Development of automatic image analysis methods for high-throughput and high-content screening

Di, Z.

Curriculum vitae

Zi Di was born on May the 24th 1984 in Chongqing, P. R. China. In 2002, she graduated from Yongrong Secondary School of Chongqing, China. From 2002 and 2006, she studied at the Beijing Language and Culture University, China. In the summer of 2006, she received her BSc degree in Computer Science. Directly after her bachelor study, she started her Master education in Leiden University, The Netherlands. During her Master education, she specialized in Bioinformatics which is a track of the Computer Science study and is organized by Leiden University and Delft University. In 2009, she finished her Master project "Evaluation of systems for analysis of high-throughput screening of static focal adhesions" under the supervision of Dr. Fons Verbeek in the Section Imaging & Bioinformatics of the Leiden Institute of Advanced Computer Science (LIACS). Later in the same year, she received her MSc degree in Bioinformatics.

In 2009, Zi Di started her PhD research through a joint project between the Division of Toxicology of the Leiden Academic Centre for Drug Research (LACDR) and the Section Imaging & BioInformatics of LIACS in the Netherlands. Under the supervision of Dr. John Meerman, Dr. Fons Verbeek, and Prof. Dr. Bob van de Water, her research focused on developing novel image analysis algorithms and performing advanced data analysis methods, especially for high-throughput and high-content screening. She was also involved in a data-integration project in collaboration with other bioinformaticians to provide bioinformatics support to PhD students in the context of Netherlands Toxicogenomics Centre (NTC).

List of publications

Automated Analysis of NF-kB Nuclear Translocation Kinetics in High-Throughput Screening
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Automated analysis pipeline for 3D surface reconstruction and phenotype profiling of 3D cultured micro-tissues suitable for high-content and high-throughput screening
Di Z., Klop M.J.D., van de Water B., Price L.S., Meerman J.H., Verbeek F.J., Manuscript in preparation, 2013