

Automated Functional Screening of IgGs for Diagnostics of Neurodegenerative Diseases
A U T O I G G
September 7, 2019, Istanbul, Turkey

AUTOIGG WORKING GROUP MEETING ON CELL RECORDING AUTOMATION
(MINUTES)

AUTOIGG WS2 meeting (Grant Agreement 778405) "Automated Functional Screening of IgGs for Diagnostics of Neurodegenerative Diseases" was held in Istanbul, Turkey on September 7, 2019, after the official workshop program at 18:00 the Working group meeting started.

Present

Pavle R. Andjus, Lidija Radenović, Dunja Bijelić, Andrej Korenić, Katarina Milićević – FBUB (Serbia)

Abdulkerim Çapar, Ufuk Özkaya, Gizem Dursun, Bilal Ersen Kerman – ARGENIT (Turkey)

Gulderen Yanikkaya Demirel, Başak Aru, Türkay Şimşek – YEDİTEPE (Turkey)

Minuted Meeting Agenda

1. **Automation of the signal analysis** – conclusions: improve the baseline selection (from semimanual to fully automatic), implement advanced algorithms for noise filtering and verify the improvement in Supervised Machine Learning accuracy.
2. **Data collection** – conclusions: increase the amount of paired ALS/CTRL data for classification and/or segmentation analysis. Data can be prepared for a publication of technical nature. Discussed obtainment of clinical serum/plasma samples from ALS patients and IgG purification by Yeditepe.
3. **Discussion on the automation of the solution application system** – gravity vs. pressure. Pros and cons of both procedures were discussed, and it is concluded that while gravity may cause less shear stress, pressure application is faster. The choice should be tested prior on particular cell types.
4. **Future secondments plan:**
 - Ufuk Özkaya will be ER from ARGENIT to be seconded to Belgrade University in 2021 (for 4+2 months).
 - Someone will be chosen from YEDİTEPE for future secondment period.
5. The WG was informed that the ethical permission and animals for Katarina Milicevic's ongoing secondment are underway.
6. It was concluded that ground truth can be prepared (Gizem Dursun) by using present ALS/CTRL data.

Record of the Minutes: *Gizem Dursun*

Revised by: *Pavle Andjus*

Date and place: September 7, 2019, Istanbul, Turkey