

We are seeking subject matter experts in hormone monitoring to explore current technologies, research methodologies, and biomarker validation strategies that enable real-time tracking of hormonal fluctuations, with a focus on understanding their implications across life stages and translating this data into actionable health insights.

Background

Hormone fluctuations play a critical role in various biological processes, yet tracking hormonal changes in real-time remains a challenge. While laboratory tests provide snapshots of hormone levels, they often fail to capture the dynamic nature of hormonal rhythms over time. This is particularly relevant for fertility and reproductive aging, menopause, menstrual health, metabolic disorders, and stress regulation, where hormonal fluctuations play a key role in symptom patterns and overall health. Despite advancements in hormone testing—ranging from saliva, urine, and blood assays to emerging non-invasive methods—there are still gaps in accuracy, accessibility, and real-world usability. For individuals experiencing major hormonal transitions, such as the onset of perimenopause or the beginning of menstruation, having a clearer picture of their hormonal patterns could offer a sense of control, validation, and preparedness. Understanding these changes as they happen could empower women to anticipate shifts in their bodies, make informed health decisions, and proactively manage symptoms. Wearables, biosensors, and Al-driven data analysis have the potential to revolutionize hormone tracking, but significant scientific and technical challenges remain in validating biomarkers, ensuring reliability while providing guidance on how to respond to these changes effectively.

What we're looking for

We are seeking to engage with leading researchers, clinicians, and technology developers in hormone tracking to gain baseline knowledge of current research areas, emerging technologies, and key gaps in this space. These conversations will help us refine our understanding of where innovation is needed and how real-time hormone monitoring could improve symptom management and consumer health solutions.

Topics of interest

- Hormone monitoring for menopause and perimenopause symptom correlation
- Tracking reproductive hormones for fertility and ovulatory health
- Non-invasive or wearable technologies for real-time hormone assessment
- Hormonal biomarkers related to skin, hair, and aging
- Hormones in stress, sleep, and circadian regulation
- Endocrine changes influencing metabolism, weight, and energy balance
- Advancements in consumer-accessible at-home hormone testing

- Hormonal changes across different life stages and their implications for health, symptom management, and well-being
- Translating hormone tracking data into actionable insights, helping individuals interpret their hormonal shifts and identify potential treatments or interventions

Required qualifications

- Expertise in developing or utilizing hormone tracking and monitoring methods
- Experience in hormone research related to reproductive health, menopause, or endocrine function
- Knowledge of endocrine biomarkers and their role in physiological health

Nice-to-have

We're open to experts who have experience with:

- Experience with non-invasive hormone tracking technologies or wearable biosensors
- Research in hormonal influences on metabolism, skin, hair, or stress regulation
- Clinical experience in endocrinology, reproductive medicine, or hormone therapy

Expert location

Accepting applications from experts based in all countries

Please contact the University of South Florida Technology Transfer office representative for submission – Karla Schramm at kschramm@usf.edu