



We at Illumina are very pleased to be part of an important new milestone in genome biology, the ENCyclopedia Of DNA Elements (ENCODE). It epitomizes one of the original concepts of the Human Genome Project, that a public reference genome sequence would enable scientists to draw together all the pieces of biological information associated with any fragment of DNA sequence and position them relative to each other. As a result, we see the dictionary of genetic words evolving into an encyclopedia with definitions that provide a foundation for understanding our genome.

These studies carry a particular significance for us at Illumina. Using DNA sequence as a single readout for a diversity of biological experiments illustrates the ubiquitous nature of sequence information in biology. The ability to scale these experiments readily across the entire genome is a wonderful demonstration of the power of fast, accurate DNA sequencing technology. These studies re-affirm the importance of continuing to innovate in sequencing technology, to aid researchers worldwide to apply the principles described in these reports to an ever wider range of samples: from whole tissues to single cells.

The ability to understand the biological functions encoded by the genome is also of special importance for us as it demonstrates the ability to begin interpreting sequences outside protein coding regions. It opens the way to interpreting individual phenotypic variation that is influenced by sequence variation across the entire genome. As this work evolves it will transform our ability to extract meaning from each person's blueprint, integrate genomic information into medical care and personal lifestyle, and empower the individual through personal genomics in the new era of precision medicine.

Illumina is proud to be a part of the ENCODE project by enabling scientific advances through innovative technology and by sponsoring the public dissemination of knowledge.

Illumina sponsors the micro-site, poster, video, iPad app, and reprint collection.

Applauding the project,

David Bentley

Vice President & Chief Scientist

Illumina, Inc.

Experience Genetic Energy