



IIeasy

Introducing the
Genome Analyzer *IIe*

Easy workflow. Easy data analysis. Easy access to next-gen sequencing. The Illumina® Genome Analyzer *IIe* delivers proven Illumina technology and industry-leading data quality at an affordable cost.

- Up to 40 Gb of output per run with 2 x 150 bp reads enables an expansive range of applications—including targeted resequencing, RNA-Seq, ChIP-Seq, and small- to medium-sized genome resequencing
- Simplest next-gen sequencing workflow
- Easy-to-use sample prep kits and simplified data analysis
- Flexibility to upgrade to Genome Analyzer *IIx* performance as your research needs expand

Learn more at www.illumina.com/GAlle

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Introducing HiSeq™ 2000

Redefining the trajectory
of sequencing.

What if you could:

- Sequence a normal and a cancer human genome at 30x coverage?
- Perform gene expression profiling on 200 samples?
- Sequence a genome on one flow cell and its epigenome and transcriptome on the other flow cell?

Each in a single run?

Now you can with HiSeq 2000. It's a new standard in output, user experience, and cost-effectiveness.

Sequence on a scale never before possible.

Learn more at www.illumina.com/HiSeq2000

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Can you see the pathogenic strain?

- Can you see the drug-resistant strain?
- Can you see the strain responsible for a food safety outbreak?
- Can you see the strain with a unique genetic fingerprint?
- Can you see the new mutation?

Introducing the new, more accurate, higher throughput SOLiD™ 4 System.

Next-generation sequencing (NGS) just leaped to the next level in accuracy. The SOLiD™ 4 System leverages advanced informatics and optimized reagents to enable scientists to obtain the highest accuracy of any NGS system. With throughputs of 100 GB per run and workflow automation, the SOLiD™ 4 System accelerates your large-scale

genomic analysis to an unprecedented pace. Plus, new paired-end library options enable detection of novel splice variation and fusion transcripts with less input DNA. Using the SOLiD™ 4 System, your lab will have the ability to detect more variation and spend less time and money doing it. Take a look at the new SOLiD™ 4 System.

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SOLiD™ 4
SYSTEM SEQUENCING

I enable
I **GENEUS**

adaptability

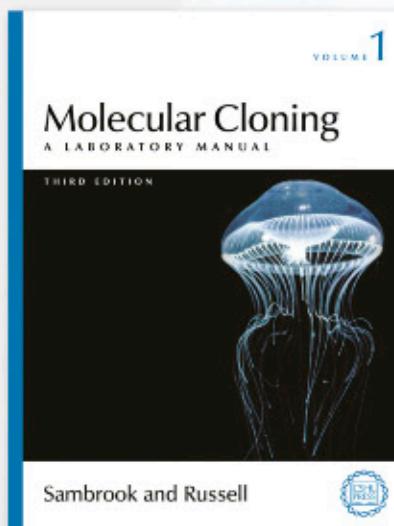
I enable next generation sequencing

Next generation sequencing facilities must have the ability to adapt to change. Constantly evolving protocols, workflows, processes, requirements, and instruments all contribute to the need for a flexible and extendible, software platform for next generation sequencing. Geneus accommodates new technologies and instruments, manages constant change, and enables configuration changes on the fly. Built to adapt while ensuring sample traceability, Geneus is a long-term solution. A best-in-class LIMS solution can help you operate a world-class sequencing facility and adapt to change.

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POSTDOCTORAL POSITIONS

Multiple postdoctoral positions are available in the Human Genetics and Genomics Program at the University of Missouri-Kansas City School of Medicine. This growing program, established and led by Prof. Hong-Wen Deng, encompasses all relevant research fields related to identifying and characterizing genes and their functional contribution to complex human disorders, with a focus on osteoporosis and related health problems. Applicants must have a Ph.D. and/or a M.D. degree. Background and prior experience in human genetics and/or bone biology is desirable. Interested candidates should apply online at our website www.umkc.edu/hr/jobsearch. Please make sure to include a research statement, curricula vitae and at least 3 references. This information should be submitted into one PDF or Microsoft Word document.

Position 1 (Molecular/Cellular Bone Biology): The successful candidate will participate in molecular bone biology research projects aimed to identify novel mechanisms of gene regulation for bone formation. Major responsibilities will include performing in vitro and in vivo experiments, such as cell culture, DNA manipulation, Western blot, qPCR, IHC, IF, EMSA, ChIP, genotyping and characterizing knockout and transgenic mice, and analyzing research data. Experience in advanced molecular and cellular biology and genetic mouse models is a plus.

Position 2 (Statistical Genetics and Bioinformatics): The successful candidate will involve in data analysis and method development for genome-wide association studies using genomic and sequence data, data modeling and analysis for epigenomic studies, and integrative analysis of genetic variation at multiple biological levels. Applicants must have background in statistical genetics, bioinformatics, or related areas.

Position 3 (Functional Genomics and Proteomics): The successful candidate will participate in functional genomics and/or proteomics research projects for osteoporosis and related diseases (e.g., genome-wide gene expression analyses using microarrays and proteomics analyses using liquid chromatography and mass spectrometry, etc.).

Position 4 (Epigenetics and Epigenomics): The successful candidate will involve in developing and executing research projects related to identification and characterization of epigenetic / epigenomic factors associated with osteoporosis and related diseases. Prior experience in chromatin immunoprecipitaion (ChIP) and/or related techniques (e.g., ChIP-chip, ChIP-seq, reporter assay, etc) is necessary.

Position 5 (Genetic Epidemiology): The successful candidate will participate in genetic epidemiological research projects for osteoporosis and related diseases (e.g., candidate gene and/or genome-wide association studies, DNA resequencing studies, nutrigenetic or nutrigenomic studies, etc.).



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