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SLAS Discovery June Issue Highlights miRNAs, Automated Electrophysiology Platform Data and More

Oak Brook, IL – The June issue of *SLAS Discovery* is now available Open Access on ScienceDirect.

Since their discovery nearly 30 years ago, microRNAs (miRNAs) and their oncogenic derivations have provided researchers new insight into how tumorigenesis can be viewed. The Kaposi's sarcoma-associated herpes virus (KSHV)-derived miRNA, miR-K12-1, has an established association with the progression of HIV-related gastrointestinal KS. Although the exact mechanisms behind the association were previously unknown, the authors of "Kaposi's sarcoma-associated herpes virus-derived microRNA K12-1 over-activates the PI3K/Akt pathway to facilitate cancer progression in HIV-related gastrointestinal Kaposi's sarcoma" by Huang, et al. uncovered the actions of miR-K12-1, with the hope that knowledge of this pathway can potentially improve the future prognosis and treatment of HIV-related gastrointestinal KS. Access this article to learn the how miR-K12-1 promotes tumor growth.

This issue also contains an examination of a new first-of-its-kind method of automating the analysis of data produced through high-throughput screening using automated patch clamp electrophysiology. In the study "An efficient and scalable data analysis solution for automated electrophysiology platforms" by Li, et al. the newly designed software workflow called "Screener" can integrate with current automated patch clamp technologies to perform automated analysis of the data they produce, making it possible to utilize high-throughput screening in patch clamp electrophysiology. Patch clamp electrophysiology has traditionally been a time-consuming, labor-intensive laboratory technique that requires low throughput screening and manually analyzing raw data. With the use of the unique workflow, Li, et al. imply that their solution can substantially improve ion channel research and drug discovery by enhancing the analysis of large-scale automated patch clamp data.

The June issue of *SLAS Discovery* includes the following articles:

- [A multiparametric calcium signal screening platform using iPSC-derived cortical neural spheroids.](#)
- [Time-resolved FRET screening identifies small molecular modifiers of mutant Huntingtin conformational inflexibility in patient-derived cells](#)
- [Validation of a high throughput screening assay to identify small molecules that target the eukaryotic replicative helicase](#)
- [High throughput screening for compounds to the orphan nuclear receptor NR2F6](#)
- [Profiling oncogenic KRAS mutant drugs with a cell-based Lumit p-ERK immunoassay](#)
- [Kaposi's sarcoma-associated herpes virus-derived microRNA K12–1 over-activates the PI3K/Akt pathway to facilitate cancer progression in HIV-related gastrointestinal Kaposi's sarcoma](#)
- [Development of a high-throughput assay to identify inhibitors of the ubiquitin-conjugating enzyme UBCH10](#)
- [Grouping concentration response curves by features of their shape to aid rapid and consistent analysis of large data sets in high throughput screens](#)
- [An efficient and scalable data analysis solution for automated electrophysiology platforms](#)

Access to the June issue of *SLAS Discovery* is available at https://slas-discovery.org/issue/S2472-5552(22)X0006-3

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