



## Vium and 3Scan Collaborate To Transform Scientific Discovery With Breakthrough Disease Models To Improve Preclinical Research

*Two pioneering San Francisco Bay Area biotech companies join forces to help advance disease research at the intersection of in vivo research and holistic 3D tissue data science*

**San Mateo, CA, September 5, 2018** — Vium, Inc. [www.vium.com](http://www.vium.com), the leading innovator for *in vivo* research applying its Digital Vivarium™ technology to accelerate preclinical drug discovery and development, today announced it will collaborate with 3Scan, Inc. (3Scan) [www.3Scan.com](http://www.3Scan.com), the world's leading 3D tissue data provider, to quantify lung and liver disease to improve preclinical research. The companies provide drug discovery and disease researchers with improved insights into disease biology and progression for these challenging diseases with high unmet clinical needs.

Among the goals of the partnership will be to utilize Vium's technology to track digital biomarkers in an *in vivo* model of lung metastasis and utilize 3Scan's high-content tissue imaging and 3D reconstruction technology to characterize the tumors. A secondary goal will be to co-publish the results of the collaboration in peer-reviewed journals demonstrating the data that their respective technologies are able to provide novel insights compared with conventional approaches.

Vium's integrated hardware and software technology enables researchers and drug developers to automatically obtain digital biomarkers that enable insights into disease progression, compound efficacy and early safety signals. Vium's platform for *in vivo* studies provides non-invasive data collection, cloud computing, storage, and analysis.

"This exciting relationship will give us the ability to evaluate metastatic disease utilizing our state-of-the-art Digital Vivarium and 3Scan's 3D analytics technology that has revolutionized the way tissue is interrogated," said Dr. Laura Schaevitz, Ph.D, Chief Scientific Officer, Vium. "Using 3Scan's data driven approach will allow us to precisely quantify the extent of tumor growth and map histologic features of tumors. With this information, we can better understand the disease biology, which is at the foundation for building better *in vivo* mouse models. Improved disease models that better translate to humans gets us closer to helping people combat disease."

Tissue samples collected from Vium's platform will be digitized in 3Scan's one-stop shop for digital and computational pathology. 3Scan's Knife-Edge Scanning Microscopy (KESM) technology, a proprietary robotic imaging platform that produces digital 3D tissue reconstructions at micron-scale resolution, preserves spatial data for the whole sample enabling unparalleled quantitative image analysis of diseases. Together, these platforms can provide mutual validation as well as demonstrate unique insights gathered using these high-bandwidth scientific approaches.

Two particular disease models have been chosen to study; one involving metastatic lung cancer and the other, a diet-induced model of Non-Alcoholic Steatohepatitis (NASH). Lung and liver samples will be digitized by 3Scan, generating volumetric microscopy data and pathology reports. This data will be compared to the individual behavioral profiles of the mice collected in Vium's Digital Vivarium to determine a correlation between underlying pathology and behavior.



“As doctors and scientists hunt for new treatments that work on the toughest diseases it is going to take these kinds of best-in-class collaborative partnerships to find the mechanisms to prevent and cure disease,” said Steve England, Chief Scientific Officer, 3Scan. “This is what the future of medical discovery will look like. Working together we can generate quantitative image analysis of diseases for liver disease and lung cancer, opening the potential for new diagnostic and therapeutic solutions.”

Vium’s platform enables automated monitoring of disease progression in respiratory diseases like Idiopathic Pulmonary Fibrosis 3Scan’s data platform enables quantitative image analysis of diseases like cancer, Parkinson’s, Alzheimer’s, and Huntington’s disease.

#### **About Vium, Inc.**

Vium is the first company to create a fully digital end to end Digital Vivarium® platform which is transforming *in vivo* research. The Vium Digital Vivarium, Vium Cloud, and online Research Suite empower scientists to optimize advances in bioengineered research models in ways previously not possible. Vium is fully accredited by AAALAC International and received an unprecedented AAALAC commendation for upholding the ‘3 Rs’, the gold-standard framework for humane animal research. Customers run the spectrum of biotechnology, pharmaceutical and computational drug discovery companies, academia, and novel therapeutic labs. Vium is backed by leading investors, including Lux Capital, Data Collective, Dolby Family Ventures, AME Cloud Ventures, Founders Fund, and Future Shape LLC. Vium is headquartered in San Mateo, California. Visit Vium at [www.vium.com](http://www.vium.com).

#### **About 3Scan**

3Scan combines automation, machine learning and computer vision to extract spatial data from tissue samples to create a 3D understanding of biology. We were founded on the belief that if we could reinvent and automate the histology workflow, it would stimulate medical innovation and improve clinical outcomes. Our diverse group of talented engineers and scientists work to revolutionize the histology workflow through novel tools and systems that combine to deliver decision support. The results are detailed 3D representations of anatomical structures, as well as quantitative analysis in the emerging field of volumetric pathology. [www.3Scan.com](http://www.3Scan.com)

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