SCC 79TH ANNUAL SCIENTIFIC MEETING & SHOWCASE

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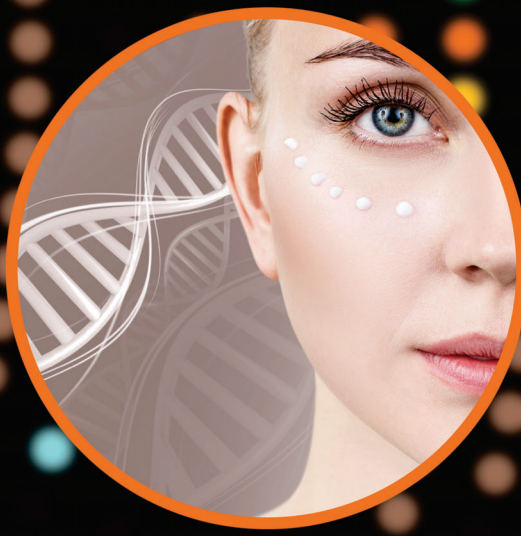
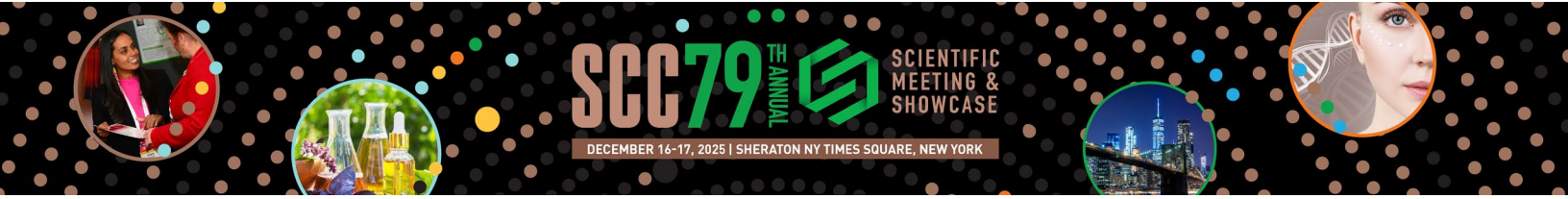
Speaker Abstracts

Session D: Inclusive Beauty





Ubiquitination - A novel target for a universal anti-aging strategy highlighted by ubiquitomics approach

Michelle Yip; Hallstar Beauty

M. Yip[1], L'Hermitte[1], L. Cardinaud[1], P. Cancellieri[1], Hallstar Beauty, Mauguio-France

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To address consumers' quest for inclusive, high-performance skincare, we identified a universal biological pathway capable of targeting all visible signs of aging—regardless of skin tone, type, age, or gender. Our research centered on ubiquitin, a small protein found in all eukaryotic cells, and its role in ubiquitination: a post-translational protein modification essential for cellular homeostasis and protein turnover [1][2][3].

We identified a unique molecule, derived from Birch Bark Extract (BBE) that activates UBE1 (Ubiquitin-activating enzyme E1), which initiates the ubiquitination cascade. Using advanced ubiquitomics techniques—including UbiQuant™ assay and TUBE-based mass spectrometry—we demonstrated BBE's ability to stimulate key ubiquitin linkages (K6, K11, and K48) linked to proteasomal degradation and autophagy in keratinocytes and 3D skin models [1][2][4].

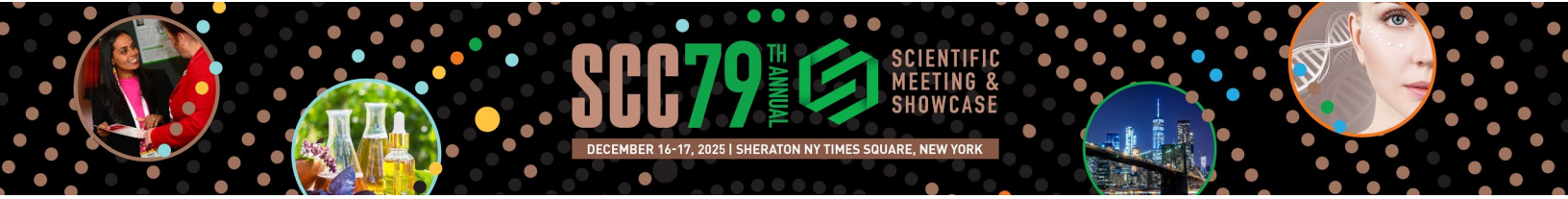
Clinically, BBE delivered multiple anti-aging benefits across a multi-ethnic panel. As the first cosmetic ingredient proven to activate skin ubiquitination, BBE represents a true breakthrough—an inclusive, science-backed hero for global skin longevity.

[1] G. Vere et al. Ubiquitomics: an overview and future. Biomolecules. 2020; 10(10): 1453

[2] Y.T. Kwon and A. Ciechanover. The ubiquitin code in the ubiquitin-proteasome system and autophagy. Trends Biochem Sci. 2017; 42(11): 873-886

[3] Y. Liao et al. Non-proteolytic ubiquitylation in cellular signaling and human disease. Commun Biol. 2022; 5(1): 114

[4] M. Raffeiner *et al*. Interplay between autophagy and proteasome during protein turnover. *Trends Plant Sci.* 2023; 28(**6**): 698-714

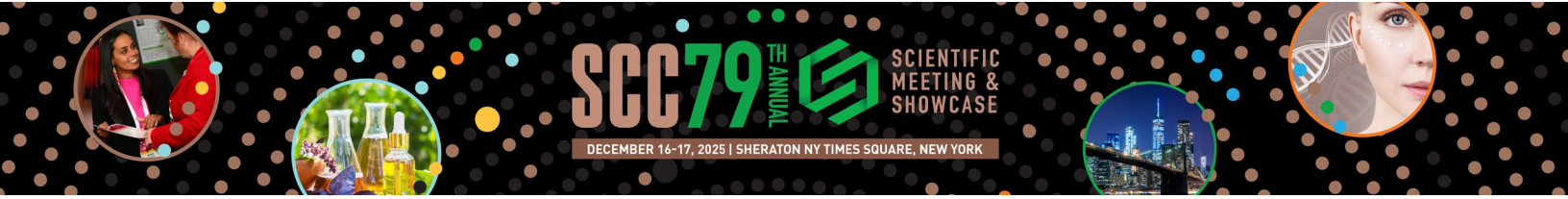


A New Approach of Dark Spots: Holistic Evaluation of Melanocytes and Surrounding Cells to Decrease Both Lipofuscin and Melanin Hyperpigmentation

Christophe TOUMIT; Greentech

Lauriane IMBERT ROUX, Christelle PARCHEMIN, Pauline DELORME, Cécile GARNIER, Célia REY, Christophe TOUMIT, Jean-Yves BERTHON

Dark spots arise from dysregulation of melanin production and from lipofuscin accumulation due to aging. Melanocytes (Mc) are also sensitive to oxidative stress, inflammation and pro-melanogenic molecules released by fibroblasts and, recently discovered, by sensory neurons (RGMB). A screening was thus conducted to develop a ginger extract (GE) rich in gingerols, specifically in 6-gingerol known for its longevity properties, for a holistic evaluation aiming both at reducing existing dark spots and preventing their formation. GE decreases melanin content in Mc (-46%) and lipofuscin in fibroblasts (Fb, -26%). It reduces release of inflammatory cytokine IL8 (-37%) by keratinocytes and growth factor SCF (-27%) by Fb. GE also reduces RGMB release (-12%) leading to a reduction of melanin production (-22%) after conditioned medium treatment. Evaluation of homogeneity, radiance and spot count, color and size was also performed on 30 volunteers to confirm GE ability to correct and prevent dark spots.



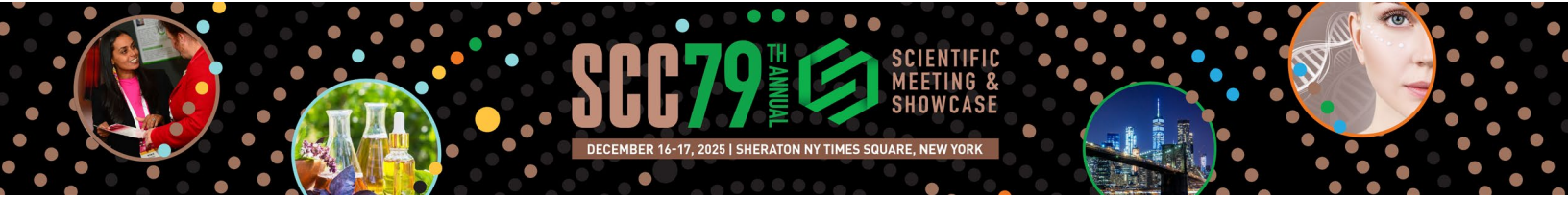
Strategies for Formulating Inclusive Suncare Products

Jamie Eldridge; Presperse

Daphne Benderly, PhD., Presperse

Demand for high SPF products continues to rise, while the need for aesthetics remains. Increasing UV filter level has tradeoffs such as tackiness (organic). or opacity (mineral). The addition of an SPF booster can reduce these trade-offs.

An industry challenge is mineral SPF formulations for darker skin tones. This research shows how opacity and shade challenges can be mitigated to help create more inclusive mineral products, in both suncare and color care with SPF applications. By using a booster, a higher SPF can be achieved with less UV filter, creating more desirable formulas, both mineral and organic, without sacrificing UV protection. The inclusion of pigments was shown to also increase SPF allowing for further reduction of UV filters and in turn creating less opaque, more inclusive formulations.



Application of Color Theory to Improve Foundation Aesthetics Across Skin Tones

Raihaanah Safee; University of Toledo

Foundation shade lines often fail to meet the undertone needs of diverse consumers, particularly those with deeper skin tones. Increasing use of black iron oxide (B) and titanium dioxide (T) can produce an ashy or gray cast. This study explores the use of ultramarine blue (UB) as a colorant and zinc oxide (Z) as an alternative opacifier to improve undertone accuracy in powder and stick foundations. Eleven dark and eleven light loose powders, along with eleven dark and nine light stick foundations, were prepared using varying B:UB and T:Z ratios (0–100%). Visual analysis using Leneta paper and spectrophotometric data assessed shade appearance. An IRB-approved consumer study evaluated shade acceptability via forearm swatching and surveys on shade-matching experiences. Increasing UB reduced gray cast in darker foundations, while adding Z improved tone clarity. Results suggest that strategic pigment balance enhances undertone diversity and supports inclusive shade development for improved consumer satisfaction.

Research Advances in Eczema and Severe Dry Skin in Diverse Patients: From Clinical Knowledge to Basic Science Discovery

Hawasatu Dumbuya, PhD; La Roche-Posay, L'Oreal USA

Populations with skin of color (SOC) remain underrepresented in atopic dermatitis (AD; eczema) clinical trials, despite higher disease incidence and persistence. This lack of inclusive recruitment and retention has led to AD being understudied in diverse racial/ethnic groups, and often misdiagnosed or undercounted due to differences in clinical presentation compared to white counterparts.

To address this gap, we established an inclusive clinical research program aimed at evaluating the benefits of a prebiotic skincare regimen in managing AD and xerosis (severe dry skin) and identifying potential nuances in skin barrier properties across diverse populations.

In this presentation, Dr. Dumbuya will highlight the team's collaborative approach—integrating innovative methodologies, clinical insights, and scientific discovery—to advance inclusive dermatological research and improve skincare outcomes for all patients.