TRANSCAN-3: Sustained collaboration of national and regional programmes in cancer research

**Preliminary Announcement**

The Third Joint Transnational Call for Proposals 2023 (JTC 2023) will be launched in May 2023

on the topic:

"Translational research on cancer epigenetics"

The ERA-NET TRANSCAN-3, in continuity of the preceding ERA-NET TRANSCAN-2, has the goal of coordinating national and regional funding programmes for research in the area of translational cancer research. The specific challenge is to promote a transnational collaborative approach between scientific teams in demanding areas of translational cancer research while avoiding the duplication of efforts and ensuring a more efficient use of available resources, to produce significant results of higher quality and impact, and share data and infrastructures.

The following **funding organisations** have agreed to participate in the JTC 2023 of TRANSCAN-3:

- Austrian Science Fund (FWF), Austria *(decision pending)*
- Fund for Scientific Research – FNRS (F.R.S.-FNRS), Belgium, French speaking community
- Canadian Institutes of Health Research (CIHR), Canada
- Estonian Research Council (ETAg), Estonia
- ARC French Foundation for Cancer Research (ARC Foundation), France
- French National Cancer Institute (INCa), France
- Federal Ministry of Education and Research (BMBF), Germany
- National Research, Development and Innovation Office (NKFIH), Hungary *(decision pending)*
- Health Research Board (HRB), Ireland
- The Chief Scientist Office of the Ministry of Health (CSO-MOH), Israel *(decision pending)*
- Ministry of Health (IT-MOH), Italy
- Tuscany Region (TuscReg), Tuscany, Italy
- Fondazione Regionale per la Ricerca Biomedica (FRRB), Lombardy, Italy
- Latvian Council of Science (LCS), Latvia
- National Research Fund (FNR), Luxembourg
AIMS OF THE CALL

The JTC 2023 of TRANSCAN-3 will focus on:

"Translational research on cancer epigenetics"

The expected outcome of the call is to improve the efficacy of current detection, diagnosis, prognosis and treatment of cancers, through the development of novel approaches based on a better understanding of cancer epigenetics. The specific objectives of this funding opportunity are to stimulate new partnerships between researchers and clinicians and support original, high-quality projects, with significant clinical impact.

In the context of translational cancer research, this call for proposals comprises two general aims. Proposals will have to cover at least one of the undermentioned aims or sub-aims. Particular attention should be given to gender balance inclusion in order to intercept sex/gender differences and to consider the role of these differences in the addressed questions.
Aim 1) The role of epigenetics in cancer initiation and progression. These studies may aim to validate novel epigenetics-based biomarkers to improve detection, diagnosis, prognosis of cancers or response to therapies (using recently developed innovative approaches, multiomic approaches, single-cell analysis, patient-derived organoids, patient-derived xenografts, tumour samples collected from retrospective and/or prospective cohorts of patients or clinical trials).

- Specific aim 1.1: To understand cancer initiation and progression by characterisation of the epigenetic landscape.
- Specific aim 1.2: To define epigenetic features of cells in the tumour microenvironment that may promote tumour progression (e.g., immune cells, vascular cells, microbiota).
- Specific aim 1.3: To study the role of epigenetic modifications as predictors of cell persistence or treatment resistance.
- Specific aim 1.4: To validate epigenetic markers useful to improve early detection and diagnosis by exploring the correlation between epigenetics and clinical cancer manifestation.

Aim 2) Validation of new epigenetics-based therapeutic strategies to limit cancer progression, prevent relapse/recurrence or increase the efficiency or reduce toxicity of existing anti-cancer therapies.

- Specific aim 2.1: To validate novel therapeutic targets (novel targets should be evaluated in translational studies with regard to their impact on treatment efficacy, safety and patient reported outcomes).
- Specific aim 2.2: To study the potential use of epigenetic modulators to overcome resistance to anti-cancer therapies.
- Specific aim 2.3: To develop novel epidrugs/therapeutic approaches, through phase I and II clinical trials (investigating combinations of available treatments, new therapeutics, new administration schemes, etc.) to improve safety and efficacy of treatments (objective responses; patient reported outcomes regarding morbidity and quality of life; etc.).
- Specific aim 2.4: To develop novel theranostic approaches involving epigenetics of cancer.

Applicants will have the opportunity to add an additional section for capacity building activities (with an associated separate budget, in compliance with the rules of their respective national/regional funding organisations). These activities have to be coherent with the objectives of the research project, and aimed to strengthening the ability of participating team(s) to perform the work detailed in the project plan as well as to improve, in the long term, the quality and potential of the translational research performed by the team(s).
MAIN ELIGIBILITY CRITERIA

Only transnational projects will be funded. Each research consortium must involve a minimum of three (3) and a maximum of six (6) eligible partners from at least three (3) different countries participating in the call. In addition, a research consortium must not involve more than two (2) research groups from one country.

In order to strengthen the European translational cancer research area, a wide inclusion of research teams from all the countries/regions participating in the call is encouraged, with a particular attention to research teams from Hungary, Latvia, Slovakia and Turkey. If a consortium includes one of these countries, the maximum number of partners can be increased to seven (7).

Each consortium must involve at least one basic or pre-clinical research team and one clinical team. It is also recommended to include an expert team in methodology, biostatistics or bioinformatics, depending on the type of work planned. The consortium may also involve other teams with specialised skills and know-how (biobanks, model systems, technological platforms, etc.) or expertise (epidemiology and molecular epidemiology, early phase clinical trials, public health, ELSI, etc.). The consortium should have sufficient critical mass to achieve ambitious scientific, technological and medical goals and, along with the particular contribution of each research team, should clearly demonstrate its transnational added value.

Applications will be submitted by the coordinator. Each consortium participant will be funded by the funding organisation from their country/region participating in the JTC 2023. Participants are therefore subject to eligibility criteria of national/regional funding organisations.

Upon the call publication, applicants will have to refer to the annexes of the document “Guidelines for Applicants” containing all specific national/regional eligibility criteria, and will have to contact their respective national/regional funding organisation contact points for additional clarification.

* This document is not legally binding and is provided for information purposes only.

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