

Novel skin lipidomics for the cosmetics industry and for dermatological applications

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Lipotype GmbH, a German Max-Planck spin-off company, launched its novel Lipotype Shotgun Skin Lipidomics Technology and offers lipid analysis services for applications such as cosmetic claim support, topical drug development, efficacy testing for dermatological pharmacology and the cosmetic industry.

High-throughput skin lipidomics with ultra-broad fully quantitative coverage

Until recently, investigating skin lipidomes was not a trivial task. On one hand, the analytical method needs to have coverage broad enough to encompass the variety of skin lipids, and a throughput allowing for statistically relevant studies. On the other hand the method should be compatible with a convenient sampling technique such as tape stripping. These prerequisites are now met in the Lipotype Shotgun Skin Lipidomics Technology platform as explained by Prof. Kai Simons, CEO of Lipotype: "We offer unprecedented throughput of hundreds of samples, absolutely quantified with broad coverage of ceramides, triglycerides and other lipids, and this is all available for samples collected by super-easy tape stripping." The development of the Lipotype Shotgun Skin Lipidomics Technology was supported by the German Central Innovation Programme for SMEs.

Applications of skin lipidomics

With tools such as Lipotype Skin Lipidomics it is now easy to investigate how the healthy skin lipidome is composed, how it changes in diseases or upon intervention with a drug or a cosmetic product. This lipidomic data can be used for cosmetic claim support, topical drug development and efficacy testing. "We are excited about new possibilities to include skin lipidomics in the product development process of cosmetics companies as well as for biomarker identification for dermatology", says Dr. Oliver Uecke, Head of Business Development and Finance at Lipotype GmbH.

Importance of skin lipids

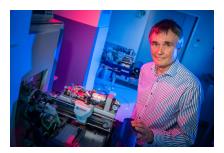
Skin is the largest human organ, keeping in what is inside and keeping out what is outside. Its condition not only affects our health but also our well being and how we feel and look, making skin the primary target for cosmetics. Skin functionality and physiology, as the major body barrier, is a derivative of the structure and the composition of its topmost layer, the *stratum corneum*, where brick-like cornecytes are sealed together in dense meshwork with the natural mortar – lipids. These lipids, including mainly a dozen of different ceramide classes, cholesterol and its esters as well as triglycerides, render skin tight, impermeable and elastic. Skin lipid composition is influenced by natural conditions, such as age and gender, but alterations of lipid profiles have been also linked to various diseases, like atopic dermatitis, ichtyosis or Netherton syndrome.

Meet us at cosmetics360 in Paris (13-14.10.2016): Schedule an individual appointment - sales@lipotype.com

Read more about the "HIGHLIGHTS" of our novel Lipotype Shotgun Skin Lipidomics Technology: www.bit.ly/2cSidMx

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Pictures:



Prof. Kai Simons, CEO of Lipotype

» Download: http://www.bit.ly/2cOPKXV



Automated sample preparation for Lipotype Shotgun Skin Lipidomics Technology

» Download: http://www.bit.ly/2d27P83

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About Lipotype

Lipotype is a spin-off company from the Kai Simons and Andrej Shevchenko labs of the world-renowned Max-Planck-Institute of Molecular Cell Biology and Genetics in Dresden, Germany. Drawing on many years of cutting edge research, Lipotype delivers comprehensive, absolutely quantitative lipid analysis services for clinical and biological samples on a high-throughput scale. Lipotype offers high quality lipid analysis services for a wide range of customers and applications including biomarker identification for clinical researchers, pharma and biotech companies, functional food development for the food industry, claim support for the cosmetics industry, as well as for the small-scale profiling needs of academic researchers.