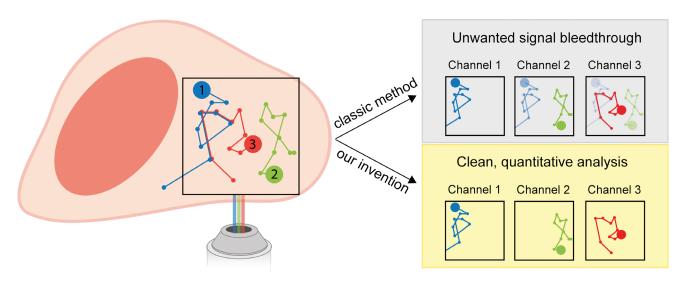
Imaging molecular motion



LICENSING OPPORTUNITY:

Artifact-free multicolor imaging of molecular motion and interactions

BACKGROUND INFORMATION

Proteins control the majority of cellular processes. As a result, many human diseases are caused by atypically low or high protein interaction levels.

Essential to understand protein function and its role in health are techniques to quantify protein interactions levels with high sensitivity and in the native environment of living cells.

Hasselt University has developed a new quantitative, sensitive and biocompatible method to measure interaction levels in a solution of molecules or in living cells.

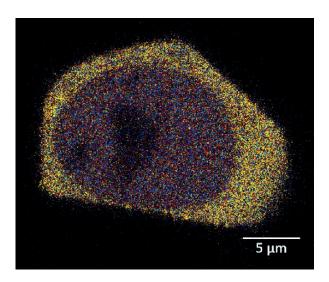


KNOWLEDGE IN ACTION



COMPELLING RESULTS

Research showed that concentration, mobility and interactions between two, three or even more possible interaction partners can be determined simultaneously in a straightforward manner on a commercial fluorescence microscope (see figure of a cell from which interaction levels where measured between three proteins).



KEY FEATURES AND ADVANTAGES

- Straightforward and highly sensitive method to verify and quantify interactions between interaction partners that bind stably or transiently.
- Applicable to two, three, or even more interaction partners simultaneously allowing analysis of both simple or more complex (bio-) molecular systems.
- Compatible with non-biological samples, as well as living cells or tissues.
- The simultaneously generated results of concentration and mobility give further information about protein function and reveal possible concentration dependent mechanisms.

MARKET POTENTIAL

The quantitative estimation of protein-protein interactions is applicable in several research areas including research of biological processes, human diseases and drug discovery.

Confocal microscopy is employed by countless researchers worldwide including academic research institutes, contract research organizations, and if extended to parallel analysis also pharmaceutical & biotechnology companies.

OUTSTANDING OPPORTUNITY

Patent application is available for licensing.

Hasselt University is searching for interested parties for commercialization.

BUSINESS DEVELOPER

An Voets, PhD UHasselt - Biomedical Research Institute

T +32 (0) 497 06 75 34

an.voets@uhasselt.be