

For Immediate Release:

April 28, 2016

Contact Information:

Tom Manning, Director of Marketing
Telephone: +1.630.256.7527, ext. 103
E-mail: tmanning@slas.org

Erik Werner Named Recipient of First SLAS Graduate Education Fellowship Grant

UC Irvine Ph.D. candidate recognized for innovative droplet array concept

CHICAGO – SLAS, the Society for Laboratory Automation and Screening, has named Erik M. Werner, a graduate student and Ph.D. candidate from the University of California, Irvine, as the inaugural recipient of the SLAS Graduate Education Fellowship Grant.

Werner collaborated on the grant application with his faculty mentor, Dr. Elliot Hui. Working with additional support from Genentech, the \$100,000 SLAS Fellowship Grant, awarded over two years, will enable Werner to maximize funding and university resources to pursue the realization of his proposed breakthrough high-throughput screening research concept.

“Erik was selected based on a number of accomplishments at the undergraduate and graduate level,” said Susan Lunte, University of Kansas, and chair of the SLAS Grant Review Panel. “We had a number of excellent proposals and candidates, and Erik rose above.”

According to the application submitted by Werner and Hui, “This project will develop a droplet array containing millions of compartmentalized and indexed droplets with a micro scale valve system to enable addressable release of individual droplets on demand. The device will consist of an array of traps connected serially, each with a bypass channel. At the entrance to each trap, an imbalance of hydrodynamic forces will either cause a droplet to enter the trap if it is empty or to bypass the trap and continue downstream if it is full. When the flow is reversed and a valve behind the trap is actuated, droplets can be ejected. This design can be scaled to allow up to millions of droplets to be stored and individually ejected without the need for labeling. Using this device, reaction volumes in a typical screening assay can be shrunk more than 100 fold, greatly decreasing the cost of each library screen. Furthermore, with such high density, entire libraries can be screened on a single chip, greatly increasing throughput by eliminating the need for fluid handling robots to transfer samples. Finally, with addressable control of each reaction chamber, validation screening reactions can be performed rapidly and specifically by cherry-picking potential drug candidates.”

SLAS GLOBAL HEADQUARTERS

100 Illinois Street, Suite 242
St. Charles, IL 60174, USA
P: +1.630.256.7527
US Toll Free: +1.877.990.SLAS (7527)
slas@slas.org
www.SLAS.org

SLAS EUROPE OFFICE

Boulevard du Souverain, 280
B-1160 Brussels, Belgium
Tel: +32 2 7393026
europe@slas.org
www.Europe-SLAS.org

SLAS Grant Award Winner Selected

Page 2

Werner began the Ph.D. program in biomedical engineering at University of California, Irvine in the fall of 2014. He matched with his research mentor, Hui, in summer 2015. It is anticipated that he will take his oral qualifying exam to advance to candidacy by summer 2016. Defense of his dissertation and completion of his degree program is expected in summer 2019. "Erik is one of the most promising researchers that I have seen," says Hui. "He gets his hands dirty and gets things done. Beyond simply having ideas, he executes and builds. Furthermore, he is very strong in his ability to assess failed attempts and understand what needs to change."

The top five finalists for the grant are also eligible to be awarded a scholarship to attend [SLAS2017](#) under the SLAS Tony B. Academic Travel Award. Winners of this award are provided complimentary airfare, lodging and registration to attend the flagship annual SLAS international conference and exhibition. In addition to Werner, finalists for this grant include Mike Garcia, University of California, Santa Barbara; Kent Gordon, University of North Carolina, Chapel Hill; Marie Malone, The Scripps Research Institute; and Kevin Yamauchi, University of California Berkeley. [Learn more about the Tony B. Academic Travel Award program.](#)

Judging criteria for the Fellowship Grant took into consideration a number of factors, including: quality and capability of the institution and its educational program, the quality and record of the specific research program and the quality and promise of the research being proposed. A total of 24 applications from 12 different organizations, across four different countries, were completed in this inaugural program year.

Members of the SLAS Grant Review Panel include:

Susan Lunte, Chair, University of Kansas

Tyler Aldredge, Metamark Genetics

Josh Bittker, Broad Institute

Frank Fan, Promega

Krister Wennerberg, FIMM-EMBL

The application process for the 2017 grant award will open in fall 2016. To access the application or for more information about this grant program, visit the [Graduate Education Fellowship Grant Program section](#) of www.SLAS.org, contact SLAS Global Headquarters at +1.877.990.SLAS (5727) or e-mail slas@slas.org.

SLAS is an international community of more than 20,000 individual scientists, engineers, researchers, technologists and others from academic, government and commercial laboratories. The SLAS mission is to be the preeminent global organization providing forums for education and information exchange and to encourage the study of, and improve the practice of life sciences research and development discovery and technology. For more information, visit www.SLAS.org.