L'ORÉAL

News Release

L'Oréal unveils prototype of first-ever wearable microfluidic sensor to measure skin pH levels

CES®, Las Vegas, 6 January 2019 – L'Oréal today introduced a prototype of the latest innovation from the L'Oréal Technology Incubator at the 2019 Consumer Electronics Show. *My Skin Track pH by La Roche-Posay* is the first wearable sensor and companion app to easily measure personal skin pH levels and create customized product regimens to better care for skin. *My Skin Track pH* has been honored with a **CES 2019 Innovation Award** in the Wearable Technology Products category. The sensor was co-developed with L'Oréal's skincare brand La Roche-Posay, which works closely with dermatologists to develop safe and effective skincare products and is committed to bringing scientific progress directly to consumers.

"The scientific and medical communities have long known the link between skin pH levels and common skin concerns that millions of people experience every day," says **Guive Balooch, Global Vice President of the L'Oréal Technology Incubator,** an arm of L'Oréal's Research and Innovation. *"Our goal is to use this advanced technology to empower consumers with meaningful information about their skin, so that they can find the products that are right for their individual needs. At L'Oréal, we know that health is the future of beauty and we are committed to leveraging technology to bring powerful insights and solutions to our consumers."*

The pH scale ranges from acidic to basic, on a spectrum measured from 0 to 14. Healthy skin pH exists within the slightly acidic range between 4.5 and 5.5. When pH balance is compromised, whether through environmental factors and underlying conditions, it can trigger inflammatory responses. Such responses can cause or exacerbate common skin concerns including dryness, eczema, and atopic dermatitis. Millions of Americans suffer from these conditions; according to the National Eczema Association, 1 in 10 Americans (31.6 million) have some form of eczema.

A small, thin, flexible sensor, *My Skin Track pH* represents the next frontier in personalized skincare technology for L'Oréal, the global beauty leader. As the first wearable to measure individual skin pH levels using microfluidic technology, it captures trace amounts of sweat from skin pores through a network of micro-channels, providing an accurate pH reading within 15 minutes.

While previous methods of measuring skin pH levels required rigid electronics or large sweat samples, *My Skin Track pH* captures, and generates accurate readings from, nearly imperceptible quantities of sweat.

My Skin Track pH provides an accurate pH, reading via a simple two-step process:

1) The wearer places the sensor on their inner arm, leaving it in place for 5-15 minutes—until the center two dots take on color.

2) Next, the wearer opens the *My Skin Track pH* app and photographs the sensor. Utilizing an advanced algorithm, the app reads the pH measurement, as well as the wearer's local sweat loss—the rate of perspiration on the skin's surface—to assess skin health and make customized La Roche-Posay product recommendations to care for skin and balance pH.

In addition to its promise as a future consumer product, *My Skin Track pH* will help L'Oréal advance its research into the science of skin and aid in product development at the world's largest beauty company.

"pH is a leading indicator of skin health," says **Prof. Thomas Luger, Head of the Department of Dermatology, University of Münster, Germany**. "*It is something my patients ask about, but until now it has been very challenging to measure skin pH outside of a clinical setting. This tool has the potential to inspire consumers to adopt healthier skincare habits and empower medical professionals with an entirely new way to recommend skincare regimens."*

My Skin Track pH was created by L'Oréal in partnership with Epicore Biosystems, the industry leader in microfluidic platforms and soft wearable sensors. Epicore Biosystems' technology is based on over two decades of microfluidic and soft materials research in Professor John Rogers' Laboratory at Northwestern University's Center for Bio-Integrated Electronics and the Simpson Querrey Institute.

"*Epicore is thrilled to collaborate with L'Oréal, an expert in skincare science, to create a new use-case for this technology that drives new research and understanding around skin pH,"* says **Roozbeh Ghaffari, PhD, co-founder and CEO of Epicore Biosystems.**

My Skin Track pH will enable L'Oréal, which has already co-authored a study on the efficacy of microfluidics, to further its research through a series of clinical studies in partnership with Northwestern University. The purpose of these studies is to explore the link between pH and the appearance of various skin conditions.

My Skin Track pH is an expansion of L'Oréal's efforts to deploy new technologies to support skin health. In November 2018, L'Oréal launched a personal UV sensor, *My Skin Track UV by La Roche-Posay*, exclusively at select U.S. Apple stores and on apple.com.

"This new prototype represents the next step in La Roche-Posay's beauty tech journey. We are committed to bringing scientific progress directly to consumers, to help them take great care of their skin," said **Laetitia Toupet, Global General Manager of La Roche-Posay.**

My Skin Track pH will initially be introduced in 2019 through select La Roche-Posay dermatologists in the U.S., with the goal of amassing new research and ultimately launching a direct-to-consumer product.

About L'Oréal
L'Oréal has devoted itself to beauty for over 100 years. With its unique international portfolio of 34 diverse and complementary brands, the Group generated sales amounting to 26.02 billion euros in 2017 and employs 82 600 people worldwide. As the world's leading beauty company, L'Oréal is present across all distribution networks: mass market, department stores, pharmacies and drugstores, hair salons, travel retail, branded retail and e-commerce.
Research and innovation, and a dedicated research team of 3 885 people, are at the core of L'Oréal's strategy, working to meet beauty aspirations all over the world. L'Oréal's sustainability commitment for 2020 "Sharing Beauty With All" sets out ambitious sustainable development objectives across the Group's value chain.
For more information: http://mediaroom.loreal.com/en/

About La Roche-Posay
Recommended by dermatologists worldwide, La Roche-Posay's mission is to offer a better life for sensitive skin. Created by a pharmacist in 1975, the brand is now present in over 60 countries. It offers a unique range of daily skincare developed for every skin type to complement their patients' treatments and promote good skincare practices adapted to each skin concern. The brand develops formulas with its exclusive Selenium-rich water, also used at its Thermal Center, the first Dermatology Center in Europe, due to its antioxidant and soothing properties. The products are developed using a strict formulation charter with a minimal number of ingredients and are formulated at optimal concentrations.
Additionally, La Roche-Posay products undergo stringent clinical testing for efficacy and safety, even on sensitive skin. The key La Roche-Posay product ranges are: Lipikar (dry skin), Anthelios (photoprotection), Effaclar (acne) and Toleriane (sensitive skin).
For additional information about La Roche-Posay, visit www.laroche-posay.us and follow La Roche-Posay USA on Facebook, Instagram and Twitter @LaRochePosayUSA.

About Epicore Biosystems
Epicore Biosystems has developed 'skin-like' wearable microfluidic sensors that are capable of non-invasively measuring sweat biomarkers, skin health, and physiology, in-real time. Founded in 2017 as a spinout company from Northwestern University's Center for Bio-Integrated Electronics and the Simpson Querrey Institute, Epicore Biosystems has partnered with Fortune 500 companies, the Department of Defense, and leading research organizations to drive personalized hydration and skin care management with wearable microfluidic products.
For more information, please visit www.epicorebiosystems.com or email info@epicorebiosystems.com.

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This news release may contain some forward-looking statements. Although the Company considers that these statements are based on reasonable hypotheses at the date of publication of this release, they are by their nature subject to risks and uncertainties which could cause actual results to differ materially from those indicated or projected in these statements."

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