

## Post-doc: metacognition, time perception, rat, electrophysiology

**Summary:** **Metacognition** is a hallmark of our mental abilities. Monitoring of internal states is typically studied in a paradigm where mental states are driven by information from the outside world. To investigate internally-driven processes we use **time perception**. Previous studies suggested that humans and animals may take into account their internal timing **uncertainty**, and thus an ability to monitor **temporal error**. However, only recently possibility to introspect about time errors was investigated in rats.

**Keywords:** interval timing, time perception, error monitoring, metacognition, rats, muscimol, electrophysiology.

**Principal investigator:** dr Tadeusz W. Kononowicz (<https://scholar.google.com/citations?user=HfkBE50AAAAJ&hl=fr>)

**Duration of the project:** 3 months - 12 months, depending on the arrangement (workplace: NeuroPSI, Saclay). Possible extension (workplace: in principle Psychology Institute, Polish Academy of Sciences, Warsaw, but other arrangements can be negotiated).

**Working time :**(35 hours/week)

**Workplace:** NeuroPSI, Saclay, France, in collaboration with Dr Valerie Doyere (<https://neuropsi.cnrs.fr/annuaire/valerie-doyere/>); Institution Hiring: Psychology Institute, Polish Academy of Sciences PAN, Warszawa, ul. Jaracza 1

**Deadline for applications:** Until the position is filled.

### Requirements

- PhD degree in psychology, cognitive science, biology, computer science, artificial intelligence, or related fields.
- High motivation for research work and strong interest in the subject of the project.
- Previous experience in research projects involving rats or mice, experience with electrophysiology of pharmacological manipulations.
- Excellent programming skills: e.g., Python, R, Matlab ...
- Excellent knowledge of basic statistical methods.
- Experience with machine learning and artificial neural networks will be an added advantage.
- Fluency in English.
- Teamwork, communication skills, and commitment.

Candidates can familiarize themselves with the description of the project:

<https://www.dropbox.com/s/byzvp9lmz8u7o9w/General%20public%20summary.pdf?dl=0>

[https://www.dropbox.com/s/9ye18q7winecwc9/Flyer\\_opus.pdf?dl=0](https://www.dropbox.com/s/9ye18q7winecwc9/Flyer_opus.pdf?dl=0)