



Gattefossé and Ambiotis have explored the role of pro-resolving lipids in skin aging

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As skin aging is increasingly seen as a sign of deep biological imbalance, Gattefossé and Ambiotis are joining forces to explore the role of pro-resolving lipids in skin health. Their scientific collaboration paves the way for innovative cosmetic solutions focused on a more integrative approach to aging.

Towards a deeper understanding of skin aging

Long considered a natural result of time and external aggressions, skin aging is now understood to stem from a deeper, silent imbalance; one that weakens the skin and undermines its natural ability to defend and regenerate itself. This imbalance leads to visible signs such as wrinkles, loss of firmness, and tissue sagging.

While the clinical signs of aged skin are now well documented, the molecular and cellular dysregulations involved mean that skin aging remains a largely misunderstood process.

To maintain healthy, vital skin and promote healthy aging, cosmetic solutions primarily target the synthesis of dermal extracellular matrix proteins, such as collagen and elastin.

Embracing new, more integrative approaches – capable of better reflecting the skin's biological complexity – will open the door to the next-generation of anti-aging solutions.

Deregulated bioactive lipids at the heart of skin aging

It is within this context that Gattefossé and Ambiotis have combined their scientific expertise to study the role of pro-resolving lipids found in the secretome, in interaction with macrophages – true sentinels of the immune system – and fibroblasts, the key architectural cells of the dermal extracellular matrix.

Gattefossé and Ambiotis have thus characterized and modeled the alterations of pro-resolving lipids observed in aged skin, revealing that these changes disrupt the interactions between macrophages and dermal fibroblasts. As a result, dermal fibroblasts become abnormally activated, adopting a pro-inflammatory and pro-degradative phenotype marked by increased secretion of matrix metalloproteinases.

An integrative approach to the cosmetics of tomorrow

This joint research conducted by Gattefossé and Ambiotis aims to design and develop innovative cosmetic solutions to combat skin aging.

"Maintaining homeostasis is a fundamental element of human physiology. Fortunately, our bodies, tissues and skin are well equipped to do it, thanks in particular to the so-called specialized proresolving mediators. These lipids play a key role in enabling the body to move from a state of imbalance to a restored state of equilibrium. Encouraging the increased synthesis of these lipids is tantamount to reinforcing the skin's own beneficial mechanisms, helping to prevent ageing and preserve the skin's vitality".



Marc Dubourdeau, CEO of AMBIOTIS.



"It is becoming essential to rethink cosmetic intervention through the lens of more integrative anti-aging approach. The tissue integrity of the skin can no longer be viewed solely in terms of the balance between synthesis and degradation of extracellular matrix components. Targeting pro-resolving bioactive lipids is now a key strategy to preserve skin health and effectively combat aging within a holistic healthy aging framework".

Nicolas Bechetoille, Head of Skin Biology Research at GATTEFOSSÉ.

To find out more about Ambiotis, visit their [website](#).

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About Gattefossé

The Gattefossé Group is a community of employees, animated by the same drivers: the performance of its products and the personalized support of its customers.

Gattefossé develops, manufactures and sells pharmaceutical excipients and cosmetic ingredients of natural origin for the beauty and health industries worldwide, through its 12 affiliated companies and network of global agents and distributors in 90 countries.

Specialist in lipid chemistry and plant chemistry, Gattefossé offers recognized expertise in formulation using its 4 Technical Centers of Excellence in France, China, India and the United States.

Environmental and social issues have always been part of the culture of this French family business, founded in Lyon in 1880. Today, Gattefossé relies on a purposeful CSR approach, Gatt'Up&Act to build its innovation and development strategy.



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