

## **Dive into the daily lives of individuals in real time: Introduction to the Ecological Momentary Assessment (EMA)**

**Organizer(s)** Jennifer Glaus, PhD & Sébastien Urben, PhD, PD

**1 ECTS**

**Summary**

Have you ever wanted to know more accurately (and objectively) about what your research participants or patients do in their everyday lives, in their naturalistic environment? How they change over the course of a day/week? Do you want to examine the exact time course between processes? You want to know which context, which elements of daily life can elicit positive behaviors or trigger dysfunctional thoughts or symptoms? But you don't know how to integrate this into your research and work. Or do you simply want to discover innovative methodologies that allows you to dive into the within-person level in real time and in real life? Then this course is for you!

Objectives:

In this interactive course, you will learn how to approach the daily life and within-person level through Ecological Momentary Assessment (EMA). EMA is an umbrella term that encompasses techniques that allow for multiple assessments per day, such as self-reports, cognitive assessments, wearable devices (e.g., accelerometry, heart rate variability), and passive sensing. We will introduce the concepts and methodological components to study intra-individual's variability in daily life. Examples of techniques and research will be presented.

**Course level** Introductory

**Pre-requirements** None

**Content of course sessions** Session 1 (8h15 - 12h): The main concepts and methods embedded in EMA will be presented in a lecture.  
Session 2 & 3 (8h15 - 12h): Presentations & discussions of the works prepared by the students.

**Location** Auditoire Lucien Bovet, rez-de-chaussée, Av. Echalens 9, 1004 Lausanne

**Course dates** Tuesday mornings:  
- 06<sup>th</sup> of February 2024  
- 19<sup>th</sup> of March 2024  
- 26<sup>th</sup> of March 2024

**Course materials**

Lectures will be at disposal in the moodle platform ([LINK](#)). Please use the self-enrollment method to access the course materials.

*Proposed reading:*

*Free Handbook ESM: <https://www.kuleuven.be/samenwerking/real/real-book/index.htm>*

Turri, F., Jones, A., Constanty, L., Ranjbar, S., Drexl, K., Miano, G., Lepage, C., Plessen, K. J., & Urben, S. Self-regulatory control processes in youths: a temporal network analysis approach. *JCPP Advances*. 2023 e12200. doi.org/10.1002/jcv2.12200

Plessen KJ, Constanty L, Ranjbar S, Turri F, Miano G, Lepage C and Urben S. The role of self-regulatory control processes in understanding aggressive ideations and behaviors: An experience sampling method study. *Front. Psychiatry*. 2023 13: 1058814 Doi : 10.3389/fpsy.2022.1058814

Merikangas, KR, Swendsen J, Hickie IB, Shou H, Merikangas AK, Zhang J, Lamers F, Crainiceanu C, Volkow ND, Zipunnikov V. Real-time Mobile Monitoring of the Dynamic Associations Among Motor Activity, Energy, Mood, and Sleep in Adults With Bipolar Disorder. *JAMA Psychiatry*. 2019. 76(2):190-198. doi: 10.1001/jamapsychiatry.2018.3546.

Glaus J, Kang SJ, Guo W, Lamers F, Strippoli MPF, Leroux A, Dey D, Plessen KJ, Vaucher J, Vollenweider P, Zipunnikov V, Merikangas KR, Preisig M. Objectively assessed sleep and physical activity in depression subtypes and its mediating role in their association with cardiovascular risk factors. *Journal of Psychiatric Research*. 2023. 163:325-336. doi: 10.1016/j.jpsychires.2023.05.042.

**Evaluation**

Participants are expected to be present to all course sessions, and to actively participate. Each participant will be invited to think critically about a potential study that may be developed with EMA methodologies in her/his area of research (or PhD, MD theme). This work will be presented and discussed with the panel of participants for mutual inspiration.

**Registration**

The course is limited to 12 participants. Register until January 20 by writing a mail to [Indscourses@gmail.com](mailto:Indscourses@gmail.com) (with your supervisor in copy) and stating the course title as subject.