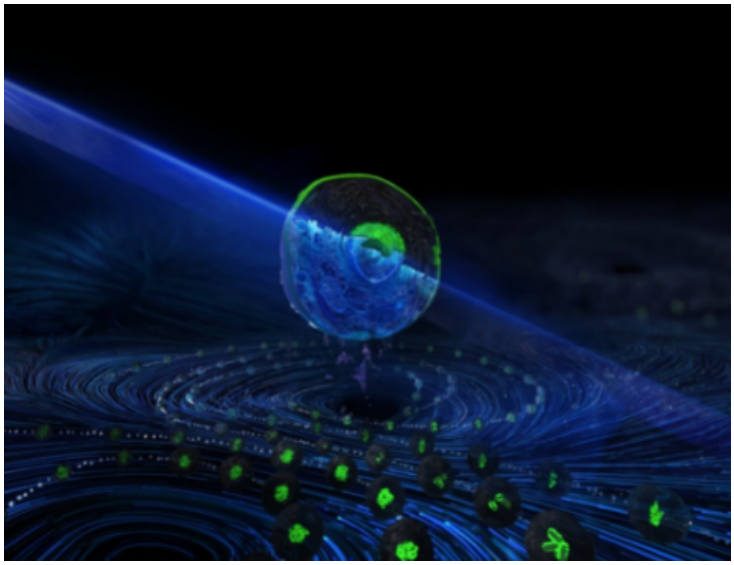
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BD develops new technology to transform immunology, cell biology

21 January 2022 | News

BD innovation profiled in 'Science' demonstrates landmark advancement in flow cytometry technology



A new technology by BD (Becton, Dickinson and Company) has the potential to transform immunology, cell biology and genomics research and enable new cell-based therapeutic discovery.

Cell sorting through flow cytometry is a technique that enables scientists to identify and sort individual cells based on specific characteristics of each cell in order to study them in more detail, evaluate how each cell may react to a new drug or perform other single cell experiments. Traditionally, cell sorters operate through identification and quantification of certain biomarkers (e.g. proteins) on or within a cell.

The new innovation from BD, known as BD CellView™ Image Technology, can capture multiple images of individual cells flowing through the system at a speed of 15,000 cells per second and also adds a previously impossible capability of sorting cells based on detailed microscopic image analysis of individual cells at this speed.

By adding imaging to the traditional biomarker identification and quantification, the new technology not only identifies if and how much of a biomarker is present in the cell, but also its location or how it is distributed within the cell. By imaging the distribution of biomarkers with this technology, researchers obtain detailed information about cells that was previously invisible in traditional flow cytometry experiments, which enables them to answer complex biological questions, such as how cells grow, function and interact, or to study exact locations of viruses or proteins within a cell, all at a highly accelerated pace.