For Immediate Release: February 10, 2023

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Assessing the Benefits of Digital Microfluidics for Bacterial Protocols

An analysis of DMF's benefits for bacterial protocols, current limitations and its future outlook is featured in Volume 28, Issue 1 of SLAS Technology.

Oak Brook, IL – The February 2023 issue of *SLAS Technology* contains a set of four original research articles and one review article covering digital microfluidics (DMF), cryopreservation, colorectal cancer research and other laboratory automation technology.

This month's featured article, "<u>Digital microfluidics as an emerging tool for bacterial protocols</u>," by Nemr, et al, provides a full assessment of DMF — an advanced liquid handling technology that utilizes electrostatic forces to manipulate microdroplets on a plate. The authors' assessment of DMF was based on 15 years' worth of compiled research and development on the technique.

DMF is used in synthetic biology (ligation, transformation and induction), diagnostics (nucleic acid detection and antibiotic susceptibility testing), and bacterial protocols for sample preparation. However, the authors identify additional applications that DMF may serve as the optimal technology for bacterial protocol advances due to its versatility.

Read this review article, along with the below research articles, in the February issue of *SLAS Technology*.

The <u>February issue</u> of *SLAS Technology* includes these additional articles:

- The 2023 SLAS technology Ten: Translating life sciences innovation
- Improving an rRNA depletion protocol with statistical design of experiments
- DOX-loaded hydroxyapatite nanoclusters for colorectal cancer (CRC) chemotherapy: Evaluation based on the cancer cells and organoids
- An Optical Approach for Cell Pellet Detection
- An automated modular open-technology device to measure and adjust concentration of aquatic sperm samples for cryopreservation
- Life sciences discovery and technology highlights

Access to the February issue of *SLAS Technology* is available at https://www.slas-technology.org/issue/S2472-6303(23)X0002-8

SLAS Technology reveals how scientists adapt technological advancements for life sciences exploration and experimentation in biomedical research and development. The journal emphasizes scientific and technical advances that enable and improve:

- Life sciences research and development
- Drug delivery
- Diagnostics
- Biomedical and molecular imaging
- Personalized and precision medicine

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 2.813. Editor-in-Chief Edward Kai-Hua Chow, Ph.D., National University of Singapore (Singapore).

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