EUROPEAN COMMISSION
Research Executive Agency (REA)

Unit A3 - Research and Innovation Staff Exchanges
Head of Unit

Brussels,

Matteo CASTRONOVO
UNIVERSITA DEGLI STUDI DI ROMA TORVERGATA
VIA ORAZIO RAIMONDO 18
00173 ROMA
ITALY

Subject: Result of Evaluation / Invitation to grant preparation
H2020 - H2020-MSCA-RISE-2014
645684 - Immuno-NanoDecoder

Dear **Matteo CASTRONOVO**,

We are pleased to inform you that the above mentioned proposal has been **favourably evaluated** by the Agency. Consequently, we wish to proceed to the preparation of the Grant Agreement based on your proposal.

You will find the Evaluation Summary Report (ESR) for your proposal together with this letter in the "***My Area***" section of the Research ***Participant Portal***. The ESR reflects the comments of the evaluators.

You will find available in the participant portal the ethics screening report/ethics assessment within the next few weeks.

Invitation to grant preparation

With reference to the submitted proposal and its evaluation, the grant preparation shall be based on the following:

1. **Proposal No: 645684 - Immuno-NanoDecoder** - MSCA-RISE

2. **Strategic objective:** H2020 - H2020-MSCA-RISE-2014

3. **Project Officer:**

   Mr. Frederico MIRANDA
   Frederico.MIRANDA@ec.europa.eu
   +32 22964524
   Marie Sklodowska-Curie Research and Innovation Staff Exchanges

4. **Maximum Grant Amount:**

(4.1) EU contribution requested in Proposal: 441,000.00 EUR
(4.2) Maximum EU grant amount attributed to the Action following evaluation: 441,000.00 EUR

5. **Duration of the Action: 48 Months**

6. **Technical content:** The 'Description of the Action' (**Annex 1** of the future Grant Agreement) and the 'Estimated budget for the action' (**Annex 2** of the future Grant Agreement) shall be based on the proposal submitted.

In the event that the ethics assessment and/or the security scrutiny identify substantive issues, these recommendations must be taken into account during grant preparation and reflected in the Description of the Action.

Please note that, in principle, no changes in the consortium composition are possible during the grant preparation phase. Please inform your Project Officer (3) as soon as possible if an organisation from the proposal is no longer in a position to participate in the grant agreement for duly-justified reasons (e.g. due to bankruptcy).

7. **Timetable for grant preparation**

7.1 **3 weeks after the date of this letter** is the deadline for the submission of the grant agreement data, including annexes. Following the assessment of the submitted version of the grant agreement data, you will have a two-week deadline to submit the final version taking into consideration all requirements highlighted by the Project Officer,

7.2 **6 weeks after the date of this letter** is the deadline for the electronic signature of the participants' declarations of honour.

The Agency foresees proceeding with the signature of the grant agreement within **3 months** after the date of this letter.

Failure to respect the deadlines indicated above will be considered as a wish not to enter into, or continue with, the grant preparation and, therefore, to withdraw your proposal. In such a case, the Agency reserves the right to initiate the procedures to reject your proposal, unless alternative arrangements have been accepted by the Agency.

8. **Other information**

- (A) beneficiary(ies)/partner(s) is(are) not yet validated by the Commission Validation Service team. Any beneficiary(ies)/partner(s) must be validated prior to the signature of the grant agreement.
Please refer to the status of the relevant participant(s) in the Participant Portal.
- Your proposal raises ethical issues:
In case of use of human cells/tissues available commercially, details on cells/tissues type and provider must be submitted.
In case human cells/tissues are obtained within another project, details on cells/tissues type and authorisation by primary owner of data (including references to ethics approval) must be provided.

Copies of relevant authorisations (for breeders, suppliers, users, and facilities) for animal experiments must be forwarded to the REA.
The applicant must confirm that the ethical standards and guidelines of Horizon2020 will be rigorously applied, regardless of the country in which the research is carried out.
- A H2020-MSCA-RISE-2014 web streaming info session for coordinators will be held on 10/09/2014 (afternoon). Please book this day. Further information will follow.

The entire grant preparation process, including communication with the Agency and the subsequent signature of the Grant Agreement, shall be carried out through the Research **Participant Portal Grant Management Service** (PP GMS). By logging into the '***My Area***' section in the Participant Portal and selecting the project, each step of the grant preparation process can be followed, and all relevant documents consulted, at any time.

The Grant Agreement preparation data provided through the Participant Portal (pre-filled with the information already available in the Beneficiary Register, and structured data from your proposal) are needed in order to prepare the grant agreement and provide programme-wide statistical information.

Please note that some information related to the legal and financial status of participants is read-only and may only be updated by the Legal Entity Appointed Representative (LEAR) of the concerned entity through the '*My Organisation*(s)' page of the 'My Area' section in the Participant Portal. It is therefore important to ensure that all participants are aware of the need to appoint a **LEAR** with an extended mandate for Horizon 2020.

Further information providing practical details on grant preparation (including how to transpose the information from your proposal to the grant agreement) as well as technical guidance, are available in the **H2020 Online Manual** on the Participant Portal.

This letter should not be regarded under any circumstances as a formal commitment by the Agency to provide financial support, as this depends on the satisfactory and timely conclusion of grant agreement preparation and on the internal completion of the formal selection process.

Please inform the other participants of the current situation.

Should you require further details concerning the granting process, you are invited to contact the officer in charge of your project (3).

Yours sincerely,

Francois WILLEKENS
Head of Unit

Enclosures:
Evaluation Summary Report

Proposal Evaluation Form

EUROPEAN COMMISSION

Horizon 2020 - Research and Innovation Framework Programme

Evaluation Summary Report

Call:	H2020-MSCA-RISE-2014
Funding scheme:	Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE)
Proposal number:	645684
Proposal acronym:	Immuno-NanoDecoder
Duration (months):	48
Proposal title:	Nanostructured molecular decoders for the quantitative, multiplexed, layer-by-layer detection of disease-associated proteins
Activity:	LIF

N.	Proposer name	Country	Total Cost	%	Grant Requested	%
1	UNIVERSITA DEGLI STUDI DI ROMA TORVERGATA	IT	166,500	37.76%	166,500	37.76%
2	AZ.OSP.-UNIV.S.M.MISERICORDIA DI UDINE	IT	72,000	16.33%	72,000	16.33%
3	UNIVERSITY OF LINCOLN	UK	63,000	14.29%	63,000	14.29%
4	Temple University-Of The Commonwealth System of Higher Education	US	0	0.00%	0	0.00%
5	IQUIBICEN (CONICET)	AR	139,500	31.63%	139,500	31.63%
	Total:		441,000		441,000	

Abstract:
The long-range goal of this project is to develop a molecular nanodevice, based on nucleic acid-protein conjugates, for the multiplexed, quantitative imaging of biomarkers in tissue samples and cultured cells. The Immuno-nanodecoder will be used for the accurate molecular characterization of skin cancer (melanoma) and glycogenosis type II cellular models and to evaluate the in vitro response to experimental therapies. The nanodevices (nanodecoders) will consist of self-assembled DNA nanostructures that can reversibly change their fluorescence signal output in response to hybridization to nucleic acid sequences, or to a specific enzymatic reaction. Each nanodevice will be coupled to a specific molecular probe, such as an antibody, peptide, or protein that uniquely recognize disease biomarkers. The coupling will allow the nanodecoder to detect biomarker presence and distribution in cells and tissues, in a layer-by-layer fashion, using optical fluorescence microscopy. The number of biomarkers that can be detected will be limited only by the capacity to design nanodecoders with differing specificities, which is essentially unlimited. The creation of nanodecoders and optimization of their function will greatly advance biomarker imaging, which currently lacks a high-throughput, convenient method for the in situ, quantitative microscopic analysis of altered tissue regions. This project will be driven by knowledge exchange and the expertise of an interdisciplinary team comprised of both early-stage and experienced university and hospital researchers. Complementary research programs, ranging from nanotechnology to molecular medicine and pathology will support each step of the developmental and applicative parts of the project towards the achievement of its objectives. Funding of this program will enable long-term, transformative collaborations that will contribute to the integration and collaboration of research groups between European Countries and key Third Countries.

Evaluation Summary Report

Evaluation Result

Total score: 82.80% (Threshold: 70/100.00)

Form information

SCORING

Scores must be in the range 0-5.

Interpretation of the score:

0– *The* ***proposal fails to address the criterion*** *or cannot be assessed due to missing or incomplete information.*

1– Poor. *The criterion is inadequately addressed, or there are serious inherent weaknesses.*

2– Fair. *The proposal broadly addresses the criterion, but there are significant weaknesses.*

3– Good. *The proposal addresses the criterion well but with a number of shortcomings*

4– Very good. *The proposal addresses the criterion very well but with a small number of shortcomings*

5– Excellent. *The proposal successfully addresses all relevant aspects of the criterion.Any shortcomings are minor.*

Criterion 1 - Excellence (weight 50%)

Score: **4.30** (Threshold: 0.00/5.00 , Weight: 50.00%)

Quality, innovative aspects and credibility of the research (including inter/multidisciplinary aspects).
Clarity and quality of knowledge sharing among the participants in light of the research and innovation objectives
Quality of the interaction between the participating organisations

Strengths:
-The proposed topic is multidisciplinary and timely.

-The research to be performed is well described and relevant for the potential new results that may be generated in the quantitative imaging of bio-markers in various tissue samples and cultured cells.
-Innovative aspects comprise the simultaneous detection of a large number of bio-markers, which may be useful for early diagnosis of some diseases.
-The scientific and technological objectives were defined and supported by a detailed description.
-The competences of the partners were explained in relation with the proposed research objectives and all participants demonstrate well equipped laboratories.

Weaknesses:
-The schedule and target audience for the planned training courses are not sufficiently specified, showing a minor shortcoming of this criteria.
-The added value of the research in sense of the knowledge sharing is not sufficiently detailed.

Criterion 2 - Impact (weight 30%)

Score: **4.10** (Threshold: 0.00/5.00 , Weight: 30.00%)

Enhancing research- and innovation-related human resources, skills and working conditions to realise the potential of individuals and to provide new career perspectives
To develop new and lasting research collaborations, to achieve transfer of knowledge between research institutions and to improve research and innovation potential at the European and global levels
Effectiveness of the proposed measures for communication and results dissemination.

Strengths:
-The impact of the work proposed is very well described in terms of the innovative research and technological progress to be achieved at European and global level.
-The benefits of networking and possibilities to develop new skills of participant's institutions are underlined.
-The proposal contains a very good strategy for communication, dissemination and exploitation of the potential results obtained. The project will stimulate the lasting research collaboration between EU/AC and TC countries.
-Intellectual property rights aspects and potential for future exploitation of results are adequately described.

Weaknesses:
-A clear strategy for enhancing the potential of individuals and to provide new career development is insufficiently described.
-Specific activities within the strategy for outreach to the public are insufficiently described.
-The practical impact of the expected results is not clearly articulated.

Criterion 3 - Quality and efficiency of the implementation (weight 20%)

Score: **3.80** (Threshold: 0.00/5.00 , Weight: 20.00%)

Overall coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources
Appropriateness of the management structures and procedures, including quality management and risk management
Appropriateness of the institutional environment (infrastructure)
Competences, experience and complementarity of the participating organisations and institutional commitment.

Strengths:
-The work plan is adequately described with appropriate objectives and tasks to be fulfilled in relation to the proposed objectives.
-The project coordinator demonstrates previous expertise in international collaboration and project management.
-The needed infrastructure of the beneficiaries/partners is adequate and the scientific background is credible to support the development of the project.
-The gender issue is appropriately addressed.

Weaknesses:
- The number of planned secondments and person months is small in relation to the complexity of the work plan/tasks.
- Research and training deliverables for the first twelve months are insufficient for the evaluation of project progress.
- Risk management, decision making mechanism and conflict resolution scheme do not fully meet the requirements for the consortium and ambitious research project.

Operational Capacity

Status: **Operational Capacity: Yes**

Not provided

Proposal content corresponds, wholly or in part, to the topic description against which it is submitted, in the relevant work programme part

Status: **Yes**

Not provided