ERACoSysMed

3rd Joint Transnational Call for European Research Projects on Systems Medicine

CALL TEXT

Submission deadline for pre-proposals: 15.03.2019 (13:00h C.E.T.)

Online access: https://www.eracosysmed.eu/call3

For further information please visit www.eracosysmed.eu

or contact

the Joint Call Secretariat (JCS) at:

Project Management Jülich
Division Life Sciences and Health Research (LGF)
Forschungszentrum Jülich GmbH,
52425 Jülich, Germany

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1. Background

The overall aim of systems medicine research is to provide a modern systems-based approach to medical practice. It aims to understand diseases as a complex interplay of different biological networks on multiple spatial and temporal levels. Computational models created from iterative cycles of experimentation, data generation and evaluation generate computer simulations of biological networks. In systems medicine such computer simulations are used to quantitatively describe and understand diseases and their underlying biological mechanisms. This powerful approach holds the potential to enable clinicians to diagnose diseases and treat patients effectively and efficiently. Furthermore, it will lead to medical interventions resulting in the prevention of many diseases, a reduction in disease severity and the ability to apply resources strategically. Accordingly, systems medicine is fundamentally different from the prevailing practice of classical medicine, which is typically characterized by a reactive approach, whereby intervention only occurs once a disease has already manifested itself.

Nowadays, large datasets gained through modern “-omics” technologies complemented by clinical, imaging, nutritional and environmental exposure data are available. The complexity of these large datasets however compels the clinicians of today to face the challenge of interpreting these data to produce results of medical relevance. Appropriate computational models for analysis and interpretation of these massive biological and clinical data are key to the personalization of medical interventions and disease understanding, since they deliver knowledge about the underlying mechanisms and pathways affected in disease states and their treatments. As a result, these computational models can be used to predict important endpoints such as individual disease risk, disease evolution or treatment response. Therefore, systems medicine will provide a new toolbox to medical researchers and clinicians with the potential to realize personalized medicine and ultimately to change the way care is delivered to patients.

The ERA-NET ERACoSysMed on “Collaboration on Systems Medicine funding to promote the implementation of Systems Biology approaches in clinical research and medical practice” has been established under the ERA-NET Co-fund scheme of the European Commission in the Framework Programme Horizon 2020. ERACoSysMed aims to enhance the implementation of systems medicine approaches in both clinical research and medical practice across Europe. It has been strategically guided by the Coordination and Support Action Systems Medicine (CASyM), which has elaborated a road map for the implementation of systems medicine across Europe (https://www.casym.eu/index.php?index=90). As an outcome of the CASyM project a charitable association, the European Association of Systems Medicine (EASyM) was established. EASyM took on the legacy of CASyM, and continues CASyM’s long-term vision of establishing systems medicine-based practices in European healthcare.

In this context, the following funding organisations have agreed to launch a third joint transnational call (JTC-3) for research projects on systems medicine. The call will be conducted simultaneously by these funding organisations in their respective countries:

- The Federal Ministry of Education and Research (BMBF), Germany
- The Austrian Science Fund (FWF), Austria
- The Fund for Scientific Research (FNRS), Belgium
- The Research Foundation - Flanders (FWO), Belgium, Flanders
- The French National Research Agency (ANR), France
- The Italian Ministry of Health (MoH), Italy
- The National Research Fund (FNR), Luxembourg
- The Netherlands Organisation for Health Research and Development (ZonMw), The Netherlands
- The Research Council of Norway (RCN), Norway
- The Slovak Academy of Sciences (SAS), Slovakia
- The National Institute of Health Carlos III (ISCIII), Spain

2. Aim of the call

The aim of the call is to fund research projects that validate existing predictive computational models using biomedical data to expand the knowledge about human diseases and their treatment.

Project proposals submitted under this call must focus on the analysis, interpretation and application of different biological and clinical data by appropriate computational models. Projects have to demonstrate the practical relevance of computational models for medical routine and their benefit for individual patients. As an example, the knowledge gained may help to enable drug repurposing across different diseases.

To fit the aim of the call projects must focus on one of the two following approaches. Projects must validate clinically relevant computational models already existing and their predictions using biomedical and/or clinical data by stepwise expansion and improvement through repeated cycles of data-driven modelling and model-based experimentation. Alternatively, projects must discover and validate common molecular mechanisms underlying at least two different diseases using appropriate computational modelling approaches allowing a re-definition of clinical phenotypes and improvement of patient stratification for clinical trials.

As prerequisite for funding, each project must meet the following conditions:

- A multidisciplinary collaboration of clinicians, experimentalists, computational scientists, bioinformaticians, data management and curation experts, industrial partners and if possible, patient communities is expected. Each consortium must include at least one clinical group and a computational modelling group.
- The project must apply a systems medicine approach.

- Relevant patient data sets and patient samples, and well annotated archived samples should be available. New data may only be generated when it is necessary for the modelling cycle, therefore generation of new data cannot be a major part of the project. Patient recruitment should be completed at the time of application.
- Computational models based on high-quality datasets (sufficient deep phenotyping, curated data sets) should already exist.
- Clinical centers providing patients and their data should give evidence of the ethical and legal clearance for data sharing, patient consent for using the data for the purpose of the proposed project if applicable, as well as their data quality and suitability for computational analysis.
- A data management plan and data handling protocols according to international state-of-the-art standards (FAIR[1] and GDPR[2] compliant and secure) must be provided as an integral part of the application. A data management plan should address criteria such as data accessibility, format and storage, stewardship/curation, time plan and schedule for the submission date, quality of meta data, and data security. For this, it may help to follow the guiding questions found in the data management plan template in Horizon 2020[3]. Data storage, data/model exchange and data/model sharing agreements should be available at the time of application.
- The use of existing infrastructures (e.g. ELIXIR) should be taken into consideration.
- The application must contain a plan for involvement of different stakeholders. This plan describes how, why and when stakeholder involvement will be handled. Furthermore, it must describe how the project will benefit from the inclusion of the stakeholder(s). The benefit can e.g. be to develop a product the end-users need or welcome, to decrease financial burden on health care providers, or to facilitate public debate of the research. Stakeholders can be patients, health care providers, public bodies, medical professionals, companies, etc.
- Applications must fulfil the national ethical and legal requirements. For instance, among other things, special attention must be paid to ethical issues (e.g. research on humans or animals; privacy of data and biomaterials; informed consent; etc.). Please be aware that regulations and ethical issues vary among different countries and should be considered from the outset.

3. Application

The implementation of the call will be coordinated by the Joint Call Secretariat (JCS) hosted by Project Management Jülich (Germany), and will be conducted simultaneously by the funding organisations in their respective countries. Furthermore, it will be implemented through a two-step evaluation procedure including submission and evaluation of pre- and full

[1] Wilkinson, M.D *et al*. The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data* 3: 160018 doi: 10.1038/sdata.2016.18 (2016)
[2] https://ec.europa.eu/commission/priorities/justice-and-fundamental-rights/data-protection/2018-reform-eu-data-protection-rules_en
[3] http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/reporting/h2020-tpl-oa-data-mgt-plan-annotated_en.pdf

proposals. **Applicants must refer and comply with the specific regulations of the national funding organisations** (**see Annex II**) **and are strongly encouraged to contact their respective contact person prior to submitting an application for any queries related to their national regulations.**

3.1 Eligibility

Applications submitted jointly by transnational consortia will be centrally handled by the JCS. Eligibility will be verified at both the transnational level as well as the national level, since eligibility for funding is subject to the regulations of the joint call as well as to specific national/regional funding requirements.

Proposals must meet the following eligibility criteria:

- Projects can be funded for a period of up to three years in accordance with national funding organisations' regulations.
- Each consortium submitting a proposal must involve **a minimum of three and a maximum of five eligible[4] partners** from at **least three different countries** participating in the call. For reasons of transnational balance, no more than two eligible partners from the same country are allowed to join each consortium.
- A maximum of two external collaborators per consortium may participate in the project. External collaborators are from countries that are not participating in this joint transnational call. External collaborators may come also from countries participating in this call but do not ask for funding. They must prove the availability of economic and human resources necessary to perform their tasks in the project prior to the full proposal submission.
- In order to strengthen the implementation of systems medicine throughout Europe, the inclusion of research teams from Slovakia is encouraged. Therefore, consortia including partners from Slovakia may increase the maximum number of eligible partners to eight (five eligible partners + two external collaborators + an additional partner from Slovakia).
- Each consortium must include at least one clinical group and a computational modelling group.
- **For applicants from certain countries/regions, it might be necessary to submit additional information before the submission deadline directly to the respective funding organisation. Information on specific regulations is provided in Annex II.** Adherence to national/regional regulations is mandatory.

The consortium members must nominate one partner to act as coordinator who represents the consortium externally, acts as contact point and is responsible for the internal management of the consortium's work. The coordinator must be eligible to receive funding from one of the funding organisations participating in this call. In case of a successful application, the consortium partners will be funded by the individual funding organisation of their country/region participating in ERACoSysMed's 3rd Joint Transnational Call.

[4] An eligible partner is entitled to receive funding according to their national/regional funding rules.

An eligibility check of the pre-proposals will be performed by the JCS and the national funding organisations to ensure that they meet the formal criteria of the call and the national regulations. Inclusion of a non-eligible partner in a proposal may lead to the rejection of the entire proposal without further review. **Accordingly, applicants are strongly advised to contact their national funding organisations to check the national eligibility criteria prior to submitting an application.**

In addition, an eligibility check of the submitted full proposals will be performed by the JCS to ensure that they have not changed substantially from the respective pre-proposals in terms of objectives and budget. Any major change in objectives and budget will lead to the ineligibility of the full proposal.

3.2 Submission of joint proposals

In both steps of pre- and full proposal submission, one joint proposal document, written in English, shall be prepared by the partners of a transnational consortium and submitted electronically by the coordinator of the applying consortium via the online submission tool (https://www.eracosysmed.eu/call3). No other means of submission will be accepted.

The submission deadline for pre-proposals is on **March 15th, 2019 (13:00h C.E.T.)**. The results of the evaluation of pre-proposals will be communicated to the coordinators on May 21st, 2019, by the JCS.

Full proposals must be electronically submitted by the coordinator of the applying consortia no later than **June 28th, 2019 (13:00h C.E.T)**.

Detailed information on how to submit pre- and full proposals is described in the Guidelines for Applicants that can be found under (https://www.eracosysmed.eu/call3). Additionally, an overview of the deadlines of the call can be found in Annex I.

4. Evaluation

A peer review panel (PRP), composed of internationally renowned, independent scientific experts will assess pre- and full proposals based on the scoring system and evaluation criteria given below.

4.1 Scoring system

Pre- and full proposals will be assessed according to a scoring system from 0 to 5 to evaluate a proposal's performance with respect to the different evaluation criteria listed under 4.2.:

Scoring system

0: Fail. The proposal fails to address the criterion in question, or cannot be assessed due to missing or incomplete information.

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

2: Fair. The proposal broadly addresses the criterion, but there are significant weaknesses that need corrections.

3: Good. The proposal addresses the criterion well, but certain improvements are necessary.

4: Very Good. The proposal addresses the criterion very well, but small improvements are possible.

5: Excellent. The proposal successfully addresses all relevant aspects of the criterion.

4.2 Evaluation criteria

Pre- and full proposals will be assessed according to the specific evaluation criteria listed:

1. EXCELLENCE

a) Sound rationale and research hypothesis based on a medical/clinical need.
b) Use of an innovative and suitable approach for applying systems medicine that incorporates proper modelling (involving medical/clinical data) and a combination of various data sets (medical/clinical and scientific).
c) Feasible testing of the concept during the course of the project.

2. IMPACT

a) Establishment of systems medicine approach in medical and/or clinical research representing an improvement over established practice and leading to future clinical, public health and/or other socio-economic relevant applications.
b) Suggest new paths for clinical/medical research aimed at delivering better prevention throughout life and more efficient and personalized therapies to cure diseases.
c) Added value of the transnational collaboration: gathering a critical mass of patients/biological material, sharing of resources (models, databases, etc.), harmonization of data, sharing of specific know-how and/or innovative technologies, etc..
d) Involvement of different stakeholders such as patients, health care providers, public bodies, medical professionals, companies, etc..

3. QUALITY & EFFICIENCY OF IMPLEMENTATION

a) International competitiveness of consortium members (i.e. expertise relevant to the field of the call, quality of the research groups and their appropriate mix) and complementarity within the consortium (balance of the partnership in terms of multidisciplinary collaboration among clinical researchers and medical doctors, experimentalists and computational biologists, where possible industrial partners).
b) Allocation and justification of resources: rational distribution of resources in relation to the project's activities, partner's balanced responsibilities, time frame, budget and other resources.

c) Availability of high-quality datasets (sufficient deep phenotyping, curated data sets) at the start of the project, including patient consent for using the data for the purpose of this new project.
d) Appropriate and reliable data management plan.
e) Description of potential risks and how to handle them, reflected by a feasible risk- and contingency plan.

4.3 Evaluation procedure

Evaluation scores will be awarded for the three main criteria, and not individually for the different aspects listed under each criterion. The threshold for each individual criterion is 3. The overall threshold, applying to the sum of the individual scores, is 10. The highest score that can be reached for the sum of all three criteria is 15.

Each eligible pre-proposal will be remotely evaluated by three reviewer experts who will produce individual evaluation reports relating to the evaluation criteria under 4.2. These individual evaluation reports will serve as starting point for discussions in a subsequent consensus meeting in which the final scores for each proposal will be determined. Based on these scores a ranking list will be established. Based on the ranking list, the Call Steering Committee (CSC), composed of one representative from each funding organisation participating in the call, will decide which pre-proposals will be invited to submit full proposals. If necessary, the number of proposals that are invited to submit a full proposal may be limited to a funding total of two or three times that of the available budget of the call. The JCS will invite the coordinators of successful consortia to submit a full proposal on May 21st, 2019.

Each eligible full proposal will be remotely evaluated by at least three reviewer experts who will produce individual evaluation reports relating to the evaluation criteria under 4.2. The evaluation process of the full-proposals also foresees a rebuttal phase to provide applicants with the opportunity to reply to issues raised by the experts in the remote phase. All individual evaluation reports will be made available through the submission system for the corresponding project coordinator without revealing the identity of the reviewers. Project coordinators may comment on possible factual errors or misunderstandings and reply the evaluators' questions on behalf of their consortium from **August 26th until September 04th, 2019 at 13:00h (C.E.T.)**. However, issues which are not related to evaluators' comments / questions cannot be addressed and the work plan cannot be modified at this stage.

After the rebuttal step, a consensus meeting will be held in which a panel of experts will discuss each full proposal and determine the final scores. Based on these scores a ranking list will be established as the outcome of the evaluation.

Subsequently, the CSC will issue a selection list of projects to be funded following the order of the ranking list. The following method will be applied successively for every group of *ex aequo* proposals having the same total score, starting with the highest score and continuing in descending order:

- Maximise the funding opportunities by giving precedence for proposals coming from participating countries with still available funding.
- Diversification of research portfolio concerning the variety of disease areas or scientific content of the proposals.

The JCS will communicate the final funding decision to the coordinators of the transnational consortia by mid-October, 2019.

5. Financial issues and responsibilities

The participating funding organisations have agreed to launch a joint transnational call using a 'virtual common pot' funding mode. National/regional funding will therefore be made available through national/regional funding organisations according to national/regional funding regulations. Eligible costs and funding rates may vary according to the corresponding national/regional funding organisation regulations.

An earmarked budget of approximately EUR 7 270 000 Mio is available for this call. Indicative budgets including an overview of eligible costs per participating funding organisation are indicated in Annex II under National budget commitment.

6. Reporting and dissemination

6.1. Reporting at national level

Individual research groups will be monitored by their respective national funding organisation. Therefore, the individual research groups must report to their respective national funding organisation according to the national rules.

6.2. Reporting at ERACoSysMed level

In addition to the national reporting obligations, the project coordinators on behalf of the consortium might be requested to submit a mid-term progress report in English to the JCS. A final scientific report must be submitted within three months after the end of the project. Templates for the reports will be provided by the JCS. These joint reports will be assessed by the JCS. The coordinators and/or principal investigators may be asked to present the results of the funded projects at a status seminar. The costs related to this status seminar should be included in the project proposal.

6.3. Dissemination

Abstracts of the projects selected for funding will be published on the ERACoSysMed website.

Funding recipients must ensure that all outcomes (publications, etc.) of transnational ERACoSysMed projects include a proper acknowledgement of the ERA-NET ERACoSysMed

and the respective funding partner organisations. An electronic copy of such publications must be sent to the JCS.

7. Consortium Agreement

The project coordinator is responsible for the preparation and negation of a consortium agreement (CA). The concluded CA applies to all participating partners and addresses issues listed in the “Guidelines for Applicants”. Support for the preparation of a consortium agreement can be found on the DESCA webpage (http://www.desca-2020.eu/). The research consortium is strongly encouraged to sign the CA before the official project start date, and in any case the CA has to be signed no later than six months after the official project start date. Please note that national regulations may apply concerning the requirement for a CA. Upon request, the CA must be made available to the ERACoSysMed JTC-3 funding organisations, together with any other information required by national regulations.

Annex I – Indicative timetable of the call

01.02.2019	Publication of the call
15.03.2019	Submission deadline for pre-proposals
21.05.2019	Communication of the results of the pre-proposal assessment and invitation for full proposals
28.06.2019	Submission deadline for full proposals
26.08. – 04.09.2019	Rebuttal
mid-October 2019	Communication of the results of the full proposal assessment
2020	First projects start

Annex II – National/regional contact persons, budget information and regulations

Please note that country specific requirements might apply to this call. For further information please contact your national representative.

Country		Germany
Funding organisation		BMBF
Contact person		Dr. Sylvia Krobitsch Tel: +49-30-20199-3403 s.krobitsch@fz-juelich.de Dr. K. Zsuzsanna Nagy +49-30-20199-3314 k.nagy@fz-juelich.de
National budget commitment (Mio €)		2 Mio €
Maximum funding per participant and anticipated number of research groups to be funded		300 000 € per consortium in case of a single German applicant in a consortium (total amount) 400 000 € per consortium in case of two German applicants in the consortium (total amount)
Eligibility of applicants	Academia	Yes
	Hospitals	Yes
	Industry	Yes Commercial enterprises with R&D* capacity in Germany, such as small and medium-sized enterprises (SMEs), are eligible to apply for funding. Premises or a branch office must be located in Germany at the time when the funding granted is paid. The European Commission's definition of an SME is available here. Large corporations and enterprises of which at least 50 % are owned by large corporations can only be funded under certain conditions.
	Patient organisation	No
Eligible costs		Personnel, travel costs, consumables, equipment and subcontracts according to national rules. Overheads are eligible costs and must be included in the budget estimation.
Additional documents to be submitted		In addition to the electronic submission of pre-proposals, industrial and/or SME partners have to contact Project Management Jülich and may have to submit: • Financial statement for the last two years including profit commission statement (Jahresabschlüsse der letzten zwei Jahre inclusive Gewinn- und Verlustrechnung GuV) • Confirmation of the financial own contribution (Erklärung zur Aufbringung des Eigenanteils) • Business analysis (Aktuelle BWA) • Liquidity planing for the duration of the proposed project (Liquiditätsplanung für die Laufzeit des vorgeschlagenen Projektes) In case of positive funding recommendation, German

	applicants have to submit a formal national application via the electronic application system “easy” (https://foerderportal.bund.de/easy)
Earliest project start date	Mid 2020
Further guidance	The funding regulations, the follow-up and reporting of publicly funded projects are regulated according to NABF (Nebenbestimmungen für Zuwendungen auf Ausgabenbasis des BMBF zur Projektförderung) and NKBF 2017 (Nebenbestimmungen für Zuwendungen auf Kostenbasis des BMBF an gewerbliche Unternehmen für Forschungs- und Entwicklungsvorhaben). Both documents can be downloaded from https://foerderportal.bund.de/easy/easy_index.php?auswahl=easy_formulare&formularschrank=bmbf .

Country		Austria
Funding organisation		Austrian Science Fund (FWF) www.fwf.ac.at
Contact person		Dr. Markus Kubicek Tel: +43-1 505 67 40 - 8202 markus.kubicek@fwf.ac.at
National budget commitment (Mio €)		0.5 Mio €
Maximum funding per participant and anticipated number of research groups to be funded		250 000 € (total amount all FWF funded participants per consortium) Anticipated number of funded research groups: 2 projects
Eligibility of applicants	Academia	Yes*
	Hospitals	Yes*
	Industry	Yes*
	Patient organisation	Yes* *) Individual researcher, working in any kind of non-profit organisation: e.g. University, University hospital, Non-university research institute. Please refer also to the general FWF Funding Guidelines: http://www.fwf.ac.at/fileadmin/files/Dokumente/Antragstellung/Einzelprojekte/p_application-guidelines.pdf available on: http://www.fwf.ac.at/en/research-funding/application/international-programmes/joint-projects-era-nets/
Eligible costs		For scientists funded by the FWF, the funding is limited to “project-specific costs, i.e. personnel and non-personnel costs that are essential to carry out the project and that go beyond the resources made available from the research institution’s infrastructure, according to the general FWF Funding Guidelines published at https://www.fwf.ac.at/fileadmin/files/Dokumente/Antragstellung/Einzelprojekte/p_application-guidelines.pdf The FWF does not finance infrastructure or basic equipment at research institutions. Overheads may not be requested. Subcontracts must be well justified, i.e. must represent the only or the most economical way to

	have the work performed, please contact the FWF directly for clarification of individual cases. The application should include all persons, in addition to the staff already available, who will be required for work exclusively on the proposed project. The available legal categories of employment are contracts of employment for full-time or part-time employees (DV) and reimbursement for work on an hourly basis (GB). In addition, a part-time contract of employment (50% contract of employment for student assistants) may be requested for researchers who have not yet completed a master's or diploma (Diplom) degree programme in the relevant subject area. The current FWF salary scale (http://www.fwf.ac.at/en/research-funding/personnel-costs/) indicates the salaries that may be requested. The FWF grants an annual salary adjustment to compensate for inflation; this is applied automatically to all contracts of employment in stand-alone projects that are valid when the adjustment takes effect.
Additional documents to be submitted	In addition to the application at the call secretariat administrative data (in accordance with the FWF guidelines for stand-alone projects) must be submitted online to the FWF at https://elane.fwf.ac.at/ This is required already at the pre-proposal stage (deadline March 15, 2019) via the programme category "IK – International Projects". For the full proposal stage applicants must choose the programme category "I – International Projects" (deadline June 28, 2019). Both steps are mandatory. For submissions to be valid, the cover sheet generated at the end of the online submission process must be printed out and signed. It can then either be sent to the FWF by conventional mail (FWF, Sensengasse 1, 1090 Vienna) or scanned in, given a digital signature and sent to the FWF (office@fwf.ac.at) as an e-mail attachment.
Earliest project start date	January 2020; not later than 6 month after receipt of the approval letter from the FWF
Further guidance	Please note that there is a maximum number of ongoing projects funded by the FWF per researcher for Stand-Alone Projects (P), International Programmes (I), Clinical Research (KLIF) and Arts-Based Research (PEEK) programmes: each researcher may serve as the principal investigator in a maximum of three projects in the P, I, KLIF and PEEK programmes. The rule on the maximum number of ongoing projects in the programmes mentioned above leads to limits on the submission of new applications. The number of possible new applications depends on the number of currently ongoing/approved projects in the above mentioned programmes, including pre-proposals for International projects (IK). A maximum of three ongoing/approved projects and new applications is permitted. https://www.fwf.ac.at/fileadmin/files/Dokumente/Antragst

	ellung/project_number_limit.pdf Please note that the final decision for funding of FWF applications is taken by the FWF board.

Country		Belgium
Funding organisation		F.R.S.-FNRS
Contact person		Joël Groeneveld +32 2 504 9209 Joel.groeneveld@frs-fnrs.be
National budget commitment (Mio €)		0.2 Mio €
Maximum funding per participant and anticipated number of research groups to be funded		The maximum amount of requested funding per project is € 200 000 for a total period of three years. If the project involves the recruitment of a PhD student, the project duration of the F.R.S.-FNRS sub-project could be up to four years (cf. PINT-MULTI regulations) The anticipated number of research group to be funded is 1.
Eligibility of applicants	Academia	Yes
	Hospitals	Yes
	Industry	No
	Patient organisation	No
Eligible costs		All eligibility rules and criteria can be found in the PINT-MULTI regulations.
Additional documents to be submitted		Applicants must provide basic administrative data by submitting and administrative application on SEMAPHORE for the same deadline as the consortium application is submitted. Please select the "PINT-MULTI" funding instrument when creating the administrative application. Proposals invited to the second stage will be able to complete the pre-proposal form and provide information for the full proposal upon validation by the F.R.S.-FNRS.
Earliest project start date		Within 6 month of results publication
Further guidance		Please note that the F.R.S.-FNRS does not allow multiple funding; the principal investigator should clearly state how the proposed project differs from other granted projects.

Country		Belgium (Flanders)
Funding organisation		FWO
Contact person		Dr. Alain Deleener Science Policy Advisor Toon Monbaliu Advisor Research Affairs Tel: +32 2 550 15 70 eranet@fwo.be
National budget commitment (Mio €)		0.2 Mio €
Maximum funding per participant and anticipated number of research groups to be funded		200 000 € – Funding of one research group
Eligibility of applicants	Academia	Yes
	Hospitals	Yes, although with strong restrictions; only hospitals associated with universities are eligible for the FWO. Additionally, the researcher(s) applying for funding must comply with Art. 9 of the FWO-regulations on the regular research projects. This implies that a ZAP-position at an eligible main host institution is mandatory, and funding is allocated to an eligible main host institution.
	Industry	No
	Patient organisation	No
Eligible costs		Funding money can be used for staff, consumables and equipment. The minimal and maximal allowed funding amounts per cost category, as applicable for the regular FWO-projects, are not applicable for the projects funded by FWO in ERA-NET. Overhead is not an eligible cost. Notwithstanding, the FWO pays the host institutions of a project directly 6% overhead on top of the funding amount.
Additional documents to be submitted		No
Earliest project start date		/
Further guidance		The FWO is participating with its fundamental programme only, which implies that the emphasis must lie on basic research. It is consequently strongly advised to contact the FWO administration, before submission, in order to verify the researchers‘ eligibility and avoid the ineligibility of the project- proposal/consortium as a whole. Additionally, we encourage researchers to inform their host institution (research coordination units (DOCs)) about their participation, for administrative purposes. More information about ERA-NET and FWO can be

	consulted online, at the FWO-website.

Country		France
Funding organisation		French National Research Agency (ANR)
Contact person		Dr. Ingrid Pfeifer Tel: +33 1 78 09 80 22 Email: ingrid.pfeifer@agencerecherche.fr
National budget commitment (Mio €)		1 Mio €
Maximum funding per participant and anticipated number of research groups to be funded		ANR has a maximum funding per partner for this call: - Maximum funding per partner: 250 000€. - Maximum funding per coordinating partner: 300 000€ There is a minimum amount per partner: 15 000 € 3-4 projects
Eligibility of applicants	Academia	Yes
	Hospitals	Yes
	Industry	Yes
	Patient organisation	Yes
Additional eligibility criteria		ANR will avoid double funding and will not finance projects or part of projects funded through other calls.
Eligible costs		Among others, eligible costs include personnel costs for temporary contracts; small equipment; consumables and animal costs; travel; and sub-contracting, if necessary to carry out the proposed activities. Please note that «overheads» correspond to «frais généraux de gestion – frais de structure» at ANR and those eligible overhead rates vary depending on the type of partner applying for funding. Please refer to ANR's financial regulations ("Règlement financier ANR") for full details at: http://www.agence-nationale-recherche.fr/RF
Additional documents to be submitted		None
Earliest project start date		First quarter of 2020
Further guidance		Please consult the specific guidelines for French applicants to this call, available on the ANR-site: http://www.agence-nationale-recherche.fr/ as well as the following documents: Plan d'action 2019 Règlement financier

Country		Italy
Funding organisation		It-MoH – Italian Ministry of Health
Contact person		Directorate General for Health Research and Innovation Ministry of Health – Ministero della Salute Office 5 Viale Giorgio Ribotta, 5 00144 Rome, Italy Giselda Scalera Maria Josefina Ruiz Alvarez Tel +39 06.5994.3214 email: mj.ruizalvarez-esterno@sanita.it
National budget commitment (Mio €)		0.75 Mio €
Maximum funding per participant and anticipated number of research groups to be funded		250 000 € per project 3/4 projects
Eligibility of applicants	Academia	No
	Hospitals	Yes. ONLY IRCCS, that are the Scientific Institutes for Research, Hospitalization and Health Care (Istituti di Ricovero e Cura a Carattere Scientifico pubblici e privati) and ISS (National Health Institute) are eligible. The simultaneous participation in proposals submitted in 2019 for different transnational research calls funded by the Ministry of Health is not allowed to Italian Principal Investigators, including WP leaders.
	Industry	No
	Patient organisation	No
Eligible costs		Only costs generated during the lifetime of the project can be eligible. They are: • Direct Costs: Personnel (only temporary contracts) (max 50%); Consumables; Animals; Equipment (only on hire); Travel (max 10%): Documentation (Max 1%) • Indirect Costs: Overhead (max 10%); • Other indirect costs are not eligible
Additional documents to be submitted		In order to expedite the eligibility check process, the Ministry of Health will grant an eligibility clearance to the applicants prior to the submission of the proposals. To this end, it is mandatory that the applicants fill out and return a pre-submission eligibility check form (in pdf format) through IRCCS Scientific Directorate using WFR System before submitting their proposals to the Joint Call Secretariat. It recommends to send the form at least 10 working days before the proposal submission deadline. Applicants will receive a written notification of their

	eligibility status. The simultaneous participation in proposals submitted in 2019 for different transnational research calls funded by the Italian Ministry of Health is not allowed to Italian Principal Investigators or other research team members.
Earliest project start date	January 2020
Further guidance	After the ERACoSysMed JTC-3 (2019) peer review process has been completed and the final (scientific) ranking list has been established and endorsed by the Call Steering Committee, the Ministry of Health will invite the principal investigators of the projects approved for funding to enter the formal national negotiations (according to national regulations). Submission of annual scientific and financial reports at the national level will be required according to the rules of the Ministry of Health. Further information on the rules of the Ministry of Health can be found at www.salute.gov.it or requested to the national contact persons.

Country		Luxembourg
Funding organisation		FNR
Contact person		Sean Sapcariu, PhD Luxembourg National Research Fund 2, avenue de l'université L-4365, Esch-sur-Alzette Luxembourg T : +352 261925-33 Sean.sapcariu@fnr.lu
National budget commitment (Mio €)		0.5 Mio €
Maximum funding per participant and anticipated number of research groups to be funded		500 000 €
Eligibility of applicants	Academia	Yes For details please check the FNR website "FNR Beneficiaries – INTER": https://www.fnr.lu/fnr-beneficiaries/
	Hospitals	Yes: hospitals engaged in research For details, please check the FNR website "FNR Beneficiaries – INTER": https://www.fnr.lu/fnr-beneficiaries/
	Industry	No
	Patient organisation	Yes: non-profit associations and foundations engaged in research For details, please check the FNR website "FNR Beneficiaries – INTER": https://www.fnr.lu/fnr-beneficiaries/
Eligible costs		Details provided in the "INTER application guidelines", download available here: https://www.fnr.lu/funding-instruments/inter/
Additional documents to be		Please consult the "INTER application guidelines" for

submitted	further details, download available here: https://www.fnr.lu/funding-instruments/inter/ 1) At both proposal stages 3 documents: - INTER budget sheet, - INTER budget details (justification), and - INTER project plan to be submitted by the Luxembourg PI to the FNR's grant management system, jointly with a pdf of the proposal submitted to ERACoSysMed. 2) Before start of the project: - A consortium agreement (at least clarifying publication and IP rights) signed by all project partners.
Earliest project start date	
Further guidance	All information concerning eligibility rules for Luxembourg participants are detailed in the FNR INTER Application Guidelines (download available on https://www.fnr.lu/funding-instruments/inter/) Proposals (pre- and full proposals) must be submitted by the PI's host institution' administration (not by the PI) in electronic format to the FNR's grant management system no later than 5 working days after the ERACoSysMed submission deadline. The FNR will only accept a maximum of 2 ERACoSysMed applications from an individual applicant.

Country		The Netherlands
Funding organisation		ZonMw
Contact person		Dr. Rob Diemel (Tel: +31 70 349 52 52) Simone de Graaf, MSc (Tel: +31 70 349 53 83) Anne Boeter, MSc (Tel: +31 70 349 53 57) E-mail: Eracosysmed@zonmw.nl
National budget commitment (Mio €)		0.45 Mio €
Maximum funding per participant and anticipated number of research groups to be funded		In this call ZonMw aims to fund the Dutch partner(s) of two research projects with a maximum national budget of 225 000 € per project.
Eligibility of applicants	Academia	Yes
	Hospitals	Yes, when in line with Grant Terms and Conditions. See www.zonmw.nl/nl/subsidies/voorwaarden-en-financien/
	Industry	Yes, but industry is not allowed to apply for budget in this call.
	Patient organisation	Yes In this call, involvement of patients in projects is highly recommended, e.g. by setting up a patient council, or by having a patient organisation as research partner. Costs

		for such patient involvement may be part of the budget to a maximum of 5 000 €.
Eligible costs		The resources provided may be used to pay for academic staff. For Dutch partners in this call, it is not allowed to appoint a PhD student. Part of the budget may also be used for: - consumables and small equipment required specifically for the project; - travel and subsistence to visit labs of consortium partners, to visit conferences and to attend training courses necessary for conducting the research of the project; - dissemination, knowledge exchange and implementation. Part of the research may be conducted by industry. Matched funding in kind will be accepted only on condition that it is an integral part of the work plan and can be identified and monitored as such; guidance and consultancy are explicitly excluded. Capitalised in cash and/or in-kind contributions specified in the budget must be supported by a letter of commitment from the private partner committing the matched funding and specifying the amount to be provided. *Inadmissible as matched funding:* - ZonMw will be guarding against improper mixing with direct and indirect government funding. In this call, matched funding may not be provided by grants obtained from governmental funding agencies; - Discounts on prices (commercial or otherwise) for material, equipment, services et cetera; - Overheads and costs of guidance and/or consultancy; - Conditional costs of services. The delivery of matched funding may not be made dependent on reaching a certain stage in the research plan (e.g. go/no-go point).
Additional documents to be submitted		The following documents should be submitted at the full proposal phase: - Budget template for the Dutch part of the project. - In case partner(s) provide matched funding: a letter of commitment for each partner that provides matched funding is required. A budget format and an example letter of commitment will be sent by e-mail to applicants who are invited to submit their full proposal.
Earliest project start date		
Further guidance		For the Dutch applicants, the ZonMw General Terms and Conditions Governing Grants of ZonMw will be applicable. *Applicants must contact the national contact persons before application of a proposal!*

Country		Norway
Funding organisation		RCN
Contact person		Renate Margrete Simonsen Tel: +47 41017592 E-Mail: rms@rcn.no
National budget commitment (Mio €)		1.3 Mio €* (12 Mio NOK) *This may have to be adjusted according to conversion rates
Maximum funding per participant and anticipated number of research groups to be funded		Maximum 435 000 €* (4.0 Mio NOK) per consortium in case of a single Norwegian applicant in a consortium Maximum 650 000 €* (6.0 Mio NOK) per consortium in case of two Norwegian applicants in a consortium Anticipated number of groups to be funded is 3-4. *This may have to be adjusted according to conversion rates
Eligibility of applicants	Academia	Yes
	Hospitals	Yes
	Industry	Yes, see below for restrictions
	Patient organisation	Yes
Eligible costs		Universities, research organisations and other non-profit entities may receive funding according to the rules of Researcher projects (Forskerprosjekt) of RCN. In these cases up to 100% of total eligible costs may be funded. Companies and commercial entities may receive funding according to the rules of Innovation Project for the Industrial Sector (Innovasjonsprosjekter i næringslivet) of RCN. In these cases up to 50% of total eligible costs may be funded.
Additional documents to be submitted		
Earliest project start date		January 2020
Further guidance		Applicants are recommended to contact the RCN before submitting an application. The Research Council of Norway (RCN) participates through the national program Biotechnology for Innovation (BIOTEK2021) in the call. RCN does not require a national application, but it should be clear from the common application what role the Norwegian partners would have and the size of their budget.

<table>
<tr><td colspan="2">Country</td><td colspan="2">Slovakia</td></tr>
<tr><td colspan="2">Funding organisation</td><td colspan="2">Slovak Academy of Sciences (SAS)</td></tr>
<tr><td colspan="2">Contact person</td><td colspan="2">Ms Katarina BIBOVA
International Cooperation Department
Stefanikova 49
814 38 Bratislava
Slovak Republik
Tel: +421 2 5751 0136
E-mail: bibova@up.upsav.sk

Dr. Jan BARANCIK
Head of International Cooperation of SAS
E-mail: barancik@up.upsav.sk</td></tr>
<tr><td colspan="2">National budget commitment (Mio €)</td><td colspan="2">0.12 Mio €</td></tr>
<tr><td colspan="2">Maximum funding per participant and anticipated number of research groups to be funded</td><td colspan="2">1-2 projects</td></tr>
<tr><td rowspan="4">Eligibility of applicants</td><td>Academia</td><td>Yes, only research Institutes of the Slovak Academy of Sciences (up to 100%) and condition is the participation of young scientists (under 35 years)</td><td></td></tr>
<tr><td>Hospitals</td><td>No</td><td rowspan="3">* Applicants from other Slovak R&D centres (universities and/or other organisations) have to cover the project costs from their own sources (Letter of Commitment). In addition to this, the teams outside of SAS can be consortium members but not the coordinator of the consortium.</td></tr>
<tr><td>Industry</td><td>No</td></tr>
<tr><td>Patient organisation</td><td>No</td></tr>
<tr><td colspan="2">Eligible costs</td><td colspan="2">Direct costs (DC) : Personnel (max. 15% of DC), Consumables, Equipment (max. 40% of DC) and Travel costs
Indirect costs (IC - overheads): max. 20 % of DC.
Total eligible costs = DC + IC</td></tr>
<tr><td colspan="2">Additional documents to be submitted</td><td colspan="2">National phase: Submission of the proposal at the national level will be required in parallel to the international evaluation. The submission will be carried out once the international evaluation and the ranking list have been performed and endorsed by the ERACoSysMed Call Steering Committee (CSC) and the Slovak project partner has been informed by the project consortium coordinator and invited by SAS to submit the proposal to it (Form MVTS). The Presidium of SAS makes the final decision for funding of selected projects.</td></tr>
<tr><td colspan="2">Earliest project start date</td><td>January 2020</td><td></td></tr>
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Further guidance	Applicants are strongly advised to contact their relevant funding organisation contact person before submitting an application. Participation at least 1 of young scientists (under 35 years)

Funding organisation	National Institute of Health Carlos III (ISCIII), Spain. http://www.isciii.es/		
Contact person	Laura Nieto Marín Email: lnieto@isciii.es Tel: (+34) 91 822 2868		
National budget pre-commitment (Mio €)	250 000 € 2-3 projects tentatively envisaged to be funded.		
Maximum funding per participant and anticipated number of research groups to be funded	• Up to **100 000 €** per partner (overheads included). • Up to **175 000** € per coordinator (overheads included).		
Eligibility of applicants		**Coordinator**	**Partner**
	• Hospitals, primary health care or public health settings of the Spanish National Health System (SNS) [1] • Accredited Health Research Institutes (Institutos de Investigación Sanitaria acreditados, IIS) [2]	YES	YES
	• CIBER or CIBERNED	YES	**NO**
	• Academia or Research Performing Centers[3]	**Only** if an additional Spanish partner of the above categories is also included in the proposal	
	Industry	NO	NO
	Patient organisation	NO	NO
	[1] These institutions may manage research via a foundation regulated in accordance to the Spanish Act 50/2002, of December 26th (a copy of the foundation's statutes may be submitted). [2] Accredited according to the RD 339/2004, of February 27th or RD 279/2016 of June 24th (These institutions may manage research via a foundation regulated according to the Spanish Act 50/ 2002, of December 26th) http://www.eng.isciii.es/ISCIII/es/contenidos/fd-investigacion/fd-institutos-investigacion-sanitaria/listado-de-iis-acreditados [3] Please note that these entities can only participate if they apply together with Hospitals, primary health care or public health settings of the Spanish National Health System (SNS), Accredited Health Research Institutes (Institutos de Investigación Sanitaria acreditados, IIS) CIBER or		

<table>
<tr><td></td><td colspan="3">CIBERNED in the same proposal. It is not allowed to apply independently, thus there must be two beneficiary Spanish institutions in the same proposal.

NOTE:
• Proposals on Personalized Medicine are not eligible for funding by ISCIII in this call.
• Only one partner per beneficiary institution may be funded within the same proposal.
• SMEs and other private companies are encouraged to participate at their own cost, or as subcontractors.
• Only one proposal per partner is allowed.
• The Principal Investigator (PI) and all members of the research group must belong to the eligible institution or be affiliated to CIBER, CIBERNED or an IIS.
• Researchers with projects ongoing in 2020 funded in an ERCOSYSMED call are not eligible for funding by ISCIII in the current call except if the applicant is the coordinator.
• There is no other incompatibility with AES 2019.
• Incompatibility for application to any other call are subject to the provisions in the relevant call.</td></tr>
<tr><td rowspan="7">Eligible costs</td><td></td><td>Coordinator</td><td>Partner</td></tr>
<tr><td><u>Personnel</u>
Up to 3-year, full-time or part-time contracts (only for additional personnel)
Excluded: Students and fellowships.</td><td>Total cost per annual full-time contract:
• Technical expert, higher degree: 29,500 €
• Technical expert, medium degree: 24,500 €
• Technical expert, FP II: 20,500 €</td><td>Not eligible</td></tr>
<tr><td>Small Equipment</td><td>Up to 40,000 €</td><td>Up to 20,000</td></tr>
<tr><td>Travel and Allowance</td><td>Up to 9,000 €</td><td>Up to 4,500</td></tr>
<tr><td>Consumables</td><td colspan="2">Up to 100% of direct cost</td></tr>
<tr><td>Subcontracting and other services</td><td colspan="2">Up to 50% of total cost. Private (bio)companies and SMEs included</td></tr>
<tr><td>Overheads</td><td colspan="2">Up to 21% of direct cost</td></tr>
<tr><td>Eligibility of PI and team members</td><td colspan="3">• The Principal Investigator (PI) and all members of the research group must belong to the eligible institution or be affiliated to CIBER, CIBERNED or an IIS.
Excluded personnel as Principal Investigator (PI):
• Those undergoing a postgraduate training in Health Specialization (MIR, FIR, QIR, BIR, PIR).</td></tr>
</table>

	• Those undergoing research training (e.g. PhD students, or "Río Hortega" contracts). • Researchers contracted by a RETIC or a CONSOLIDER. • Those undergoing postdoctoral training (e.g. "Sara Borrell" or "Juan de la Cierva" contracts).
National phase	• National applications will be required by ISCIII. Spanish Applicants should periodically check in the web page of ISCIII if they are qualified. ISCIII may not send invitations to the mandatory national phase. • Double funding of the same concept is not allowed. • Due to administrative and legal regulations, the National Institute of Health Carlos III declares the September 23rd, 2019, as national deadline for the final decision by all relevant funding agencies on a fundable project consortium which includes a Spanish partners to be funded by ISCIII. Any concerned applicant in a proposal for which no full final decision has been made by the deadline, will be declared not fundable by ISCIII.
Mandatory acknowledgement	Any publication, data base, product or event protected with IPR or not, resulting from the granted project must acknowledge "*Award no. XX by ISCIII thorough AES 2019 and within the ERACOSYSMED framework"* even after the end of the project.
Requirements on data and repositories	• Researchers funded by ISCIII must make public the human genomic data, as well as relevant data (phenotype and exposition data) generated inside the funded project and will use open access repositories. Researchers must also make public all the necessary information for the interpretation of these genomic data, including lab protocols, data instruments survey tools. Regarding genomic data it is understood: association of complete genomes (GWAS), matrixes of de polymorphism of a single nucleotide (SNP) and sequence of genome, and transcriptomic, metagenomic, epigenomic and gene expression data. The researchers whose projects are funded by ISCIII are recommended to store their scientific data at the" ELIXIR Core Data Resources" or if non-European repositories or data bases they must be certified by ELIXIR or the US National Center for Biotechnology Information (NCBI). • ISCIII may <u>not fund</u> any project that may require a repository and/or a data base without a plan ensuring sustainability and decommissioning after the end of funding.