

CONSORTIUM AGREEMENT

**Systems Biology Tools Development for Cell Therapy and Drug Development -
SYSTHER**

The Contractors:

1) National Institute of Biology (hereinafter referred to as NIB), Večna pot 111, SI-1000 Ljubljana, Slovenia, represented by prof. dr. Tamara Lah Turnšek, director, duly authorised for the purposes hereof, as Contractor and Slovene Coordinator

2) Universität Potsdam (hereinafter referred to as UniP), represented by its president represented by the Registrar Steffi Kirchner, Am Neuen Palais 10, D-14469 Potsdam, Germany, and the Institute of Biochemistry, Biology and Bioinformatics, c/o Max Planck Institute of Molecular Plant Physiology, Am Mühlenberg 1, 14476 Potsdam-Golm, represented by prof. dr. Joachim Selbig duly authorised for the purposes hereof, as Contractor and German Coordinator

3) Blood Transfusion Centre (hereinafter referred to as BTC), Šljajmerjeva 6, SI-1000 Ljubljana, Slovenia, represented by doc.dr. Matjaž Jeras, duly authorised for the purposes hereof, as Contractor

4) Humboldt-Universität zu Berlin, Unter den Linden 6, 10099 Berlin, represented by its president, for its Institute for Theoretical Biology, Dr. Michal Or-Guil (**hereinafter referred to as HUB**), duly authorised for the purposes hereof, as Contractor

5) Klinikum der Universität München, University Clinic for Neurosurgery (hereinafter referred to as LMU), represented by the head of administration _____, Marchioninistraße 15, 81377 Munich, Germany, duly authorised for the purposes hereof, as Contractor

6) MicroDiscovery GmbH (hereinafter referred to as MD), Marienburger Str. 1, 10405 Berlin, represented by Johannes Schuchhardt, duly authorised for the purposes hereof, as Contractor

Article 1 (Preamble)

The Contractors shall conclude this Consortium Agreement on the basis of the successful grant of the project "Systems Biology Tools Development for Cell Therapy and Drug Development – SYSTHER", submitted by the German and Slovenian coordinators as a response to a call for tender to co-finance a German-Slovenian virtual research institution for "Industrially Relevant Molecular Life INREMOS", which will be co-financed by the Ministry of Higher Education, Science and Technology of the Republic of Slovenia and by the German Federal Ministry of Education and Research. The Slovenian coordinator was chosen on the basis of the decision No. 4312-38/2006/14, dated 10.13.2006 adopted by the Ministry of Higher Education, Science and Technology RS, while the German coordinator was chosen on the basis of the decision No 0315005A, adopted by the German Federal Ministry of Education and Research.

Article 2 (Definitions)

Coordinator means the Contractor identified in the Consortium Agreement who, in addition to its obligations as a Contractor, is obliged, as institution, to carry out the specific coordination tasks provided for in the Consortium Agreement on behalf of the Contractors, as well as certain tasks undertaken to be performed in relation to the Ministry of Higher Education, Science and Technology of the Republic of Slovenia and the German Federal Ministry of Education and Research, respectively;

Contract means any co-financing contract signed between the German Federal Ministry of Education and Research and any of the German Contractors in relation to the Project SYSTHER and/or any co-financing contract signed between the Slovenian Ministry of Higher Education, Science and Technology and any of the Slovenian Contractors in relation to the Project SYSTHER;

Contractor means any of the signatories of the Consortium Agreement as enumerated above, and **Contractors** means all of them; in case of admission of new contractors, the word Contractor shall also include any such new contractors;

Consortium means all the Contractors participating in the Project SYSTHER covered by the Consortium Agreement;

Consortium Agreement means this Consortium Agreement as entered into in relation to the Project SYSTHER, including its Annexes;

German Contractors means UniP, HUB, LMU and MD collectively; in case of admission of new contractors having a registered office in Germany, the word German Contractor shall also include any such new contractors;

German Grant means all financial means as granted and to be granted to the German Contractors by the German Federal Ministry of Education and Research and/or other German public bodies for the purpose of the Project SYSTHER;

Knowledge means know-how, intellectual property rights and other knowledge;

Pre-existing know-how means the know-how included in Annex II hereto that shall be excluded from the other Contractors' access in accordance with Article 18 hereof;

Project SYSTHER means the project Systems Biology Tools Development for Cell Therapy and Drug Development – SYSTHER which is described in more details in Article 1 (Preamble) hereof;

Signature Date means the date when this Consortium Agreement is signed by the last Contractor;

Slovenian Contractors means NIB and BTC collectively; in case of admission of new contractors having a registered office in Slovenia, the word Slovenian Contractor shall also include any such new contractors;

Slovenian Grant means all financial means as granted and to be granted to the Slovenian Contractors by the Ministry of Higher Education, Science and Technology of the Republic of Slovenia and/or other Slovenian public bodies for the purpose of the Project SYSTHER;

Work Package means a work package described in Article 3 (2) of this Consortium Agreement.

Article 3 (Project SYSTHER Purpose and Work Packages)

(1) The objectives of the Project SYSTHER are described in Annex I.

(2) To allow easier implementation of the objectives described in paragraph (1) hereof, the Project SYSTHER shall be divided into four Work Packages, as follows:

- Work Package 0: Project management (leader: NIB; participants: NIB, UniP);
- Work Package 1: Systems biology tools (leader: HUB; participants: HUB, NIB, UniP);
- Work Package 2: Stem cell based tumor therapy (leader: LMU; participants: LMU, NIB, HUB);
- Work Package 3: MIS / MIT Clinical trial (leader: BTC; participants: BTC, HUB, LMU, UniP);
- Work Package 4: Exploitation (leader: NIB; participants: all Contractors).

(3) The Project SYSTHER tasks are to be primarily executed within the Work Packages described in paragraph (2) hereof. However, the Project SYSTHER is to be run as an efficient network, where each Contractor shall contribute to the scientific content of the Project SYSTHER, as well as manage a key task. This will allow all Contractors to interact throughout the Project SYSTHER and will not limit interaction to the Work Package level.

(4) The performance of the consortium will be judged on its effectiveness in achieving the deliverables (as agreed upon), reaching milestones (as agreed upon) in time, the quality of its internal communications and its profile in the external environment.

Article 4 (Purpose/Tasks)

(1) The purpose of this Consortium Agreement is:

- to specify the organisation of the work among the Contractors;
- to organise the management of the Project SYSTHER;
- to define the respective rights and obligations of the Contractors, including, but not limited to, their liability and indemnification;
- to define the basic principles of treatment of intellectual property rights in the Project SYSTHER.

(2) The Contractors agree to cooperate pursuant to the terms of this Consortium Agreement in order to execute and perform the tasks designated according to their Grants which is given in the project summary in Annex I.

(3) Each Contractor is obliged to fulfil promptly, actively and on time its tasks according to the respective Grant.

Article 5 (Project SYSTHER Management)

(1) The principal governing body of the Project SYSTHER shall be the Consortium consisting of all Contractors. The Consortium shall be authorized to take all decisions binding on all Contractors.

(2) The management coordinator of the Project SYSTHER shall be the Board of Directors, and the scientific coordination shall be performed by the STEM Committee.

(3) Scientific coordination of each Work Package identified in Article 3 (2) hereof shall be the task of the work package management.

(4) Rules for the decision-making of the Consortium as described in Article 6 hereof shall apply, *mutatis mutandis*, to the decision-making of all other bodies in the Project SYSTHER management.

Article 6 (Consortium)

(1) The Consortium shall meet as required by the Project SYSTHER development, as a rule at least once per year. The Consortium shall be convened by the Board of Directors. The Consortium may also adopt decisions in writing, in such a manner that each Contractor signs a proposed resolution in writing and sends it to the Board of Directors.

(2) A resolution of the Consortium shall only be adopted if all Contractors vote for the adoption of such a resolution. It shall, however, be the duty of the Contractor voting against a resolution to explain its objections in writing and propose an alternative resolution.

(3) The Consortium shall be authorized to decide on any issue not expressly reserved to any other body in the Project SYSTHER management.

Article 7 (Board of Directors)

(1) The Board of Directors consists of two individuals acting jointly, one appointed by the Slovenian Coordinator and the other one appointed by the German Coordinator. It shall act as the management coordinator of the Project SYSTHER.

(2) From the Signature Date on, the Board of Directors shall be composed of Miomir Knežević and Joachim Selbig. The Slovenian Coordinator and the German Coordinator shall have the right to appoint other individuals upon notice to all Contractors.

(3) The Board of Directors shall chair the STEM committee, convoke the Consortium and act as the communication partner to the Ministry of Higher Education, Science and Technology of the Republic of Slovenia and the German Federal Ministry of Education and Research.

Article 8 (STEM Committee)

(1) The STEM committee shall form the scientific-advisory and controlling body of the Project SYSTHER. It shall consist of two boards: the IP and Economy Board, and the Science and Technology Board.

(2) Each Board of the STEM Committee shall be chaired by the Board of Directors. Each Contractor is authorized (but not obliged) to nominate its representative to each Board of the STEM Committee. Furthermore, internal and external invited experts shall be invited to consult the STEM Committee Boards.

(3) The STEM Committee Boards shall provide the scientific and operational input for the Board of Directors to successfully run the Project SYSTHER, and propose resolutions to the Consortium.

(4) In addition to the responsibilities as mentioned in paragraph (3) hereof, the main responsibilities of the STEM Committee will be to:

- Facilitate the effective technical and managerial operation of the Project SYSTHER based upon the principles of Contractor inclusion and even distribution of workload and responsibilities;
- Monitor and control the progress of the individual Work Packages;
- Organize technical meetings alternating between face-to-face and teleconferencing;
- Review and maintain this Consortium Agreement, and propose amendments to the Consortium, if necessary.

Article 9 (Work Package Management)

Work Package management of each Work Package identified in Article 3 (2) hereof shall be obliged to report to the Board of Directors on all matters, activities and developments important for the Project SYSTHER or that could otherwise be of interest to the Contractors.

Article 10 (Performance indicators)

The SYSTHER Consortium will monitor performance by the following indicators:

- a) delivering project results on a timely basis;
- b) the generation of new knowledge that is of high quality;
- c) interest that is shown in the SYSTHER consortium by other industries, SMEs and Venture Capital (VC).

The Board of Directors, the STEM Committee and the Work Package Management are obliged to provide the Consortium with all required information to enable such monitoring.

Article 11 (Budget)

(1) The budget comprises the resources and costs required to execute the Project SYSTHER in accordance to the Grants and own funds of each Contractor.

(2) Each Contractor shall bear its own costs in connection with the carrying out of the Project SYSTHER and will be solely responsible for its applications to obtain Grants therefore. No Contractor shall be liable for the obligations of any other Contractor, each Contractor shall be solely responsible to perform its tasks hereunder. In case any person or entity claims reimbursement or any other payment assuming collective responsibility of the Contractors, all Contractors shall be obliged to ensure that the previous sentence is respected, otherwise the defaulting Contractor shall be obliged to provide compensation to the Contractor from whom reimbursement is being sought.

(3) Each Contractor is obliged to use the Grants obtained for or in connection with the Project SYSTHER exclusively for the purposes of the Project SYSTHER.

Article 11a (Project Charter Document)

(1) After the signing of this Agreement and until December 1st .2007 the Contractors hereby agree to jointly prepare a Project Charter Document (PCD) as a detailed organizational - technical document for the realization of the Project. PCD serves as a reference of authority for the future of the project.

(2) The PCD shall include project scope, objectives and organizational structure with detailed plan of deliverables, milestones, tasks, financials, reporting, communication and risk management, along with procedure of changing specifications (in case of non-conformances in the time of Project realization).

Article 12 (General Responsibilities)

(1) Each Contractor hereby undertakes with respect to the other Contractors to use all reasonable endeavours to perform and fulfil, promptly, actively and on time, all of its obligations under this Consortium Agreement and in relation to the Project SYSTHER.

(2) Each Contractor undertakes to use all reasonable endeavours:

- to notify the Board of Directors and each of the Contractors promptly of any significant problem and delay likely to affect the success of the Project SYSTHER;
- to inform the Board of Directors and all other Contractors of relevant communications it receives from third parties in relation to the Project SYSTHER.

(3) Each Contractor shall use reasonable endeavours to ensure the accuracy of any information or materials it supplies hereunder and promptly to correct any error therein of which it is notified. The recipient Contractor shall be entirely responsible for the use to which it puts such information and materials.

(4) Each Contractor shall be obliged to provide all information required for the reporting purposes of any other Contractor towards the authority providing Grants to such a Contractor. Should a Contractor grossly violate such information duties, it shall be liable to the other Contractor for damages that could result from such a violation.

Article 13 (Liability of the Contractors towards each other)

As regards any claims or damages arising in connection with the preparation and performance of this Consortium Agreement, the following liability provisions shall apply:

- a) In respect of information or materials provided by one Contractor to another hereunder or under the Contract, the supplying Contractor shall be under no obligation or liability other than as stated in Article 12 and no warranty condition or representation of any kind is made, given or to be implied as to the sufficiency, accuracy or appropriateness for purpose of such information or materials, or, subject to Article 12, the absence of any infringement of any proprietary rights of third parties by the use of such information and materials, and the recipient Contractor shall in any case be entirely responsible for the use to which it puts such information and materials.
- b) Save in case of liability under Article 12(4) hereof, no Contractor shall be responsible to another Contractor for any damage including indirect or consequential loss, such as, but not limited to, loss of profit, loss of revenue or loss of contracts except in cases of intent or gross negligence.

Article 14 (Indemnification)

Each Contractor shall be solely responsible in respect of acts or omissions of itself and of its employees, agents and Subcontractors constituting a breach of any obligation under this Consortium Agreement.

Article 15 (Liability towards Third Parties)

Subject always to such other undertakings and warranties as are provided for in this Consortium Agreement (Articles 12 and 13) and the Contract, each Contractor shall be solely liable for any loss, damage or injury to third parties resulting from the execution of its assigned tasks in the Project SYSTHER and from its Use of Knowledge and/or Pre-existing know-how.

Article 16 (Subcontractors)

Each Contractor shall be fully responsible for the performance of any part of its share of the Project SYSTHER, or other Contract obligations, in respect of which it enters into any contract with a third party (a Subcontractor) and shall ensure that:

- a) such contracts with a Subcontractor enable fulfilment of the Contract;
- b) the other Parties' Access-rights are the same as would have been in the case had the Contractor performed its share of the Project SYSTHER and/or those obligations itself; and
- c) the third party shall not have access to any other Contractor's Knowledge or Pre-Existing Know-How without that Contractor's prior written consent.

Article 17 (Intellectual Property Rights)

(1) The Contractors agree to respect their respective intellectual property rights and confidentiality of their respective confidential information.

(2) Should a Contractor, in the course of carrying out work on the Project SYSTHER, independently create an invention, design or work, it shall be entitled to apply for IP protection (including patent protection) in all countries in its own name and for its account.

(3) Before applying for protection pursuant to paragraph (2) hereof, the respective Contractor shall be obliged to inform the other Contractors (via the Board of Directors, if this is practical) in writing, providing them with sufficient details to ensure that they can timely object in case they consider that an invention should be treated as a joint invention pursuant to Article 19 hereof.

Article 18 (Knowledge, Access Rights and Exclusion of Access-rights to Pre-existing Know-how)

(1) Except as provided otherwise in this Article 18, each Contractor shall be obliged to provide access to all other Contractors, on a need to know basis, to all of its Knowledge any of the Contractors might need for the purposes of executing its tasks in the Project SYSTHER. Access-rights to Knowledge needed for the execution of the Project SYSTHER shall be granted on a royalty-free basis.

(2) The granting of access-rights pursuant to the paragraph (1) hereof shall be made conditional on to the following principles:

- a) the access to Knowledge is limited to the field of application being identified as the objectives and goals of the Project SYSTHER;
- b) the access has to be granted within 6 months after written request by the potential user to the owning Contractor.

(3) Each Contractor is entitled to use the Knowledge as disclosed pursuant to the paragraph (1) hereof exclusively for the purposes of the Project SYSTHER and during the duration of the Project SYSTHER.

(4) Each Contractor has the right to exclude its specific Pre-existing know-how as listed in Annex II from the other Contractors' access, as far as the restrictions are announced as described hereinafter before the signature of the Consortium Agreement or before the effective joining of a new Contractor or if acquired in parallel with the Project SYSTHER. In case of Pre-existing Know-how, Access-rights shall be granted only after conclusion of a bilateral agreement between the Contractors concerned. Access-rights to Pre-existing Know-how shall be granted on fair and non-discriminatory conditions.

(5) In the event that a new contractor is admitted to the Project SYSTHER, any other Contractor may exclude access to Pre-Existing Know-how only to the newly admitted contractor by way of amending the Annex II with respect to such new contractor.

(6) It is each Contractor's duty to describe the Pre-existing Know-how in sufficient detail to allow its identification to a third party expert in this field. Should any Pre-existing Know-how not be described in sufficient detail, this will be interpreted in the case of a dispute to the detriment of the party describing such Pre-existing Know-how.

Article 19 (Joint Inventions)

(1) If, in the course of carrying out work on the Project SYSTHER, a joint invention, design or work is made - and more than one Contractor is contributor to it - and if the features of such joint invention, design or work are such that it is not possible to separate them for the purpose of applying for, obtaining and/or maintaining the relevant patent protection or any other intellectual property right, the Contractors concerned agree that they shall jointly apply to obtain and/or maintain the relevant right together with any other relevant Contractors.

(2) The Contractors concerned shall seek to agree amongst themselves arrangements for applying for, obtaining and/or maintaining such right on a case-by-case basis. Such co-ownership agreements shall specify, inter alia, the applicable arrangements in case of the extension of rights as well as those applicable to the allocation and assumption of expenses in connection with the requested protection.

(3) As long as any such right is in force, each Contractor concerned shall be entitled to use such right on a non-exclusive basis. Licensing shall only be possible with the consent of all of the Contractors concerned. In case of use and/or licensing, appropriate financial compensation shall be given to the other Contractors concerned.

(4) Should any of the Contractors contributing to the joint invention, design or work not be interested in pursuing patent protection or any other intellectual property right protection, it shall allow the other Contractor(s) contributing to the joint invention, design or work to apply for such protection, and shall not hinder such applications in any way (including without limitation by public or other disclosure).

Article 20 (Protection Waiver)

(1) A Contractor shall notify the other Contractors (via the Board of Directors, if this is practical) if it does not intend to seek adequate and effective protection of certain of its Knowledge from the Project SYSTHER or if that Contractor intends to waive such protection.

(2) If another Contractor (or Contractors) informs the notifying Contractor in writing within one calendar month of such notice that it wishes to obtain or maintain such protection, the notifying Contractor shall assign to such other Contractor(s) all rights necessary to obtain or maintain such protection. The conditions for the assignment including the financial aspects will be negotiated between the relevant Contractors. Such assignment shall ensure that the access-rights of all Contractors will be unaffected. For the avoidance of doubt, the Contractor which assigned its rights shall have at least the same access-rights as the non-involved Contractors.

Article 21 (Access-rights for Use for Other Purposes)

(1) Access-rights to Knowledge needed for any purpose not regulated in this Agreement (including commercial use) shall be granted upon bilateral agreement between the Contractors concerned.

(2) Access-rights to Knowledge in accordance with paragraph (1) hereof shall be granted on preferential conditions in favour of the Contractors of a joint invention; Contractors which are not involved in a joint invention shall be granted access-rights on fair and non-discriminatory conditions.

Article 22 (Access-rights for using Knowledge in subsequent Research Activities)

(1) Recognising the Contractors' obligations to act in good faith, the Contractors agree that the access-rights for using Knowledge in subsequent research activities are to be as follows: Contractors are deemed to be granted a right to use free of charge Knowledge from the Project SYSTHER for:

- a) internal research;
- b) publications, provided that such publications do not jeopardize commercial exploitation of any Contractor's Knowledge.

(2) Before making a publication, pursuant to paragraph (1) hereof, the respective Contractor shall be obliged to inform the other Contractors concerned (via the Board of Directors, if this is practical) in writing, providing them with sufficient details to ensure that they can timely object to such publications in case it jeopardizes commercial exploitation of their Knowledge.

Article 23 (Language)

This Consortium Agreement is drawn up in the English language, which shall govern all documents, notices and meetings, for its application and/or extension or in any other way relative thereto.

Article 24 (Duration)

(1) This Consortium Agreement shall come into force on the Signature Date and shall continue in full force and effect on the Final Implementation Date of the grants given to each Contractor, or on the complete discharge of all obligations for carrying out of the Project SYSTHER undertaken by the Contractors under this Consortium Agreement, whichever is later.

(2) Should any Grant be revoked or should conditions of any Grant be changed to such an extent to render the performance of a part of the Project SYSTHER impossible, the remaining parts of the Project SYSTHER shall be completed to the greatest extent possible and the Contractors undertake to use their best efforts in this respect.

Article 25 (Annexes and Amendments)

(1) Annexes to this Consortium Agreement represent its integral part. In case of an inconsistency between the provisions of an Annex and the provisions of this Consortium Agreement, provisions of this Consortium Agreement shall prevail.

(2) Amendments or changes to this Consortium Agreement shall be valid only if made in writing and signed by any and all of the Contractors.

Article 26 (Applicable Law, Jurisdiction)

This Consortium Agreement shall be governed by and construed in accordance with German law. Any disputes and controversies between the Contractors that can not be solved by mutual consent shall be finally settled by ordinary courts competent according to the seat of the defendant.

Article 27 (Counterparts)

(1) Each Contractor shall sign seven (7) original copies of the Consortium Agreement's signature page, initialize all other pages of the Consortium Agreement (including its attachments) and return them to the Slovene Coordinator.

(2) The Slovene Coordinator shall collect the signed signature pages and shall send to each Contractor an original signed copy of its signature page together with copies of all original signed signature pages of the other Contractors as soon as possible after the Signature Date.

Annex I: Project Summary

Annex II: List of excluded Pre-existing Know-how

INTENDING TO BE LEGALLY BOUND, the Contractors have executed this Consortium Agreement in seven original copies, one for each of the Contractors and one for the Ministry of Higher Education, Science and Technology of the Republic of Slovenia.

Each person signing this Agreement in the name and on behalf of a Contractor hereby represents and warrants that he or she is duly authorized to sign this Agreement in the name and on behalf of such a Contractor.

Authorised to sign on behalf of **NIB**

By (signature):

Name (block letters):

Position:

Date:

Stamp of organisation:

Authorised to sign on behalf of **UniP**

By (signature):

By (signature):

Name (block letters): STEFFI KIRCHNER Name (block letters): Prof.Dr. JOACHIM SELBIG

Position: Registrar

Institute of Biochemistry and Biology

Date:

Stamp of organisation:

Authorised to sign on behalf of **BTC**

By (signature):

Name (block letters): doc.dr. MATJAŽ JERAS,

Position: director of Blood Transfusion Centre of Slovenia

Date:

Stamp of organisation:

Authorised to sign on behalf of **HUB**

By (signature):

Name (block letters): Dr. Brigitte Lehmann

Position: Head of research department

Date:

Stamp of organisation:

Authorised to sign on behalf of **LMU**

By (signature):

Name (block letters):

Position:

Date:

Stamp of organisation:

Authorised to sign on behalf of **MicroDiscovery**

By (signature):

Name (block letters):

Position:

Date:

Stamp of organisation: