

**Workshop on Microscale Thermophoresis**

Department of Clinical Science, University of Bergen

March 15, 2016

When: Tuesday, March 15, 2016

Where: 5th floor, Seminar room 5th floor, Laboratory building, Haukeland Hospital

***Dr. Teresia Hallström & Dr. Moran Jerabek-Willemsen***

***NanoTemper Technologies GmbH, Munich***

**The Technology:** The term Microscale Thermophoresis refers to the directed movement of molecules in optically generated microscopic temperature gradients. This thermophoretic movement is determined by the entropy of the hydration shell around the molecules. Almost all interactions between molecules and virtually any biochemical process related to a change in size, stability and conformation of molecules alters this hydration shell and can be quantified. Such changes allow quantification of binding affinities of proteins, nucleic acids and small molecules as well in standard buffers as well in bioliquids (serum, cell lysate).

**Agenda:**

09.00 – 10.00 Collection of samples and protein labeling using NanoTemper dyes

10.00 – 11.00 Starting measurements

11.00 – 12.00 **Seminar: Fluorescence based Microscale Thermophoresis**

12.00 – 13.00 Lunch break

13.00 – 17.00 Binding experiments using customer samples in Microscale Thermophoresis

**Please Note:** To demonstrate the performance of Microscale Thermophoresis, we would like to invite you to analyze your samples on the Monolith NT.115 instrument. We also offer the possibility to label any protein within 30 minutes during our workshop day. For more information please contact [teresia.hallstroem@nanotemper.de](mailto:teresia.hallstroem@nanotemper.de)