

Video: The squishiness of cancer cells

June 3 2014

Did you know that cells have a texture? Not only that, but the specific qualities of this texture actually can tell us important information about human health, and even begin to answer long-held questions about diseases like cancer. UCLA's Amy Rowat studies cells, specifically exploring the potential revelations of their texture, with a focus on what the cell nucleus can teach us.

A misshapen nucleus can be a marker to help diagnose cancer, but there is still more to be understood about the role of the nucleus. Researchers know that [cancer cells](#) are softer than [healthy cells](#) and that when treated, they become stiffer. But it's not completely clear how or why the nucleus becomes enlarged and what that might mean for a deeper understanding of the prognosis and diagnosis of cancer. Rowat seeks answers to these questions and is hopeful there are ways to illuminate these mysteries.

While the minutiae of a nucleus may initially seem too tiny to focus on if we're seeking to understand something as complex as cancer, the 'squishiness' of a cell may open up a vast array of innovations and breakthroughs. The significance of basic research is just as consequential as applied research. It seeks to answer larger, fundamental questions and offers the possibility of finding answers with wide ranging effects. Sometimes starting with a broader set of questions can lead to a variety of discoveries whose full impact cannot be known at the outset. A collaboration with the UCLA medical school means Rowat's work could have a meaningful clinical impact on the study and treatment of [cancer](#) and other diseases.

Provided by University of California

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