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SCIEX, EluciData team up for metabolomics data processing

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SCIEX and EluciData to offer an End-to-End data processing pipeline for all Metabolomics Workflows in a Single Cloud-based Environment

SCIEX, a global leader in life science analytical technologies, announces a co-marketing agreement with EluciData, a disruptive integrated Omics platform company providing tools for metabolomics data processing. This relationship will uniquely position SCIEX to address the major challenges faced by scientific researchers and allow them to efficiently process all of their metabolomics data from a diverse range of workflows. It will allow scientists to interpret these results in a biological context to further advance the fields of target identification and validation, as well as deeply characterize the underlying biology.

Under this agreement, EluciData and SCIEX will promote EluciData's integrated Omics platform, called Polly, in conjunction with SCIEX technologies, including TripleTOF, X500R QTOF, and QTRAP, as well as Differential Ion Mobility technology.

Polly is an end-to-end, vendor-neutral, integrated omics platform that standardizes and streamlines metabolomics data analysis workflows, as well as integrates various other forms of omics data, to better understand cellular phenotype. In addition to hosting and maintaining its proprietary workflows on a single cloud-based environment, EluciData allows its customers to post their own bespoke applications on Polly, freeing up scientists' time to focus their efforts on higher value activities. The result is an environment supporting customized omics processing pipelines, comprehensive bioinformatics analysis capabilities, real-time scientific collaboration, and project management.

Polly MetScape, a global metabolomics profiling data analysis workflow, is compatible with data acquired in SWATH Acquisition mode, a data-independent acquisition (DIA) workflow that is now increasingly employed in untargeted metabolomics workflows. SWATH Acquisition allows users to collect the MS and MS/MS of every detectable peak in their sample, thus creating a digital map of the metabolome.

The PollyPhi workflow enables hypothesis validation, allowing scientists to go from pathways to highlighting changes in enzyme function by analyzing the flow of labels through metabolites to validate hypotheses. Scientists can find the relative and kinetic flux from targeted and untargeted metabolomic data, acquired from MS and MS/MS methods, and using liquid and gaseous chromatographic methods.

"Manual mass spectroscopic flux analysis, and especially MS/MS analysis for our MIMOSA workflows, is incredibly time and thought demanding, as well as prone to user errors and limiting to our output," said Dr Richard Kibbey, Associate Professor of Medicine at Yale Medical School. "PollyPhi provides a soup-to-nuts analysis of our Differential Ion Mobility MS/MS data that greatly accelerates this process, freeing the bright minds and hands for more appropriate tasks. We use PollyPhi for analysis of data generated from our SCIEX QTRAP 5500 and TripleTOF 6600 instruments. It has transformed my lab."

"Improving the efficiency of metabolomics workflows is critical if academic researchers and pharma customers want to advance precision medicine," said Mark Cafazzo, Director of Strategic Market Management at SCIEX. "The use of Polly with SCIEX metabolomics workflows accelerates their capabilities and empowers them to spend more time on the biology than on crunching data through fragmented software tools. By partnering with EluciData and applying Polly to SCIEX next-generation metabolomics solutions, we help scientists address the challenges they face every day."

"We are very pleased to be working with SCIEX to provide scientists with effective solutions for metabolomics analysis," said Dr Abhishek Jha, CEO of EluciData. "The combined capabilities of our two companies will enable scientists to extract superior biological insights from raw metabolomics data generated from various workflows."

SCIEX helps to improve the world we live in by enabling scientists and laboratory analysts to find answers to the complex analytical challenges they face. The company's global leadership and world-class service and support in the capillary electrophoresis and liquid chromatography-mass spectrometry industry have made it a trusted partner to thousands of the scientists and lab analysts worldwide who are focused on basic research, drug discovery and development, food and environmental testing, forensics and clinical research.

With over 40 years of proven innovation, SCIEX excels by listening to and understanding the ever-evolving needs of its customers to develop reliable, sensitive and intuitive solutions that continue to redefine what is achievable in routine and complex analysis.

EluciData's mission is to transform the way data is used to drive decisions in R&D labs. It combines a proprietary platform with optional, on-demand high-value bioinformatics services for biological target identification and validation, pathway elucidation, cellular phenotype analysis, and biomarker identification.