CALL TEXT

TO THE JOINT TRANSNATIONAL CALL 2015 FOR

“EPIGENOMICS OF COMPLEX DISEASES”

Submission deadline of proposals: 30th of January 2015
at 01 p.m. CET (Paris, Berlin local time)

Link to Call for Proposals webpage and documents
Link to electronic proposal submission system

For further information, contact the joint call secretariat:

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1. MOTIVATION

Substantially altered personal life styles and ongoing demographic change in many societies of modern industrialized countries have led to an increasing number of citizens who suffer from so-called common and complex diseases. Particularly, when it comes to common diseases like cardiovascular, neurological/mental health or metabolic diseases, the resulting socioeconomic impact is immense.

Over the past several years, human genome research and related omics-approaches have led to a substantially improved knowledge in the field of common and complex human diseases. However, from this understanding it also has become clear that our current knowledge about the etiology and development of complex diseases on the cellular level needs to be extended by more context-related approaches.

In this respect, the newly developed field of health-oriented epigenomics provides a huge potential for a new and more context- and systems-oriented understanding of the cellular regulation in health and disease. Epigenetics deals with the highly complex mechanisms within our cells that regulate the activity of our genes. Given the highly specialised function of most of our cells, only a limited number of genes - in a context dependent manner - are switched on in a certain cell type and under certain conditions. This activation is highly regulated by epigenetic processes which can confer information brought about by external factors such as environmental impacts, nutrition or cellular stress. Epigenomics is the high-throughput research approach which investigates a wide range of epigenetic factors on a general, systematic level. Epigenomics is a demanding field, both in terms of research infrastructure and scientific expertise. A substantially improved understanding of human epigenetic mechanisms and processes that lead to common and complex diseases will pave the way for novel approaches in prevention, diagnosis and therapy.

As a result of the level of complexity, epigenomics calls for international cooperation that can pool resources and generate "critical masses" of research capacities and competencies.

The Agence Nationale de la Recherche (ANR), the Bundesministerium für Bildung und Forschung (BMBF) and the Canadian Institutes of Health Research (CIHR) together with the Fonds de Recherche du Québec - Santé (FRQS), decided to join forces in a multilateral joint transnational call for proposals to support epigenomics of common and complex diseases. The aim of this joint call is to promote and create strategic synergy and multidisciplinary research activities between scientists in France, Germany and Canada at a high level. The multilateral joint transnational call will foster the identification and characterization of epigenomic mechanisms relevant for complex diseases and open new routes for prevention, diagnosis and therapy. The multilateral joint transnational call will be published simultaneously in the three countries on [www.agence-nationale-recherche.fr/EPIG-2015](http://www.agence-nationale-recherche.fr/EPIG-2015), at [www.gesundheitsforschung-bmbf.de/en/5376.php](http://www.gesundheitsforschung-bmbf.de/en/5376.php), at [www.researchnet-recherchenet.ca/rnr16/search.do?fodAgency=CIHR&fodLanguage=E&view=currentOpps](http://www.researchnet-recherchenet.ca/rnr16/search.do?fodAgency=CIHR&fodLanguage=E&view=currentOpps) and at [www.frqs.gouv.qc.ca](http://www.frqs.gouv.qc.ca).
2. AIM OF THE CALL

Common and complex human diseases usually have multifactorial causes and highly specific histories. Many of them are the result of complex processes, based on genetic contributions and epigenetic influences. Even if their origin involves genetic predisposition, progression of common and complex diseases is clearly influenced by environmental factors including nutrition, exposure to infectious agents, or life style aspects. These factors in turn influence an individual’s epigenetic profile and these effects may even increase with age leading to the observed increased occurrence and/or progression of complex diseases among elderly people.

From current genetic research efforts it has become evident that common and complex diseases cannot be fully understood by concentrating just on isolated features and factors. Novel systems-oriented methods and technologies such as in epigenomics are needed to investigate multiple fundamental factors in a parallel manner, to draw a context-oriented picture of complex diseases.

In the context of this joint transnational call, research consortia shall investigate the multifaceted role of the epigenome in disease occurrence and progression. Epigenomic mechanisms that are relevant for common and complex human diseases will be explored. Proposals should seek to produce or deploy high-quality epigenomic mapping\(^1\) data if relevant, and combine these with disease-oriented functional analyses.

Further, the combination and synergistic usage of patient cohorts, biomaterial or animal model collections within a consortium is expected. The sharing of relevant results, data sets and/or resources within each consortium is a condition of funding. Consortia must clearly describe how the members will work collaboratively, and what mechanisms are in place to facilitate the sharing of data and/or resources.

Transnational research proposals must focus on the elucidation of epigenomic mechanisms that are relevant for complex human diseases. These diseases are of major social and economic interest for the societies in France, Germany and Canada. So called rare diseases and cancer research are excluded from this call.

Project proposals must have a clear disease-orientation and clearly demonstrate the potential impact for clinical and/or public health or other socioeconomic health aspects. Furthermore, proposals must demonstrate the added value of transnational collaboration: gathering a critical mass of patients/biological material, sharing of existing data and resources (models, data-sets, diagnosis etc.), harmonization of data, sharing of specific expertise and/or innovative technologies, etc. Exchanges of research personnel within the consortium are strongly encouraged.

\(^1\) Such as (but not limited to): large scale DNA-methylation analysis, Histone-modification analysis or transcriptional analysis
This call is meant to promote multidisciplinary work and to encourage translational research proposals that combine basic and clinically oriented approaches. The research teams within a consortium should include investigators of all scientific disciplines and research areas necessary to address the proposed research aims.

Multidisciplinary research funded within this call may include both, high-quality mapping activities and functional approaches. Examples of mapping activities could include (but are not limited to) large scale DNA-methylation analyses, histone-modification analyses or transcriptional analyses. However, the emphasis must be on an integrated move from reference epigenome sequencing to functional analysis in disease contexts. These functional analyses may include manipulation of epigenetic processes.

Please note that funding will not be provided for the following:

- focused approaches that are of a narrow epigenetic dimension and not of a broader systems-oriented epigenomic scope;
- pure large scale mapping activities;
- clinical trials;
- rare diseases and cancer research (due to national funding regulations).

Projects will be funded for a period up to three years

The envisioned budget for this call is subject to availability of funds among funding partners. Should partner funding levels not be available or are decreased due to unforeseen circumstances, the partners reserve the right to reduce, defer or suspend financial contributions to this funding call.

3. APPLICATION

3.1 FUNDING RECIPIENTS/BENEFICIARIES’ ELIGIBILITY

Joint research proposals may be submitted by applicants belonging to one of the following categories (according to country/regional regulations):

- academia (research teams working in universities, other higher education institutions or research institutes);
- clinical/public health sector (research teams working in hospitals/public health and/or other health care settings and health organizations);
- enterprise (all sizes of private companies). Participation of small and medium-size enterprises (SMEs) is encouraged when allowed by national/regional regulations (please check with your respective funding organisation).
Please note that the inclusion of a non-eligible partner in a proposal leads to the rejection of the entire proposal without further review.

Whilst applications will be submitted jointly by research groups from several countries, individual groups will be funded by the individual funding organisation of their country/region that is participating in this JTC. Hence, the applications have to comply with the eligibility criteria of individual national/regional funding organisations.

Applicants are strongly advised to contact their corresponding national/regional representative to confirm their eligibility before submitting an application (see national/regional contact details below).

Only transnational projects will be funded. Each consortium submitting a proposal must involve a minimum of three and a maximum of six distinct research groups from all three countries participating in the call (see list above). Research groups from other countries may be associated with proposals if these groups are able to secure their own funding. They must state clearly in the proposal that these funds are already secured, or if they are not, how these groups plan to obtain funding and ensure it before the final funding decision is made.

The number of participants and their research contribution should be appropriate for the aims of the transnational research project. Each transnational collaborative project should represent the critical mass to achieve ambitious scientific goals and should clearly demonstrate an added value from working together.

Each transnational proposal must nominate a project consortium coordinator among the project partners. The coordinator must be domiciled in a JTC funding country/region. The project coordinator will represent the consortium towards the JCS and Call Steering Committee (CSC), and will be responsible for its internal scientific management. Each project partner will be represented by a single team leader.

The duration of the projects will be up to 3 years.

3.2 SUBMISSION OF JOINT PROPOSALS

There will be a one-stage submission process: one joint proposal document (written in the English language) has to be prepared by the partners of a research consortium, and must be submitted to the JCS via the electronic proposal submission system by the coordinator.
Please, note that only proposals using the proposal template (http://www.agence-nationale-recherche.fr/EPIG-2015) and submitted to the electronic proposal submission system (https://www.pt-it.de/ptoutline/application/EPIG2015) will be considered eligible. Full registration on the electronic submission site must be done no later than January 30th, 2015 at 01 p.m. CET (Paris, Berlin local time).

Further information on how to submit proposals electronically is available in the "Guidelines for applicants" (http://www.agence-nationale-recherche.fr/EPIG-2015). Applicants should take note of individual national/regional rules, and should contact their national/regional contact person for any questions (see “contact information” section below).

**4. EVALUATION**

**4.1 MANAGEMENT BOARDS**

Two boards, the Call Steering Committee (CSC) and the Peer Review Panel (PRP), will manage the evaluation process of the call with the support of the Joint Call Secretariat (JCS), which will be set up at The French National Research Agency (ANR).

The PRP is a panel of internationally renowned scientific experts responsible for the evaluation of submitted proposals, chosen for their expertise and particular thematic orientations related to this call. PRP members must not submit or participate in proposals within this call, and must sign a confidentiality agreement and a statement to confirm that they do not have any conflicts of interest. They normally will not come from countries represented in this call.

The CSC is composed of a representative from each funding party.

**4.2 FORMAL CRITERIA CHECK**

The JCS will assess proposals to ensure that they meet the joint transnational call’s eligibility criteria (date of submission; number of participating countries; inclusion of all necessary information in English). The JCS will forward the proposals to the CSC members, who will perform a formal check for compliance with their respective regulations.

After the formal criteria check, proposals will be forwarded to the PRP members for evaluation. Proposals not meeting the formal criteria will be declined without further review. Please note that if a proposal includes one non-eligible partner, the whole proposal could be rejected (for a definition of eligible partners see "Guidelines for applicants" and national/regional regulations and contact your national representative).
Please note that proposals not meeting the formal criteria or the national/regional eligibility criteria and requirements will be declined without further review.

4.3 PEER REVIEW

The reviewers of the PRP will carry out the evaluation according to specific evaluation criteria (see below) to recommend proposals for funding, using a common evaluation form. A scoring system from 1 to 4 will be used to evaluate the proposal’s performance with respect to the different evaluation criteria. Scoring system: 1: poor: clear recommendation for rejection; 2: fair: only moderate potential for feasible performance of all central aspects; 3: good: below excellent, but clear potential for feasible performance of all central aspects; 4: excellent: clear recommendation for funding.

a. Relevance to the aims of the call.

b. Scientific quality of the proposal (innovation potential, methodology).

c. Feasibility of the project (adequate resources (budget, personnel), work plan, time schedule).

d. International competitiveness of participating research groups in the field(s) of the proposal (previous work in the field, expertise of the research groups).

e. Level of collaborative interaction between the groups, interdisciplinary and added value of the transnational consortium.


Each proposal will be evaluated by at least 2 PRP members. If necessary, additional reviews may be requested from external experts in particular cases. These external reviews will be provided to the PRP for consideration.

A PRP meeting will be organized to allow PRP members to meet and discuss each proposal. After consideration of the evaluation criteria, external reviewers’ written evaluations and their own discussions, the PRP will identify the top-quality proposals recommended for funding and establish a ranking list.

Based on the proposals’ ranking established by the PRP and on available funding, the CSC will suggest the projects to be funded to the national/regional funding agencies. Based on these recommendations, final funding decisions will be made by the national/regional funding agencies according to their legal frameworks and regulations.
The JCS will communicate to all project coordinators the final decisions together with a summary report from the PRP meeting.

5. FINANCIAL AND LEGAL ISSUES

5.1 FUNDING MODEL

The parties have agreed to launch a JTC using the “virtual pot” funding mode. This means that national/regional funding will be made available through national/regional funding organisations according to national/regional funding regulations. Each country/region funds only its national/regional component of the transnational research project.

Prior to submitting a proposal, applicants should verify their eligibility and the financial support level with their national/regional funding organisation (see national/regional contact details below).

Funding is granted for a maximum of three years according to national regulations. Eligible costs may vary according to the corresponding national/regional funding agency regulations. Each group is subject to the rules and regulations of their respective national/regional funding agency (for more information, please refer to the Annex at the end of this document and the “guidelines for applicants”).

5.2 FUNDING CONTRACTS

Each project includes several consortium members called research partners and one project coordinator. Each research partner/research institution will have a separate funding contract/letter of grant according to national/regional regulations with the appropriate national/regional funding institutions.

Changes to the composition of research consortia or to the budget cannot occur during the contract/letter of grant, unless there is a good justification. Any changes have to be well justified and the relevant funding organizations will decide upon the proper action to be taken. In case of ANY significant changes in the work program or the consortium composition, the coordinator must inform the JCS, who will inform the national/regional funding organizations, who will decide upon the proper action to be taken.

5.3 CONSORTIUM AGREEMENT AND INTELLECTUAL PROPERTY RIGHTS

The project consortium partners must sign a consortium agreement (CA) addressing the issues given in the “Guidelines for Applicants” on consortium agreements. The research consortium is strongly encouraged to sign this CA before the official project start date. Upon request, this CA must be made available to the concerned funding organizations. Please note that a signed CA is mandatory by ANR prior to its first payment of researchers in France.
Results and new Intellectual Property Rights (IPR) resulting from projects funded through this JTC will be owned by the researchers’ organisations according to national rules on IPR. If several participants have jointly carried out work generating new IPR, they shall agree amongst themselves (consortium agreement) as to the allocation of ownership of IPR, taking into account their contributions to the creation of those IPR as well as the European guidelines on IPR issues.

The results of the research project and IPR created should be actively exploited and made available for use, whether for commercial gain or not, in order for public benefit to be obtained from the knowledge created.

### 6. RESPONSIBILITIES, REPORTING REQUIREMENTS AND DISSEMINATION

Each project coordinator, on behalf of all participating partners, of all the funded projects must submit a **mid-term and a final** (within three months of the end of the project) **scientific progress project report** to the JCS, stating the scientific progress, the goals that have been met, and corrective measures set in case that the project plan has not been fulfilled. All reports must be in English and use a common report form that will be provided by the JCS. The research partners share the joint responsibility for the delivery of the reports. The JCS will only accept reports delivered on behalf of the consortium via the project coordinator.

If required, participants submit financial and scientific reports to their **national/regional funding organisations** according to national/regional regulations.

Funding recipients must ensure that all outcomes (publications, etc.) of these transnational projects include a proper acknowledgement of this joint call and the respective national/regional funding partner organisations.

### 7. CONTACT

The JCS is set up at ANR (The French National Research Agency) to assist the CSC members and the national/regional funding bodies during the implementation of the call and until the funded research projects and all reporting requirements have ended. The JCS will be responsible for the administrative management of the call. It will be the primary point of contact between the research consortia, the funding organisations (CSC) and the peer reviewers.

However, for information on national/regional requirements, the applicants are strongly encouraged and advised to contact their national/regional contact person, indicated below:
<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Institution</th>
<th>Website</th>
<th>National contact</th>
</tr>
</thead>
</table>
| Canada        | CIHR        | [http://www.cihr-irsc.gc.ca](http://www.cihr-irsc.gc.ca) | For questions about the objectives of this funding call:  
Name: Dr Eric Marcotte  
Position: Associate Director  
Phone: 1-905-467-1822  
Email: eric.marcotte@cihr-irsc.gc.ca |
| Canada (Quebec) | FRQS       | [http://www.frqs.gouv.qc.ca](http://www.frqs.gouv.qc.ca) | Name: Dr Anne-Cécile Desfaits  
Position: Director of Programs and Partnerships  
Phone: 1-514-873-0463  
Email: AnneCecile.Desfaits@frq.gouv.qc.ca |
| France        | ANR         | [http://www.agence-nationale-recherche.fr](http://www.agence-nationale-recherche.fr) | Name: Dr. Guillaume Pons  
Position: Scientific officer  
Phone: +33 1 73 54 83 32  
Email: guillaume.pons@agencerecherche.fr |
| Germany       | PT-DLR on behalf of BMBF | [www.gesundheitsforschung-bmbf.de](http://www.gesundheitsforschung-bmbf.de) | Name: Dr. Peter Südbeck  
Dr. Roland Bornheim  
Position: Scientific officer  
Phone:+49 228 3821 1210  
Email: peter.suedbeck@dlr.de  
roland.bornheim@dlr.de |
## ANNEX A: ELIGIBILITY OF BENEFICIARY INSTITUTIONS

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Institution</th>
<th>Eligible beneficiary institution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Academia</td>
</tr>
<tr>
<td>Canada</td>
<td>CIHR</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada (Quebec)</td>
<td>FRQS</td>
<td>Yes</td>
</tr>
<tr>
<td>France</td>
<td>ANR</td>
<td>Yes</td>
</tr>
<tr>
<td>Germany</td>
<td>PT-DLR on behalf of BMBF</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The eligibility of companies and institutions is subjected to different conditions in each country/region. Further details regarding the eligible beneficiaries and other national eligibility criteria and requirements are available on the “guidelines for applicants”. Please contact the national/regional contact point for specific information.

* For CIHR and FRQS, industry can apply as co-applicants (project partners) but are not eligible to receive funding directly through CIHR or FRQS. Regular CIHR or FRQS policies will apply, please contact CIHR or FRQS for more information (see national contact details above).
ANNEX B: ANTICIPATING AMOUNT OF FUNDING PROVIDED BY EACH PARTY

The provision of funds for the JTC is under reservation of availability of the estimated national budgetary appropriations for the expected funding period, according to national regulations. These values represent the expected financial commitment for 3 years from the respective PARTIES and are not legally binding.

<table>
<thead>
<tr>
<th>Country</th>
<th>Funding body</th>
<th>Anticipated amount of funding (for 3 years)</th>
<th>Anticipated number of fundable research groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Canadian Institutes of Health Research (CIHR)</td>
<td>2.3 Million CAD</td>
<td>4 - 6</td>
</tr>
<tr>
<td>Canada</td>
<td>Fonds de Recherche du Québec – Santé (FRQS)</td>
<td>0.5 Million CAD</td>
<td>2(^1)</td>
</tr>
<tr>
<td>France</td>
<td>The National Research Agency (ANR)</td>
<td>2.5 Million Euro</td>
<td>4 - 6</td>
</tr>
<tr>
<td>Germany</td>
<td>Federal Ministry of Education and Research (BMBF)</td>
<td>2(^2)</td>
<td>2(^2)</td>
</tr>
</tbody>
</table>

\(^1\) FRQS will contribute to the Quebec-based members of research projects, in collaboration with CIHR. FRQS funded projects will thus be a subset of the total Canadian funded projects.

\(^2\) Funding from Germany includes salaries. Please contact BMBF for more information (see national contact details above).