PAVIR.ORG 7/27/2024

# **Luminex 200- Bead Array System**

## **Brief description:**

Luminex is a multiplex bead-based immunoassay flexible platform based on flow cytometry: the array reader detects individual beads by flow cytometry. The fluidics system of the reader aligns the beads into single file as they enter a stream of sheath fluid and then enter a flow cell. Once the beads are in single file within the flow cell, each bead is individually interrogated for bead color (analyte) and assay signal strength (PE fluorescence intensity). This that enables multiplex analysis of up to 100 analytes in a single microplate well, minimizing sample volume usage (i.e. 20ul of serum can detect up to 100 analytes).

There are multiple companies selling different kits to measure multiple targets (from serum to cell lysate) and you have the ability to design a personalized assay via companies or by coupling your own analytes to the beads.

### Location:

Bldg. 101, room C4-191

### Main contact:

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#### Access:

Open for all VA appointed researchers and VA R&D approved projects, but the laboratory requires that users will provide their own reagents and kits.

## Cost to use:

None at this time.

### Other information:

We recommend purchasing of magnetic beads assay whenever possible, to minimize sample loss during washes.