

# Microscale thermophoresis to characterize hits from high-throughput screening

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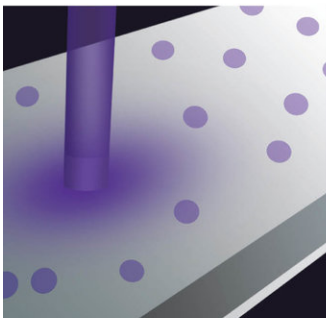
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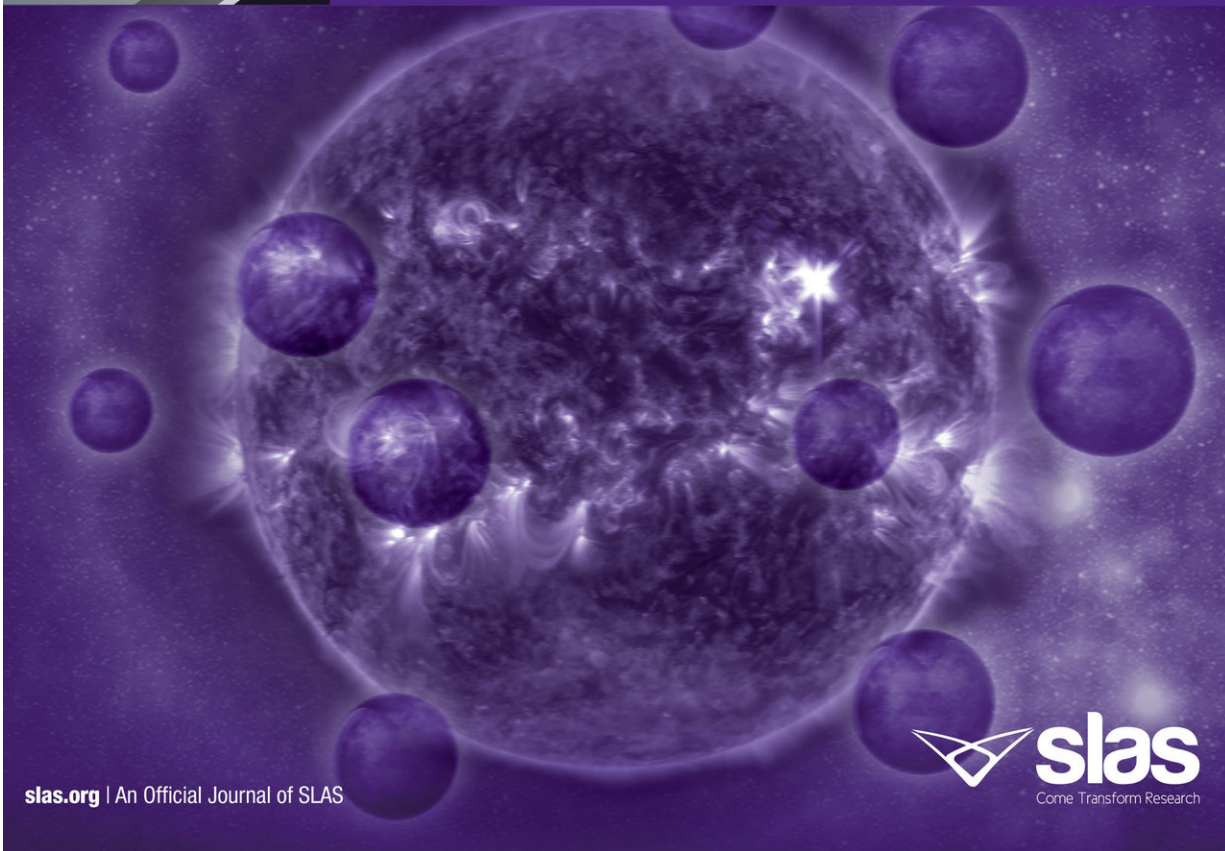
Advancing Life Sciences R&D



## In This Issue

Using Microscale Thermophoresis to Characterize Hits from High-Throughput Screening: A European Lead Factory Perspective

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Microscale thermophoresis to characterize hits from high-throughput screening:

a european lead factory perspective. Credit: European Lead Factory

A new perspective article in the March 2018 issue of *SLAS Discovery* from the biology group at the European Screening Centre Newhouse details how the European Lead Factory (ELF), a large publicly accessible drug discovery platform, uses microscale thermophoresis (MST) to aid in the prioritization of small molecule hits from high-throughput screening.

MST measures the rate and direction of movement of biomolecules through a temperature gradient, which can change when small molecules bind to them. The authors describe the MST technology, their assay development and [screening](#) workflows, lessons learned and compare the success of MST with other common biophysical assay techniques.

Developing the use of such relatively new technologies is critically important to improving the efficiency of [drug discovery](#). According to the authors, most [drug discovery](#) professionals have war stories of trying to develop hit compounds only to have experienced crashing disappointment, often at great expense, as it became apparent the compounds were affecting the target protein through some spurious, unproductive and ultimately undevelopable mechanism.

The ELF provides a unique perspective in evaluating the usefulness of MST in avoiding this unpleasant dead-end due to the scale of their activities and the large number and variety of targets that have been worked on.

**More information:** Julie M. Rainard et al, Using Microscale Thermophoresis to Characterize Hits from High-Throughput Screening: A European Lead Factory Perspective, *SLAS DISCOVERY: Advancing*

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