January 21, 2016

Icagen to Showcase Ion Channel and Transporter Drug Discovery and Development Expertise at SLAS 2016

Strategies for Overcoming Challenges to Advancing Sodium Channels and SLC Transporters as Drug Discovery Targets

DURHAM, N.C.-- Icagen, Inc. today announced that company scientists will showcase its proprietary technology platforms and expert strategies for sodium (Na_V) channel and transporter drug discovery at the 2016 Society for Laboratory Automation & Screening annual meeting, being held January 23-27, 2016 in San Diego, CA.

The company's sodium channel platform and services will be featured in an Icagen sponsored tutorial held on Tuesday, January 26th entitled, "**Overcoming Challenges of Developing Sodium Channels and SLC Transporters as Drug Discovery Targets."** Also discussed in the tutorial will be Icagen's XRpro®, a novel label-free technology for membrane ion and solute transport assays based on X-ray fluorescence, and its use in the analysis of SLC (solute carrier) transporters as therapeutic targets. SLC transporters, a family of more than 300 membrane-bound proteins that facilitate the transport of a wide array of substrates across biological membranes, have been of increasing interest to drug developers as they play important roles in physiological processes ranging from the cellular uptake of nutrients to the absorption of drugs and other substances.

Icagen scientists will also present a poster on the development and validation of the industry's first cell lines that stably express recombinant human $Na_V1.9$, a sodium channel subtype related to both loss and gain of pain sensitivity, in HEK-293 cells. Drug developers have long sought such a resource for the discovery of novel, selective drugs with the potential to improve the treatment of pain.

"Drugs that selectively target specific Na_V channels, which potentiate activity in nerve and muscle cells, are of considerable interest to pharmaceutical developers as treatments for pain and cardiac indications," said Doug Krafte, Ph.D., Icagen Chief Scientific Officer. "Icagen researchers and their collaborators at Pfizer have been at the forefront of Na_V research for many years, including identifying the first molecules that selectively bind to the recently described $Na_V1.7$ voltage-sensor site published by Genentech and Xenon Pharmaceuticals in *Science*. Similarly, our XRPro® technology directly quantifies ion flux in cell populations without dyes, fluorophores, or radiolabels and offers the ability to conduct transporter assays in complex buffers and media. Our aim now is to make our expertise, novel technology platforms and cell lines, reagents and assays available on an industry-wide basis to support innovation throughout pharmaceutical research and development."

Icagen Tutorial
Title: *Overcoming Challenges of Developing Sodium Channels and SLC Transporters as Drug Discovery Targets*
Date: Tuesday, January 26, 2016
Time: 2:00 PM – 2:45 PM
Room: 5A

Poster Presentation at SLAS
Title: *Overcoming Historical Challenges of Nav1.9 Voltage Gated Sodium Channel as a Drug Discovery Target for Treatment of Pain*
Poster Number: 5006
Date: Tuesday, January 26, 2016
Time: 1:00 PM – 3:00 PM
Poster Track: Drug Target Strategies

Exhibition Booth

Icagen will be exhibiting at SLAS at Booth 1048. Please stop by to learn more.

About Icagen's Sodium Channel Platform

Icagen has assembled the most extensive collection of cell lines stably expressing functional Na_V Channels, including human $Na_V1.1$ – $Na_V1.9$, species orthologs (human, cynomologous monkey, marmoset, pig, dog, rat, mouse), distinct disease-related or drug binding site Na_V channel mutants, complemented by a broad set of validated functional fluorescence, flux and electrophysiological assays. The company offers services based on these assays from high-throughput screening (HTS) and selectivity to detailed biophysical and pharmacological analysis. This unmatched portfolio of tools enables Icagen scientists to conduct high-throughput screening of >500K compound libraries, evaluate Na_V channel potency and subtype selectivity, and determine species ortholog activity. In addition, Icagen continues to help clients assess mechanism-of-action or site-of-action for candidate molecules and conduct detailed biophysical and pharmacological analyses.

About XRpro®

XRpro® technology leverages the unique capabilities of X-ray fluorescence for high throughput analysis of plasma membrane ion channels and transporters, including non-electrogenic symporters and antiporters. XRpro® is a label-free technology that directly quantifies ion flux in cell populations without dyes, fluorophores, and radiolabels and offers the ability to conduct assays in complex buffers and media, including 100% serum. All elements with an atomic number of 13 (aluminum) or greater are measured simultaneously, including biologically important monovalent ions (*e.g.* K^+), divalent ions (*e.g.* Ca^{2+}), transition metals (*e.g.* Zn^{2+}) halogens (*e.g.* Cl^-), and tracer ions (e.g., Rb^+, Sr^{2+}).

About Icagen Inc.

Icagen partners with pharmaceutical and biotechnology companies to offer industry-leading scientific expertise and comprehensive access to technologies for ion channel and transporter drug discovery and development. With over 20 years of leadership in the ion

channel field, the Icagen team offers an extensive track record of success in advancing molecules from drug discovery to clinical development across multiple therapeutic areas and ion channel classes. Icagen's growing tool box comprises a broad range of cell lines and technologies for ion channel and transporter research, capped by the label-free XRpro® platform. XRpro® technology, based on X-ray fluorescence, is a novel method that enables high throughput assessment of ion channels and transporters, including challenging systems with high therapeutic interest. For more information on our company, please visit our website at www.icagen.com.

This release includes forward-looking statements on the Company's current expectations and projections about future events. In some cases forward-looking statements can be identified by terminology such as "may," "should," "potential," "continue," "expects," "anticipates," "intends," "plans," "believes," "estimates," and similar expressions. These statements are based upon current beliefs, expectations and assumptions and are subject to a number of risks and uncertainties, many of which are difficult to predict and include statements regarding the Company's aim to make expertise novel technology platforms and cell lines, reagents and assays available on an industry-wide basis to support innovation throughout pharmaceutical research and development, *cell lines available industry wide, the growing tool box and the Company's continued creation of cell lines and assays and the Company's continued help in assessing mechanism-of-action or site-of-action for candidate molecules and conducting detailed biophysical and pharmacological analyses*. *The forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those set forth or implied by any forward-looking statements. Important factors that could cause actual results to differ materially from those reflected in the Company's forward-looking statements include, among others, our ability to successfully combine the acquired assets and the Icagen team with the prior XRpro team and technology and the other factors described in the Company's Report on Form 10-K for the year ended December 31, 2014 and any other filings with the SEC. The information in this release is provided only as of the date of this release, and the Company undertakes no obligation to update any forward-looking statements contained in this release on account of new information, future events, or otherwise, except as required by law.*

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