



Faculty of Medicine, University of Ljubljana in cooperation with Medical University of Graz and Catholic University of Leuven invites participants to **COGDEC SUMMER SCHOOL 2021**

»Advancing the Knowledge in Brain Imaging Methods«

taking place from **September 20th to 24th 2021** in Ljubljana.

Summer School 2021 is part of H2020 Twinning project COGDEC, which aims to **enable knowledge transfer in the field of various brain imaging methods from the two internationally-leading organisations.**

The workshop is intended for graduates in the field of various sciences (medicine, biology, chemistry, psychology, computer science and cognitive science) and **will give participants basic knowledge in using Matlab tools for EEG signal analysis and other advanced brain imaging methods.**

Lecturers from University of Ljubljana, Medical University of Graz and Catholic University of Leuven will share their knowledge and broad experience in studying cognition and analyzing data obtained with different brain imaging techniques (MRI, EEG) **at an interactive in-person workshop held in Ljubljana.** In case of poor epidemiological situation and possible restrictions related to the spread of new coronavirus, the workshop will be run via remote access.

Theoretical introduction to the use and analysis of EEG and MRI obtained data will be followed by intensive practical work for participants. Last day of the workshop will be dedicated to the latest findings and current projects in using imaging methods for brain and cognition studying.

The workshop will be held in English. Computers and software will be provided at the site. In case of running the workshop via remote access, **participants will need their own computer and good internet connection.** Detailed instructions on software needed, connections and other procedures will be given before the workshop starts.

Summer School 2021 is intended for participants who:

- want to get basic knowledge in MR and EEG brain imaging techniques as primary research method to understand mechanisms of human cognition and cognitive decline;
- want to explore the possibilities of using MR and EEG brain imaging techniques as secondary and complementary research method to understand mechanisms of human cognition and cognitive decline;
- want to learn about connection between MR and EEG detected brain changes and clinical assessment of human cognition and cognitive decline.

Special requirements for participants are:

- Bachelor's degree (2nd Bologna) in respective field (medicine, biology, chemistry, psychology, informatics, cognitive science, or similar).
- Only applications from researchers with less than 4 years of experience in the research field and without PhD degree will be accepted (however they can already be enrolled in the PhD study).
- Basic knowledge of Matlab environment and programming language. Participants with no prior knowledge will be allowed to attend and complete Matlab Basic course before the workshop starts:
<https://matlabacademy.mathworks.com/R2020b/portal.html?course=gettingstarted>
- Before the workshop starts participants will be asked to provide us with a Matlab basic course Certificate of completion or with a brief description of past working experience with Matlab.

Before the workshop begin we will send participants some additional material (theoretical basics, matlab scripts...) related to the practical work.

Participation in the COGDEC Summer School 2021 is recognized as an elective course in interdisciplinary doctoral study program Biomedicine at University of Ljubljana and is evaluated with 5 ECTS credit points.

Participation in the workshop is free. The number of participants is limited. Applications are accepted until Friday, September 3rd 2021 [here](#).

More information about COGDEC project can be found on the following [page](#). For additional informations please contact us on e-mail: cogdec@mf.uni-lj.si