

## Chemotherapy induces long-lasting epigenetic changes in blood cells

Many breast cancer survivors experience fatigue and other debilitating symptoms that persist months to years after their course of treatment has ended.

Now researchers at the Winship Cancer Institute of Emory University have found clues that may explain how these symptoms can linger. Chemotherapy, one of the major treatments for breast cancer, can leave a long-lasting epigenetic imprint in the DNA of breast cancer patients' blood cells. That imprint is associated with biological signs of inflammation up to six months after the completion of treatment. Inflammation in turn is believed to cause symptoms like fatigue.

The findings are published online in the journal *Brain, Behavior and Immunity*.

**Read the full, original story:** [Chemotherapy induces long-lasting epigenetic changes in survivors' blood cells](#)