For Immediate Release: December 21, 2020

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January Issue of SLAS Discovery Features “Cryo-EM: The Resolution Revolution and Drug Discovery”

Oak Brook, IL – The January edition of SLAS Discovery features the cover article, “Cryo-EM: The Resolution Revolution and Drug Discovery” by Taiana Maia de Oliveira, Ph.D., Lotte van Beek, Ph.D., Fiona Shilliday, Ph.D., Judit E. Debreczeni, Ph.D., and Chris Phillips, Ph.D., from AstraZeneca.

Cryo-EM, a fast-growing technique in the pharmaceutical industry, enables structure determination of sought-after targets such as large multiprotein complexes and membrane proteins that eluded other structural biology methods. The intricate interactions between compounds and proteins are crucial in accelerating the drug discovery process. The cover article reviews how the structural understanding gained through Cryo-EM is influencing drug discovery projects focused on TRP channels, GPCRs, ribosomes and other high value targets.

The January issues of SLAS Discovery includes 13 articles of Original Research in addition to the cover article.

Articles of Original Research include:

- In-Plate Cryopreservation of 2D and 3D Cell Models: Innovative Tools for Biomedical Research and Preclinical Drug Discovery
- MALDI-TOF-Based Affinity Selection Mass Spectrometry for Automated Screening of Protein–Ligand Interactions at High-Throughput
- High-Throughput Amenable MALDI-MS Detection of RNA and DNA with On-Surface Analyte Enrichment Using Fluorous Partitioning
- Activity-Based Screening Assay for Mono-ADP-Ribosylhydrolases
- Development of a Microscale Thermophoresis-Based Method for Screening and Characterizing Inhibitors of the Methyl-Lysine Reader Protein MRG15
- Development of High-Throughput Assays for Evaluation of Hematopoietic Progenitor Kinase 1 Inhibitors
- Development of a Homogeneous Time-Resolved Fluorescence Resonance Energy Transfer (TR-FRET) Assay for the Inhibition of Keap1–Nrf2 Protein–Protein Interaction
- Identification of Small-Molecule Inhibitors of Neutral Ceramidase (nCDase) via Target-Based High-Throughput Screening
- Optimization of a High-Throughput Cell-Based Screening Strategy to Identify Small Molecule Inhibitors of IL-23 Signaling
• A New Method for Screening Natural Products to Stimulate IFN-γ Production in Jurkat Human T Lymphocytes
• Validation of a High-Throughput Calcium Mobilization Assay for the Human Trace Amine-Associated Receptor 1
• Development of a Testing Funnel for Identification of Small-Molecule Modulators Targeting Secretin Receptors
• P-Glycoprotein-Mediated Efflux Using a Rapidly Maturing Caco2 Clone (CLEFF4) in Only 5 Days without Requiring Modified Growth Medium

Access to January’s SLAS Discovery issue is available at https://journals.sagepub.com/toc/jbxb/25/11. For more information about SLAS and its journals, visit www.slas.org/journals. Access a “behind the scenes” look at the latest issue with the SLAS Discovery Author Insights podcast. Tune in by visiting https://www.buzzsprout.com/1099559.

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