



PerkinElmer Supports JUMP-CP Consortium Creating World's Largest, Public Cell Painting Dataset

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Leading academic, research and industry group led by Broad Institute to help speed drug discovery

WALTHAM, Mass. – June 7, 2021 [PerkinElmer, Inc.](#), a global leader committed to innovating for a healthier world, today announced that it is providing its [PhenoVue™ Cell Painting Kit](#) to the [Joint Undertaking in Morphological Profiling-Cell Painting \(JUMP-CP\) consortium](#). The consortium, spearheaded by the [Broad Institute](#) of MIT and Harvard and including leading pharmaceutical companies and non-profit research organizations, is focused on creating and sharing the world's largest, public cell imaging data set to help scientists determine the mechanism of action of new therapeutics before they are introduced into patients in clinical trials. When completed, the dataset will feature information from over one billion cells responding to more than 140,000 small molecule and genetic perturbations. A current lack of comprehensive and open access to this type of valuable data - including compound activity and toxicity reactions and disease matching insights - has been a major bottleneck in drug discovery, leading to longer development cycles.

Using the PerkinElmer PhenoVue kit, which features validated, preoptimized fluorescent-probes, consortium scientists will benefit from the convenience and simplicity of its ready-to-use format and compatibility with high-content screening applications. This will help save the researchers both time and resources.

Commenting on the importance of the JUMP-CP collaboration, Dr. Alan Fletcher, senior vice president of Life Sciences at PerkinElmer, Inc. said, "One of the key challenges for drug discovery today is anticipating how potential new drugs will act when they enter the human body. Cell Painting is an exciting new way to combine cell and computational biology to conduct more predictive drug discovery which can help accelerate time to market for novel therapies while reducing late stage failures at clinical trial. We are delighted to be playing a role in this groundbreaking research and dataset development."

Also speaking to the goals and value of the innovative effort, Dr. Anne Carpenter, senior director of the Imaging Platform at the Broad Institute, said, "Cell Painting is proving to be such a powerful data source for identifying phenotypic patterns in cells that have been impacted by compounds, gene alterations, or disease. I'm delighted that the members of JUMP-CP Consortium have come together to help create the world's largest public gene/compound Cell Painting dataset which will benefit drug researchers around the globe."

The PhenoVue kit is part of PerkinElmer's complete workflow solution for Cell Painting and relevant disease-related cellular models, including [CellCarrier™ Ultra microplates](#), [Horizon Discovery Edit-RTM CRISPR and Dharmacon™ RNAi Reagents and Libraries](#), the [customized explorer™ G3 Cell Painting workstation](#), the [Opera Phenix® Plus](#) and [Operetta CLS™](#) high content imaging systems, the [Harmony®](#) and [Columbus™](#) high-content analysis and storage software systems, and the PerkinElmer [Signals™ Screening](#) data and workflow management and visualization platform with [TIBCO Spotfire®](#) analysis.

For more information please visit:

<https://www.perkinelmer.com/category/phenovue-cell-painting-kits>;

<https://jump-cellpainting.broadinstitute.org/>

About PerkinElmer

PerkinElmer enables scientists, researchers, and clinicians to address their most critical challenges across science and healthcare. With a mission focused on innovating for a healthier world, we deliver unique solutions to serve the diagnostics, life sciences, food, and applied markets. We strategically partner with customers to enable earlier and more accurate insights supported by deep market knowledge and technical expertise. Our dedicated team of about 14,000 employees worldwide is passionate about helping customers work to create healthier families, improve the quality of life, and sustain the well-being and longevity of people globally. The Company reported revenue of approximately \$3.8 billion in 2020, serves customers in 190 countries, and is a component of the S&P 500 index. Additional information is available through 1-877-PKI-NYSE, or at www.perkinelmer.com.

About the JUMP-Cell Painting Consortium

Funded in part by the Bits to Bytes Capital Call of the Massachusetts Life Sciences Center (MLSC), the [JUMP-Cell Painting Consortium](#) is creating a new data-driven approach to drug discovery based on cellular imaging, image analysis, and high dimensional data analytics. We believe it will transform drug discovery by relieving a major bottleneck in the pharma pipeline: determining the mechanism of action of potential therapeutics prior to introduction into patients. We will create an unprecedented public data set to validate and scale up this image-based drug discovery strategy. This valuable public resource will then be available for other applications, including predicting compounds' activity and toxicity, matching drugs to disease states, and more.

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