

Smoking 'influences gene function'

N a recent study, researchers found that exposure to cigarette smoke can alter gene expression - the process by which a gene's information is converted into the structures and functions of a cell. These alterations in response to smoking appear to have a wide-ranging negative influence on the immune system, and a strong involvement in processes related to cancer, cell death and metabolism. Scientists at the Southwest Foundation for Biomedical Research (SFBR) identified 323 unique genes whose expression

levels were significantly correlated with smoking behaviour in their study of 1,240 people. The changes were detected by studying the activity of genes within white blood cells of study participants."Our results indicate that not only individual genes but entire networks of gene interaction are influenced by cigarette smoking," said Charlesworth, the lead author. As many as 1,240 individuals, including 297 current smokers were studied. The findings of the study were published in BMC Medical Genomics. ANI