

# Research Program in Environmental Toxicology and Ecotoxicology

## CALL FOR RESEARCH PROJECTS 2023

**Supporting Innovation, Models or Strategies to reduce  
contaminants and their effects in the food web.  
From ecosystems to humans**

Download proposal template and send your  
proposal to [contact@fcsrovaltain.org](mailto:contact@fcsrovaltain.org) between February  
and June 2023 (deadline June 30<sup>th</sup>) in an email entitled  
“RT2E2023 – Food & Toxic Substances”

### **The Rovaltain Foundation**

The Rovaltain Foundation, a Foundation for Scientific Cooperation in Environmental Toxicology and Ecotoxicology Research, was created in July 2013 by the Ministry of Higher Education and Research. Its purpose is to support research and training in Health & Environment and to promote the dissemination of knowledge in this field.

To achieve this goal, the Rovaltain Foundation finances research projects through a framework validated by the Foundation's International Scientific Advisory Board: the Research Program in Environmental Toxicology and Ecotoxicology (RT2E).

Food safety is of major public health concern. In particular, contaminants in food, e.g. pesticides, antibiotics, are an important topic to deal with. Indeed, food can be contaminated through multiple sources. It starts from the very beginning with soil and water contamination, and ends with feeding. Obviously, all along the growth cycle, food contamination can move through the food chain. Furthermore, other processes of food production that poses a risk of contamination, for example packaging and its contact with food and plastic transfer through packaging and temperature variations, have to be taken into account.

In this context, the aim of the RT2E 2023 call is **to help support innovation, models or strategies, proof of concept, so as to reduce contaminants in consumed food and their effect in the food web: from ecosystems to humans.**

This Call for Proposals issued by Rovaltain will finance projects of 2-year duration with a total maximum budget of 40K euros.

As mentioned above, toxic substances found in food originate from various sources, and the effects of these substances on human health are poorly understood. Topics to consider include agricultural practices, water quality and food packaging. Clearly, reducing food contamination is a major challenge. This call targets projects that address one or more of the following items:

- Study of the effects of contaminants in food, alone or in mixtures, on ecosystem or human health: pesticides, pharmaceuticals, antibiotics, plastics, additives, microbial contamination, etc.
- Study of the transfer of toxic substances in the food web: from the ecosystem to the dinner plate.
- Study of the effects of diet-borne toxic substances within the food web.
- Study of the biodynamics of contaminant transfers: from ecosystems to humans.
- Study of the production chain; for example, where does accumulation or reduction/dilution of contamination occur through the production chain? Which processing steps are best suited to reduce contamination in food?

Examples of projects that would be particularly appreciated include:

- Proposals targeting the development of innovative approaches to reduce contaminants “all along the process”, i.e. all the steps leading to food contamination, from ecosystem contamination or packaging, to final product (food consumed by humans).
- Proposals addressing potential effects of climate change on food contamination.
- Proposals addressing the effect of mixed contaminations in food, i.e. which mixtures occur, at which concentrations, what are the effects from the ecosystem to the dinner plate (human health).
- Partnerships between natural and social science research teams to include considerations of regulatory and/or public engagement issues.
- Projects dealing with eco-anxiety and food contamination.

**N.B.** The call is open to ecotoxicological, toxicological, epidemiological, ecological or social sciences research teams. Projects including risk assessment and prediction, modelling, tools development like applications to reduce pesticide use / contaminants that may affect food would be particularly welcome.

### Characteristics of the proposals

Research projects proposed under the RT2E program must be innovative. Projects such as pilot studies would be particularly appreciated.

Projects must have at least one, or several clearly identified objectives and the potential to contribute to the development of future research projects through co-financing or other funding sources.

These research projects may be led by a single team or involve several partner teams. Public/private/industry/voluntary sector collaborations are welcome but only a French public team can receive funding as project leader.

The financial support granted to the projects will not exceed 40,000 euros, the maximum duration of the projects being fixed at two years. The rules applicable to financing are detailed below.

### Review of project proposals

The main steps of the selection procedure are as follows:

- The call for proposals is open from February 22<sup>th</sup> 2023; proposals in response to the call can be sent until June 30<sup>th</sup> 2023.
- Examination of the eligibility of project proposals by the Rovaltain Foundation according to the criteria presented below.
- Peer review by external experts selected by the Rovaltain Foundation (July 2023 - Oct. 2023).
- Evaluation of project proposals by the International Scientific Council (SC) of the Rovaltain Foundation, based on the external reviews (Nov. 2023).
- Publication of the list of projects selected for funding (Dec. 2023).
- Finalisation of the scientific, financial, and administrative process for the selected projects (2024).

## Eligibility of proposals and commitment of the project leader

The Rovaltain Foundation's examination of the eligibility of project proposals will be based on the criteria set below:

- The call for research projects is open to French research teams from higher education and research institutions, research organisations and public institutions with a research mission. National or international partners are welcome. Partners of another nature are also allowed, provided that they bring clearly established added value in the project. The call is also open to companies in the social and solidarity economy, as partners.
- The funds allocated to the project will be paid to the project leader; he/she will manage the project's funds for the entire collaboration and will compile and submit the scientific and financial report at the end of the project.
- The project leader must not be a member of the Rovaltain Foundation (board of directors, scientific council, etc).
- The duration of the project, including the preparation and submission of the final report, must not exceed 24 months.
- The financial support provided by the Rovaltain Foundation will not exceed 40,000 euros.
- The project leader must participate in the promotion and demonstration activities organised by the Rovaltain Foundation during the project period and during the 12 months following its closure (maximum 2 solicitations).
- Proposals and reports must be written in English.

## Evaluation of proposals

Projects submitted under the RT2E framework are evaluated by external experts identified by the Rovaltain Foundation as well as by the scientific council. The evaluation is carried out on the basis of the criteria set below:

- Scientific quality of the project, in particular its innovative nature and the integration of different disciplinary fields.
- Feasibility and justification of methodological choices. In particular, the exposure concentrations must be justified, as well as other exposure parameters, e.g. time of exposure, temperature, route of exposure, models used to evaluate exposure and effects. Furthermore, environmentally realistic exposure scenarios would be particularly appreciated. Similarly, if the project deals with climate change, the temperature/pH of exposure must be justified, e.g. according to an IPCC (Intergovernmental Panel on Climate Change) scenario.
- Ability of the consortium to carry out the proposed project according to the proposed schedule will be evaluated. The CV of the principal investigator, included in the proposal template, should demonstrate how their past experience fits with the proposed project. The project must include a paragraph on the relevance of the consortium (½ page).
- The quality / expertise of the team will be analysed in terms of its relevance to the objectives established in the project. The involvement of foreign partners is possible.

- The adequacy of the financial demand in relation to the scope of the project.
- The potential leverage effect of the project for starting new collaborative research and implementation activities.

Based on the assessments provided by the external reviewers and the Scientific Council, a ranking of the projects will be established and submitted to the Board of Directors of the Foundation.

### **Ethics - animal experimentation**

Projects requiring the use of animal testing within the framework of European Directive 2010/63/EU must demonstrate how they abide by the relevant regulations in force at national level, particularly in terms of obtaining experiment authorisations. The organisation responsible for implementing these experiments and its approval number should be clearly indicated in the project proposal. Where the experimental project has already been granted approval by the competent authorities, the authorisation number must also be indicated in the proposal.

### **Funding rules**

The financial support granted to the projects will not exceed 40,000 euros. Eligible expenses are those strictly necessary for the implementation of the project. They include:

- Staff costs, namely the wages of fixed-term contracts, vacations, social charges, internship bonuses and payroll taxes included.
- Operating expenses including laboratory costs (purchase of products or consumables, access to equipment), publication costs, travel expenses for permanent or temporary staff assigned to the project (in particular, participation in promotional events organised by the Foundation), conference registration fees related to the project.
- Subcontracting, the cost of which must remain less than 30% of the total amount of the grant, unless the project leader is able to justify an exception.

NB : If the project is co-funded, (1) the nature and amount of co-financing must be specified and (2) applicants have to explain what would happen if they do not receive the co-funding, i.e. will the project will be still realized if the projected co-funding is not received. Finally, if the project completion depends on other parameters besides the Rovaltain Foundation funding, these constraints must be specified in the text and in the budget template.

**Budget Template:**

<b>Categories</b>	<b>Rovaltain Foundation funding</b>	<b>Other funding (amount, funders)</b>	<b>Self-funding</b>	<b>Total</b>
Staff cost				
Small equipment				
Consumables				
Reagents				
Analysis kits				
Subcontracting of analyses (< 30% of the total budget)				
Travels (meetings and conferences)				
Structure costs (< 4% of the total budget)				
Communication				
<b>TOTAL</b>				