



University of Colorado **Anschutz Medical Campus**

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For immediate release

## **CU Anschutz Researchers find surprising differences between cannabis and cigarette smoke**

**AURORA, Colo.** (May 19, 2018) – Researchers at the [University of Colorado Anschutz Medical Campus](#) have found that certain gene expressions from marijuana-only smokers are significantly different from those in cigarette smokers.

The study, led by Sunita Sharma, M.D., M.P.H., looked at samples taken from cigarette smokers, marijuana smokers, and non-smokers in an attempt to determine what relationship marijuana has to respiratory disease. The findings showed differences in oxidative stress genes between marijuana smokers and cigarette smokers.

The gene expressions used in the study—obtained from bronchoalveolar lavage fluid—are used to identify potential precursors of respiratory disease.

“We found that there are biologic differences between marijuana smoke and tobacco smoke that may be influential in terms of disease development,” said Sharma.

One challenge for Dr. Sharma and her team was finding marijuana smokers who don’t smoke cigarettes. Ultimately, they found a sample population that abided by this stipulation.

The next step, according to Dr. Sharma, is to follow-up with a larger study to determine the impact of these genes on disease development over time.

Dr. Sharma will be presenting on her findings as part of session B93 “Where There is Smoke, There is Lung Disease,” on Wednesday, May 23<sup>rd</sup> at 3:00 PM in room 12 A-B (Mezzanine Level)-San Diego Convention Center.

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### **About the University of Colorado School of Medicine**

Faculty at the University of Colorado School of Medicine work to advance science and improve care. These faculty members include physicians, educators and scientists at UCHealth’s University of Colorado Hospital, Children’s Hospital Colorado, Denver Health, National Jewish Health, and the Denver Veterans Affairs Medical Center. The school is located on the [Anschutz](#)

[Medical Campus](#), one of four campuses in the University of Colorado system. To learn more about the medical school's care, education, research and community engagement, visit its [web site](#).

Tags: Marijuana, medical marijuana, cigarette smoke, COPD, respiratory disease, University of Colorado