



VA's

MILLION VETERAN PROGRAM: CURRENT STUDIES

VA researchers are using MVP data to learn about a range of health conditions affecting Veterans. Below are descriptions of studies underway as of summer 2017.

Gulf War illness risk factors

Researchers are studying how genes relate to Gulf War illness (GWI) in Gulf War-era Veterans. GWI is a chronic illness affecting many Veterans from that era. It can include fatigue, headaches, joint pain, indigestion, insomnia, dizziness, respiratory disorders, skin problems, and memory problems. The researchers are comparing men and women with GWI to those without the condition. They are also looking at how different genes and self-reported Gulf War environmental exposures relate to GWI rates. The findings could lead to better treatments to help these Veterans.

Posttraumatic stress disorder (PTSD) risk factors

Researchers are using MVP data to learn about the genes that may affect whether combat Veterans develop PTSD. The team hopes to gain new insight into the effects of PTSD on the brain so that new

and improved treatments can be explored. This will be one of the largest genomic studies on PTSD ever done.

Genetics of schizophrenia and bipolar illness

This research project is studying what genes make it more likely for people to have schizophrenia or bipolar disorder. It is also looking at the problems with thinking and day-to-day function that come with these conditions. Researchers are comparing participants with the two conditions to those who do not have the condition in the MVP database. The findings could help Veterans and others with serious mental illnesses.

Genetic vulnerability to substance abuse

Researchers are studying genetic risk factors for chronic alcohol, tobacco, and opioid use. Past studies have suggested genes play a role in these unhealthy habits. The

team hopes to use the findings to advance screening, diagnosis, and treatment of alcohol, tobacco, and opioid abuse.

Heart disease risk factors

This research study is exploring the role of genetics in obesity, diabetes, and abnormal lipid levels as drivers of heart disease. The knowledge gained through this research may lead to new therapies that are safe, effective, and personalized. Heart disease is the No. 1 cause of death among Veterans.

Genetics related to heart disease

Researchers are studying the genes that influence how obesity and lipid levels affect heart disease risk. Using MVP data, this study is looking at whether these genetic factors differ among African Americans and Hispanics. Most previous studies have looked mainly at Caucasians. The findings could help guide treatment and prevention efforts.

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How genes affect kidney disease

This study is focusing on how genes affect the risk and progression of kidney disease, a condition common in people with diabetes. It is examining differences in how people with diabetes respond to the drug metformin (the most common treatment for diabetes) and what role genes play in these differences. The project is also looking at people with high blood pressure, a major risk factor for kidney disease, to determine whether genes play a role. The work may help doctors personalize kidney disease treatment.

Genetic risk for macular degeneration

Past studies have shown that macular degeneration (an eye condition that causes vision



Photo: Mitch Mirkin

loss) is related to specific genes. However, these studies have included mostly Caucasian volunteers. Our researchers are now looking at whether similar genes are carried by African Americans. This study will help to develop better treatments to slow or stop vision loss.

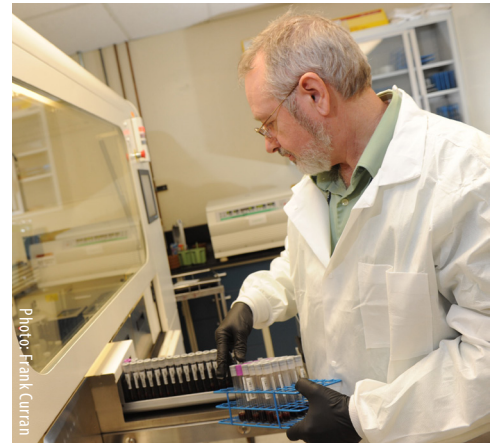


Photo: Frank Curran

Future studies will focus on additional areas of importance to Veterans and service members, including suicide prevention and cancer.



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