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CENTER FOR HEALTH SECURITY

COVID-19

Testing Toolkit

## Johns Hopkins Center for Health Security COVID-19 Testing Toolkit Webinar Series

### Lessons from Ginkgo Bioworks and Concentric by Ginkgo

March 24, 2021

#### Panelists:

**Matt McKnight**  
General Manager  
Biosecurity  
Ginkgo Bioworks

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Vice President  
Business Development  
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#### Summary:

At the start of the COVID-19 pandemic, Ginkgo Bioworks worked to scale mass asymptomatic surveillance testing with a focus on getting children safely back into K-12 schools. This effort was designed with scale in mind, as well as ease of use, removal of responsibility from teachers and nurses, and economic feasibility. Concentric by Ginkgo gives K-8 and K-12 schools the ability to test every kid, every week via classroom/cohort testing services. The service provides data to decision makers, helps to focus diagnostic test use more efficiently, keeps more kids in classrooms, and allows schools to make better risk decisions, all with biosecurity in mind. Biosecurity is becoming national security, and preventing economic, educational, and healthcare infrastructure disruptions going forward is imperative.

#### Key lessons include:

- A dedicated Concentric by Ginkgo team works with schools directly, provides the tools to design the schools' own unique testing programs, and helps schools navigate issues and health guidance.
- Concentric does not collect any personal information from students. Participating labs receive a classroom number associated with the specimen tube number. Each school's administration determines who has access to the results.
- Concentric used its own lab to validate other local labs around the country, helping to reach more schools and cut down on processing time. These labs are digitally connected to form an information pipeline.
- The model could be expanded to include other diseases of interest in school systems, as well as used in ports of entry, airports, and border crossings.
- The cost includes the testing material, digital technology, shipping labels, material for classrooms, training material for teachers and nurses, and access to labs in the network.