

ILLUMINA TO PERFORM LARGE-SCALE MOUSE GENOTYPING STUDY FOR THE WELLCOME TRUST CENTRE

Study Designed to Measure Association between Genetic Variation and Metabolic and Behavioral Disorders

SAN DIEGO, CALIFORNIA, August 12, 2004 -- Illumina, Inc. (NASDAQ: ILMN) announced today that they will generate over 25 million mouse genotypes for The Wellcome Trust Centre for Human Genetics at Oxford University under a fast-track services agreement signed between the two organizations. Wellcome Trust-funded researchers will use SNP (single nucleotide polymorphism) variants to search for quantitative trait loci (QTL) that contribute to variation across a broad range of physiological and behavioral traits that are relevant to human disease, including diabetes, obesity, asthma, anxiety and depression. The Wellcome Trust will publish genotyping results and make this information freely available to other researchers and to the public.

The genotyping project - one of the largest of its type ever conducted - will examine over 15,000 SNP (single nucleotide polymorphism) loci in 2,700 animals from a unique multigenerational mouse collection derived from inbred strains. The size of the experiment, the large number of SNPs and the nature of the breeding program together provide a resource that the project leaders expect will aid identification of genes that confer susceptibility to many common diseases.

With a gene content that is over 99% identical with human genes, the mouse is the preferred model organism for genetic researchers. Since specific genes and gene order are highly conserved between mouse and human species, QTL information should, in turn, promote accelerated identification of disease genes and genetic function in humans.

Under the terms of the agreement, The Wellcome Trust will provide Illumina with SNP loci and samples from inbred mouse crosses. Illumina will develop assays for high-multiplex genotyping using the Company's GoldenGate(TM) protocol, completing over 25 million genotypes for the study. The study follows a successful pilot completed in 2003 for Oxford and GNF (Genomics Institute of the Novartis Research Foundation), and is expected to result in Illumina marketing a standard mouse panel (s) for generating genotypes with predictive value for behavioral disorders.

Commenting on the study, Jonathan Flint, Ph.D., principal investigator at The Wellcome Trust Center for Human Genetics at Oxford University, stated "Along with GNF, we've devoted extensive time and resources into study design and execution, including breeding, SNP identification, sample collection, and DNA preparation. We're now eagerly anticipating genotyping results and data analysis, and we expect a significant harvest of high-value information consistent with the scale of this project. Following study completion, we may have in our grasp powerful data and tools that will help us better understand human behavioral disorders and impact individual outcomes. Illumina is a valuable ally in this effort."

According to Jay Flatley, Illumina President and CEO, "We're pleased to extend our relationship with The Wellcome Trust and work with Oxford and GNF on a project that offers so much potential benefit to the life

science community. Our Fast-Track Genotyping Services will enable completion of this project in significantly less time than other approaches, which means valuable project data will be freely available sooner rather than later."

Illumina (www.illumina.com) is developing next-generation tools that permit large-scale analysis of genetic variation and function. The Company's proprietary BeadArray(TM) technology -- now used in leading genome centers around the world -- provides the throughput, cost effectiveness and flexibility to enable researchers in the life sciences and pharmaceutical industries to perform the billions of tests necessary to extract medically valuable information from advances in genomics and proteomics. This information will help pave the way to personalized medicine.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: this release may contain forward-looking statements that involve risks and uncertainties. Among the important factors which could cause actual results to differ materially from those in the forward-looking statements are Illumina's ability to manufacture Sentrix(R) Array Matrices in a robust and cost-effective manner, to fully develop its BeadArray(TM) and Oligator technologies, to successfully build support organizations to install and service its laboratory facilities at customer locations, and other factors detailed in the Company's filings with the Securities and Exchange Commission including its 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. Illumina disclaims any intent or obligation to update these forward-looking statements beyond the date of this release.