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SLAS Technology February Issue Highlights the "Technology Top Ten" from 2021 and Thirteen Original Articles

Oak Brook, IL – The February issues of *SLAS Technology* is now available Open Access.

The February issue contains the article, "Biosensor detection of airborne respiratory viruses such as SARS-CoV-2" by Jeong-Yeol Yoon, M.S., Ph.D., *et al*, and explains why biosensors can be effective in detecting the presence of airborne pathogens and may be a dependable way to slow down or even prevent the spread of disease. Knowing how the virus enters the atmosphere, how it passes from one person to the next, and how harmful a virus is to its host organism are all important to the process, but identifying the virus is the critical first step. In comparing various collection and detection methods, this article highlights the recent advancements of biosensor technology in discovering the SARS-CoV-2. Considering that biosensors are a low-cost and portable option, the authors note improved methods of airborne particle sampling, collection, and detection are still on the horizon.

The issue also includes an article by Anna A. Popova, Ph.D., *et al*, entitled, "Simple assessment of viability in 2D and 3D cell microarrays using single step digital imaging." This article identifies live cells at-a-glance through a viability assay process of adding dye, incubating cells with the dye, imaging cells, and analyzing the images to count the number of colored cells. This process, completed with common laboratory equipment, uses a minimal amount of liquid and reduces both the overall time of detection and number of cells needed to image on the flat panels of the droplet microarray bringing the possibility of drug treatment assays into play at a lower cost. Popova was also an SLAS Innovation Award finalist at

SLAS2022 International Conference and Exhibition with her presentation on "The Droplet Microarray (DMA) as a versatile platform of the future for high throughput cell experiments in nanolitre droplets."

In addition to these two featured articles, the February issue of *SLAS Technology* includes:

- The 2022 SLAS technology ten: Translating life sciences innovation
- <u>Towards robotic laboratory automation Plug & Play: The "LAPP" framework</u>
- Automation of a multiplex agglutination-PCR (ADAP) type 1 diabetes (T1D) assay for the rapid analysis of islet autoantibodies
- Enabling high throughput drug discovery in 3D cell cultures through a novel bioprinting workflow
- Lab-made 3D printed stoppers as high-throughput cell migration screening tool
- <u>Quantitative determination of uric acid using paper-based biosensor modified with graphene</u> <u>oxide and 5-amino-1,3,4-thiadiazole-2-thiol</u>
- <u>COVID-19 detection using chest X-ray images based on a developed deep neural network</u>
- <u>DeepImageTranslator: A free, user-friendly graphical interface for image translation using deep-learning and its applications in 3D CT image analysis</u>
- Benchmarking feature selection methods for compressing image information in high-content screening
- Life Sciences Discovery and Technology Highlights
- Automation in arthrosis research
- <u>A collaborative robotic solution to partly automate SARS-CoV-2 serological tests in small</u> <u>facilities</u>

Access to the February SLAS Technology issue is available at

https://www.sciencedirect.com/journal/slas-technology/vol/27/issue/1.

SLAS (Society for Laboratory Automation and Screening) is an international professional society of academic, industry and government life sciences researchers and the developers and providers of laboratory automation technology. The SLAS mission is to bring together researchers in academia, industry, and government to advance life sciences discovery and technology via education, knowledge exchange and global community building.

SLAS Technology: Translating Life Sciences Innovation, 2021 Impact Factor 3.047. Editor-in-Chief Edward Kai-Hua Chow, Ph.D., National University of Singapore (Singapore).

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