Why does the minority community need to be informed about the Human Genome Project and the resulting developments in genetics research?

“It [The Human Genome Project] is the most expensive, most ambitious biology mission ever. The Human Genome Project at $250 million and counting is biology's moonshot. In the eyes of boosters, it promises to provide no less than the operating instructions for a human body, and will revolutionize the detection, prevention and treatment of conditions from cancer, to depression to old age itself.”

(Newsweek, April 10, 2000)

What should the minority community know about the Human Genome Project?

A genome is all of the DNA in an organism. The Human Genome Project (HGP) goals are to sequence the entire human genome and identify all human genes; to facilitate and accelerate research studies to characterize these genes, determine their function, and understand how diseases can result from errors in their functions.

What are some of the positive results already achieved from human genome research?

The genetic discoveries from this research have already resulted in development of DNA-based tests (gene tests) to diagnose disease, confirm a diagnosis, provide information about the course of a disease, and to some extent predict the risk of future disease in healthy individuals. Gene tests for diseases such as sickle cell anemia, breast, ovarian, and colon cancers, muscular dystrophy, cystic fibrosis, and Huntington disease, are already in use.

Use of DNA for identification has increased, and has resulted in identification of potential criminal suspects; exoneration of persons wrongfully accused of crimes; identification of victims of crimes and catastrophes; and establishment of family relationships.

What potential results can the minority community expect in the future from the continuing human genome research?

New therapies to treat diseases such as diabetes, arthritis, cancer, cardiovascular diseases, muscle diseases, blindness, and deafness, can be expected, as research continues. More available and affordable drugs, as well as drugs customized to an individual's genetic profile, are predicted.

The minority community can expect the “new medicine” and its related technology to go a long way toward the elimination of the health disparities that currently exist.