

## **MicroTAS 2021 Workshop 2 Information**

**WORKSHOP TITLE:** Global Health Diagnostics in Resource-Limited Settings

### **PRESENTER AFFILIATION:**

- John Connelly, Director, Diagnostics, Global Health Labs
  - Link: <https://www.linkedin.com/in/john-connelly-22849122/>
- Rebecca Richards-Kortum, Malcom Gillis University Professor and Professor of Bioengineering, Rice University; Director, Rice 360° Institute of Global Health
  - Link: <https://kortum.rice.edu/people/rebecca-richards-kortum>
- Bhushan Tolley, Principal Investigator, Indian Institute of Science, Bangalore, INDIA
  - Link: <https://toleylab.weebly.com/>

### **WORKSHOP DESCRIPTION:**

Diagnostics are a critical component of healthcare used to support prevention, diagnosis, and treatment of diseases. Point-of-care (POC) diagnostics are particularly important as they can allow for testing in a wide range of settings, from remote health outposts to more centralized hospitals, and provide actionable results near patient. There are already rapid diagnostics tests available to address some of global health challenges, but they have limitations in terms of sensitivity, reliability, and integration of advanced functions. Microfluidics have the potential to revolutionize this by providing more sensitive, low-cost, rapid and connected diagnostics at the POC.

This workshop will give a general overview on key considerations for developing technologies for global health applications with a focus on microfluidic-enabled POC. Attendees will be introduced to design and fabrication of portable microfluidic systems, different strategies for fluid control, integration and long-term storage of reagents, and specific applications related to the global health.

### **WHO SHOULD ATTEND:**

The workshop is intended for a broad audience, ranging from PhD and postdoctoral researchers of the engineering and analytical fields, to application specialists, as well as industrial stakeholders.

### **PARTICIPANTS WILL NEED THE FOLLOWING:**

Likely nothing, unless they cannot use a phone during the panel discussion, in which case indicate that a laptop is needed.

**For those attending in-person, a laptop or iPad with headphones are required.**