



## Microfluidic Device And Method Of Assaying For Immune Cell Exhaustion Using Same

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### The Invention

A microfluidic device and method of assaying for immune cell exhaustion therewith are provided. The microfluidic device includes a moveable rod positioned across a chamber of a microfluidic device adjacent a first end thereof. Target cells are mixed into a hydrogel and the hydrogel is injected into the chamber about the moveable rod. The hydrogel is polymerized in the chamber and the moveable rod is removed from the hydrogel so as to form a passageway in the hydrogel. The passageway is filled with a solution including immune cells. The immune cells migrate/diffuse into the hydrogel. A gradient of nutrients is formed in the chamber from the first end to a second end of the chamber. One or more biopsies of the hydro gel may be taken at user selected location(s) of the chamber.

### Additional Information

#### For More Information About the Inventors

- [David Beebe](#)

#### Tech Fields

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

For current licensing status, please contact Jeanine Burmania at [jeanine@warf.org](mailto:jeanine@warf.org) or 608-960-9846