12/15, 15-0565

# The S is for Simplicity

The new Ion S5™ System. Targeted sequencing has never been simpler.

Simple library prep tools, cartridge-based reagents and automated data analysis have reduced DNA-to-data hands-on time to less than 45 minutes. So you'll spend less time doing routine molecular biology, and more time informing time-sensitive decisions.



#### Ion AmpliSeq™ technology

As little as 1 ng low-quality DNA sample input for library prep



#### Cartridge-based reagents

Less than 15 minutes of sequencing setup time



#### 2.5 to 4 hours of run time

Fastest run time of any benchtop sequencer



Watch the Ion S5 System in action at  
[thermofisher.com/ionS5](http://thermofisher.com/ionS5)

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SCIENTIFIC



# rRNA Depletion - Do it reasonably

## RiboCop rRNA Depletion Kit

Crude RNA extract contains a vast amount of ribosomal RNA which is usually of less interest to most researchers, and depletion of those molecules is a critical process for efficient RNA-Seq.

However, with the solutions offered to date, it has been one of the most cost consuming processes within the RNA-Seq pipeline. We at Lexogen do not think this is reasonable at all. We believe Ribosomal RNA depletion should be easy and affordable for all researchers, and therefore we introduced the RiboCop rRNA Depletion Kit.

- ✓ Elimination of cytoplasmic and mitochondrial ribosomal RNA
- ✓ 1 hour of hands-on time
- ✓ USD 29.7/sample\*



### Free trial kits are available

Contact us at [info@lexogen.com](mailto:info@lexogen.com) / +43 1345 1212 - 41  
[www.lexogen.com](http://www.lexogen.com)

# BD FACSseq™ Cell Sorter and BD™ Precise Assays

## Gene expression assays for single cells



**NGS-ready samples for gene expression**  
Thousands of single cells, individually barcoded  
and indexed, now at the transcript level



The new BD FACSseq™ cell sorter selects thousands of individual cells, quickly discarding any dead/dying cells and then isolating them into PCR plates that contain preloaded BD™ Precise reagents for your customized targeted gene expression assays. A much simplified workflow prepares the samples for absolute and direct molecular counting of transcripts by next generation sequencing (NGS), while minimizing amplification bias that can potentially occur in these crucial steps.

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23-17810-00



Helping all people  
live healthy lives

The affordable BD FACSseq cell sorter combined with BD Precise assays lets you easily amp up your lab's productivity to help ensure that your high quality single cell samples are ready for gene expression assays. And, you can significantly increase data accuracy and throughput while controlling costs.

*Find out how at*  
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San Jose, CA 95131  
[bdbiosciences.com](http://bdbiosciences.com)

# Single Molecule & Single Cell Analysis

15 - 16 March 2016 • Madrid, Spain  
#SMSCA2016

## Keynote Speakers



Chwee Teck Lim  
Professor  
National University  
of Singapore



Menno Prins  
Professor  
Eindhoven  
University of  
Technology



Ulf Landegren  
Principal  
Investigator  
University of  
Uppsala

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## Agenda Topics

- Biological Heterogeneity
- Single Molecule Sequencing
- Liquid Biopsies
- Single Molecule Biosensing
- Digital PCR

**Poster submission deadline**  
08 March 2016

**SELECT BIO**

enquiries@SELECTBIO.com +44 (0)1787 315110  
Woodview, Bull Lane, SUDBURY, CO10 0FD, UK

## Custom Oligonucleotides

- ◆ Regular oligos
- ◆ Long oligos
- ◆ Phosphorothioated oligos (S-Oligos)
- ◆ Modified oligos
- ◆ Fluorescent oligos
- ◆ Taqman probes
- ◆ Molecular beacon
- ◆ Oligo pool & microarray

## Custom Peptide Synthesis

- ◆ Purities from desalt to 98%
- ◆ Acetylation/Amidation
- ◆ Phosphorylated peptides
- ◆ Fluorescein/Biotin labeled peptides
- ◆ Specialty peptides with unnatural amino acids
- ◆ Cyclic peptides
- ◆ KLH/BSA/OVA Conjugation
- ◆ Multiple Antigenic Peptides
- ◆ Peptide nucleic acid (PNA)



## Works, straight out the box.



Sometimes your best ideas are simple, like using ultra-fast, isothermal DNA/RNA amplification *recombinase polymerase amplification* (RPA) with your next microfluidics, agriculture or water-testing project. It works with PCR primers straight out the box, no thermocycler needed.

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2016 • NEW ORLEANS

American Association  
for Cancer Research

APRIL 16-20, 2016  
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CONVENTION CENTER  
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For more information visit  
[www.AACR.org/AACR2016](http://www.AACR.org/AACR2016)

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**Cures**  
Through Cancer  
Science

## Join us in New Orleans

for the best cancer science and medicine meeting in the world...  
the AACR Annual Meeting 2016!

You are invited to stretch your boundaries, form collaborations, attend sessions outside of your own area of expertise, and learn how to apply exciting new concepts, tools, and techniques to your own research.

Get your fill of ground-breaking cancer science each day, and then enjoy the great sounds, food, and culture that is New Orleans.

If you can only attend one cancer science meeting this year, the AACR's Annual Meeting is it!

Be sure to register early to take advantage of reduced rates!

### Become a Member!

Join the AACR and enjoy substantially reduced registration rates, the privilege of sponsoring an abstract for the Annual Meeting, funding and award opportunities, and much more.

We look forward to seeing you in New Orleans!

# EMBL 2016

## Conferences

7 - 8 MAR | EMBL - EBI Workshop  
**SME Bioinformatics Forum**  
 D. Clark, T. Hancocks, N. Shivji | EMBL-EBI Hinxton, UK

3 - 6 APR | EMBL | EMBL Symposium  
**Tumour Microenvironment and Signalling**  
 A. Berns, P.P. Pandolfi, B. Paulty | EMBL Heidelberg, Germany

20 - 22 APR | EMBL Conference  
**The Epitranscriptome**  
 M. Frye, D. O'Carroll | EMBL Heidelberg, Germany

8 - 11 MAY | EMBL | EMBL Symposium  
**New Model Systems for Linking Evolution and Ecology**  
 D. Tautz, D. Weigel | EMBL Heidelberg, Germany

18 - 20 MAY | EMBL Conference  
**BioMalPar XII: Biology and Pathology of the Malaria Parasite**  
 G. Christophides, F. Osier, A. Scholten, T. Voss | EMBL Heidelberg, Germany



4 - 7 APR, 3 - 6 OCT | EMBL-EBI Course  
**Introduction to Next Generation Sequencing**  
 T. Hancocks, J. Randall, M. Rossello | EMBL-EBI Hinxton, UK

17 - 23 APR | EMBL Course  
**High-Accuracy CLEM: Applications at Room Temperature and *in cryo***  
 R. Mellwig, M. Schorb | EMBL Heidelberg, Germany

18 - 22 APR | EMBL-EBI Course  
**Advanced RNA-Seq and ChIP-Seq Data Analysis**  
 G. Rustici | EMBL-EBI Hinxton, UK

20 - 21 APR | EMBL Course  
**Transgenic Animals**  
 J. Dreyer-Lamm, Y. Petersen, S. Stobrawa | EMBL Heidelberg, Germany

24 APR - 1 MAY | EMBL Practical Course  
***In vivo* Plant Imaging**  
 M. Heisler, A. Maizel, R. Simon | EMBL Heidelberg, Germany

9 - 13 MAY, 11 - 15 JUL, 21 - 25 NOV | EMBL Courses  
**NGS: Enrichment Based Targeted Resequencing**  
 V. Benes, J. Dreyer-Lamm, A. Heim | EMBL Heidelberg, Germany

9 - 13 MAY | EMBL-EBI Course  
**Networks and Pathways**  
 T. Hancocks, S. Orchard | EMBL-EBI Hinxton, UK

21 - 26 MAY | EMBL Practical Course  
**Structural Characterisation of Macromolecular Complexes**  
 T. Forsyth, D. Hart, M. S. López, M. Marcia, C. Petosa, D. De Sanctis | EMBL Grenoble, France

23 - 24 MAY, 4 - 5 JUL, 28 - 29 NOV | EMBL Courses  
**NGS: Whole Genome Sequencing Library Preparation**  
 V. Benes, J. Dreyer-Lamm, A. Heim | EMBL Heidelberg, Germany

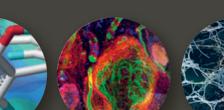
29 MAY - 1 JUN | EMBL | EMBL Symposium  
**Microtubules: From Atoms to Complex Systems**  
 M. Dogterom, C. Janke, A. Musacchio, M. Steinmetz | EMBL Heidelberg, Germany

3 - 5 JUN | EMBL Conference  
**Hematopoietic Stem Cells: From the Embryo to the Aging Organism**  
 K. Kiss, C. Lancrein, C. Lo Celso, C. Robin | EMBL Heidelberg, Germany

12 - 15 JUN | EMBL Conference  
**CTLS 2016 - Core Technologies for Life Science**  
 P. England, R. Pepperkok, S. Shorte | EMBL Heidelberg, Germany

26 - 29 JUN | EMBL | EMBL Symposium  
**Innate Immunity in Host-Pathogen Interactions**  
 Z. Chen, W-D. Hardt, N. Pariente, F. Rando | EMBL Heidelberg, Germany

5 - 7 JUL | EMBL Conference  
**Lifelong Learning in the Biomedical Sciences**  
 M. Hardman, C. Janko, C. Johnson | EMBL Heidelberg, Germany



24 - 26 JUL | EMBL Conference  
**Microfluidics 2016**  
 C. Merten, S. Quake | EMBL Heidelberg, Germany

27 - 30 AUG | EMBL Conference  
**Transcription and Chromatin**  
 D. Duboule, E. Furlong, A. Shilatifard, M. Timmers | EMBL Heidelberg, Germany

31 AUG - 3 SEP | EMBL Conference  
**Chemical Biology 2016**  
 M. Kohn, J. Overington, C. Schultz | EMBL Heidelberg, Germany

7 - 10 SEP | EMBL | EMBL Symposium  
**Actin in Action: From Molecules to Cellular Functions**  
 B. Baum, J. Faix, P. Lenart, D. Mullins, F. Nedelec, C. Sykes | EMBL Heidelberg, Germany

14 - 17 SEP | EMBL-Wellcome Genome Campus Conference  
**Proteomics in Cell Biology and Disease Mechanisms**  
 A.-C. Gavin, A. Lamond, M. Mann | EMBL Heidelberg, Germany

25 - 27 SEP | EMBL-Wellcome Genome Campus Conference  
**Big Data in Biology and Health**  
 E. Birney, B. Grossman, J. Korbel, C. Repton | EMBL Heidelberg, Germany

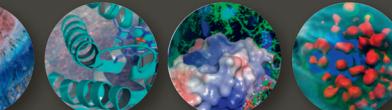
5 - 8 OCT | EMBL | EMBL Symposium  
**The Complex Life of mRNA**  
 A. Ephrussi, N. Sonenberg, J. Steitz, D. Tollervey | EMBL Heidelberg, Germany

12 - 15 OCT | EMBL | EMBL Symposium  
**Organoids: Modelling Organ Development and Disease in 3D Culture**  
 M. Bissell, J. Knoblich, E. Schnapp | EMBL Heidelberg, Germany

19 - 23 OCT | EMBL Conference  
**Experimental Approaches to Evolution and Ecology Using Yeast and Other Model Systems**  
 J. Berman, M. Dunham, J. Leu, L. Steinmetz | EMBL Heidelberg, Germany

12 - 15 NOV | EMBL Conference  
**From Functional Genomics to Systems Biology**  
 E. Furlong, F.C.P. Holstege, N. Rajewsky, M. Walhout | EMBL Heidelberg, Germany

20 - 23 NOV | EMBL Conference  
**Molecular Machines: Integrative Structural and Molecular Biology**  
 J. Briggs, T. Carlmagno, G. Kleymeyer, D. Panne, D. Svergun | EMBL Heidelberg, Germany



## Courses

23 - 25 MAY | EMBL Course  
**Computational Aspects of High-Throughput Screening**  
 J. Dreyer-Lamm, T. Hancocks, A. Hershey, J. Lewis, U. Uhrig | EMBL Heidelberg, Germany

23 - 27 MAY | EMBL-EBI Course  
**Bioinformatics of Plants and Plant Pathogens**  
 P. Kersey | EMBL-EBI Hinxton, UK

29 MAY - 3 JUN | EMBL Practical Course  
**Non-Neuronal Optogenetics**  
 H. Janovjak, S. De Renzis, J. Toetlicher | EMBL Heidelberg, Germany

6 - 10 JUN | EMBL-EBI Course  
**Bioinformatics for Principal Investigators**  
 S. Morgan | EMBL-EBI Hinxton, UK

5 - 11 JUN | EMBL Course  
**Bioimage Data Analysis**  
 K. Miura, P. Paul-Gilloteaux, S. Tosi | EMBL Heidelberg, Germany

13 - 17 JUN | EMBL-EBI-Wellcome Genome Campus Course  
**Summer School in Bioinformatics**  
 T. Hancocks, S. Morgan | EMBL-EBI Hinxton, UK

19 - 23 JUN | EMBL Practical Course  
**Computational Biology: Genomes to Systems**  
 P. Bork, F. Ciccarelli, J. Korbel, R. Krause | EMBL Heidelberg, Germany

20 - 24 JUN | EMBL Course  
**Fundamentals of Widefield and Confocal Microscopy and Imaging**  
 F. Eich, J. Marquardt, S. Terjung | EMBL Heidelberg, Germany

27 JUN - 1 JUL | EMBL-EBI Course  
**Cancer Genomics**  
 G. Rustici | EMBL-EBI Hinxton, UK

28 JUN - 1 JUL, 4 - 7 OCT | EMBL Courses  
**Whole Transcriptome Data Analysis**  
 V. Benes, R. Calogero | EMBL Heidelberg, Germany

3 - 8 JUL | EMBL Course  
**Advanced Fluorescence Imaging Techniques**  
 F. Eich, R. Pepperkok, S. Terjung | EMBL Heidelberg, Germany

3 - 8 JUL | EMBL-EBI-Wellcome Genome Campus Course  
**In silico Systems Biology**  
 L. Emery | EMBL-EBI Hinxton, UK

11 - 15 JUL | EMBL Course  
**Quantitative Proteomics**  
 J. Krijgsveld, M. Savitski | EMBL Heidelberg, Germany

28 AUG - 5 SEP | EMBL Practical Course  
**Cryo-Electron Microscopy and 3D Image Processing**  
 J. Briggs, B. Boettcher, L. Passmore, C. Sachse, H. Stahlberg | EMBL Heidelberg, Germany

29 AUG - 2 SEP | EMBL Course  
**Chromatin Signatures During Differentiation**  
 J. Dreyer-Lamm, P. Grandi, K.-M. Noh | EMBL Heidelberg, Germany

12 - 14 SEP | EMBL-EBI Course  
**Metagenomics Bioinformatics**  
 H. Denise, L. Emery, A. Mitchell | EMBL-EBI Hinxton, UK

12 - 20 SEP | EMBL Practical Course  
**Protein Expression, Purification and Characterization**  
 C. Loew, R. Meijers, A. Parret | EMBL Hamburg, Germany

19 - 23 SEP | EMBL-EBI Course  
**Structural Bioinformatics**  
 T. Hancocks, G. Kleymeyer, C. Orengo | EMBL-EBI Hinxton, UK

19 - 24 SEP | EMBL Course  
**Extracellular Vesicles: from Biology to Biomedical Applications**  
 J. Dreyer-Lamm, A. Hendrix, E. Nolte-'t Hoen | EMBL Heidelberg, Germany

17 - 24 OCT | EMBL Practical Course  
**Solution Scattering from Biological Macromolecules**  
 A. Kikhney, D. Svergun | EMBL Hamburg, Germany

17 - 23 OCT | EMBL Practical Course  
**High-Throughput Microscopy for Systems Biology**  
 J. Ellenberg, D.W. Gerlich, B. Neumann, R. Pepperkok | EMBL Heidelberg, Germany

7 - 11 NOV | EMBL-EBI-Wellcome Genome Campus Course  
**Resources for Computational Drug Discovery**  
 T. Hancocks | EMBL-EBI Hinxton, UK

9 - 10 NOV | EMBL Course  
**Microinjection into Adherent Cells**  
 J. Dreyer-Lamm, S. Stobrawa | EMBL Heidelberg, Germany

28 NOV - 2 DEC | EMBL-EBI Course  
**Biological Interpretation of Next Generation Sequencing**  
 G. Rustici | EMBL-EBI, Hinxton UK

4 - 9 DEC | EMBL-EBI-Wellcome Genome Campus Course  
**Proteomics Bioinformatics**  
 L. Emery | EMBL-EBI, Hinxton UK

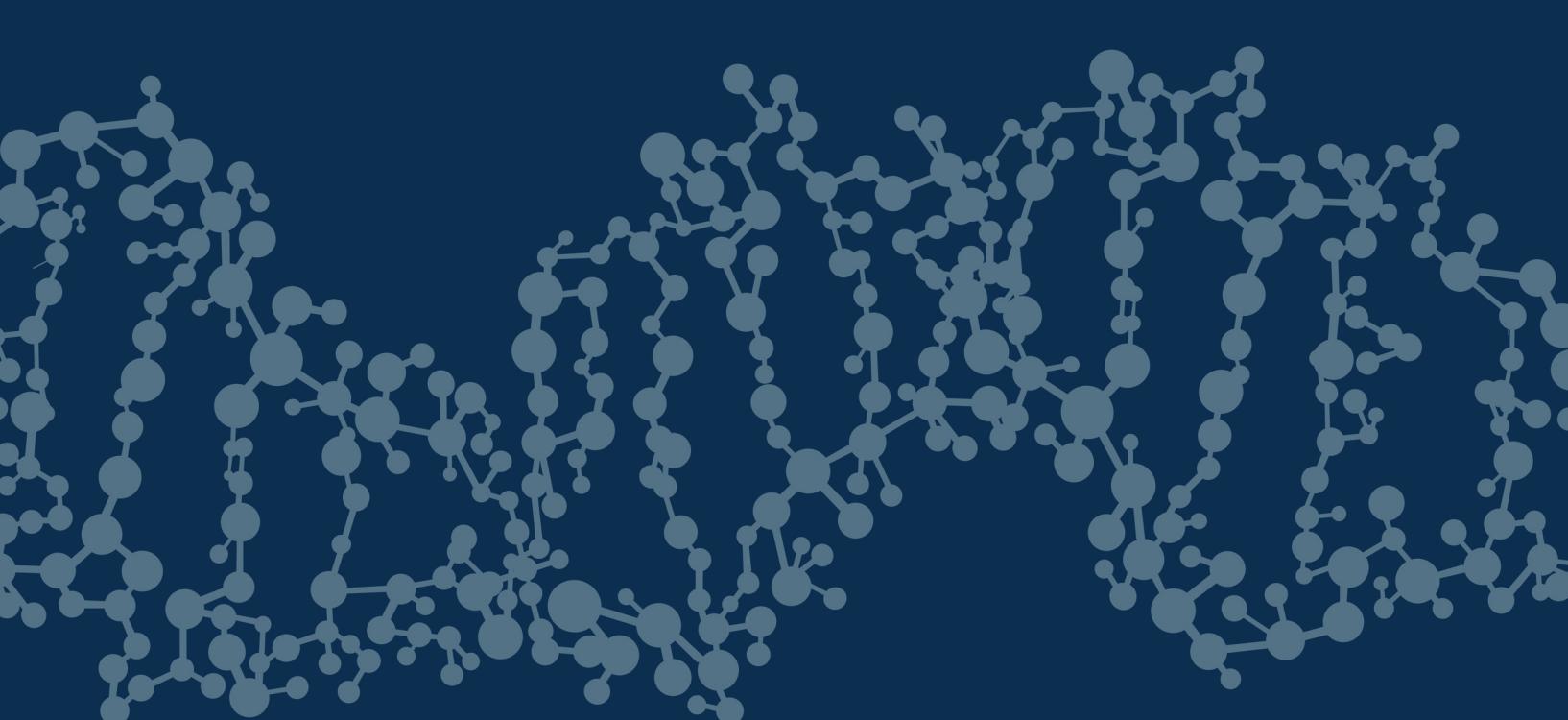
7 - 11 DEC | EMBL Course  
**Microbial Communities: Modelling Meets Experiments**  
 R. Mahadevan, K. Patil, K. Sasaki | EMBL Heidelberg, Germany

For full event listing please visit our website  
[www.embl.org/events](http://www.embl.org/events)



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# LEAD NATIONAL-SCALE GENOMICS PROJECTS

We are scientists, engineers, communicators, and data lovers.  
We are musicians, homebrewers, yogis, cyclists, and chess players.

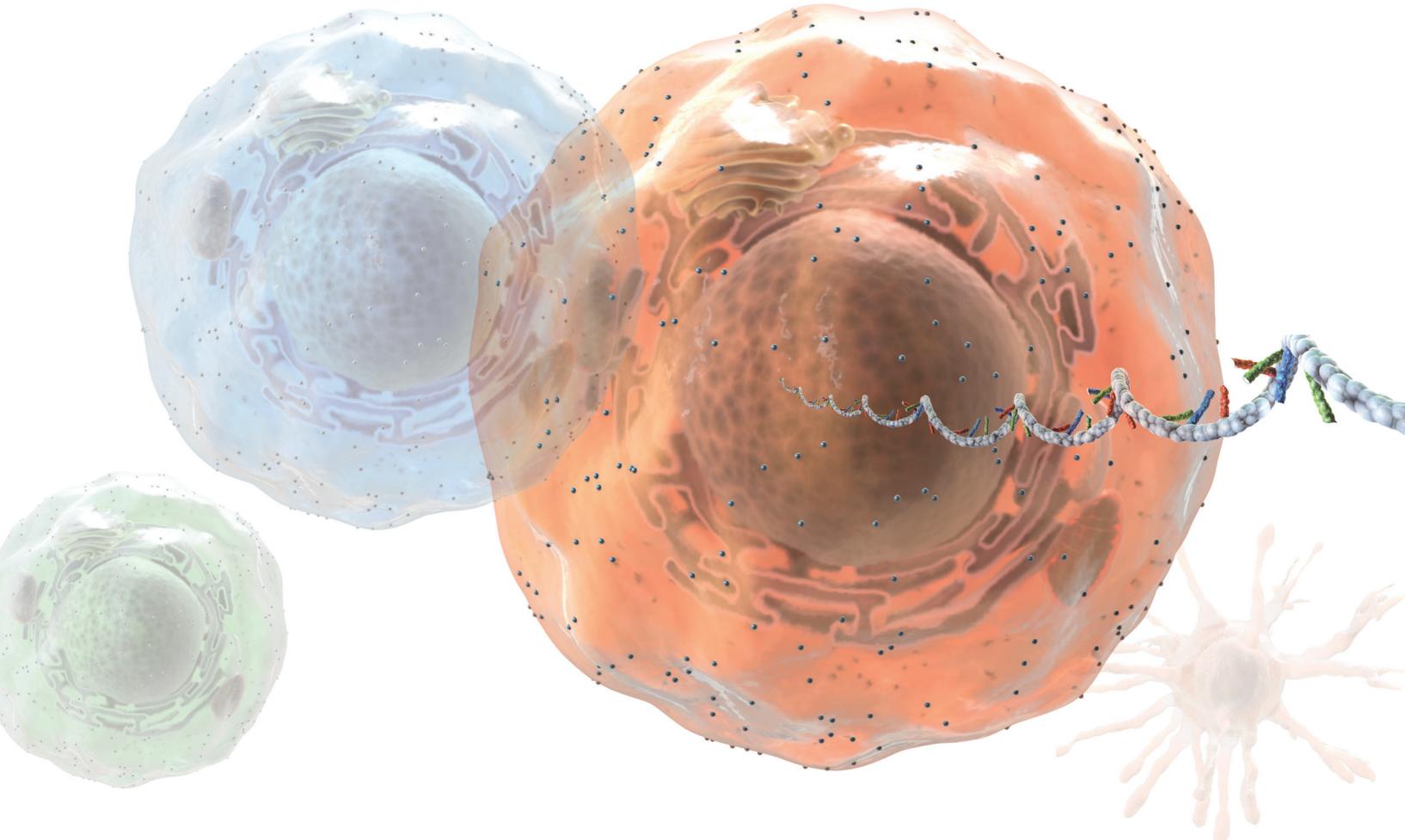
Our team is passionate about how genomics and technology can impact and improve human health. And, as part of an innovative startup building the most advanced cloud computing platform for biomedical data analysis - that impact is huge.

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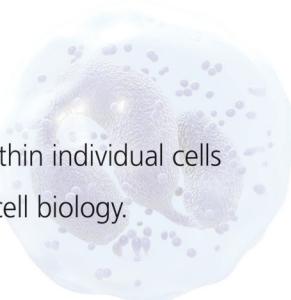


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