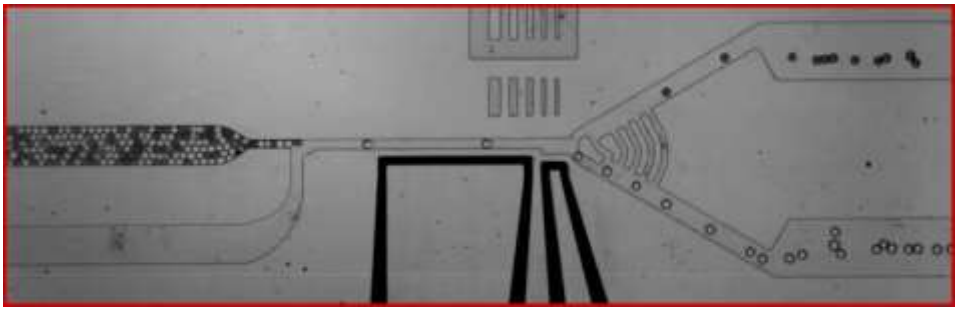
Mass General Brigham
Mass Eye and Ear

Schepens Eye Research Institute

The Technology Seminar Series Presents:

"Droplet microfluidics for ultra-high throughput screening and super-sensitive detection"

David A. Weitz, PhD
Professor of Physics and Applied Physics
Dept. of Physics and School of Engineering and Applied Sciences
Wyss Institute of Biologically Inspired Engineering
Harvard University



Thursday, February 17th, 2022
12:00 – 1:00 pm
Zoom Meeting/Meltzer Auditorium

https://masseyeandear.zoom.us/j/583662273?pwd=TWJTUEV6ZTFUTzUzaWx5dXFmR2puQT09

Meeting ID: 583 662 273
Passcode: 248969

HARVARD MEDICAL SCHOOL
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Summary of Dr. Weitz's talk:

This talk will describe the use of drop-based microfluidics for very sensitive detection of biomarkers or cells for diagnostics and pathogen detection. The use of large numbers of small drops improves sensitivity and specificity of the detection. This technology is of particular use in these times of the pandemic. In addition, this talk will show how the small drops can be used for very high throughput screening applications, which is also of great value in detecting cell variability, both for oncology applications and for studies of pathogens.

About Dr. Weitz:

Weitz received his PhD in physics from Harvard University and then joined Exxon Research and Engineering Company, where he worked for nearly 18 years. He then became a professor of physics at the University of Pennsylvania and moved to Harvard at the end of the last millennium as professor of physics and applied physics. He leads a group studying soft matter science with a focus on materials science, biophysics, microfluidics, biotechnology and flow in porous media. Several startup companies have come from his lab to commercialize research concepts.

Website:

http://weitzlab.seas.harvard.edu/