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Contact Information:

Jill Hronek, Director of Marketing Communications

Telephone: +1.630.256.7527, ext. 103

E-mail: jhronek@slas.org

The Use of High-Throughput Screening and High-Content Screening in Anti-Obesity Drug Discovery is Investigated in the October Issue of *SLAS Discovery*

Oak Brook, IL – The October issue of *SLAS Discovery* is now available open access on ScienceDirect.

In 2016, the World Health Organization (WHO) reported that nearly 13% of the world's adult population suffered from obesity. It is well known that this complex disease is correlated with long-term health effects such as type-2 diabetes, hypertension and coronary heart disease that impacts an individual's quality of life. Researchers have spent nearly three decades trying to develop new therapies by utilizing high-throughput screening (HTS) and high-content screening (HCS) methods to assess the changes that occur in adipose tissues and adipocytes in relation to obesity. However, effective pharmaceutical treatments are still not readily available, which raises questions for why this is the case.

The perspective article featured in the October issue of *SLAS Discovery*, "Adipocyte-based high throughput screening for anti-obesity drug discovery: Current status and future perspectives" by Tsui, investigates the use of HTS/HCS techniques in anti-obesity drug discovery. The article shares two profound discoveries: not only did very few studies utilize HTS/HCS technology when performing drug screening using adipocyte models, but the studies that did utilize HTS/HCS techniques lacked the original data or adequate information regarding the experimental design. It is possible that these findings could explain why pharmaceutical treatments are limited.

Read this perspective article to explore the proposed reasons for why HTS- and HCS-based studies are underutilized in anti-obesity drug discovery, and more research articles.

The October issue of *SLAS Discovery* includes these additional articles:

- Screening for positive allosteric modulators of cholecystokinin type 1 receptor potentially useful for management of obesity
- Identification of chemicals breaking the USP8 interaction with its endocytic substrate CHMP1B
- Label-free LC-MS based assay to characterize small molecule compound binding to cells
- BRET measurement on CCD camera-based microtiter plate readers

Access to the October issue of *SLAS Discovery* is available at https://slas-discovery.org/issue/S2472-5552(22)X0009-9

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SLAS Discovery reports how scientists develop and use novel technologies and/or approaches to provide and characterize chemical and biological tools to understand and treat human disease. The journal focuses on drug discovery sciences with a strong record of scientific rigor and impact, reporting on research that:

- Enables and improves target validation
- Evaluates current drug discovery technologies
- Provides novel research tools
- Incorporates research approaches that enhance depth of knowledge and drug discovery success

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 Discovery: Advancing the Science of Drug Discovery, 2021 Impact Factor 3.341. Editor-in-Chief Robert M. Campbell, Ph.D., Twentyeight-Seven Therapeutics, Watertown, MA (USA)

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