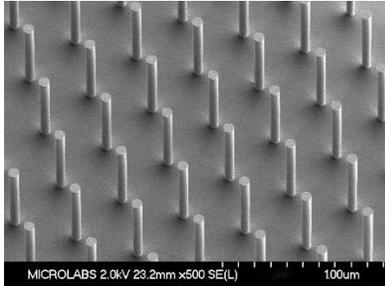


## PRESS RELEASE



### Sensera's MEMS Mimic Human Organs Through Bioengineering

**Woburn, MA, June 4, 2018** – [Sensera Inc.](http://www.sensera.com), a leading provider of MEMS devices, is adapting its technology for new applications in bioengineering. The company's MEMS, or MicroElectroMechanical Systems, technology is now being used at Harvard University in the creation of microfluidic devices, which mimic the functions of living human organs, including the lung, intestine, kidney, skin, bone marrow and blood-brain barrier.

"Sensera is a key partner providing critical microdevice component fabrication, which enables our growing applications in precision medicine and personalized health," said Dr. Richard Novak, Senior Staff Engineer at Harvard University's Wyss Institute for Biologically Inspired Engineering. "These microchips, called 'organs-on-chips', offer a potential alternative to traditional animal testing. Each organ-on-chip comprises a polymeric membrane that contains hollow channels lined by living human cells."

"These hollow, microfluidic channels carry fluids in a way that accurately mimics various functions of the human body, including the respiratory, circulatory and digestive systems. Mechanical forces can be applied to emulate the physical microenvironments of living organs, including breathing motions in the lung and peristalsis-like deformations in the intestine," Dr. Novak explained.

For Wyss Institute and other customers, Sensera provides molds to manufacture the polymeric membranes that are assembled in the organ-on-a-chip microfluidic devices. Ralph Schmitt, CEO of Sensera Inc., said, "Manufacturing these molds is a new challenge for us. We've had to adapt our traditional MEMS processes and implement a very stringent quality management system that meets the demands of biomedical applications. Through our collaboration with the Wyss Institute, we now have multiple customers engaged in this technology."

“Sensera has been able to deliver consistent quality while meeting challenging specifications,” Dr. Novak added.

The success of Sensera’s involvement in the microfluidic device market is supported by the fact that it is ISO 9001 certified and is working towards its ISO 13485 certification. “These types of MEMS-based products are exciting,” Schmitt said. “It’s a high-growth market space in precision medical technology. We are pleased to be able to offer such unique capabilities for customers impacting the health of people worldwide.”

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### **About Sensera**

Sensera Inc. (MicroDevices) is a designer and manufacturer of specialized high-performance sensors, and modules. Sensera’s core expertise in MicroElectroMechanical Systems (MEMS) based technologies is bringing custom devices from concept to market.

More information on [www.sensera.com](http://www.sensera.com)

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