

## DP-CHUV "QUANTITATIVE APPROACHES IN PSYCHIATRY" – Course option for doctoral candidates

**CHUV-Department of Psychiatry** 

**Coordinator: PhD Setareh Ranjbar** 

The aim of this seminar is to provide ongoing training and skills development for people involved or interested in psychiatric research. Designed for both researchers and clinicians with a foundational knowledge of statistics (basic descriptive statistics, hypothesis testing, and simple linear regression), the program provides a dynamic and applied approach to statistical methods in mental health research.

The curriculum is participant-focused, adapting to the needs and interests of attendees, and spans a wide range of essential topics: from data management and study design to advanced analytical methods such as longitudinal modelling, machine learning. The objectives are to equip participants with additional analytical tools, to facilitate communication between researchers and statisticians, and to make it easier to interpret data and results.

Speakers: Setareh, Ranjbar, Sandra Vieira, Enrique Castelao, Marie-Pierre Strippoli, Fulvio Magara, Giorgio Pistis

Schedule: 12 times a year, Mondays from 4 to 6 p.m. Dates in the table below.

Attendance/Evaluation: continuing education seminar for employees of the Department of Psychiatry. Participation in at least 10 of the 12 seminars grants 1 ECTS for doctoral candidates. Please take screenshots of your Webex window to show your participation, copy those into a pdf for credit validation. For students who would like to obtain 1.5 ECTS overall, the same conditions as above apply. Plus, they must participate in the multiple-choice exams in the last session of Module 2, 3 and 4. These exams will consist of a couple of questions testing the acquired knowledge of the student in each module.

Language: English/French

**Modality:** Videoconference via Webex.

**Registration:** Via Moodle >>> <a href="https://moodle.unil.ch/course/view.php?id=35407">>>> self-enrollment</a>

For more information contact <a href="mailto:Setareh.ranjbar@chuv.ch">Setareh.ranjbar@chuv.ch</a>.

## Schedule in 2025-26

No. Seminaire	titre de seminaire	intervenant.e.s	Date	Horaire
1	Data Management (Overview)	Enrique Castelao ; Marie-Pierre Strippoli	03.11.2025	16:00-18:00
2	Fundamentals of Experimental Design	Fulvio Magara	10.11.2025	16:00-18:00
3	Data Visualisation I (Exploratory)	Setareh Ranjbar	24.11.2025	16:00-18:00
4	Data Visualisation II (Explanatory)	Setareh Ranjbar	01.12.2025	16:00-18:00
5	Data Visualisation III (Practical Exercise)	Setareh Ranjbar	08.12.2025	16:00-18:00
6	Longitudinal Analysis I (repeated measures)	Setareh Ranjbar	12.01.2026	16:00-18:00
7	Longitudinal Analysis II (Multilevel Modelling)	Setareh Ranjbar	19.01.2026	16:00-18:00
8	Longitudinal Analysis III (Practical Exercise)	Setareh Ranjbar	26.01.2026	16:00-18:00
9	Machine Learning I (Theory and methods)	Sandra Vieira	23.02.2026	16:00-18:00
10	Machine Learning II (Theory and methods)	Sandra Vieira	02.03.2026	16:00-18:00
11	Machine Learning III (Practical Exercise)	Sandra Vieira	09.03.2026	16:00-18:00
12	Genome-wide association	Giorgio Pistis	30.03.2026	16:00-18:00

## **Course Modules:**

Module 1: Data management and fundamentals

Module 2: Data visualization

Module 3: Longitudinal data analysis

Module 4: Machine learning