

## Storing and securing data acquired in CF MAFIL

Multimodal and Functional Imaging Laboratory (CF MAFIL) collects following data types during the research studies realization:

- 1) Data with the characteristics of measured subjects and measurements carried out on those subjects for individual research studies. These data are generated on the basis of the MR safety questionnaire, eventually also of the informed consent of the given study. Entries in the MR safety questionnaire are converted into electronic form and stored into a database placed in a secure infrastructure that uses the principle of dual authentication. Original paper forms are then archived in a private room of laboratory in a locked cabinet. Access to the aforementioned paper and electronic data is restricted to authorized employees of CF MAFIL (device operators, data administrators). Authorized members of particular research teams may have the access to their research data as well. Collected personal information includes:
  - a. the name and surname
  - b. personal identification number (or similar identification number for foreigners)
  - c. date of birth
  - d. sex
  - e. laterality
  - f. native language
  - g. vision correction
  - h. height, weight
  - i. basic indication about the state of health (in terms of possible contraindications and risks of MR examination) - these remain only in paper form within the MR safety questionnaire
- 2) The data from the magnetic resonance (MR). These data includes the personal data (name, surname, date of birth, personal identification number, sex, height and weight) and may potentially contain information about the health of the measured subject (some of the acquisition techniques are similar to the medical diagnostics, depending on the specific protocol, location of the measured area and in particular on the capability of evaluating person to discern health information from the data). Given their nature, these data are considered sensitive personal data. Secure network infrastructure where the MR data are located is completely separated from the Internet and meets all requirements for the storage of medical records. Physical security of the devices and computers connected to secure network is implemented at both the access restriction level (key) and a password. Access to these data is limited to authorized employees of CF MAFIL (device operators, data administrators).
- 3) The anonymized MR data, which were created by removing the identification/personal data from the original MR data. During the anonymization process subject's name, surname, identity number, date of birth and date of measurement are replaced by a unique code. These data are forwarded to researchers for further processing/evaluation in the context of the study and it is not possible to identify measured subject retrospectively without access to a database from point 1.
- 4) The data from electrophysiological methods (e.g. EEG, ECG, etc.) and in case of functional measurement also information about experimental stimulation (recordings of the subject's response). These data are stored directly in anonymous form (using the unique code) – it is not possible to assign them to a specific person without access to a database in point 1.

Only anonymized data are forwarded to researchers (points 3 and 4).