

Sigma® Life Science Presents a Technical Webinar

## THE FUTURE OF RNAI SCREENING: COMPLEMENTARY TECHNOLOGIES AND ADVANCEMENTS USING CRISPR AND LENTIORFS

DATF:

THURSDAY, JULY 16, 2015

TIME

10:00 AM - 11:00 AM

SPEAKER

RYAN RAVER, PH.D.
PRODUCT MANAGER
SHORT HAIRPIN RNA (SHRNA) /
LENTIORES



## **Abstract**

RNAi screening has made it possible to identify new genes, or gene networks, that are involved in a wide variety of biological processes, including assays relevant to signal transduction, cell viability, cell morphology, protein localization and function, drug resistance, and responses of host cells to pathogens. As such, RNAi continues to help us gain critical insights into the mechanisms underlying human disease and accelerate the development of treatments for cancer and a host of other disorders. The intersection between RNAi screening and complementary approaches such as CRISPR-Cas9-mediated genome editing has opened up new opportunities for assay development, screening and validation. The successful implementation of genome-editing technologies in several species suggests this will serve as an important and relevant tool for validation studies in numerous cell lines and model systems. Additionally, RNAi rescue experiments using LentiORFs serve an important role in further validating and boosting confidence of screened hits. As we continue to develop new strategies to improve genome-wide RNAi screening and validation, the significance of RNAi as a research tool will remain for many years to come.

## Speaker Biography:

## Ryan Raver

Ryan Raver is a Global Product Manager at Sigma-Aldrich in Functional Genomics where he manages the Mission RNAi (TRC 1-2), miRNA, and LentiORF (TRC3) Product Portfolios. He earned his PhD in Cellular and Molecular Pathology from University of Wisconsin-Madison in 2013, specializing in molecular virology and publishing a first author in the Journal of Virology. Ryan has also served as an Associate Product Manager in Proteomics at Promega Corporation during the course of his graduate studies. Ryan has been in his current role at Sigma for the past year and a half and is excited to be involved in the forefront of cutting-edge genome-editing technology.

For more information and to register for the event, visit sigma.com/webinar-LentiORFs

or email: technicalworkshops@sial.com

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