PRESS RELEASE

Blue Oak and PsychoGenics Announce a Drug Discovery Partnership

Companies will Work Together to Identify New Treatments for Brain Disorders

BOSTON MA AND PARAMUS N.J., December 4, 2017 – Blue Oak Pharmaceuticals, Inc. (Blue Oak) and PGI Drug Discovery LLC (PsychoGenics), today announced that they have entered into a partnership to discover and optimize novel treatments for brain disorders and psychiatric conditions.

Under the terms of the agreement, PsychoGenics is providing access to its powerful phenotypic discovery platforms, including its SmartCube® system and machine learning expertise, for unbiased discovery of novel therapeutics for brain disorders identified from the Blue Oak library of privileged chemotypes. The PsychoGenics technology platforms combine broad *in vivo* behavioral expertise with developments in robotics, computer vision, and bioinformatics to evaluate drug candidates for potential utility across the spectrum of CNS disease indications.

"We are excited to have the opportunity to once again work with Drs. Tom Large and Kerry Spear, founders of Blue Oak. We have worked productively together at Sunovion in the past and have every confidence we can again discover first-in-class drugs and ultimately deliver much needed treatments to patients with severely disabling psychiatric conditions" remarked Emer Leahy, Ph.D., PsychoGenics' President & Chief Executive Officer.

"We have a strong, 10-year relationship with Dr. Emer Leahy and PsychoGenics that has validated our systems neurobiology paradigm for discovering clinical molecules with mechanisms-of-action distinct from existing drugs. We are confident that combining PGI's deep behavioral profiling with Blue Oak's privileged chemotypes and brain imaging biomarkers will yield the new therapies that have eluded the industry for several decades" said Tom Large, Ph.D., Blue Oak's President and Chief Executive Officer.

By eliminating human bias and applying machine learning to high dimensional behavioral data, PsychoGenics together with its partners, have been instrumental in phenotypically identifying treatments with novel mechanisms-of-action. This includes an investigational psychotropic agent that is being studied in Phase II clinical trials as a treatment for patients with schizophrenia and for Parkinson's disease psychosis.

Blue Oak was founded on the concept that the next generation of drugs for brain disorders will be discovered by modulating brain circuitry, the most relevant "target" for many CNS diseases. Blue Oak's proprietary chemistry platform is designed to engage brain circuits through polypharmacology rather than individual molecular targets, which is a key feature of most approved drugs for brain disorders. Integration with brain imaging and translational medicine biomarkers allows for the rapid optimization of clinical leads and Phase 1 clinical proof-of-principle studies.

About PsychoGenics

PsychoGenics has pioneered the translation of rodent behavioral responses into robust, high throughput, and high content phenotyping. Its drug discovery platforms, SmartCube®, NeuroCube®, and PhenoCube® have been used in shared risk partnerships with major pharma companies such as Sunovion and Roche and has resulted in the discovery of several novel compounds now in clinical trials or advanced preclinical development. PsychoGenics' capabilities also include standard behavioral testing, electrophysiology, translational EEG, molecular biology, microdialysis and quantitative immunohistochemistry. In addition, the company offers a variety of in-licensed transgenic mouse models that support research in areas such as Huntington's disease, autism spectrum disorders, psychosis/schizophrenia, Alzheimer's disease, Parkinson's disease, Spinal Muscular Atrophy (SMA), muscular dystrophy and other disorders.

About Blue Oak

Blue Oak is discovering and developing first-in-class therapeutics for brain disorders using a systems neurobiology strategy that designs privileged chemotypes to target brain circuitry and behavior. First-in-class drugs with new mechanisms-of-action are in late discovery phase for large unmet medical needs in bipolar disorder, schizophrenia and treatment resistant depression. Additionally, these compounds have the potential to identify novel pathways and targets for subsequent best-in-class drug discovery programs.

For more information contact:

Dr. Emer Leahy
President & CEO
Ph: (914) 406-8000
Email: info@PsychoGenics.com
www.PsychoGenics.com

Dr. Thomas Large
CEO & Co-Founder
Ph: (978) 620-0625
Email: Thomas.large@blueoakpharma.com
www.blueoakpharma.com