

CARNEGIE MELLON UNIVERSITY

BME 2023 SPRING SEMINAR SERIES

Molecular Diagnostics for the Extreme Points-of-Care



PRESENTED BY

Jacqueline Linnes

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Weldon School of Biomedical
Engineering
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SCHEDULE

Hall of Arts (HOA) 160

**Thursday,
April 6, 2023
(11:00AM-12:00PM)**

Over 90% of current point-of-care diagnostic health tests still reside within hospital settings. How can we unlock these capabilities and make molecular diagnostics accessible to the patients around the world who need them most? I will discuss advances in technologies that will put point-of-care tests into the hands of primary care physicians and concerned citizens themselves in order to rapidly detect and monitor a wide range of diseases. These distributed sample-to-answer tests will require highly accurate, portable sensors with near foolproof operation and interpretation. Critically, test developers require an understanding of the stakeholders and end-users of their technologies and the barriers to adoption and use. I will discuss research from my lab both developing microfluidic tests and reducing the barriers to their implementation in order to enable rapid diagnosis and real-time wearable monitoring anywhere in the world.



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