Company Profile

Industry Sector: Instruments for Research and Drug discovery

Company Overview: AfaSci, Inc. has been a pioneer in the development of a wireless, non-invasive rodent behavior monitoring system in an animal’s homecage. This instrumented homecage behavioral monitor is marketed as the SmartHomeCage™ series for in vivo high throughput screening of new drugs and for behavioral phenotyping of transgenic or gene knockout mice. Technological innovation and a deep understanding of the biological research and drug discovery marketplace have allowed AfaSci to be awarded multiple grants from the Small Business Innovative Research grants and the Small Business Technology Transfer Program (SBIR/STTR) of the National Institute of Health (NIH). AfaSci has established research collaborations with SRI International (California), Pennsylvania State University (Pennsylvania), and George Washington University, (Washington, D.C.).

Target Market(s): Academic and industrial biological science research laboratories.

Key Value Drivers

Functions of SmartHomeCage™ series
- Rodent sleep/wake monitoring: Continuous monitoring from seconds to weeks
- Detection of locomotion (traveling distance and speed) and movement patterns
- Light/dark preference test to measure anxiety
- Stereotypic behaviors: grooming and rearing
- Abnormal behaviors (tremor and seizure) and death event
- Cognitive function assessment using visual discrimination
- Automated rodent sleep deprivation apparatus with online-sleep detection

Competitive Advantage:
- Non-invasive technology and wireless operating
- Automated data analysis programs are sophisticated yet user-friendly
- AfaSci provides individualized guidance and advice on test protocol and behavioral paradigms

Plan & Strategy: Seeks investors and a professional manager to lead commercialization

*Technology funded by the NCRR, NIMH and IHLB and being commercialized under the NIH-CAP

Management

Leadership:
Simon Xie, M.D., Ph.D, President and Chief Scientific Officer
Jingxi Zhang, M.D., Ph.D, Chief Technology Officer
Sue Li, Ph.D, Controller

Scientific Advisory Board:
Lawrence Toll, Ph.D.: Senior Director of Neuropharmacology, SRI International, CA
Taline Khroyan, Ph.D.: Principal Investigator in pharmacology and drug abuse research, SRI International, CA
Jidong Fang, M.D., Ph.D: Pennsylvania State University School of Medicine, PA
Lawrence Rothblat, Ph.D.: the George Washington University, Washington, D.C.