

Terms and Conditions of the PASIFIC Call 1

of the Polish Academy of Sciences (PAS)



PASIFIC
www.pasific.pan.pl



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 847839.

Marie Skłodowska-Curie Actions

The PASIFIC Call 1 for applications for Fellowships realised at the institutes of the Polish Academy of Sciences or the International Institute of Molecular and Cell Biology in Warsaw dedicated to incoming researchers, hereinafter referred to as the Call, is announced within the PASIFIC Programme co-financed from Horizon 2020 within the Marie Skłodowska-Curie Actions in the COFUND call under agreement No. GA 847639.

The aim of the Call is to develop the careers of researchers by supporting their international mobility and financing ambitious research projects carried out by them at the Institutes of the Polish Academy of Sciences or the International Institute of Molecular and Cell Biology in Warsaw.

The Call for Proposals runs from 15 March 2021 to 30 June 2021.

Terms and Conditions of the PASIFIC Call 1
History of changes

Version	Publication	Changes
G01	15.03.2021	Initial version
G02	26.05.2021	Template 1 "Letter of support from the host institute" and Template 2 "Letter of support from the institute supporting the host institute": Proposal ID in the SEA System has been deleted.

TABLE OF CONTENTS

1.	Definitions	3
2.	Addressees of the Call	4
3.	Duration of the Fellowships	4
4.	Type of Research under the Fellowship Implementation	4
5.	Responsibilities of the Supervisor	5
6.	Responsibilities of the Supervisor	6
7.	Secondment.....	8
8.	Fellowship Funding Rules	8
9.	Application Procedure.....	10
10.	Proposal Evaluation – General Principles	10
11.	Formal Evaluation of Proposals.....	10
12.	Evaluators and Evaluation Panels	10
13.	Merit-based Evaluation.....	11
14.	Panel Ranking List	12
15.	List of Proposals Recommended for Funding	12
16.	Ethics Evaluation.....	13
17.	Final Outcome of the Call.....	15
18.	Redress Procedure	15
19.	Transfer of Funds for the Fellowship	15
20.	Call Financial Outlays	16
	APPENDICES	16



1. Definitions

- 1.1. PAS – Polish Academy of Sciences;
- 1.2. Applicant – a person applying for Fellowship within the PASIFIC Call 1;
- 1.3. Fellow – an individual who, as a result of the PASIFIC Call1, has obtained funding for their Fellowship at one of the Institutes;
- 1.4. Supervisor – a researcher, selected by the Applicant as a person responsible for scientific support of the Fellow’s research and for facilitating Fellow’s contacts with the local scientific community; understood as a supervisor for Applicants less than 12 years after the PhD, and as a research partner for Applicants at least 12 years after the PhD;
- 1.5. Supporting Supervisor – in Interdisciplinary Proposals, a researcher selected by the Applicant as the person responsible for the scientific support of the Supervisor;
- 1.6. Institute – an Institute of the Polish Academy of Sciences or the International Institute of Molecular and Cell Biology in Warsaw;
- 1.7. Host Institute – the Institute which has agreed to host the Fellow selected in the Call;
- 1.8. Programme Coordinator – the person who acts as the coordinator of the PASIFIC Programme under agreement No. GA 847639;
- 1.9. Fellowship – a stay of the Fellow at the Host Institute, covering research within a specified period of time on the subjects specified by the Applicant in the submitted Proposal, activities aiming at the development of the researcher” ’s career, networking and participation in training, conducted under agreement for hosting and financing of the Fellowship, hereinafter referred to as the Fellowship Agreement;
- 1.10. Secondment – a stay of the Fellow in an organisation not belonging to the System of Higher Education and Science within the meaning of Article 7(1) items 1-7 of the Polish Higher Education and Science Act of 20 July 2018 (Journal of Laws of 2020, item 85, as amended);
- 1.11. Research Areas – areas defined in Appendix 2 to the Terms and Conditions;
- 1.12. Proposal – a proposal for Fellowship funding submitted by the Fellow in the PASIFIC Call 1;
- 1.13. Interdisciplinary Proposal – a that covers more than one Research Area.

2. Addressees of the Call

- 2.1. The Call is dedicated to incoming researchers who wish to conduct research at the Institutes.
- 2.2. An Applicant in the Call may be a person who, at the closing date of the Call (30 June 2021):
 - a. holds a doctoral degree within the meaning of the law of the country in which the degree was awarded or has at least 4-years of full-time research experience after having obtained a degree entitling to embark on a doctoral programme;
 - b. has not been living, working or studying in the territory of the Republic of Poland, hereinafter referred to as Poland, for more than 12 months out of the 3-years prior to the Call deadline;
 - c. is not employed under a permanent employment contract at the Institute indicated in the Proposal as the Host Institute.

3. Duration of the Fellowships

- 3.1. Only Proposals for 24 month-length Fellowships may be submitted in the Call.
- 3.2. The Fellowship must start on the first day of a calendar month, at the earliest on 1 January 2022 and at the latest on 1 April 2022. In exceptional, justified cases, the PAS President may set a different starting date of the Fellowship, no later than 1 October 2022.

4. Type Research Conducted During the Fellowships

- 4.1. The Call is open to Proposals of any subject covering research within the meaning of Article 4(2) of the Act on Higher Education and Science of 20 July 2018.
- 4.2. Research conducted as a part of Fellowships must comply with the ethical principles applicable to the H2020 Programme as set out in the Regulation (EU) No. 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020).

5. Place of the Fellowship Implementation

- 5.1. The Applicants may select any Institute as the place of the Fellowship implementation
- 5.2. The Applicants attach to the Proposal a letter of support signed by the Director of the Institute selected by the Applicant as a place of the Fellowship implementation, drawn up in accordance with the template in Appendix No. 5 to these Terms and Conditions. The letter of support must contain a commitment that, if the Applicants are awarded funding, the Institute shall, among others:
- a. employ the Applicants under a full-time employment contract for the entire duration of the Fellowship;
 - b. provide the Applicants with the resources for conducting their research, including office/laboratory infrastructure and research equipment;
 - c. assign to the Applicant the Supervisor indicated in the Proposal;
 - d. for Interdisciplinary Proposals, assign to the Applicant the Supporting Supervisor indicated in the Proposal if the Supporting Supervisor is employed by the Host Institute;
 - e. assign to the Applicant a research buddy, i.e., a person who will familiarise the Applicant with the research environment of the Host Institute, its rules and procedures;
 - f. provide administrative and financial support during the Fellowship, including support related to the arrival and stay of the Applicant in Poland, and appoint an employee responsible for its coordination;
 - g. organise, during the Fellowship, a Secondment in an organisation selected by the Applicant in Poland or abroad, if such a secondment was expected in the Proposal;
 - h. enable the Applicant to decide on the allocation of 1/5 of indirect costs of the project;
 - i. support the Applicant in obtaining the required approvals, opinions, permits or authorisations if the research carried out under the Fellowship requires formal certification of compliance with ethical standards
 - j. respect the principles of the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers¹;
 - k. apply for the “HR Excellence in Research” logo no later than one year after signing the Fellowship Agreement, if the Host Institute does not have such a logo
- 5.3. In Interdisciplinary Proposals, it is possible to select a second Institute where the

¹ Commission Recommendation of 11 March 2005 on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers

Fellowship will be conducted. The Institute has a supporting role for the Host Institute and is not a party to the Fellowship Agreement with the Polish Acad of Sciences. In that case, a letter of support of the supporting Host Institute according to the template in Appendix 6 is also to be attached to the Proposal. The letter of support must contain a commitment that, if the Applicant is awarded funding, the Institute supporting the Host Institute shall, among others:

- a. provide the Applicant with an office/laboratory space as well as research equipment necessary to conduct the research in the scope of the Fellowship in the Research Area not covered by the Host Institute;
- b. assign to the Applicant the Supporting Supervisor indicated in the Proposal;
- c. support the Host Institute in the administrative and financial services necessary for the research carried out during the Fellowship related to a Research Area not covered by the Host Institute;
- d. support the Applicant and the Host Institute in obtaining the required approvals, opinions, permits or authorisations in case the research carried out by the Applicant requires formal certification of compliance with ethical standards.

6. Responsibilities of the Supervisor

- 6.1. The Applicants indicate the Supervisor in the Proposal, whereas, in Interdisciplinary Proposals, they also indicate the Supporting Supervisor.
- 6.2. The Supervisor must hold at least a doctoral degree and be employed at the Host Institute under a permanent employment contract or a nomination, and in the case of the International Institute for Molecular and Cell Biology upon a fixed-term employment contract, pursuant to Article 16 sec. 1 of the Act of 26 June 1997 on the International Institute of Molecular and Cell Biology in Warsaw (Journal of Laws of 2020, item 982).
- 6.3. At the Proposal submission stage, the Supervisor is required, among others, to:
 - a. assist the Applicants in obtaining the letter of support from the Host Institute;
 - b. support the Applicants in the preparation of the Proposal, especially in the description of the Fellowship's impact on the scientific environment of the Institute and the description of ethical issues related to the research conducted within the Fellowship;
 - c. support the Applicants in establishing contact with the organisation where the Applicant plans to carry out the Secondment;
 - d. provide the Applicants with the information necessary for the preparation of part B1 of the Proposal, including the Supervisor's CV and a description of their achievements.

- 6.4. If the Applicant is awarded funding, the Supervisor commits, among others, to:
- a. provide the Fellow with the scientific support during the Fellowship;
 - b. prepare, in collaboration with the Fellow, a Career Development Plan by the end of the first month of the Fellowship at the latest, which includes, among others:
 - ◆ a description of the objectives and milestones of the Fellowship;
 - ◆ a research results publication plan;
 - ◆ a plan for presenting the Fellow's research results at international scientific meetings;
 - ◆ a plan of action concerning Fellow's participation in scientific conferences;
 - ◆ a description of the objectives and activities during the Secondment (if the Secondment is expected during the Fellowship);
 - ◆ a description of short study visits (if short study visits are expected during the Fellowship);
 - ◆ a plan for participation in workshops and training courses, including those organised by the PAS under the PASIFIC Programme;
 - ◆ plan of researcher's career development, including activities beyond the Fellowship;
 - c. evaluate the implementation of the Fellow's Career Development Plan during semi-annual evaluation meetings and update it if necessary;
 - d. monitor the compliance of the Fellow's research with fundamental ethical principles, relevant European legislation, international declarations and national law, and with the recommendations resulting from the evaluation of ethical issues related to the Proposal, if the research carried out during the Fellowship covers the Research Areas indicated in Appendix 7;
 - e. assist in the preparation of the annual and final report;
 - f. facilitate the Fellow's cooperation with the academic community in Poland and abroad;
- 6.5. The Supporting Supervisor must hold at least a doctoral degree and be employed at the
Host Institute under a permanent employment contract or a nomination and, in the case of the International Institute for Molecular and Cell Biology upon a fixed-term employment contract pursuant to Article 16 sec. 1 of the Act of 26 June 1997 on the International Institute of Molecular and Cell Biology in Warsaw (Journal of Laws of 2020, item 982).
- 6.6 At the Proposal stage, the Supporting Supervisor is obliged, among others, to:
1. assist the Applicants in obtaining a letter of support from the Institute supporting the Host Institute if the Supporting Supervisor is not an employee of the Host Institute;
 2. support the Applicants in the Proposal preparation if the Research Area is not covered by the Host Institute;

3. support the Applicants in establishing contact with the organisation where the Applicant plans to carry out the Secondment;
4. provide the Applicant with the CV and information on the scientific achievements of the Supporting Supervisor necessary for the Proposal preparation;
- 6.7 If the Applicant is awarded funding, the Supporting Supervisor commits, among others, to:
 1. provide scientific support for the research carried out by the Fellow during the Fellowship in collaboration with the Supervisor;
 2. prepare the Fellow's Career Development Plan together with the Supervisor and the Fellow;
 3. support the Supervisor in evaluating the implementation of the Fellow's Career Development Plan during semi-annual evaluation meetings and update it if necessary;
 4. monitor, in collaboration with the Supervisor, the compliance of the Fellow's research with fundamental ethical principles, relevant European legislation, international declarations and national law, and with the recommendations resulting from the evaluation of ethical issues related to the Proposal, if the research carried out during the Fellowship covers the Research Areas indicated in Appendix 7;
 5. assist, in collaboration with the Supervisor, in the preparation of annual and final reports;
 6. facilitate the Fellow's cooperation with the academic community in Poland and abroad.

7. Secondment

- 7.1. The Applicants may include in the Proposal a Secondment to a unit not belonging to the System of Higher Education and Science within the meaning of Article 7(1) items 1-7 of the Act on Higher Education and Science of 20 July 2018, implementing the research results related to the research conducted within the Fellowship.
- 7.2. The duration of the Secondment may not exceed 6 months.
- 7.3. The duration of the Secondment does not extend the duration of the Fellowship.

8. Fellowship Funding Rules

- 8.1. The Host Institute indicated by the Applicant as the place of Fellowship implementation shall receive:

- a. funds for hiring the Applicant under a full-time employment contract for a period of 24 months in the amount of EUR 99,000;
 - b. funds for the family allowance of EUR 7,200 for researchers who, at the closing date of the Call, have family commitments, i.e., are married or in a relationship equivalent to marriage according to the law of the country where the relationship has been formalised, or have dependent children. Entitlement to the family allowance is determined at the closing date of the Call and is not verified between the closing date and the end of the Fellowship. The allowance is due if the spouse(s)/partner(s) or child(ren) change their place of residence and come to Poland with Fellows for at least 3 months during the Fellowship;
 - c. financial resources for research during the Fellowship by the Applicant in the amount not exceeding PLN 257,484.00;
 - d. indirect costs calculated as 20% of the sum of the costs indicated in Section 8.1(a), (b) and (c).
- 8.2. For the calculation of indirect costs, the costs included in Section 8.1 (a) and (b) are converted into the PLN according to the euro exchange rate announced by the National Bank of Poland in the Average Exchange Rate Table No. 088/A/NBP/2019 of 8 May 2019, i.e., EUR 1 = PLN 4.2914.
- 8.3. The amounts in EUR set out in Section 8.1 (a) and (b) are converted into PLN at the higher of the following rates:
- a. EUR exchange rate announced by the National Bank of Poland in the Average Exchange Rate Table No. 088/A/NBP/2019 of 8 May 2019, i.e., EUR 1 = PLN 4.2914;
 - b. average EUR exchange rate (for foreign currencies) announced by the European Central Bank
https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-pln.en.html:
 - ◆ in the period from 1 March 2020 to 28 February 2022 for the period from 1 March 2020 to 28 February 2022;
 - ◆ in the period from 1 March 2022 to 31 August 2023 for the period from 1 March 2022 to 31 August 2023;
 - ◆ in the period from 1 September 2023 to 28 February 2025 for the period from 1 September 2023 to 28 February 2025
- 8.4. The funds will be provided by the PAS to the Host Institute as follows:
- a. 85% of the sum of the funds indicated in Section 8.1 (a-b) converted into the PLN according to the euro exchange rate indicated in Section 8.3 (a) and the funds indicated in Section 8.1 (c-d) in tranches specified in the Fellowship Agreement referred to in Section 19.3;

- b. the remaining funds are transferred to the Institute following the final approval of the Fellowship final report.

8.5. The Fellowship's costs must meet the requirements set out in Appendix 4 to these Terms and Conditions.

9. Application Procedure

- 9.1. The Proposal, along with the required attachments, must be submitted electronically in
 1. English in the SEA system available at <https://sea.pan.pl/> between 15 March 2021 and 30 June 2021. The Proposal is considered to have been submitted when it has a status "submitted" in the SEA system. It is the Applicant's responsibility to check whether submitting the Proposal has been successfully completed.
- 9.2. The scope of data required in the Proposal and the attachments are specified in Appendix No. 1 to these Terms and Conditions.

10. Proposal Evaluation – General Principles

- 10.1. Proposals are subject to formal, merit-based and ethics evaluation.
- 10.2. Only Proposals with the "submitted" status in the SEA system at the closing date of the Call are evaluated.
- 10.3. The Proposal evaluation is based on the data contained in the Proposal and the attachments thereto.

11. Formal Evaluation of Proposals

- 11.1. The first stage of the Proposal evaluation is a formal evaluation. The criteria for formal evaluation are laid down in Appendix 3 to the Terms and Conditions. Failure to meet one of the criteria will result in a rejection of the Proposal on formal grounds.
- 11.2. The formal evaluation of the Proposal is performed by the employees of the Polish Academy of Sciences Chancellery appointed by the PASIFIC Programme Coordinator; the formal evaluation is approved by the PASIFIC Programme Coordinator.

12. Evaluators and Evaluation Panels

- 12.1. Proposals in the PASIFIC Call 1 are submitted to one of the three Evaluation Panels:
 - a. Panel 1 – Humanities and Social Sciences;

- b. Panel 2 – Physical Sciences and Engineering;
 - c. Panel 3 – Life Sciences.
- 12.2. A list of the Research Areas evaluated by each panel can be found in Appendix 2 to these Terms and Conditions.
- 12.3. The Applicants is obliged to indicate which of the Evaluation Panels is the most appropriate for evaluating their Proposals.
- 12.4. The Applicants submitting an Interdisciplinary Proposal, covering Research Areas evaluated by at least two different Evaluation Panels, indicate in the Proposal the primary Evaluation Panel and a supporting Evaluation Panel.
- 12.5. The Chairperson of the Evaluation Panel may transfer a Proposal to another Evaluation Panel upon the consent of the Chairperson of that Evaluation Panel.
- 12.6. Each Evaluation Panel consists of 15 evaluators and the Chairperson indicated by the Programme Coordinator.
- 12.7. At least 35% of the evaluators in each Evaluation Panel should be women.
- 12.8. All Evaluation Panels consist of at least 25 evaluators of non-Polish nationality.
- 12.9. Evaluators are selected by the Programme Coordinator from among distinguished Polish and foreign researchers on the basis of their scientific achievements and experience in evaluating research projects.

13. Merit-based Evaluation

- 13.1. The Chairperson of the Evaluation Panel selects 5 evaluators responsible for the merit based evaluation of each Proposal.
- 13.2. The merit-based evaluation of Proposals is carried out in two stages:
- a. Stage I – at this stage, the Proposal is read independently by 5 evaluators, who carry out the individual assessments.
 - b. Stage II – at this stage, the joint evaluation is performed collectively by evaluators, who assessed Proposals at Stage I.
- 13.3. As a result of the merit-based evaluation, the evaluators award a score ranging from 0 to 100 points with a written justification.
- 13.4. The merit-based evaluation is performed according to criteria grouped into the three categories: Excellence, Impact and Feasibility described, together with the maximum number of points for each criterion, in Appendix 3 to these Terms and Conditions.
- 13.5. At the individual evaluation stage referred to in Section 13.2 (a), each evaluator assesses the Proposal without consulting other evaluators. At the stage of joint evaluation referred to in Section 13.2 (b), evaluators, through discussion and

exchange of opinions, agree upon a joint score for the Proposal and jointly prepare its justification.



14. Panel Ranking List

- 14.1. Allocation of funds to the given Evaluation Panel is determined after the closing date of the Call as a result of the multiplication of financial outlays of the Call as specified in Section 19 of these Terms and Conditions. The sum of the budgets of the Proposals submitted to the given Evaluation Panel divided by the sum of the budgets of the Proposals submitted in the Call.
- 14.2. The position of a Proposal in the ranking list of the given Evaluation Panel is determined by the joint score referred to in Section 13.6.
- 14.3. Should two or more Proposals obtain the equal joint score, the Proposal with the higher score for the Excellence criterion will be placed higher in the ranking. If the Proposals referred to in the first sentence obtain the equal score for this criterion, the Proposal with the higher score for the Impact criterion would be placed higher in the ranking. If the Proposals referred to in the previous sentence obtain the equal score for the Impact criterion, the Chairperson of the Evaluation Panel decides on their final position in the ranking list.
- 14.4. The Evaluation Panel recommends for funding the Proposals that reached the threshold of over 60 points as referred to in Section 13.6, and whose sum of total planned expenditure does not exceed the amount of funds allocated to the given Evaluation Panel.
- 14.5. In addition to the Proposals recommended for funding, the Proposals in the ranking list of the given Evaluation Panel that reached the threshold of over 60 points form a reserve list of Proposals conditionally recommended for funding.
- 14.6. The number of positions on the reserve list of the given Evaluation Panel is equal to the multiplication of 15 (the maximum total number of Proposals on the final reserve list, combined from reserve lists from all the Evaluation Panels) and the funds allocated to the given Evaluation Panel divided by the funds specified in Section 20.1 of the Terms and Conditions.

15. List of Proposals Recommended for Funding

- 15.1. The list of Proposals recommended for funding in the Call is created by combining the lists of Proposals recommended for funding created by all the Evaluation Panels.
- 15.2. The Chairpersons of the Evaluation Panels jointly create a Call reserve list by

combining the reserve lists of the individual Evaluation Panels and determine the order of the Proposals on this list. The Call reserve list includes a maximum of 15 Proposals. The Call reserve list is not to be complemented at later stages.

- 15.3. If the sum of the budgets of the Proposals recommended for funding in all the Evaluation Panels is lower than the financial outlay for the Call specified in Section 20.1 of the Terms and Conditions, and, at the same time, sufficient for funding the next Proposal, the Chairpersons of the Evaluation Panels may jointly decide that the first Proposal from the reserve list will be included in the list of Proposals recommended for funding in the Call.

16. Ethics Evaluation

- 16.1. The ethics evaluation of the Proposals is performed by ethics experts appointed by the PAS President.
- 16.2. All Proposals recommended for funding and those on the reserve list are subject to ethics evaluation, which consists of the following stages:
- a. ethics screening;
 - b. ethics assessment;
- 16.3. Ethics screening
- a. At the stage of the ethics screening, each Proposal is read by one ethics expert who verifies whether the Proposal contains any of the areas of research requiring ethics assessment as specified in Appendix 7.
 - b. If the Proposal does not cover any of the Research Areas listed in Appendix 7, the Proposal will be directed to financing. If the Proposal covers at least one of the Research areas listed in Appendix 7, the ethics expert will refer the Proposal for ethics assessment.
- 16.4. Ethics assessment
- a. The ethics assessment addresses the compliance of the Applicant's proposed research with fundamental ethical principles, relevant European legislation, international declarations and national law.
- 16.5. The ethics assessment consists of two stages:
- a. Individual ethics assessment.
At this stage, the Proposal is read independently by 3 ethics experts, who carry out the individual ethics assessments.
 - b. Joint ethics assessment.
At this stage, the ethics experts jointly make the final ethics recommendation with justification.
- 16.6. The ethics recommendation may be as follows:

- a. The Proposal is directed to financing and does not require any changes;
 - b. The Proposal is directed to financing but requires changes recommended by the ethics experts;
 - c. The Proposal raises serious ethical issues and is not directed to financing.
- 16.7. The Fellowship Agreement may be concluded only if ethics recommendations, if any, are implemented.

17. Final Outcome of the Call

- 17.1. After the ethics evaluation, the final list of Proposals directed to financing is created, including all Proposals from the list of Proposals recommended for funding in the Call, that are directed to financing and do not require changes, and those which are directed to financing but require changes recommended by the ethics experts.
- 17.2. If the ethics experts agree that a Proposal from the list of Proposals recommended for funding raises serious ethical issues and is not directed to financing, then this Proposal will not be included in the final list of Proposals directed to financing, and will be replaced by the first Proposal from the Call reserve list.
- 17.3. The final list of Proposals directed to financing and the Call reserve list, after the Programme Coordinator's approval, is accepted by the PAS President and published on the website <https://pasific.pan.pl/> by 31 December 2021.
- 17.4. If the Applicant, whose Proposal is placed on the final list of Proposals directed to financing, resigns from the Fellowship or is not able to pursue it, the PAS President may direct to financing the first Proposal from the Call reserve list.

18. Redress Procedure

- 18.1. In case the Proposal is rejected, the Applicant has a right to appeal to the PASIFIC Programme Redress Committee within 30 days from the date of publication of the list of Proposals directed to financing referred to in Section 17.3.
- 18.2. An appeal may be lodged only if the Call procedure set forth in the Terms and Conditions has been infringed.
- 18.3. Appeals must be sent by e-mail to redress@pan.pl, including at least:
- a. Name, Last Name;
 - b. Proposal ref. No.;
 - c. Proposal Acronym and Title;

- d. Indication of infringement;
 - e. Justification.
- 18.4. The PASIFIC Programme Redress Committee consists of the PAS Chancellor and two employees of the PAS Chancellery nominated by him, holding a university degree in law, who have not participated in the evaluation process of the Proposal submitted in the Call.
- 18.5. The PASIFIC Programme Redress Committee decides on the redress no later than 2 weeks after the redress procedure has been lodged.
- 18.6. If justified, the PASIFIC Programme Redress Committee may refer the Proposal for formal, merit-based and ethical re-evaluation.
- 18.7. If the Proposal is directed by the PASIFIC Programme Redress Committee to re-evaluation, the following rules apply:
- a. the re-evaluation of the Proposal should be completed within 10 months from the date on which the Proposal was directed to the re-evaluation in terms of content and ethics, as described in Sections 13-16;
 - b. as a result of the re-evaluation of the Proposal, the Evaluation Panel makes a new joint assessment and issues an opinion if the Proposal is appropriate for funding, taking into account scores of all Proposals assessed previously in the Call;
 - c. if the Proposal is deemed appropriate for funding, it is directed to ethics evaluation.
 - d. in case of a positive ethics evaluation, after the approval of the Programme Coordinator, the PAS President introduces adequate changes to the list of Proposals directed to financing or the reserve list.
 - e. experts who participated in the previous evaluation cannot participate in the re-evaluation of the Proposal.

19. Transfer of Funds for the Fellowship

- 19.1. After the announcement of the list of Proposals directed to financing, the Polish Academy of Sciences concludes agreements for the Fellowships with the Host Institutes.
- 19.2. Research involving human embryos or human embryonic stem cells can only be carried out after the PAS receives approval from the Research Executive Agency (REA). The agreement for the implementation of Fellowships involving such research can only be signed after the PAS obtains approval from the REA.
- 19.3. The Fellowship Agreement specifies:

- a. terms and conditions of the Fellowship;
 - b. conditions for the Fellow's employment;
 - c. the funds allocated for the Fellowship and rules for transferring the funds by the Polish Academy of Sciences;
 - d. description of the Fellow's research project;
 - e. principles and procedures of the Fellowship supervision and monitoring by the Polish Academy of Sciences;
 - f. rules of the Fellowship financial settlement;
 - g. rules of the final Fellowship evaluation.
- 19.4. The Host Institute is obliged to provide a copy of the employment contract concluded with the Fellow no later than 7 days after the Fellowship's commencement. Failure to meet the deadline may result in the termination of the Fellowship Agreement.
- 19.5. During the Fellowship, the Fellows are obliged to participate in at least four training courses to develop competencies. They will be organised and financed by the Polish Academy of Sciences.

20. The Call financial outlays

- 20.1. Within the Call, a maximum of 35 Fellowships with a total budget not exceeding EUR 6,980,400 are expected to be funded.

APPENDICES

- ◆ Appendix 1 – Data required in the Proposal
- ◆ Appendix 2 – The list of Research Areas assessed in the PASIFIC Evaluation Panels
- ◆ Appendix 3 – Criteria for formal and merit-based evaluation
- ◆ Appendix 4 – Eligible costs in the PASIFIC Programme
- ◆ Appendix 5 – Template of letter of support from the Host Institute
- ◆ Appendix 6 – Template of the letter of support from the Institute Supporting Host Institute
- ◆ Appendix 7 – Research Areas requiring ethical assessment

Appendix 1. Data required in the Proposal

Appendix No. 1 to the Terms and Conditions of the
PASIFIC Call 1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 847839.

Marie Skłodowska-Curie Actions

TABLE OF CONTENTS

1. Data to be filled in the system	19
1.1. Information on the Applicant	19
1.2. Eligibility information.....	19
1.3. Information on the project.....	19
1.4. Information on the Host Institute and the Supervisor	20
1.4. Budget.....	20
1.6. Ethics issues table	20
1.7. Information on how the Applicant found out about the Programme.....	24
1.8. Access to pre-submission data.....	24
1.9. Applicant's declarations.....	24
2. Required attachments	25
2.1 Attachment B1 to the Proposal	25
2.2 Attachment B2 to the Proposal.....	25
2.3. Letter of Support of the Host Institute	26
2.4. Letter of Support of the Institute supporting the Host Institute.	26
2.5. A scanned copy of the doctoral diploma	26
2.6. Other documents	26



1. Data to be filled in the system:

1.1 Information on the Applicant:

- a. first name,
- b. last name,
- c. date and place of birth,
- d. gender,
- e. Nationality.

1.2 Eligibility information

- a. To choose from: I have a PhD/ I do not have a PhD, but I have at least the 4-year equivalent research experience
- b. For holders of a PhD: date, place, and institution where the doctoral degree was obtained
- c. For those without a PhD:
 - i. date, place, country and institution where the degree/title the doctoral degree was awarded
 - ii. information on research experience since obtaining the degree entitling to embark on a doctorate, i.e., period, institution, percentage of a full-time, type of experience
- d. Information about places of residence and main activities during the last 3 years before the closing date of the Call (start date, end date, country, place, institution, type of activity selected from the list)

1.3 Information on the project:

- a. Evaluation Panel (To choose from the list in Appendix No. 3)
- b. Discipline
- c. Keywords (To choose from the list)
- d. Free Keywords
- e. Check-box to indicate if the project is interdisciplinary; if so, a possibility to choose the second panel, research area, discipline, keywords from the list and free keywords
- f. Acronym
- g. Title
- h. Abstract (max. 2000 characters)

1.4 Information on the Host Institute (to be chosen from the list) and the Supervisor (to be indicated)

1.5 Budget:

- a. Fellow's remuneration
- b. Family allowance
- c. Supervisor's remuneration
- d. Other personnel costs
- e. Equipment
- f. Consumables
- g. Travel costs
- h. Publications
- i. Dissemination activities
- j. Other
- k. Total direct costs
- l. Total indirect costs
- m. Total estimated eligible costs

1.6 Ethics issues table (Applicant should answer the following questions):

1. HUMAN EMBRYOS/FOETUSES

Does your project involve Human Embryonic Stem Cell (hESC) research?

Does your research involve the use of human embryos?

Does your research involve the use of human foetal tissues or cells?

2. RESEARCH WITH HUMAN PARTICIPANTS

Does your research project involve human participants?

Does your research include physical interventions on the study participants?

If your research involves processing genetic information, see also Section 4.

3. HUMAN CELLS/TISSUES

Does your research involve human cells or tissues (other than human embryos/foetuses, i.e. Section 1)

4. PERSONAL DATA

Does your research involve personal data collection and/or processing?

Does your research involve further processing of previously collected personal data (secondary use)?

5. ANIMALS

Does your research involve animals?

6. SCIENTIFIC COOPERATION WITH COUNTRIES OUTSIDE THE EUROPEAN UNION (EU)

Where non-EU countries are involved in the research, do the research activities undertaken in those countries raise potential ethical issues?

Do you plan to use local resources (e.g. animal and/or human tissue samples, genetic material, live animals, human remains, materials of historical value, samples of endangered fauna or flora, etc.)?

Do you plan to import any material – including personal data – from non-EU countries into the EU?

Do you plan to export any material – including personal data – from the EU to countries outside the EU?

If your research includes low and/or lower middle income countries, are there any benefit sharing activities planned?

Could the situation in the country potentially endanger persons taking part in the research?

7. ENVIRONMENT, HEALTH AND SAFETY

Does your research involve the use of elements that may cause harm to the environment, animals or plants?

Does your research deal with endangered fauna and/or flora and/or protected areas?

Does your research involve elements that may cause harm to humans, including research staff?

8. DUAL USE

Does your research involve dual-use items within the meaning of Regulation No. 428/2009 or other items for which an authorisation is required?

9. FOCUS ON CIVIL APPLICATIONS

Could your research raise concerns about an exclusive focus on civil applications?

10. MISUSE

Is there a risk of potential misuse of research results?

11. OTHER ETHICAL ISSUES

Are there any other ethical issues to consider in the research?

If you answered Yes to any of the questions above, answer the specific questions:

1. HUMAN EMBRYOS/FOETUSES

Does your project involve Human Embryonic Stem Cell (hESC) research?

◆ Will they be directly derived from embryos?

- ◆ Are they pre-established cell lines?

Does your research involve the use of human embryos?

- ◆ Will your research lead to their destruction?

Does your research involve the use of human foetal tissues or cells?

2. RESEARCH WITH HUMAN PARTICIPANTS

Does your research project involve human participants?

- ◆ Are they volunteers for social or human sciences research?

- ◆ Are they persons unable to give informed consent?

- ◆ Are they particularly vulnerable individuals or groups?

- ◆ Are they children/minors?

- ◆ Are they patients?

- ◆ Are they healthy volunteers participating in medical research?

Does your research include physical interventions on the study participants?

- ◆ Does your research involve invasive techniques?

- ◆ Does your research involve biological sampling?

If your research involves processing genetic information, see also Section 4.

3. HUMAN CELLS/TISSUES

Does your research involve human cells or tissues (other than human embryos/foetuses, i.e. Section 1)

- ◆ Are they commercially available?

- ◆ Will they be obtained as part of the project?

- ◆ Will they be obtained within another project, laboratory or institution?

- ◆ Are they deposited in a biobank?

4. PERSONAL DATA

Does your research involve personal data collection and/or processing?

- ◆ Does it involve the collection and/or processing of sensitive personal data (e.g. concerning health, sex life, ethnic origin, political opinions, religious or philosophical beliefs)?

- ◆ Does your research involve processing genetic information?

- ◆ Does it involve tracking or observing participants?

Does your research involve further processing of previously collected personal data (secondary use)?

5. ANIMALS

Does your research involve animals?

◆ Are they vertebrates?

◆ Are they non-human primates?

◆ Are they genetically modified?

◆ Are they cloned farm animals?

◆ Are they endangered species?

◇ Please list these species (up to 1000 characters)

6. SCIENTIFIC COOPERATION WITH COUNTRIES OUTSIDE THE EUROPEAN UNION (EU)

Where non-EU countries are involved in the research, do the research activities undertaken in those countries raise potential ethical issues?

◇ Please list these countries (up to 1000 characters)

Do you plan to use local resources (e.g. animal and/or human tissue samples, genetic material, live animals, human remains, materials of historical value, samples of endangered fauna or flora, etc.)?

Do you plan to import any material – including personal data – from non-EU countries into the EU?

◇ Please specify material and countries involved (up to 1000 characters)

Do you plan to export any material – including personal data – from the EU to countries outside the EU?

◇ Please specify material and countries involved (up to 1000 characters)

If your research includes low and/or lower middle income countries, are there any benefit sharing activities planned?

Could the situation in the country potentially endanger persons taking part in the research?

7. ENVIRONMENT, HEALTH AND SAFETY

Does your research involve the use of elements that may cause harm to the environment, animals or plants?

Does your research deal with endangered fauna and/or flora and/or protected areas?

Does your research involve elements that may cause harm to humans, including research staff?

8. DUAL USE

Does your research involve dual-use items within the meaning of Regulation No. 428/2009 or other items for which an authorisation is required?

9. FOCUS ON CIVIL APPLICATIONS

Could your research raise concerns about an exclusive focus on civil applications?

10. MISUSE

Is there a risk of potential misuse of research results?

11. OTHER ETHICAL ISSUES

Are there any other ethical issues to consider in the research?

◇ Please specify (up to 1000 characters)

1.7 Information on how the Applicant found out about the Programme (indication from the list)

1.8 Access to pre-submission data

The Applicant can choose whether to give access to pre-submission data. The PASIFIC Team needs it to plan the evaluations. The pre-submission data is limited to: Project Acronym, Host Institute, Supervisor, Evaluation Panel, Discipline, Keywords, Abstract. Neither Part B nor any annexe(s) from the pre-submission data can be accessed by the PASIFIC Team before the call deadline.

1.9 Applicant's declarations

- a. I declare that during the last three years before the Call's deadline, I have not worked, studied or lived in Poland for more than 12 months
- b. I declare that I am not employed on the basis of an employment contract for an indefinite time period at the Host Institute indicated in the application form.
- c. If funding is granted for a research fellowship within the PASIFIC Programme, I will not apply for the POLONEZ funding scheme announced by the National Science Center.
- d. I declare that the information contained in the application form is accurate and in accordance with the facts and law. I confirm that the scans of the documents attached to the application are consistent with the originals of these documents.
- e. I declare that if the application is selected for financing, I consent to the publication of a brief description of the research project (abstract) together with the information about the call results on the website of the Polish Academy of Sciences.

2. Required attachments

2.1 Attachment B1 to the Proposal (max. 10 pages)

1. Description of the research planned
 1. Scientific objective of the proposed research
 2. Current state of the arts
 3. Research idea and plan
 4. Impact of the research planned on a discipline
 5. Methodology
 6. Description of Secondment (if planned)
 7. References
2. Impact of the fellowship on the Applicant's career

2.2 Attachment B2 to the Proposal (max. 8 pages)

1. Applicant's CV
2. Description of the Applicant's scientific achievements during 5 years prior to the closing date of the Call²
 - 2.1 Scientific publications (max. 5), monographs (max. 3)
 - 2.2 Presentations at scientific conferences/symposia
 - 2.3 Participation in research projects
 - 2.4 Other achievements
3. Supervisor's CV
4. Description of the Supervisor's scientific achievements during 10 years prior to the closing date of the Call
 - 4.1 Scientific publications (max. 10), monographs (max. 3)
 - 4.2 Presentations at scientific conferences/symposia
 - 4.3 Participation in research projects
 - 4.4 Other achievements

² For applicants who, in the last 5 years before the closing date of the Call, have had career breaks of more than 90 days due to compulsory military or civil service, long-term illness or paternity leave, the 5-year period may be extended by documented periods of absence from work. For Applicants, who gave birth in the last 5 years before the closing date of the Call, the 5-year period is automatically extended by 18 months for each child. If Applicant's maternity leave is longer than 18 months, they can be granted an extension for the whole documented absence period.

5. Information on the Supporting Supervisor
6. Information on the Host Institute, including an explanation of the Fellow's choice, description of the scientific environment and the research equipment
7. Impact of the Fellowship on the Host Institute

2.3 Letter of Support of the Host Institute

The Letter confirms the Host Institute's willingness to host the Fellow. It needs to be signed by both the Director of the Institute (or other authorised persons) and the Supervisor(s).

2.4 Letter of Support of the Institute supporting the Host Institute

For interdisciplinary projects involving more than one Institute, a Letter of Support from the Supporting Institute.

2.5 A scan of the PhD diploma or documents confirming 4 years of equivalent experience

A scan of the PhD diploma or the diploma entitling to embark on a doctorate together with documents confirming at least 4-year of full-time equivalent research experience after having obtained a degree entitling to embark on a doctoral studies and their translation into English or Polish, if they are in a language other than English or Polish.

2.6 Other documents

- ◆ In case of a positive answer to at least one question in the section "Ethical Issues Table", the Applicants prepare an "Ethics self-assessment" tackling ethical issues related to their research project and explaining how the Applicant and the Host Institute will ensure that the research complies with fundamental ethics principles, relevant European legislation, international declarations, and national law;
- ◆ Other documents.

List of Research Areas assessed in the PASIFIC Evaluation Panels

Appendix No. 2 to the Terms and Conditions of the
PASIFIC Call 1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 847839.

Marie Skłodowska-Curie Actions

TABLE OF CONTENTS

1. PANEL 1: Humanities and Social Sciences	29
1.1 RESEARCH AREA: SH1 Unit, institutions, markets	29
1.2 RESEARCH AREA: SH2 Institutions, governments and legal systems	31
1.3 RESEARCH AREA: SH3 Social world and its diversity	32
1.4 RESEARCH AREA: SH4 Human mind and its complexity	33
1.5 RESEARCH AREA: SH5 Culture and cultural products	34
1.6 RESEARCH AREA: SH6 Studies of the past.....	35
1.7 RESEARCH AREA: SH7 Mobility, environment and space	36
2. PANEL 2: Physical Sciences and Engineering (PE)	37
2.1 RESEARCH AREA: PE1 Mathematical sciences.....	37
2.2 RESEARCH AREA: PE2 Basic constituents of matter.....	38
2.3 RESEARCH AREA: PE3 Condensed matter physics	39
2.4 RESEARCH AREA: PE4 Physical and analytical chemistry	40
2.5 RESEARCH AREA: PE5 Chemistry and synthetic materials	41
2.6 RESEARCH AREA: PE6 Computer science and information technology	42
2.7 RESEARCH AREA: PE7 Systems and telecommunications engineering	43
2.8 RESEARCH AREA: PE8 Process and production engineering	44
2.9 RESEARCH AREA: PE9 Astronomy and space research	45
2.10 RESEARCH AREA: PE10 Earth sciences.....	46
2.11 RESEARCH AREA: PE11 Material engineering.....	47
3. PANEL 3: Life Sciences (LS)	48
3.1 RESEARCH AREA: LS1 Basic life processes at the cellular level: biological mechanisms, structures and functions ...	48
3.2 RESEARCH AREA: LS2 Integrative biology: from genes and genomes to systems	49
3.3 RESEARCH AREA: LS3 Biology at the cell level: cellular, developmental and regenerative biology.....	50
3.4 RESEARCH AREA: LS4 Biology at the tissue, organ and organism level: human physiology in health, disease and ageing processes	51
3.5 RESEARCH AREA: LS5 Neurology and nervous system diseases	52
3.6 RESEARCH AREA: LS6 Immunology, infections and immunotherapy	53
3.7 RESEARCH AREA: LS7 Prevention, diagnosis and treatment of human diseases	54
3.8 RESEARCH AREA: LS8 Environmental biology, ecology and evolution	55
3.9 RESEARCH AREA: LS9 Biotechnology and biosystems engineering.....	56

List of Research Areas assessed in the PASIFIC Evaluation Panels

For the purpose of merit-based evaluation of applications submitted in the Call, the following division into 3 Evaluation Panels, covering the entire thematic scope of research, was adopted. Each Evaluation Panel covers the research areas described below with keywords.

1. PANEL 1: Humanities and Social Sciences (SH)

1.1 RESEARCH AREA: SH1

Unit, institutions, markets: economics, finance, management

KEYWORDS:

Number	Keywords
SH1_1	Macroeconomics; monetary economics; economic growth
SH1_2	International trade; international management; international business; spatial economics
SH1_3	Development economics; structural change; political economy of development
SH1_4	Finance; asset pricing; international finance; market microstructure
SH1_5	Corporate finance; banking and financial intermediation; accounting; auditing; insurance
SH1_6	Econometrics; operations research
SH1_7	Behavioral economics; experimental economics; neuro-economics
SH1_8	Microeconomic theory; game theory; decision theory
SH1_9	Industrial organization; entrepreneurship; R&D and innovation
SH1_10	Management; strategy; organizational behavior
SH1_11	Human resource management; operations management, marketing
SH1_12	Environmental economics; resource and energy economics; agricultural economics

SH1_13	Labour and demographic economics
SH1_14	Health economics; economics of education
SH1_15	Public economics; political economics; law and economics
SH1_16	Historical economics; quantitative economic history; institutional economics; economic systems

1.2 RESEARCH AREA: SH2

Institutions, governments and legal systems: political science, international relations, law

KEY WORDS:

Numer	Słowa klucz
SH2_1	Political systems, governance
SH2_2	Democratization and social movements
SH2_3	Conflict resolution, war, peace building, international law
SH2_4	Legal studies, constitutions, human rights, comparative law
SH2_5	International relations, global and transnational governance
SH2_6	Humanitarian assistance and development
SH2_7	Political and legal philosophy
SH2_8	SH2_8 Big data in political and legal studies

1.3 RESEARCH AREA: SH3

Social world and its diversity: sociology, social psychology, social anthropology, pedagogy, communication studies

KEY WORDS:

Numer	Stowa klucz
SH3_1	Social structure, social mobility, social innovation
SH3_2	Inequalities, discrimination, prejudice
SH3_3	Aggression and violence, antisocial behavior, crime
SH3_4	Social integration, exclusion, prosocial behavior
SH3_5	Attitudes and beliefs
SH3_6	Social influence; power and group behaviour
SH3_7	Kinship; diversity and identities, gender, interethnic relations
SH3_8	Social policies, welfare, work and employment
SH3_9	Poverty and poverty alleviation
SH3_10	Religious studies, ritual; symbolic representation
SH3_11	Social aspects of teaching and learning, curriculum studies, education and educational policies
SH3_12	Communication and information, networks, media
SH3_13	Digital social research
SH3_14	Social studies of science and technology

1.4 RESEARCH AREA: SH4

Human mind and its complexity: cognitive science, psychology, linguistics, theoretical philosophy

KEY WORDS:

Numer	Słowa klucz
SH4_1	Cognitive basis of human development and education, developmental disorders; comparative cognition
SH4_2	Personality and social cognition; emotion
SH4_3	Clinical and health psychology
SH4_4	Neuropsychology
SH4_5	Attention, perception, action, consciousness
SH4_6	Learning, memory; cognition in ageing
SH4_7	Reasoning, decision-making; intelligence
SH4_8	Language learning and processing (first and second languages)
SH4_9	Theoretical linguistics; computational linguistics
SH4_10	Language typology; historical linguistics
SH4_11	Pragmatics, sociolinguistics, linguistic anthropology, discourse analysis
SH4_12	Philosophy of mind, philosophy of language
SH4_13	Philosophy of science, epistemology, logic

1.5 RESEARCH AREA: SH5

Culture and cultural products: literary studies, cultural studies, art, philosophy

KEY WORDS:

Numer	Słowa klucz
SH5_1	Classics, ancient literature and art
SH5_2	Theory and history of literature, comparative literature
SH5_3	Philology; text and image studies
SH5_4	Visual and performing arts, film, design and architecture
SH5_5	Music and musicology; history of music
SH5_6	History of art and architecture, arts-based research
SH5_7	Museums, exhibitions, conservation and restoration
SH5_8	Cultural studies, cultural identities and memories, cultural heritage
SH5_9	Metaphysics, philosophical anthropology; aesthetics
SH5_10	Ethics and its applications; social philosophy
SH5_11	History of philosophy
SH5_12	Computational modelling and digitization in the cultural sphere

1.6 RESEARCH AREA: SH6

Studies of the past: archaeology and history

KEY WORDS:

Numer	Słowa klucz
SH6_1	Historiography, theory and methods in history, including the analysis of digital data
SH6_2	Classical archaeology, history of archaeology, social archaeology
SH6_3	General archaeology, archaeometry, landscape archaeology
SH6_4	Prehistory, palaeoanthropology, palaeodemography, protohistory, bioarchaeology
SH6_5	Palaeography and codicology
SH6_6	Ancient history
SH6_7	Medieval history
SH6_8	Early modern history
SH6_9	Modern and contemporary history
SH6_10	Colonial and post-colonial history
SH6_11	Global history, transnational history, comparative history, entangled histories
SH6_12	Social and economic history
SH6_13	Gender history, cultural history, history of collective identities and memories, history of religions
SH6_14	History of ideas, intellectual history, history of economic thought
SH6_15	History of science, medicine and technologies

1.7 RESEARCH AREA: SH7

Mobility, environment and space: human geography, demography, health, sustainable development, territorial planning, spatial analysis

KEY WORDS:

Numer	Słowa klucz
SH7_1	Human, economic and social geography
SH7_2	Migration
SH7_3	Population dynamics: households, family and fertility
SH7_4	Social aspects of health, ageing and society
SH7_5	Sustainability sciences, environment and resources
SH7_6	Environmental and climate change, societal impact and policy
SH7_7	Cities; urban, regional and rural studies
SH7_8	Land use and planning
SH7_9	Energy, transportation and mobility
SH7_10	GIS, spatial analysis; big data in geographical studies

2. PANEL 2: Physical Sciences and Engineering (PE)

2.1 RESEARCH AREA: PE1

Mathematical sciences: all areas of mathematics, theoretical and applied, and the mathematical foundations of computer science, physics and statistics

KEY WORDS:

Numer	Stowa klucz
PE1_1	Logic and foundations
PE1_2	Algebra
PE1_3	Number theory
PE1_4	Algebraic and complex geometry
PE1_5	Lie groups, Lie algebras
PE1_6	Geometry and global analysis
PE1_7	Topology
PE1_8	Analysis
PE1_9	Operator algebras and functional analysis
PE1_10	ODE and dynamical systems
PE1_11	Theoretical aspects of partial differential equations
PE1_12	Mathematical physics
PE1_13	Probability
PE1_14	Mathematical statistics
PE1_15	Generic statistical methodology and modelling
PE1_16	Discrete mathematics and combinatorics
PE1_17	Mathematical aspects of computer science
PE1_18	Numerical analysis
PE1_19	Scientific computing and data processing
PE1_20	Control theory, optimisation and operational research
PE1_21	Application of mathematics in sciences
PE1_22	Application of mathematics in industry and society

2.2 RESEARCH AREA: PE2

Basic constituents of matter: particle, nuclear, plasma, atomic, molecular, gas and optical physics

KEY WORDS:

Numer	Słowa klucz
PE2_1	Theory of fundamental interactions
PE2_2	Phenomenology of fundamental interactions
PE2_3	Experimental particle physics with accelerators
PE2_4	Experimental particle physics without accelerators
PE2_5	Classical and quantum physics of gravitational interactions
PE2_6	Nuclear, hadron and heavy ion physics
PE2_7	Nuclear and particle astrophysics
PE2_8	Gas and plasma physics
PE2_9	Electromagnetism
PE2_10	Atomic, molecular physics
PE2_11	Ultra-cold atoms and molecules
PE2_12	Optics, non-linear optics and nano-optics
PE2_13	Quantum optics and quantum information
PE2_14	Lasers, ultra-short lasers and laser physics
PE2_15	Thermodynamics
PE2_16	Non-linear physics
PE2_17	Metrology and measurement
PE2_18	Equilibrium and non-equilibrium statistical mechanics: steady states and dynamics

2.3 RESEARCH AREA: PE3

Condensed matter physics: structure, electronic properties, fluids, nanoscience, biological physics

KEY WORDS:

Numer	Słowa klucz
PE3_1	Structure of solids, material growth and characterisation
PE3_2	Mechanical and acoustical properties of condensed matter, lattice dynamics
PE3_3	Transport properties of condensed matter
PE3_4	Electronic properties of materials, surfaces, interfaces, nanostructures
PE3_5	Physical properties of semiconductors and insulators
PE3_6	Macroscopic quantum phenomena, e.g. superconductivity, superfluidity, quantum Hall effect
PE3_7	Spintronics
PE3_8	Magnetism and strongly correlated systems
PE3_9	Condensed matter – beam interactions (photons, electrons, etc.)
PE3_10	Nanophysics, e.g. nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics
PE3_11	Mesoscopic quantum physics and solid-state quantum technologies
PE3_12	Molecular electronics
PE3_13	Structure and dynamics of disordered systems, e.g. soft matter (gels, colloids, liquid crystals), granular matter, liquids, glasses, defects
PE3_14	Fluid dynamics (physics)
PE3_15	Statistical physics: phase transitions, condensed matter systems, models of complex systems, interdisciplinary applications
PE3_16	Physics of biological systems

2.4 RESEARCH AREA: PE4

Physical and analytical chemistry: analytical chemistry, theoretical chemistry, physical chemistry (chemical physics)

KEY WORDS:

Numer	Słowa klucz
PE4_1	Physical chemistry
PE4_2	Spectroscopic and spectrometric techniques
PE4_3	Molecular architecture and Structure
PE4_4	Surface science and nanostructures
PE4_5	Analytical chemistry
PE4_6	Chemical physics
PE4_7	Chemical instrumentation
PE4_8	Electrochemistry ,electrodialysis, microfluidics, sensors
PE4_9	Method development in chemistry
PE4_10	Heterogeneous catalysis
PE4_11	Physical chemistry of biological systems
PE4_12	Chemical reactions: mechanisms, dynamics, kinetics and catalytic reactions
PE4_13	Theoretical and computational chemistry
PE4_14	Radiation and Nuclear chemistry
PE4_15	Photochemistry
PE4_16	Corrosion
PE4_17	Characterization methods of materials
PE4_18	Environment chemistry

2.5 RESEARCH AREA: PE5

Chemistry and synthetic materials: new materials and their preparation, structure-property relationships, solid state chemistry, molecular architecture, organic chemistry

KEY WORDS:

Numer	Słowa klucz
PE5_1	Structural properties of materials
PE5_2	Solid state materials chemistry
PE5_3	Surface modification
PE5_4	Ionic liquids
PE5_5	New materials: oxides, alloys, composite, organic-inorganic hybrid, nanoparticles
PE5_6	Biomaterials synthesis
PE5_7	Intelligent materials synthesis – self assembled materials
PE5_8	Coordination chemistry
PE5_9	Colloid chemistry
PE5_10	Biological chemistry and chemical biology
PE5_11	Chemistry of condensed matter
PE5_12	Homogeneous catalysis
PE5_13	Macromolecular chemistry
PE5_14	Polymer chemistry
PE5_15	Photochemistry
PE5_16	Supramolecular chemistry
PE5_17	Organic chemistry
PE5_18	Medicinal chemistry

2.6 RESEARCH AREA: PE6

Computer science and information technology: computer science, information technology and systems, scientific computing, smart systems

KEY WORDS:

Numer	Stowa klucz
PE6_1	Computer architecture, embedded systems, operating systems
PE6_2	Distributed systems, parallel computing, sensor networks, cyber-physical systems
PE6_3	Software engineering, programming languages and systems
PE6_4	Theoretical computer science, formal methods, automata
PE6_5	Security, privacy, cryptology, quantum cryptography
PE6_6	Algorithms and complexity, distributed, parallel and network algorithms, algorithmic game theory
PE6_7	Artificial intelligence, intelligent systems, natural language processing
PE6_8	Computer graphics, computer vision, multimedia, computer games
PE6_9	Human computer interaction and interface, visualisation
PE6_10	Web and information systems, data management systems, information retrieval and digital libraries, data fusion
PE6_11	Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video)
PE6_12	Scientific computing, simulation and modelling tools
PE6_13	Bioinformatics, bio-inspired computing, and natural computing
PE6_14	Quantum computing (formal methods, algorithms and other computer science aspects)

2.7 RESEARCH AREA: PE7

Systems and telecommunications engineering: electrical, electronic, communications, optical and systems engineering

KEY WORDS:

Numer	Słowa klucz
PE7_1	Control engineering
PE7_2	Electrical engineering: power components and/or systems
PE7_3	Simulation engineering and modelling
PE7_4	(Micro- and nano-) systems engineering
PE7_5	(Micro- and nano-) electronic, optoelectronic and photonic components
PE7_6	Communication systems, wireless technology, high-frequency technology
PE7_7	Signal processing
PE7_8	Networks, e.g. communication networks and nodes, Internet of Things, sensor networks, networks of robots
PE7_9	Man-machine interfaces
PE7_10	Robotics
PE7_11	Components and systems for applications (in e.g. medicine, biology, environment)
PE7_12	Electrical energy production, distribution, applications

2.8 RESEARCH AREA: PE8

Process and production engineering: product and process design, chemical, civil, environmental, mechanical, automotive engineering, energy processes and relevant computational methods

KEY WORDS:

Numer	Słowa klucz
PE8_1	Aerospace engineering
PE8_2	Chemical engineering, technical chemistry
PE8_3	Civil engineering, architecture, offshore construction, lightweight construction, geotechnics
PE8_4	Computational engineering
PE8_5	Fluid mechanics
PE8_6	Energy processes engineering
PE8_7	Mechanical engineering
PE8_8	Propulsion engineering, e.g. hydraulic, turbo, piston, hybrid engines
PE8_9	Production technology, process engineering
PE8_10	Manufacturing engineering and industrial design
PE8_11	Environmental engineering, e.g. sustainable design, waste and water treatment, recycling, regeneration or recovery of compounds, carbon capture & storage
PE8_12	Naval/marine engineering
PE8_13	Industrial bioengineering
PE8_14	Automotive and rail engineering; multi-/inter-modal transport engineering

2.9 RESEARCH AREA: PE9

Astronomy and space research: astrophysics, astrochemistry, astrobiology, Solar System, planetary systems, stellar, galactic and extragalactic astronomy, space research, instruments

KEY WORDS:

Numer	Stowa klucz
PE9_1	Solar physics – the Sun and the heliosphere
PE9_2	Solar system science
PE9_3	Exoplanetary science, formation and characterization of extrasolar planets
PE9_4	Astrobiology
PE9_5	Interstellar medium and star formation
PE9_6	Stars – stellar physics, stellar systems
PE9_7	The Milky Way
PE9_8	Galaxies – formation, evolution, clusters
PE9_9	Cosmology and large-scale structure, dark matter, dark energy
PE9_10	Relativistic astrophysics and compact objects
PE9_11	Gravitational wave astronomy
PE9_12	High-energy and particle astronomy
PE9_13	Astronomical instrumentation and data, e.g. telescopes, detectors, techniques, archives, analyses

2.10 RESEARCH AREA: PE10

Earth sciences: physical geography, geological sciences, geophysics, atmospheric and climate sciences, oceanography, cryology, ecology, global environmental change, biogeochemical cycles, natural resource management

KEY WORDS:

Numer	Stowa klucz
PE10_1	Atmospheric chemistry, atmospheric composition, air pollution
PE10_2	Meteorology, atmospheric physics and dynamics
PE10_3	Climatology and climate change
PE10_4	Terrestrial ecology, land cover change
PE10_5	Geology, tectonics, volcanology
PE10_6	Palaeoclimatology, paleoecology
PE10_7	Physics of earth's interior, seismology, geodynamics
PE10_8	Oceanography (physical, chemical, biological, geological)
PE10_9	Biogeochemistry, biogeochemical cycles, environmental chemistry
PE10_10	Mineralogy, petrology, igneous petrology, metamorphic petrology
PE10_11	Geochemistry, cosmochemistry, crystal chemistry, isotope geochemistry, thermodynamics
PE10_12	Sedimentology, soil science, palaeontology, earth evolution
PE10_13	Physical geography, geomorphology
PE10_14	Earth observations from space/remote sensing
PE10_15	Geomagnetism, paleomagnetism
PE10_16	Ozone, upper atmosphere, ionosphere
PE10_17	Hydrology, hydrogeology, engineering and environmental geology, water and soil pollution
PE10_18	Cryosphere, dynamics of snow and ice cover, sea ice, permafrosts and ice sheets
PE10_19	Planetary geology and geophysics
PE10_20	Geohazards
PE10_21	Earth system modelling and interactions

2.11 RESEARCH AREA: PE11

Material engineering: development of advanced materials: performance improvement, modelling, large-scale processes, modification, adjustment, optimisation, innovative use of existing materials e.g. composites

KEY WORDS:

Numer	Słowa klucz
PE11_1	Engineering of biomaterials, biomimetic, bioinspired and bio-enabled materials
PE11_2	Engineering of metals and alloys
PE11_3	Engineering of ceramics and glasses
PE11_4	Engineering of polymers and plastics
PE11_5	Engineering of composites and hybrid materials
PE11_6	Engineering of carbon materials
PE11_7	Engineering of metal oxides
PE11_8	Engineering of alternative established or emergent materials
PE11_9	Nanomaterials engineering, e.g. nanoparticles, nanoporous materials, 1D & 2D nanomaterials
PE11_10	Soft materials engineering, e.g. gels, foams, colloids
PE11_11	Porous materials engineering, e.g. covalent-organic, metal-organic, porous aromatic frameworks
PE11_12	Semi-conducting and magnetic materials engineering
PE11_13	Metamaterials engineering
PE11_14	Computational methods for materials engineering

3. PANEL 3: Life Sciences (LS)

3.1 RESEARCH AREA: LS1

Basic life processes at the cellular level: biological mechanisms, structures and functions: molecular biology, biochemistry, structural biology, molecular biophysics, synthetic and chemical biology, drug design, innovative methods and modelling

KEY WORDS:

Numer	Słowa klucz
LS1_1	Macromolecular complexes including interactions involving nucleic acids, proteins, lipids and carbohydrates
LS1_2	Biochemistry
LS1_3	DNA and RNA biology
LS1_4	Protein biology
LS1_5	Lipid biology
LS1_6	Glycobiology
LS1_7	Molecular biophysics, biomechanics, bioenergetics
LS1_8	Structural biology
LS1_9	Molecular mechanisms of signalling processes
LS1_10	Synthetic biology
LS1_11	Chemical biology
LS1_12	Protein design
LS1_13	Early translational research and drug design
LS1_14	Innovative methods and modelling in molecular, structural and synthetic biology

3.2 RESEARCH AREA: LS2

Integrative biology: from genes and genomes to systems: genetics, epigenetics, genomics and other omics research, bioinformatics, systems biology, genetic diseases, gene editing, innovative methods and modelling, omics for personalised medicine

KEY WORDS:

Numer	Stowa klucz
LS2_1	Genetics
LS2_2	Gene editing
LS2_3	Epigenetics
LS2_4	Gene regulation
LS2_5	Genomics
LS2_6	Metagenomics
LS2_7	Transcriptomics
LS2_8	Proteomics
LS2_9	Metabolomics
LS2_10	Glycomics/Lipidomics
LS2_11	Bioinformatics and computational biology
LS2_12	Biostatistics
LS2_13	Systems biology
LS2_14	Genetic diseases
LS2_15	Integrative biology for personalised medicine
LS2_16	Innovative methods and modelling in integrative biology

3.3 RESEARCH AREA: LS3

Biology at the cell level: cellular, developmental and regenerative biology: structure and function of the cell, cell-cell communication, embryogenesis, tissue differentiation, organogenesis, growth, development, evolution of development, organoids, stem cells, regeneration, therapeutic approaches

KEY WORDS:

Numer	Stowa klucz
LS3_1	Cell cycle, cell division and growth
LS3_2	Cell senescence, cell death, autophagy, cell ageing
LS3_3	Cell behaviour, including control of cell shape, cell migration
LS3_4	Cell junctions, cell adhesion, the extracellular matrix, cell communication
LS3_5	Cell signalling and signal transduction, exosome biology
LS3_6	Organelle biology and trafficking
LS3_7	Mechanobiology of cells, tissues and organs
LS3_8	Embryogenesis, pattern formation, morphogenesis
LS3_9	Cell differentiation, formation of tissues and organs
LS3_10	Developmental genetics
LS3_11	Evolution of developmental strategies
LS3_12	Organoids
LS3_13	Stem cells
LS3_14	Regeneration
LS3_15	Development of cell-based therapeutic approaches for tissue regeneration
LS3_16	Functional imaging of cells and tissues
LS3_17	Theoretical modelling in cellular, developmental and regenerative biology

3.4 RESEARCH AREA: LS4

Biology at the tissue, organ and organism level: human physiology in health, disease and ageing processes: organ and tissue physiology, comparative physiology, physiology of ageing, pathophysiology, communication between organs and tissues, endocrinology, nutrition, metabolism, interaction with the microbiome, non-communicable diseases including cancer (except diseases of the nervous system and those related to the immune system)

KEY WORDS:

Numer	Słowa klucz
LS4_1	Organ and tissue physiology and pathophysiology
LS4_2	Comparative physiology
LS4_3	Physiology of ageing
LS4_4	Endocrinology
LS4_5	Non-hormonal mechanisms of inter-organ and tissue communication
LS4_6	Microbiome and host physiology
LS4_7	Nutrition and exercise physiology
LS4_8	Impact of stress (including environmental stress) on physiology
LS4_9	Metabolism and metabolic disorders, including diabetes and obesity
LS4_10	The cardiovascular system and cardiovascular diseases
LS4_11	Haematopoiesis and blood diseases
LS4_12	Cancer
LS4_13	Other non-communicable diseases (except disorders of the nervous system and immunity-related diseases)

3.5 RESEARCH AREA: LS5

Neurology and nervous system diseases: development of the nervous system, homeostasis and ageing, function and dysfunction of the nervous system, neuroscience and systems modelling, biological basis of cognitive processes and behaviour, neurological and psychiatric disorders

KEY WORDS:

Numer	Stowa klucz
LS5_1	Neuronal cells
LS5_2	Glial cells and neuronal-glia communication
LS5_3	Neural development and related disorders
LS5_4	Neural stem cells
LS5_5	Neural networks and plasticity
LS5_6	Neurovascular biology and blood-brain barrier
LS5_7	Sensory systems, sensation and perception, including pain
LS5_8	Neural basis of behaviour
LS5_9	Neural basis of cognition
LS5_10	Ageing of the nervous system
LS5_11	Neurological and neurodegenerative disorders
LS5_12	Mental disorders
LS5_13	Nervous system injuries and trauma, stroke
LS5_14	Repair and regeneration of the nervous system
LS5_15	Neuroimmunology, neuroinflammation
LS5_16	Systems and computational neuroscience
LS5_17	Imaging in neuroscience
LS5_18	Innovative methods and tools for neuroscience

3.6 RESEARCH AREA: LS6

Immunology, infections and immunotherapy: immune system, related diseases and their mechanisms, biology of infectious agents and infections, biological basis for prevention and treatment of infectious diseases, innovative immunological tools and approaches, including therapies

KEY WORDS:

Numer	Stowa klucz
LS6_1	Innate immunity
LS6_2	Adaptive immunity
LS6_3	Regulation of the immune response
LS6_4	Immune-related diseases
LS6_5	Biology of pathogens (e.g. bacteria, viruses, parasites, fungi)
LS6_6	Infectious diseases
LS6_7	Mechanisms of infection
LS6_8	Biological basis of prevention and treatment of infection
LS6_9	Antimicrobials, antimicrobial resistance
LS6_10	Vaccine development
LS6_11	Innovative immunological tools and approaches, including therapies

3.7 RESEARCH AREA: LS7

Prevention, diagnosis and treatment of human diseases: medical technologies and tools for prevention, diagnosis and treatment of human diseases, therapeutic approaches and interventions, pharmacology, preventive medicine, epidemiology and public health, digital medicine

KEY WORDS:

Numer	Stowa klucz
LS7_1	Medical imaging for prevention, diagnosis and monitoring of diseases
LS7_2	Medical technologies and tools (including genetic tools and biomarkers) for prevention, diagnosis, monitoring and treatment of diseases
LS7_3	Nanomedicine
LS7_4	Regenerative medicine
LS7_5	Applied gene, cell and immune therapies
LS7_6	Other medical therapeutic interventions, including transplantation
LS7_7	Pharmacology and toxicology
LS7_8	Effectiveness of interventions, including resistance to therapies 9
LS7_9	Public health and epidemiology
LS7_10	Preventative and prognostic medicine
LS7_11	Environmental health, occupational medicine
LS7_12	Health care, including care for the ageing population
LS7_13	Palliative medicine
LS7_14	Digital medicine, e-medicine, medical applications of artificial intelligence
LS7_15	Medical ethics

3.8 RESEARCH AREA: LS8

Environmental biology, ecology and evolution: ecology, biodiversity, environmental change, evolutionary biology, behavioural ecology, microbial ecology, marine biology, ecophysiology, theoretical development and modelling

KEY WORDS:

Numer	Stowa klucz
LS8_1	Ecosystem and community ecology, macroecology
LS8_2	Biodiversity
LS8_3	Conservation biology
LS8_4	Population biology, population dynamics, population genetics
LS8_5	Biological aspects of environmental change, including climate change
LS8_6	Evolutionary ecology
LS8_7	Evolutionary genetics
LS8_8	Phylogenetics, systematics, comparative biology
LS8_9	Macroevolution and paleobiology
LS8_10	Ecology and evolution of species interactions
LS8_11	Behavioural ecology and evolution
LS8_12	Microbial ecology and evolution
LS8_13	Marine biology and ecology
LS8_14	Ecophysiology, from organisms to ecosystems
LS8_15	Theoretical developments and modelling in environmental biology, ecology, and evolution

3.9 RESEARCH AREA: LS9

Biotechnology and biosystems engineering: biotechnology with the use of all organisms, biotechnology for environmental and food applications, applied plant and animal sciences, bioengineering and synthetic biology, biomass and biofuels, biological hazards

KEY WORDS:

Numer	Stowa klucz
LS9_1	Bioengineering for synthetic and chemical biology
LS9_2	Applied genetics, gene editing and transgenic organisms
LS9_3	Bioengineering of cells, tissues, organs and organisms
LS9_4	Microbial biotechnology and bioengineering
LS9_5	Food biotechnology and bioengineering
LS9_6	Marine biotechnology and bioengineering
LS9_7	Environmental biotechnology and bioengineering
LS9_8	Applied plant sciences, plant breeding, agroecology and soil biology
LS9_9	Plant pathology and pest resistance
LS9_10	Veterinary and applied animal sciences
LS9_11	Biomass production and utilisation, biofuels
LS9_12	Ecotoxicology, biohazards and biosafety

Criteria for formal and merit-based evaluation

Appendix No. 3 to the Terms and Conditions of the PASIFIC Call 1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Maria Skłodowska-Curie grant agreement No 847639.

Maria Skłodowska-Curie Actions

TABLE OF CONTENTS

1. Formal evaluation criteria	59
1.1 Applicant's eligibility	59
1.1 Proposal's eligibility.....	60
1.1 Research Area eligibility	60
1.1 Research supervisor's eligibility	61
2. Merit-based evaluation criteria	61



1. Formal evaluation criteria

The formal evaluation of the project is based on the following criteria:

1.1 Applicant's eligibility:

Checking whether the Applicant:

- 1.1.1 on the closing date of the Call (30 June 2021), holds a doctoral degree within the meaning of the legislation of the country in which the degree was awarded or had at least 4-year of full-time equivalent research experience after having obtained a degree entitling to embark on a doctoral programme;
- 1.1.2 has not been living, working, or studying in Poland for more than 12 months out of the three years prior to the opening date of the Call. Work in Poland is understood as employment in an entity with its registered seat in the territory of the Republic of Poland, under an employment contract, including remote work outside of the Republic of Poland.

1.3 Proposal's eligibility:

Checking whether the Proposal is:

1.2.1 complete, i.e., includes the administrative part filled in in the SEA system and the obligatory attachments in the indicated format (pdf), which open correctly and allow for the correct reading of the information, including:

- Description of the project
- CV and description of the scientific achievements of both the Applicant and the Supervisor
- Letter of support of the Host Institute
- Letter of support of the Institute supporting the Host Institute, if indicated in the Proposal
- Scan of the diploma or a scan of the diploma entitling to embark on the doctoral studies along with documents confirming the 4-year of full-time equivalent research experience after having obtained a degree entitling to embark on a doctoral programme
- Ethics self-assessment (if the answer to at least one question in the section "Ethical Issues Table" is positive)

1.2.2 written in English

1.2.3 submitted through the SEA system available at the PASIFIC website before the closing date of the Call, i.e., 30 June 2021 at 11:59 PM.

1.

1.2 Research Area eligibility :

Checking if the activities described in the Proposal include research carried out in any scientific field

1.4 Research supervisor's eligibility :

Checking whether in the application is indicated a Supervisor who

1.1.1 holds at least a doctoral degree,

1.1.2 is employed under a permanent employment contract at one of the Institutes.

2. Merit-based evaluation criteria

Merit-based evaluation criteria with the maximum score one may obtain in each criterion are presented in the table below.

A. Excellence		Up to 50 points
1.	<p>1. Excellence of the research project</p> <p>The PASIFIC programme aims to promote innovative and bold research ideas, so the <u>excellence of the research project is a key evaluation criterion</u>. This approach will allow researchers with interesting and potentially ground-breaking projects to compete with those who may have more scientific experience or publication records. This is particularly important for young researchers who are starting their scientific careers. Criteria for assessing project excellence:</p> <ul style="list-style-type: none"> (a) Thorough knowledge of the state of the science; (b) A clearly defined, engaging, and topical research problem; (c) State-of-the-art or innovative methodology; (d) New approaches/methods of research in the field; (e) Research at the interface of disciplines/interdisciplinarity. 	Up to 30 points
2.	<p>2. Excellence of the researcher</p> <p>The researchers' CV and scientific achievements from the last 5 years will be assessed according to the stage of their career and, where appropriate, considering career breaks.</p> <p>Applicants must demonstrate that they have the appropriate skills and experience to meet the project objectives and deliver the planned results:</p>	Up to 20 points

	<p>(a) Outstanding scientific and research achievements;</p> <p>(b) Outstanding record of dissemination of research results appropriate to the research field (e.g., articles in leading journals, peer-reviewed monographs, patents, presentations at international conferences);</p> <p>(c) Experience in conducting research projects;</p> <p>(d) where appropriate, the candidate's valuable and relevant experience in the non-academic sector (e.g., industrial innovation, public services).</p>	
<p>B. Impact</p>		<p>Up to 35 points</p>
<p>1.</p>	<p>1. Impact on the research area</p> <p>Focusing on the excellence of research projects, PASIFIC Fellowships aim to fund and support ideas that can have a major impact on a specific research discipline. Together with the criterion of excellence of the scientific project, this gives almost half (45%) of the total score. The following criteria will be taken into account:</p> <p>(a) How is the project likely to change the respective discipline?</p> <p>(b) How will the proposed research contribute to shaping new research areas/methodologies/approaches?</p> <p>(c) Is the project idea potentially ground-breaking for its specific, narrow field of study?</p> <p>(d) Are the results applicable or relevant to other fields of research?</p> <p>(e) Does interdisciplinarity, if it occurs in the project, add value to the field?</p>	<p>Up to 15 points</p>
<p>2.</p>	<p>2. Career impact (considering the candidate's current career stage)</p> <p>The fellowships are intended to support the career development of scientists, enabling them to pursue their research dreams in the vibrant intellectual community of the network of institutes supervised by the President of PAS. At the same time, they are supposed to provide them with a range of skills – both scientific and more universal. The following criteria will be considered:</p> <p>(a) What new research skills, techniques and abilities will the candidate acquire or develop during the fellowship?</p> <p>(b) What transferable skills will the candidate have a chance/be able to acquire?</p> <p>(c) Does the Host Institute and the Supervisor have adequate scientific knowledge or skills to impart to the fellow?</p> <p>(d) Is the career goal set by the candidate both ambitious and feasible?</p> <p>(e) Is the successful implementation of the research plan and the projected results sufficient to achieve the candidate's career goal?</p>	<p>Up to 10 points</p>
<p>3.</p>	<p>3. Impact on the host institute</p> <p>The PASIFIC project also provides benefits for the network of institutes supervised by the President of PAS by enabling knowledge transfer and the creation of new research connections. One of the objectives is to develop these connections not only during, but also after the fellowship, which would allow contacts and collaborations to be maintained.</p>	<p>Up to 10 points</p>

- (a) Does the Applicant bring the specialist knowledge, skills, and abilities to the research environment of the host institution?
- (b) Does the Applicant's project fit into the research strategy of the host institute?
- (c) Does the project offer mechanisms to ensure the sustainability of long-term scientific cooperation (e.g., a future joint application for research grants)?
- (d) Does the project provide opportunities to promote national, international, and cross-industry cooperation?

C. Feasibility		Up to 15 points
1.	<p>PASIFIC encourages ambitious and bold projects but also pays attention to their feasibility.</p> <ul style="list-style-type: none"> (a) Is the scope of the project realisable, considering the timeframes of the project? (b) Are the resources sufficient to implement and perform the project? 	Up to 10 points
2.	<p>PASIFIC highlights the role of the research supervisor, especially in the career development of young researchers. As such, the Supervisor's CV and scientific experience will also be considered when assessing proposals.</p> <ul style="list-style-type: none"> (a) Has the Supervisor been adequately selected by the Applicants, especially in the context of their research interests and experience? (b) Does the Supervisor have an internationally recognised research profile? (c) Does the Supervisor have experience in supporting the scientific development of young researchers? 	Up to 5 points

Eligible costs in the PASIFIC Call 1

Appendix No. 4 to the Terms and Conditions of the
PASIFIC Call 1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 847639.

Marie Skłodowska-Curie Actions

TABLE OF CONTENTS

1. Eligible cost	66
2. Non-eligible cost	66
3. Indirect costs	67
4. Direct cost	68
5. Fellow’s allowances	68
6. Research funds	69
7. Remuneration of persons other than fellow who participate in the research	69
8. Cost of purchasing research equipment, devices and software	69
9. Costs of purchasing materials	70
10. Travel costs	70
11. Publication costs	71
12. Workshop and conference costs	71
13. Other direct costs	71
14. Revenues related to the fellowship	71

1. Eligible cost

1.1 An eligible cost is a cost or expense eligible for funding from PASIFIC Call 1.

1.2 For costs or expenses to be considered eligible they must meet the following conditions, i.e., they must be:

- 1.2.1 actually incurred by the Host Institute
- 1.2.2 incurred during the Fellowship

Costs recording and settlement of all liabilities arisen during the Fellowship is possible until the date of submission of the Fellow's final report, but no longer than within 60 days after the completion of the Fellowship, in the event that it is necessary to pay adjustments to the allowance paid during the Fellowship resulting from the need to apply the exchange rate set out in Section 8.3(b) of the Terms and Conditions of the PASIFIC Call 1, at the latest one month after the end of the last period of calculation of the average exchange rate set out in Section 8.3(b) of the Terms and Conditions;

- 1.2.3 included in the estimated budget specified in the agreement between the PAS and the Host Institute;
- 1.2.4 identifiable and verifiable, accurately documented and properly recorded in the accounts in accordance with the Host Institute's common practice;
- 1.2.5 compliant with the regulations in force, including the Terms and Conditions of the PASIFIC Call 1 and the agreement signed between the PAS and the Host Institute, with the Host Institute's internal rules and common practice;
- 1.2.6 incurred in a purposeful and reasonable manner, following the principle of cost-effectiveness, i.e., obtaining the best effects from given resources;
- 1.2.7 necessary to conduct the Fellowship and the related tasks described in the agreement between the PAS and the Host Institute.

1.3 Eligible costs incurred by the Host Institute are divided into indirect and direct costs.

2. Non-Eligible cost

2.1 Non-eligible costs are costs or expenditures which do not meet the eligibility conditions set out in Article 1 of this Appendix to the Terms and Conditions of the PASIFIC Call 1.

2.2 Non-eligible costs include, but are not limited to:

- 2.2.1 costs related to the rate of return on capital;
- 2.2.2 liabilities and their management costs;
- 2.2.3 provisions for future losses or liabilities;
- 2.2.4 interest due
- 2.2.5 doubtful liabilities;
- 2.2.6 losses resulting from exchange rate differences;
- 2.2.7 excessive or unjustified expenditure;
- 2.2.8 costs incurred during the suspension of the Fellowship;

- 2.2.9 deductible VAT, i.e., VAT that is recoverable under national legislation. VAT which cannot be recovered by the beneficiary according to national legislation is an eligible cost.
- 2.3 In order to avoid double funding, costs declared under other projects funded from other sources, including Horizon 2020, Horizon Europe or Structural Funds projects, are also non-eligible.
- 2.4 The assessment of the eligibility of the costs is carried out during the proposal assessment, the evaluation of the annual report, the final report and the external control and audit.

3. Indirect costs

- 3.1 Indirect costs – are costs indirectly related to the Fellowship and necessary for the proper implementation of the funding agreement.
- 3.2 Indirect costs are accounted for by a flat rate and are treated as incurred. The amount of indirect costs is 20% of direct costs.
- 3.3 For the purpose of calculating indirect costs, the costs of applicant's allowance and family allowance referred to in Section 5.1(a) and (b) are converted into Polish currency according to the euro exchange rate announced by the National Bank of Poland in the Average Exchange Rate Table No. 088/A/NBP/2019 of 8 May 2019, the euro purchase rate for foreign currencies announced by Bank Gospodarstwa Krajowego S.A. in the first Exchange Rate Table No. 78 of 1 March 2020, i.e., EUR 1 = 4.2914
- 3.4 The Host Institute will enable the Fellow to co-determine how 1/5 of the indirect costs will be spent.
- 3.5 Indirect costs include:
 - 3.5.1 remuneration costs of the administration and finance personnel (e.g., HR, legal and accounting services of the project, including costs of contracting accounting services to the accounting office, support and organisation of the Fellow's business trips);
 - 3.5.2 refurbishment and renovation costs,;
 - 3.5.3 costs of adapting premises to the extent necessary to carry out research tasks,
 - 3.5.4 costs of space utilisation, property taxes, etc.;
 - 3.5.5 utility charges (electricity, heating, gas and water and other industrial charges, transmission charges, sewerage, etc.;
 - 3.5.6 telecommunications services (telephone, Internet) and postal and courier services, except for those referred to in Section 13.2 other direct costs;
 - 3.5.7 costs of property cleaning services;
 - 3.5.8 costs of building security services;
 - 3.5.9 costs of property insurance;
 - 3.5.10 handling and administrative charges;
 - 3.5.11 banking costs, including: costs of opening and holding a separate sub-account for the purposes of the project in a bank account or a separate bank account, bank charges;
 - 3.5.12 costs of subscriptions (excluding data and access cost as indicated in Section 13.3);
 - 3.5.13 contributions due from individuals for membership in organisations, associations, etc.;
 - 3.5.14 costs of the procedures associated with awarding an academic degree/title;
 - 3.5.15 office supplies, stationery;
 - 3.5.16 other indirect costs not listed above.

4. Direct costs

4.1 Direct costs are costs directly related to the conduct of the Fellowship.

4.2 Direct costs include:

- 4.2.1 Fellow's allowances,
- 4.2.2 costs of research, including the expenditure described in Section 8.2.,

5. Fellow's allowances

5.1 The Host Institute may bear:

- a) costs of the Fellow's employment under a full-time employment contract for a period of 24 months in the amount of EUR 99,000.
- b) Family allowance cost of €7,200 for the Fellow who, on the closing date of the Call, have family commitments, i.e., are married or in a relationship equivalent to marriage according to the law of the country where the relationship has been formalised, have dependent children.

Entitlement to the family allowance is determined at the closing date of the Call and is not verified between the closing date and the end of the Fellowship. The allowance is due if the spouse(s)/partner(s) and/or child(ren) change their place of residence and come to Poland with the Fellow for a period of at least 3 months during the Fellowship.

5.2 The amounts in the currency (euro) set out in Section 5.1 (a) and (b) are converted into Polish currency at the higher of the rates indicated in Section 5.2 (a) and (b):

- a) euro exchange rate announced by the National Bank of Poland in the Average Exchange Rate Table No. 088/A/NBP/2019 of 8 May 2019
- b) average euro exchange rate (in foreign currency) announced by the European Central Bank
https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-pln.en.html

- ◆ in the period from 1 March 2020 to 28 February 2022 for the period from 1 March 2020 to 28 February 2022
- ◆ in the period from 1 March 2022 to 31 August 2023 the period from 1 March 2022 to 31 August 2023
- ◆ in the period from 1 September 2023 to 28 February 2025 for the period from 1 September 2023 to 28 February 2025

5.3 Of the amounts indicated in Section 5.1 regarding allowances and other benefits, the Host

Institute bears the costs of social and health insurance contributions and other allowance components financed by the Host Institute. Furthermore, the funds will cover the additional end-of-year bonus (the so called "trzynastka"), if the Host Institute is obliged to pay it.

5.4 During the period of the Fellowship, the Fellow may not receive any other remuneration in any form, including from entities other than the Host Institute.

6. Research funds

6.1 The Host Institute receives funds for the implementation of research by the Fellow in the amount not exceeding PLN 257,484.

6.2 The following types of costs may be incurred from the funds indicated in Section 6.1

- 6.2.1 Remuneration of persons other than the Fellow who participate in the research
- 6.2.2 Costs of purchasing research equipment, devices and software
- 6.2.3 Costs of purchasing materials
- 6.2.4 Travel costs
- 6.2.5 Publication costs
- 6.2.6 Workshop and conference costs
- 6.2.7 Other direct costs

7. Remuneration of persons other than the fellow who participate in the research

7.1 Additional remuneration may be paid from the research funds to persons other than the Fellow involved in the research, as well as to participants of the research conducted by the Fellow.

7.2 Scholarships may not be funded from the research funds.

7.3 The maximum amount of funds specified in Section 7.1 may not exceed PLN 60,000, while one person may not receive more than PLN 36,000.

7.4 The additional remuneration referred to in Section 7.1 may be paid under a full-time or part-time employment contract or a civil-law contract.

8. Cost of purchasing research equipment, devices and software

8.1 This category of costs includes expenditure on the purchase or manufacture of research equipment, other devices and software necessary to carry out scientific work under the Fellowship, understood as:

- 8.1.1 Research equipment (as defined by the Central Statistical Office) – a set(s) of testing, measurement and laboratory apparatus of limited application and high technical parameters (usually several orders of magnitude higher than typical apparatus used

for production or exploitation purposes), which, in accordance with the accounting principles (policy) in force at the Host Institute, is classified as fixed assets.

8.1.2 Other equipment – other equipment which does not fall within the definition of research equipment, which, in accordance with the accounting principles (policy) in force at the Host Institute, is classified as fixed assets.

8.1.3 Software – software purchased for the purposes of the Fellowship which, in accordance with the accounting principles (policy) in force at the Host Institute, is classified as intangible assets.

8.2 For research equipment, devices and software which are fixed assets or intangible assets depreciable in accordance with the provisions of the Accounting Act of 29 September 1994, the eligible cost is the purchase price or cost of manufacture of fixed assets or intangible assets, within the meaning of the said Act, including all costs incurred by the Host Institute up to the date of their commissioning.

9. Costs of purchasing materials

9.1 The costs of purchasing materials include the costs of purchasing materials and non-fixed assets intended for direct consumption in the implementation of the Fellowship, including, but not limited to:

9.1.1 raw materials,

9.1.2 semi-finished products,

9.1.3 reagents,

9.1.4 small laboratory equipment,

9.1.5 IT/office equipment (e.g., computer, software licensing and development costs, printers, scanners, monitors, photocopiers), if not included in fixed assets in accordance with the Host Institute's accounting principles (policy)

9.1.6 other equipment, insofar as it is not classified as fixed assets in accordance with the Host Institute's accounting principles (policy)

10. Travel costs

10.1 Costs of the Fellow's business trips include without limitation:

10.1.1 costs of participation in seminars/conferences relating to the topic of the research, excluding conference fees,

10.1.2 costs of business trips (including short research stays) necessary for the implementation of the research, e.g., queries, field research, etc.,

10.1.3 costs of participation in training and other meetings organised within the PASIFIC Programme,

10.1.4 if the organisation where the Secondment is carried out is located outside the workplace of the Fellow:

10.1.4.1 accommodation costs at the place of the Secondment,

10.1.4.2 travel costs from the place of work at the Host Institute to the place of the Secondment and back.

10.2 Travel costs include:

10.2.1 per diems and subsistence allowance in accordance with the rules laid down in the regulations issued pursuant to Article 775 § 2 of the Polish Labour Code,

10.2.2 personal insurance,

10.2.3 other reasonable and necessary travel costs, such as visas, costs of required vaccinations, etc.

11. Publication costs

11.1 Publication costs include:

11.1.1 costs of publishing scientific articles or open-access research data

11.1.2 purchase costs of specialist services necessary for the preparation of publications (proofreading, editing, graphic design),

12. Workshop and conference costs

12.1 Workshop and conference costs include:

12.1.1 costs of organising conferences, workshops, seminars, meetings, including, without limitation:

12.1.1.1 hire costs of meeting and conference rooms,

12.1.1.2 catering,

12.1.1.3 travel and subsistence expenses of invited guests

12.1.1.4 costs of organising workshops and conferences, other than remuneration costs

12.1.2 conference fees related to the participation of the Fellow in external workshops and conferences

13. Other direct costs

13.1 Other direct costs are other costs directly related to the Fellowship not included in above mentioned cost categories, e.g.:

13.1.1 costs of purchasing research services (laboratory analyses, statistical studies, surveys, etc.),

13.1.2 costs of purchasing other professional services needed for the proper conduct of the research

13.2 postal, courier or transportation costs directly related to the performance of the specific research task,

13.3 costs of purchasing or accessing data/databases.

14. Revenues related to the fellowship

14.1 Revenues related to the Fellowship do not include:

- 14.1.1 interest resulting from the management of the bank account that the Host Institute is obliged to open in connection with the Fellowship
- 14.1.2 exchange revenue from foreign exchange operations related to the Fellowship

Letter of Support from the Host Institute

Appendix No. 5 to the Terms and Conditions of the
PASIFIC Call 1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 847839.

Marie Skłodowska-Curie Actions



LETTER OF SUPPORT FROM THE HOST INSTITUTE

.....
(name of the Institute, address of the registered seat)

Proposal title :

Applicant's full name:

Having reviewed the aforementioned Proposal, if it will be accepted for funding, the Host Institute declares as follows:

Article 1

The Host Institute declares to conclude a fixed-term, full-time employment contract with (Applicant's full name) for the entire duration of the Fellowship, funded within the PASIFIC Call 1.

Article 2

If the Fellowship is funded, the Host Institute commits to:

- 1) include the planned research activities carried out during the Fellowship in the action-based financial plan of the unit;
- 2) supervise the implementation of the Fellowship and monitoring if the funds are spent in a correct and justified manner;
- 3) provide the Applicants with resources necessary for the implementation of their research, including office/laboratory infrastructure and research equipment;
- 4) assign to the Applicant the Supervisor in the person of, responsible for scientific support to the project and facilitating Applicant's contacts with the local scientific community;
- 5) assign to the Applicant a Supporting Supervisor³ in the person of
- 6) assign to the Applicant a research buddy in the person of, who will familiarize the Applicant with the research environment of the Host Institute and its rules and procedures;
- 7) provide administrative and financial support during the Fellowship, including support related to the arrival and stay of the Applicant in Poland, and appoint an employee responsible for its coordination in the person of.....;
- 8) organise, during the Fellowship, a Secondment at the following organisation:
.....⁴;
- 9) enable the Applicant to decide on the allocation of 1/5 of indirect costs of the project;

³ Applies only to interdisciplinary projects.

⁴ If such a secondment was foreseen in the Proposal.

- 10) support the Applicant in obtaining the required approvals, opinions, permits or authorisations⁵;
- 11) respect the principles laid down in the “European Charter for Researchers” and the “Code of Conduct for the Recruitment of Researchers”⁶;
- 12) apply for the “HR Excellence in Research” logo awarded by the European Commission no later than one year after concluding the Fellowship Agreement.

Article 3

Should no funding be awarded from the PASIFIC Call 1, this letter of support will not entail any obligations for the Host Institute.

Article 4

Declaration of the person indicated as the Applicant’s Supervisor is attached to this letter of support.

Letter of support signed (place, date):

.....
(authorised representative legible signature)

⁵ If research carried out as a part of the Fellowship requires formal certification that ethical standards are met during its conduct.

⁶ Commission Recommendation of 11 March 2005 on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers.



Appendix No. 1
to the Letter of Support
from the Host Institute

.....
(Supervisor's full name)

.....
(place, date)

.....
.....
(position and place of employment)

.....
.....
(contact details)

SUPERVISOR DECLARATION

I, the undersigned, declare that I am aware of the obligations arising from supervising the Fellowship of (Applicant's full name), and I commit to act as the Applicant's Supervisor, if the funding is awarded from the PASIFIC Call 1.

.....
(Supervisor's signature)



Appendix No. 2
to the Letter of Support
from the Host Institute

.....
(Supporting Supervisor's full name)

.....
(place, date)

.....
.....
(title and place of employment)

.....
.....
(contact details)

DECLARATION BY THE SUPPORTING SUPERVISOR

I, the undersigned, declare that I am aware of the obligations arising from supervising the Fellowship of (Applicant's full name), and I commit to act as the Applicant's Supporting Supervisor, if the funding is awarded from the PASIFIC Call 1.

.....
(Supervisor's signature)



Letter of Support from the Institute supporting the Host Institute

Appendix No. 6 to the Terms and Conditions of the
PASIFIC Call 1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 847839.

Marie Skłodowska-Curie Actions



LETTER OF SUPPORT FROM THE INSTITUTE SUPPORTING THE HOST INSTITUTE

.....
(name of the Institute, address of the registered seat)

Proposal title:.....

Applicant's full name:

Having reviewed the aforementioned Proposal, if it will be accepted for funding, the Host Institute declares as follows:

Article 1

If the Fellowship is funded, the Institute supporting the Host Institute commits to:

- a. provide the Applicant with office/laboratory infrastructure and research equipment necessary to conduct the research in the scope of the Fellowship in the Research Area not covered by the Host Institute;
- b. assign to the Applicant the Supporting Supervisor in the person of
- c. support the Host Institute in the provision of administrative and financial services necessary for the research carried out during the Fellowship, covering a Research Area not covered by the Host Institute;
- d. support the Applicant and the Host Institute in obtaining the required approvals, opinions, permits, or authorisations in case the research carried out by the Applicant requires formal certification of compliance with ethical standards during its conduct.

Article 2

Should no funding be awarded from the PASIFIC Call 1, this letter of support will not entail any obligations for the Host Institute.

Article 3

Declaration of the person indicated as the Supporting Supervisor is attached to this letter of support.

Letter of support signed (place, date):

.....
(authorised representative legible signature)

Appendix
to the Letter of Support
from the Institute Supporting the Host Institute

.....
(Supporting Supervisor's full name)

.....
(place, date)

.....
.....
(title and place of employment)

.....
.....
(contact details)

DECLARATION BY THE SUPPORTING SUPERVISOR

I, the undersigned, declare that I am aware of the obligations arising from supervising the Fellowship of (Applicant's full name), and I commit to act as the Applicant's Supporting Supervisor, if the funding is awarded from the PASIFIC Call 1.

.....
(legible signature)



Research Areas requiring ethics assessment

Appendix No. 7 to the Terms and Conditions of the
PASIFIC Call 1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 847839.

Marie Skłodowska-Curie Actions

Research Areas requiring ethics assessment:

1. Research on human embryos and fetuses

Research on human embryos and fetuses (mainly human embryonic stem cells (hESCs)). The following fields of research in this Area are not eligible for funding and may not be included in Proposals: research activities aiming at human cloning for reproductive purposes; research activities intended to modify the genetic make-up of human beings which could make such changes heritable (apart from research relating to cancer treatment of the gonads, which may be financed); research activities intended to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including the technique of somatic cell nuclear transfer; research activities which result in the destruction of human embryos.

2. Research with human beings

Research with human beings regardless of the nature or subject matter of the research, i.e., research involving interviews, observation or tracking of the participants, collection of biological samples, medical interventions. Categories of research participants that require a detailed description of the research procedure or certification are, for example children or minors, patients, volunteers participating in medical research, participants on whom medical interventions are to be performed.

3. Research on human cells/tissues

Research that uses, produces or collects human cells or tissues that are obtained: from commercial sources, as a part of this research project, from another research project, laboratory or institution, from a biobank

4. Research related to the processing of personal data

Research that involves the processing of personal data, regardless of the method used. "Personal data" means information relating to an identified or identifiable natural person. "Processing of personal data" means any operation (or set of operations) performed on personal data. This includes collection, recording, organising, structuring and storage; adaptation or alteration of data; retrieval and consultation of data; use of data; disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction of personal data.

5. Research involving animals

Research involving animals, especially research involving the following groups, e.g. endangered species, genetically modified animals, non-human primates. Research involving animals includes, but is not limited to: studying emotional states, testing drugs, studying the effects of substances on animals.

6. Research involving non-EU countries (third countries)

Research carried out partly or entirely in a country outside the EU, as well as research in which participants or resources come from a country outside the EU; the material is imported from or exported to a country outside the EU. Funding may not be granted for activities carried out outside the EU if they are prohibited in all EU Member States.

7. Research that may adversely affect the environment, health and safety

This refers to research that may adversely affect the environment or the health and safety of researchers involved in the research. Negative impacts may be due to the experiments planned as part of the study or undesirable side effects of the technologies used.

8. Research involving dual-use items

Studies on items, software and technology covered by Council Regulation (EC) No. 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items and other items for which an authorisation is required. Dual-use items are those normally used for civilian purposes but which may have military applications or may contribute to the proliferation of weapons of mass destruction. Dual-use products include, for instance, toxic chemicals, human pathogens and diseases carried by animals.

9. Research that could raise concerns regarding the exclusive focus on civil applications

Research carried out in collaboration with military partners or concerning the development of generic technologies, products or knowledge which may benefit both civil and military areas, provided that the research itself focuses exclusively and explicitly on civil applications. Research that could raise concerns regarding the exclusive focus on civil applications includes, for example, research involving defence industries or organisations, research in the field of defence: explosives, chemical, biological, radiological and nuclear defence, or counter-terrorism.

The PASIFIC Programme only funds research that focuses exclusively on civil applications.

10. Research that could potentially be misused

Research involving or generating materials, methods, technologies or knowledge that may be used for unethical purposes. Even if the primary aim of the research is ethical, there is a risk that it could harm people, animals or the environment.

11. Research that may give rise to other ethical issues not covered by the above points

Research that may raise new ethical issues not currently addressed in the above-mentioned areas (e.g. new developments in neuroscience, human-machine interaction, development of nanotechnologies, research on androids/cyborgs, etc.).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Maria Skłodowska-Curie grant agreement No 847639.

Maria Skłodowska-Curie Actions