



Illumina, Inc  
NR200420



Contacts: Jay Flatley  
President & CEO  
+1 858.202.4501  
[jflatley@illumina.com](mailto:jflatley@illumina.com)

Gualberto Ruaño, M.D., Ph.D.  
President  
+1 860.545.3773  
[g.ruano@genomas.net](mailto:g.ruano@genomas.net)

William Craumer  
Director, Corporate Communications  
+1 858.202.4667  
[bcraumer@illumina.com](mailto:bcraumer@illumina.com)

## **GENOMAS AND ILLUMINA FORM STRATEGIC ALLIANCE ON PHYSIOGENOMICS OF METABOLIC SYNDROME**

### **Partnership Will Utilize Illumina's BeadArray™ Technology at Genomas to Identify Proprietary Sets of Biomarkers and Commercialize Gene Marker Panels**

SAN DIEGO, CALIFORNIA and HARTFORD, CONNECTICUT, July 20, 2004 -- Illumina, Inc. (NASDAQ: ILMN), a provider of integrated solutions for the large-scale analysis of genetic variation and function, and Genomas, Inc., a healthcare company developing products for personalized treatments of obesity and related metabolic disorders announced today a collaboration for the design and validation of gene marker panels.

Under the agreement, Genomas will use the Illumina BeadStation 500GX for the discovery of diagnostic markers to be used in the development of PhysioTypes™. PhysioTypes are predictors incorporating haplotypes from various genes, baseline physiological and clinical information, and demographic data. Genomas will develop PhysioTypes for the prediction of an individual's response to exercise, diet and drug regimens to personalize prevention and treatment of obesity and the related metabolic syndrome leading to diabetes and cardiovascular disease.

Genomas will create gene marker panels consisting of SNP's (single nucleotide polymorphisms) and haplotypes (linked SNPs identifying functional variation) for metabolic syndrome utilizing its PhysioGenomics™ platform. PhysioGenomics is a systems biology approach to the

understanding of the complex responses of an organism to environmental challenges including exercise, diet, and drugs.

The BeadStation 500GX is an integrated system that supports single nucleotide polymorphism (SNP) genotyping and RNA profiling applications on a single platform. Illumina's technology delivers a scalable range of parallel sample throughput with industry-leading performance and per-sample pricing.

Illumina will support Genomas' discovery process and facilitate the validation of the metabolic syndrome gene marker panels developed by Genomas. Upon validation, the content-specific SNP and haplotype panels may become available to Illumina customers as products under a royalty-bearing license. Illumina's BeadStation will also support research in psychiatry and preventive cardiology at the Hartford Hospital Genetics Research Center (GRC), which is affiliated with Genomas.

"We are beginning to understand obesity as a constellation of metabolic disorders ranging from lipid abnormalities to derangements in blood glucose control. Treatments of such complex disease require integrated and personalized use of diet, fitness, and medications conforming to both the individual's genetic inheritance and current physiological status," stated Gualberto Rúaño, M.D., Ph.D., President of Genomas and Director of the GRC. "Metabolic syndrome is probably the best example of a multi-system disease where PhysioGenomic analysis is essential, and the discovery platform afforded by the Illumina system is simply a perfect fit." Paul Thompson, M.D., Director of Preventive Cardiology at Hartford Hospital said: "The combination of PhysioGenomics and the Illumina system should be particularly powerful to optimize preventive treatments such as exercise which impacts multiple physiological systems at once."

"Illumina's platform complements the Genomas PhysioGenomics technology, as it allows parallel examination of thousands of gene markers from a single biological sample," said Jay Flatley, CEO of Illumina. "The BeadStation provides customers like Genomas the opportunity to extract maximum value from every patient sample in their clinical programs to discover genomic markers for molecular medicine. Future commercialization of the panels may deliver significant benefit for improved treatments and patient outcomes.

## **About the Companies**

Genomas ([www.genomas.net](http://www.genomas.net)) is developing novel diagnostic products to personalize disease prevention and health enhancement. The company is the biotechnology anchor of the Genetics Research Center at Hartford Hospital. The company's proprietary PhysioGenomics technology allows it to rapidly and precisely produce PhysioType products. PhysioTypes are predictors of response to diet, exercise and drugs – not diagnostics for disease - and are utilized to direct preventive strategies. A PhysioType product is made from the combination of all genetic, physiological or clinical markers that Genomas has discovered to be significant determinants of individual response. PhysioTypes are revolutionary healthcare products, which empower physicians with the unprecedented capability to prescribe personalized and highly effective preventive treatments incorporating diet, exercise and drug regimens for each patient. Genomas conducts clinical research with major clinical institutions to discover these PhysioTypes and commercializes them for practicing physicians and hospitals.

Illumina ([www.illumina.com](http://www.illumina.com)) is developing next-generation tools for the large-scale analysis of genetic variation and function. The Company's proprietary BeadArray technology -- now used in leading genomics centers around the world -- provides the throughput, cost effectiveness and flexibility necessary 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 by correlating genetic variation and gene function with particular disease states, enhancing drug discovery, allowing diseases to be detected earlier and more specifically, and permitting better choices of drugs for individual patients.

“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 continue to improve its BeadArray and Oligator technologies, the Company’s ability to reproducibly manufacture Array Matrices and BeadChips and to reconfigure these platforms to other geometries, the Company’s ability to successfully build out international sales and support organizations, the Company’s ability to develop and deploy new applications for its platform technology, 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.

# # #