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Moffitt researchers help lead efforts to find new genetic links to prostate cancer

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Researchers at Moffitt Cancer Center, including Center Director Thomas A. Sellers, Ph.D., M.P.H., Jong Park, Ph.D. and Hui-Yi Lin, Ph.D., have discovered 23 new regions of the genome that influence the risk for developing prostate cancer, according to a study published Sept. 14 in *Nature Genetics*.

Prostate cancer is the most common non-skin cancer in American men. About 1 in 6 men will be diagnosed with the disease in his lifetime. Family history is the strongest risk factor. A man with one close relative, a brother or father with prostate cancer is twice as likely to develop the disease as a man with no family history of prostate cancer.

This study brings the number of genetic variants linked to prostate cancer to 100. Testing for those variants can identify men with a risk of the disease that is almost six times higher than average.

"This study gives us a more complete list of genetic factors that increase a man's prostate cancer risk. The goal is to now take this information and use it to develop a reliable test that can be used in addition to current screening methods," said Park.

The collaborative effort, which included scientists from The Institute of Cancer Research, University of Cambridge and the National Institutes of Health, conducted a large-scale analysis of nearly 90,000 men to identify novel inherited factors that contribute to prostate cancer. For the first time, the researchers looked at men from all over the world, including

those of European, African, Japanese and Latino ancestry.

Provided by H. Lee Moffitt Cancer Center & Research Institute