



News Release

Ashland brings a cosmetic solution inspired by the science behind clock genes

Chronogen™ YST solves the effects that social jetlag can have on skin

Sophia Antipolis, France, April 5, 2018. Ashland pioneered one of the first biofunctional ingredients in the cosmetics industry to be inspired by clock genes. Today, Ashland is re-introducing the novel solution Chronogen™ YST to provide a cosmetic solution to the deleterious effect of social jetlag on the skin.

Chronogen™ YST helps maintain the proper synchronization of key day and night skin regulators, the clock genes. It is a modern age-defying approach to help strengthen the skin's capabilities for protection and self-renewal.

"Social jetlag is a new field of studies connected to health problems in modern societies and it is a mismatch between the body's biological clock and sleep patterns, which can often be linked to late-night social activities such as television, online activities and personal hobbies," said Neil Astles, global marketing and new business development manager, biofunctionals, Ashland.

In 2017, the Nobel Prize in Physiology /Medicine was awarded for the elucidation of the molecular mechanisms controlling circadian rhythm. Each biological cell has its own clock. Clock genes are key regulators that play a significant role in 43 percent of genes' expression. Understanding these key cellular mechanisms inspired the development of Chronogen™ YST, a breakthrough in age-defying strategy in cosmetic science.

Ashland has a long history in researching clock genes, and filed patents for Chronogen™ in 2009. Key cosmetic applications for Chronogen™ YST include age defying formulations inspired by social jetlag or epigenetic science, formulations to help maintain the skin's synchronized internal clocks, day time formulations to help skin boost its natural defenses against UV-induced damage while maintaining its integrity and nighttime formulations to help the skin boost its nighttime processes.

REBRAND® 2018 Winner of Distinction

In February, Ashland was recognized as a 2018 Winner of Distinction by REBRAND®, the pioneer awards program for branding and the leading global resource for case studies on effective brand transformations, repositioning, revitalizing and redesign of existing brand assets to meet business goals. The REBRAND® 100 awards are not a "beauty

pageant," but rather they are based on bona fide business challenges and the brand strategy applied to accomplish the business objectives. Ashland was recognized this year among other prestigious winners such as COTY, Cadillac, Hewlett Packard, Siemens and more. <https://rebrand.com/> and <http://www.ashland.com/pages/rebrand-100>

About Ashland

Ashland Global Holdings Inc. (NYSE: ASH) is a premier global specialty chemicals company serving customers in a wide range of consumer and industrial markets, including adhesives, architectural coatings, automotive, construction, energy, food and beverage, personal care and pharmaceutical. At Ashland, we are approximately 6,500 passionate, tenacious solvers – from renowned scientists and research chemists to talented engineers and plant operators – who thrive on developing practical, innovative and elegant solutions to complex problems for customers in more than 100 countries. Visit ashland.com to learn more.

FOR FURTHER INFORMATION:

Nina Servino
302-594-6237
janina.servino@ashland.com