



Work package descriptions

Work package number ⁹	WP1	Lead beneficiary ¹⁰	1 - FBUB
Work package title	Standardization and benchmarking		
Start month	6	End month	46

Objectives

- rigorous standardization in the lab
- selection of best practice for cell cultures
- benchmarking of protocols
- defining patterns of correlation of parameters of cell reactivity and disease stage
- software design and testing
- autoantibody testing with clinical samples
- recruitment of women for secondments as ERs, and ESRs, in order to reach a minimal 40% participation in the network

Description of work and role of partners

WP1 - Standardization and benchmarking [Months: 6-46]

FBUB

T1.1. ROS imaging – UEF, FBUB (standardization of activity parameters and correlation with disease parameters), ArGenit and ELVESYS (benchmarking of measurement protocols).

T1.2. Ca²⁺ imaging – FBUB, UCONN, UChic (standardization of activity parameters and correlation with disease parameters), ArGenit and ELVESYS (benchmarking of measurement protocols).

T1.3. Vesicle trafficking – FBUB (standardization of activity parameters and correlation with disease parameters), ArGenit (benchmarking of measurement protocols), ELVESYS (benchmarking of measurement protocols and software pilot).

T1.4 Advanced microscopy – LANOTEC, FBUB (subcellular characterization of inflammatory markers).

T1.5. Synaptic activity – following with voltage sensitive dyes (UCONN), FBUB (complementary electrophysiology and in vitro implementation in neuronal cultures), UChic (complementary measurements in MEA systems), ArGenit and ELVESYS (benchmarking of measurement protocols).

T1.6 Autoantibody testing in clinical environment – YEDITEPE (collection of clinical samples of autoimmune diseases vs ALS, complementary analysis and testing), FBUB (testing of samples).

Participation per Partner

Partner number and short name ¹⁰

1 - FBUB

2 - YEDITEPE

3 - UEF

4 - Argenit

5 - ELVESYS

6 - LANOTEC-CENAT-CONARE

7 - UCHC

8 - University of Chicago

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D1.1	Report on ROS imaging standardisation, benchmarking and diagnostic value	3 - UEF	Report	Confidential, only for members of the consortium (including the Commission Services)	19
D1.2	Report on Ca ²⁺ imaging and vesicle trafficking standardisation and diagnostic value	1 - FBUB	Report	Confidential, only for members of the consortium (including the Commission Services)	19
D1.3	Report on benchmarking protocols in Ca ²⁺ imaging and in vesicle trafficking	4 - Argenit	Report	Confidential, only for members of the consortium (including the Commission Services)	22
D1.4	Report on subcellular microscopy markers	1 - FBUB	Report	Confidential, only for members of the consortium (including the Commission Services)	40
D1.5	Report on benchmarking protocols in electrophysiology (voltage-sensitive dyes and MEA)	1 - FBUB	Report	Confidential, only for members of the consortium (including the Commission Services)	34
D1.6	Report on testing comparative antibody samples	2 - YEDITEPE	Report	Confidential, only for members of the consortium (including the Commission Services)	43

Description of deliverables

Reports on standardization and benchmarking of IgG effects.

D1.1 : Report on ROS imaging standardisation, benchmarking and diagnostic value [19]

standardisation of activity parameters and correlation with disease parameters, benchmarking of measurement protocols

D1.2 : Report on Ca²⁺ imaging and vesicle trafficking standardisation and diagnostic value [19]

standardisation of activity parameters and correlation with disease parameters, benchmarking of measurement protocols

D1.3 : Report on benchmarking protocols in Ca²⁺ imaging and in vesicle trafficking [22]

standardisation of activity parameters and correlation with disease parameters, benchmarking of measurement protocols and software pilot

D1.4 : Report on subcellular microscopy markers [40]

subcellular characterization of inflammatory markers

D1.5 : Report on benchmarking protocols in electrophysiology (voltage-sensitive dyes and MEA) [34]

following with voltage sensitive dyes, complementary electrophysiology and in vitro implementation in neuronal cultures, complementary measurements in MEA systems, benchmarking of measurement protocols

D1.6 : Report on testing comparative antibody samples [43]

collection of clinical samples of autoimmune diseases vs ALS, complementary analysis and testing of samples

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS1	Standardisation of IgG effects on Ca ²⁺ and relation to disease stage	1 - FBUB	19	Lab protocol established and available
MS2	Standardisation of IgG effects on ROS and relation to disease stage	3 - UEF	19	Lab protocol established and available
MS3	Standardisation of IgG effects on vesicle trafficking and relation to disease stage	1 - FBUB	22	Lab protocol established and available
MS4	Standardisation of electrophysiological IgG effects .(voltage-sensitive dyes and MEA)	1 - FBUB	29	Lab protocol established and available

Work package number ⁹	WP2	Lead beneficiary ¹⁰	1 - FBUB
Work package title	Pilot platform design		
Start month	6	End month	47

Objectives

- design and validation of the lab platform
- defining quantitative parameters
- conversion of activity parameters onto pseudo color matrices that are software-readable
- recruitment of women for secondments as ERs, and ESRs, in order to reach a minimal 40% participation in the network

Description of work and role of partners

WP2 - Pilot platform design [Months: 6-47]

FBUB

T2.1. Designing the automated microscopic stage – ArGenit (main design), FBUB & UCONN, LANOTEC (experimental data support)

T2.2. Designing the fluorescence detector for dynamic measurements – ELVESYS (main design), FBUB, UCONN & UCHIC (experimental data support) and software – ELVESYS (main design), FBUB, YEDITEPE, UCONN & UCHIC (experimental data support)

T2.3. Validation of the measurement device with clinical samples – FBUB & YEDITEPE (near to operational environment), ArGenit & ELVESYS (technical support).

Participation per Partner

Partner number and short name ¹⁰
1 - FBUB
2 - YEDITEPE
4 - Argenit
5 - ELVESYS
6 - LANOTEC-CENAT-CONARE
8 - University of Chicago

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D2.1	Report on microscope stage prototype	4 - Argenit	Report	Confidential, only for members of the consortium (including the Commission Services)	32
D2.2	Report on fluorescence detector prototype and software demo	5 - ELVESYS	Report	Confidential, only for members of the consortium (including the Commission Services)	32

List of deliverables

Deliverable Number¹⁴	Deliverable Title	Lead beneficiary	Type¹⁵	Dissemination level¹⁶	Due Date (in months)¹⁷
D2.3	Validation report on automated measurement device	2 - YEDITEPE	Report	Confidential, only for members of the consortium (including the Commission Services)	34

Description of deliverables

Reports and validation of the point of care fluorescence detection platform

D2.1 : Report on microscope stage prototype [32]
 Designing the automated microscopic stage: main design, experimental data support

D2.2 : Report on fluorescence detector prototype and software demo [32]
 Designing the fluorescence detector for dynamic measurements: main design, experimental data support Software design: main design, experimental data support

D2.3 : Validation report on automated measurement device [34]
 Validation of the measurement device with clinical samples: near to operational environment, technical support

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS5	Blueprint of automated device	4 - Argenit	31	Design draft completed and validated
MS6	Software demo for dynamic fluorescence acquisition and vesicle trafficking	5 - ELVESYS	31	Software demo released and functional

Work package number ⁹	WP3	Lead beneficiary ¹⁰	1 - FBUB
Work package title	Dissemination, communication and networking		
Start month	3	End month	48

Objectives

- finding the best communication channels
- organization of meetings and workshops
- disseminating project outcomes for the community as a whole
- to communicate to key stakeholders the existence of the project and provide regular updates on new data generated

Description of work and role of partners

WP3 - Dissemination, communication and networking [Months: 3-48]

FBUB

T3.1. Trainings and workshops. (FBUB, YEDITEPE, UEF)

T3.2. Outreach and publications: website. (FBUB, ELVESYS), approaching governments and Ministries of Health and Science (FBUB, YEDIPE, UEF, LANOTEC); patients associations (FBUB, YEDITEPE, UEF, LANOTEC), public engagement (FBUB, YEDITEPE, UEF, ELVESYS, ArGenit), press releases. (FBUB, YEDITEPE, UEF, LANOTEC), publications (FBUB, YEDITEPE, UEF, LANOTEC),

T3.3. Valorization, entrepreneurship & communication (FBUB, ELVESYS)

Participation per Partner

Partner number and short name ¹⁰
1 - FBUB
2 - YEDITEPE
3 - UEF
4 - Argenit
5 - ELVESYS
6 - LANOTEC-CENAT-CONARE

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D3.1	Training schools	3 - UEF	Websites, patents filling, etc.	Confidential, only for members of the consortium (including the Commission Services)	31
D3.2	Workshops 1, 2, 3	2 - YEDITEPE	Websites, patents filling, etc.	Public	35
D3.3	Report on outreach activities with compendium of press clippings and publications	1 - FBUB	Report	Public	48

Description of deliverables

Reports on outreach and proceedings of training and workshop events

D3.1 : Training schools [31]

Two Training Schools will be organized by UEF: one on free radical (ROS) monitoring – essential for one of the tasks in WG1, and one on inducible pluripotent stem cells (iPSCs) and their applications - as an alternative model for the proposed automated recording platform.

D3.2 : Workshops 1, 2, 3 [35]

Three workshops will be hosted by YEDIPE in Istanbul. Two workshops will deal with the fundamentals of the scientific goals of the project - immunology and detection methods for the IgGs and their effects. The third workshop will be organized in the first year of the project and will deal with an important soft skill – Good Laboratory Practice.

D3.3 : Report on outreach activities with compendium of press clippings and publications [48]

The goal and outcomes of the project will be communicated to a wider laymen public.

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS7	Training and workshops 1st year	1 - FBUB	12	Proceedings and handouts published
MS8	Training and workshops 3rd year	1 - FBUB	36	Proceedings and handouts published

Work package number ⁹	WP4	Lead beneficiary ¹⁰	1 - FBUB
Work package title	Project management and sustainability		
Start month	1	End month	48

Objectives

- formation of the Supervisory Board, Secondments Committee and its R & I Council.
- managing all project phases: solution design, prototyping, testing and validation.
- ensure that AUTOIGG achieves its aims
- coordinating secondments involving all beneficiaries and partners towards exchange of experiences
- controlling the money flow
- quality control of all aspects of the work plan
- maintaining regular relations with REA
- design of a sustainability plan (wider application for other neuroinflammatory diseases)

Description of work and role of partners

WP4 - Project management and sustainability [Months: 1-48]

FBUB

T4.1. Control of all phases of the project and fulfilling all the contractors obligations towards the EC including reporting (FBUB)

T4.2. Assessing progress of the secondment program (FBUB & YEDITEPE)

T4.3. Implementing changes in work sharing, budget and participants (FBUB)

T4.4. Reviewing of the reports regarding workshops, training schools (FBUB, UEF, YEDITEPE, ArGenit, ELVESYS)

T4.5. Reviewing reports regarding IPR issues (ArGenit, ELVESYS).

T4.6. Drafting of Ethical guidelines (FBUB, UEF, YEDITEPE)

T4.7. Agreeing on press releases by the contractors with regard to the project (FBUB, ELVESYS)

Participation per Partner

Partner number and short name ¹⁰

1 - FBUB

2 - YEDITEPE

4 - Argenit

5 - ELVESYS

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D4.1	Kick-off meeting; Ethical guidelines and website up and running	1 - FBUB	Other	Confidential, only for members of the consortium (including the Commission Services)	3
D4.2	Annual meetings (inc. Final) with Minutes and financial updates	1 - FBUB	Other	Public	48
D4.3	Progress report 1	1 - FBUB	Report	Confidential, only for members of the	12

List of deliverables

Deliverable Number¹⁴	Deliverable Title	Lead beneficiary	Type¹⁵	Dissemination level¹⁶	Due Date (in months)¹⁷
				consortium (including the Commission Services)	
D4.4	Mid-term meeting	1 - FBUB	Report	Confidential, only for members of the consortium (including the Commission Services)	16
D4.5	Final reports on workshops, and training schools	1 - FBUB	Report	Confidential, only for members of the consortium (including the Commission Services)	37
D4.6	Progress report 2	1 - FBUB	Report	Confidential, only for members of the consortium (including the Commission Services)	36

Description of deliverables

Management reports and meeting minutes

D4.1 : Kick-off meeting; Ethical guidelines and website up and running [3]
 A kick-off meeting will indicate the official start of the project. Thus starting points will be established among beneficiaries and partners such as ethics guidelines, secondment plan, and website design.

D4.2 : Annual meetings (inc. Final) with Minutes and financial updates [48]
 Annual meetings will be minuted and will update project parties and discuss future matters (finances and mobilities).

D4.3 : Progress report 1 [12]
 Progress report after the first year.

D4.4 : Mid-term meeting [16]
 Mid-term meeting will validate the project activity so far and the fulfilment of the secondments plan.

D4.5 : Final reports on workshops, and training schools [37]
 These reports should sum up the achievements of the workshops and training schools, particularly regarding the transfer of know-how among participants of the project.

D4.6 : Progress report 2 [36]
 Update of the project state of the art after the 3rd year.

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS9	Resource engagement mid-term plan	1 - FBUB	17	Plan drafted, validated and published
MS10	Financial mid-term plan	1 - FBUB	17	Plan drafted, validated and published

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS11	Minutes of 2nd annual meeting incl. mid-term reports	1 - FBUB	24	Minutes and reports collected and published

Work package number ⁹	WP5	Lead beneficiary ¹⁰	1 - FBUB
Work package title	Ethics requirements		
Start month	1	End month	48

Objectives

The objective is to ensure compliance with the 'ethics requirements' set out in this work package.

Description of work and role of partners

WP5 - Ethics requirements [Months: 1-48]

FBUB

This work package sets out the 'ethics requirements' that the project must comply with.

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D5.1	A - Requirement No. 6	1 - FBUB	Ethics	Confidential, only for members of the consortium (including the Commission Services)	6
D5.2	A - Requirement No. 7	1 - FBUB	Ethics	Confidential, only for members of the consortium (including the Commission Services)	6
D5.3	GEN - Requirement No. 11	1 - FBUB	Ethics	Confidential, only for members of the consortium (including the Commission Services)	1
D5.4	NEC - Requirement No. 12	1 - FBUB	Ethics	Confidential, only for members of the consortium (including the Commission Services)	4
D5.5	H - Requirement No. 13	1 - FBUB	Ethics	Confidential, only for members of the consortium (including the Commission Services)	3

Description of deliverables

The 'ethics requirements' that the project must comply with are included as deliverables in this work package.

D5.1 : A - Requirement No. 6 [6]

5.1. Copies of relevant authorisations (for breeders, suppliers, users, and facilities) for animal experiments must be obtained, kept on file and submitted upon request.

D5.2 : A - Requirement No. 7 [6]

5.4. If applicable, copies of training certificates/personal licenses of the staff involved in animal experiments must be obtained, kept on file and provided upon request.

D5.3 : GEN - Requirement No. 11 [1]

12.4. Due to the severity of the ethics issues raised by the proposed research work, it is required that an independent Ethics Advisor is appointed to oversee the implementation the ethical concerns involved in this research. A report by the ethics Advisor must be submitted to the Agency with the periodic reports.

D5.4 : NEC - Requirement No. 12 [4]

6.3. The applicant must obtain the adequate authorisations on the material which will be imported to/exported from EU, keep them on file and submit them if requested.

D5.5 : H - Requirement No. 13 [3]

2.9. Copies of ethics approvals for the research with humans must be obtained, kept on file and be submitted upon request.

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS12	Ethics requirements accomplishment	1 - FBUB	6	The requirements of the Ethics report accomplished