



## MODULE TO INTEGRATE SINGLE CELL AUTOFLUORESCENCE LIFETIMES WITH SINGLE-CELL TRANSCRIPTION (SCRNA-SEQ)

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### The Invention

UW-Madison and Morgridge Institute for Research researchers have created the first high throughput instrument to integrate single cell autofluorescence lifetimes with single-cell transcription (scRNA-seq) data. The new module allows cell-to-cell correspondence between high-throughput autofluorescence lifetimes in a flow-based system and scRNA-seq. Specifically, a single cell deposition module interfaces with an autofluorescence flow sorter and deposits single cells into each well of a 384 well plate. The system uses a novel microfluidic channel design required tuning sheath flow rate (80  $\mu\text{L}/\text{min}$ ), cell flow velocities (2 mm/sec) and dilution factors (

### Additional Information

#### For More Information About the Inventors

- [Melissa Skala](#)

#### Tech Fields

- [Analytical Instrumentation, Methods & Materials : Microfluidics](#)
- [Analytical Instrumentation, Methods & Materials : Microscopy](#)

For current licensing status, please contact Andy DeTienne at [adetienne@warf.org](mailto:adetienne@warf.org) or 608-960-9857