

## GENOMIC MEDICINE

## **BACKGROUND**

The U.S. Human Genome Project completed a map of human genes in 2003. One of the next steps is to apply that knowledge to patients' routine medical care. VA is in the forefront of the movement to develop safer, more effective treatments based on new knowledge about the role of genes in health and disease.

## WHAT VA IS DOING

Genomic analysis, or the study of genetic information, has already provided tremendous insights into the origins of diseases as diverse as diabetes, chronic fatigue syndrome, and cancer. Genomic analysis may also help predict patients' response to drug treatments. For example, thanks to the work of research teams including scientists at the VA Puget Sound Healthcare System, a genetic risk factor called APOE-e4 has been shown to affect the response of older people with Alzheimer's disease to insulin-based treatments.

For veteran patients who volunteer to participate, the VA Genomic Medicine Program will link individuals' genetic information to VA's electronic health record. This will eventually enable VA healthcare providers to consider patients' genetic profiles when prescribing treatments or recommending preventive measures. Throughout this process, protecting the privacy of veterans and safeguarding the confidentiality of their genetic information will be the foremost priority.

For more information on VA research: Web: www.research.va.gov Tel: (410) 962-1800, ext. 223 **Establishment of a Genomic Medicine Program Advisory Committee** – In March 2006, VA took the first step toward establishing its genomic medicine program by appointing a Genomic Medicine Program Advisory Committee, consisting of veterans' advocates and internationally recognized scientists. Their role is to help lay the groundwork for future development of a comprehensive genomic medicine program in VA. The committee's first priority will be to provide expert counsel about protecting veterans' privacy and establishing a strong ethical foundation for VA's use of genetic information. On this foundation, VA researchers will expand and stepup their efforts to unravel the mysteries of genetics, understand how genes affect our health, and apply this knowledge to the everyday healthcare of veterans.