

SCC ONTARIO CHAPTER **LUNCH** MEETING

*“Enhancing Skin Barrier Integrity:
A Comprehensive Evaluation of a barrier support serum and its active technologies”*

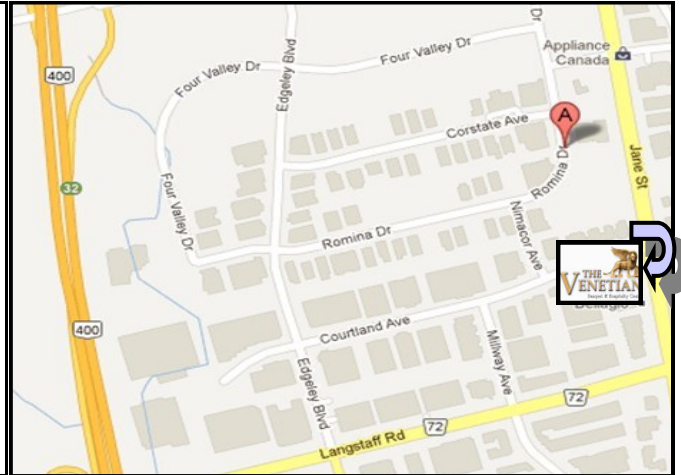
- Lakshana Sreenivasan

February 1st, 2024

Location: The Venetian Banquet & Hospitality
Centre 219 Romina Drive,
City of Vaughan, ON, L4K 4V3
(tel: 905-264-9960)

Time: 12:30 p.m. **Registration/Networking**
1:00 p.m. **Lunch**
2:00 p.m. **Presentation**

Fees: \$60 pre-paid SCC member
\$70 pre-paid non-member
\$30 pre-paid student
\$75 at the door



Abstract:

“Enhancing Skin Barrier Integrity: A Comprehensive Evaluation of a barrier support serum and its active technologies”

The skin barrier, composed of multiple elements including Natural Moisturizing Factors, lipids, and skin cells, plays a pivotal role in protecting against water loss and external stressors. Disruption of this barrier can result in skin issues such as dehydration, dryness, redness, and discomfort, making barrier support a crucial aspect of skin care. A barrier support formulation was developed to assess performance of an active complex to maintain and restore skin barrier health, effectively addressing these concerns. To assess how the formulation and ceramide complex impact the function of the skin barrier, we examined the expression of E-cadherin and the thickness of the epidermis in human. E-cadherin is a cell adhesion molecule that plays a crucial role in maintaining the integrity and barrier function of the skin. It is predominantly expressed in the epidermis and contributes to the formation and maintenance of the skin barrier by mediating the adhesion between adjacent keratinocytes. Disruptions or alterations in E-cadherin expression or function can compromise the integrity of the skin barrier. Human skin explants treated with barrier support formulation and ceramide complex induced a qualitative increase in E-cadherin expression compared to untreated samples. In addition, the formulation and ceramide complex exhibited a significant increase in epidermal thickness when compared to untreated controls, indicating a potential strengthening effect on the skin barrier. Remarkably, this *ex vivo* study complements clinical data from an *in vivo* study. The findings from the *in vitro* study, showing increased E-cadherin expression and potential barrier improvement in treated skin explants, align with the observed reduction in TEWL seen in the *in vivo* study. Furthermore, the active technologies in the formulation offers immediate soothing hydration, reduces redness over time, and provides an boost in skin hydration. In conclusion, active complex has demonstrated efficacy in enhancing skin barrier integrity and function, ultimately leading to improved overall barrier health.

Biography:

Lakshana Sreenivasan is an accomplished Clinical Research Senior Scientist at DECIEM, with a distinguished academic background including a bachelor's degree from the University of Arizona and a PhD in Experimental Medicine from The University of British Columbia. With over a decade of experience in research and development, Lakshana Sreenivasan has played a pivotal role in the design and implementation of cell and tissue-based assays. Her impactful research stemming from her prior work has been disseminated through conferences and as first-author publications. Currently, based at the Toronto headquarters, Lakshana is a key member of the Clinical Research Lab at The Ordinary, leading efforts in evaluating product performance and garnering clinical acclaim for The Ordinary.