2026

Call for proposals:

Epidemiological Study of Rheumatic and Musculoskeletal Diseases (RMDs) in France

Context and objective

Rheumatic and musculoskeletal diseases (RMDs) represent a major public health issue due to their high prevalence (29.5% of the French population in 2023[1]), their impact on quality of life, and their contribution to functional impairment and healthcare utilization. They also account for a substantial loss of healthy life years, expressed in disability-adjusted life years (DALYs), the indicator used by the WHO and the Global Burden of Disease[2] to quantify disease burden. Consequences include chronic pain, functional limitations, reduced quality of life, social exclusion, work disability, and major psychological burden.Despite their significant health and socioeconomic impact, RMDs remain underrepresented—or even neglected—in public health priorities, surveillance systems, and prevention policies. In France, more than 20 million people are estimated to be affected by at least one RMD, with common conditions such as low back pain (over 9 million cases), osteoarthritis (over 9 million cases), or osteoporosis (over 5 million cases according to a recent study estimating its prevalence at 7.6%)[1],[3]. These conditions generate a substantial economic burden: osteoporotic fractures alone cost nearly €7 billion in 2019, according to a recent study based on national French data[4]. In the national study evaluating the impact of the media campaign "Mal de dos ? Le bon traitement, c'est le mouvement"[5], 65% of general practitioners reported prescribing sick leave during the first consultation for low back pain, underscoring the major contribution of this condition to work disability. Low back pain thus represents a significant economic burden, with 12.2 million lost workdays each year and more than €1 billion in direct costs for employers[6]. Chronic inflammatory rheumatic diseases, although affecting a smaller proportion of the population, are highly disabling and carry a considerable economic impact. In 2023, rheumatoid arthritis (0.5% of the population), ankylosing spondylitis (0.4%), and related conditions generated €2.3 billion in annual expenditures[7]. In a context of demographic ageing and the progression of chronic diseases, it is necessary to develop an integrated approach, based on applied epidemiology, capable of better characterizing at-risk populations, identifying modifiable determinants, and supporting targeted, multidisciplinary, and equitable interventions. This requires strengthening the production of robust, up-to-date, and usable epidemiological data, to guide research priorities, raise awareness among public authorities, structure effective prevention strategies, and assess their long-term impact. Recognizing RMDs as a public health priority has now become essential.

To address this major challenge, the Arthritis Foundation, Arthritis R&D (hereinafter collectively referred to as "Arthritis"), and the French Society of Rheumatology (SFR) are combining their expertise to strengthen research and prevention in RMDs. The Arthritis Foundation, recognized as being of public utility, mobilizes and funds research on musculoskeletal diseases to foster therapeutic innovation and improve patients' quality of life. Arthritis R&D, a simplified joint-stock company wholly owned by the Foundation, leads scientific activities and develops translational research projects in rheumatology in partnership with academic and industrial stakeholders. The SFR is the national scientific society bringing together rheumatology professionals and working to promote research, training, and best practices in diseases of the musculoskeletal system.

For several years, Arthritis and the SFR have been collaborating through the Ensemble contre les Rhumatismes (ECR) initiative (ensemblecontrelesrhumatismes.org), which aims to increase the visibility of rheumatic and musculoskeletal diseases, raise public awareness, promote prevention efforts, and support research on conditions that remain insufficiently represented in public health policies.

Building on this momentum, Arthritis and the SFR are joining forces through a strategic partnership to launch an ambitious **call for proposals (CFP)** aimed at **assessing the impact of RMDs in France, identifying modifiable risk factors, and prioritizing these factors to inform future strategies for primary and secondary prevention.** This CFP is designed to support a **collaborative** and structuring project composed of two distinct components:

1) the production of reliable descriptive epidemiological data that will serve as a key foundation for advancing knowledge, designing public health policies, and informing the general population;

2) the prioritization of identified modifiable risk factors based on their impact and actionability, to establish strategic priorities for targeted prevention among at-risk populations.

Projects must meet the following criteria to ensure they are relevant, impactful, feasible, and reproducible.

- **The first component** of the project will focus on **collecting and producing robust, quantitative, and up-to-date epidemiological data** (incidence, prevalence, modifiable risk factors, etc.). These data must be structured and usable to enable, in the medium and long term, the development of a concrete deliverable such as an RMD atlas, a mapping tool, a national segmentation, or any other relevant output. Applicants are invited to specify the type of deliverable they intend to produce to ensure its utility and usability. Particular attention will be given to the deliverable's or tool's capacity to be regularly updated with new data over time, ensuring its long-term sustainability and relevance. Such a strategic tool would ultimately enable the comparison, analysis, and visualization of disease burden, risk factors, and available resources, thereby informing health policies, research efforts, and prevention actions through evidence-based decision-making.
- **The second component** of the project will be dedicated to **the identification and prioritization of modifiable risk factors**. The collection of modifiable risk factors carried out under the first component will constitute the essential foundation for this component. It will aim to identify and prioritize modifiable risk factors by ranking them according to their impact and potential for action. This prioritization will consider not only their epidemiological weight (impact on the occurrence of RMDs) but also their broader health, economic, and societal implications. The objective is to establish clear priorities to guide, in the long term, targeted and effective prevention strategies by focusing efforts on the most relevant levers for effective intervention.
- The project may rely on **prospective or retrospective data**, provided that their quality, updating, and usability are ensured.
- The project must be collaborative, ambitious, and structuring, bringing together complementary expertise, particularly in rheumatology, epidemiology, and public health. Cross-cutting approaches covering multiple thematic areas will be especially encouraged. Approaches integrating several key dimensions of RMDs—such as the characterization of at-risk populations, identification and prioritization of modifiable risk factors, assessment of the health, economic, and societal impact of RMDs, and data structuring and interoperability—will be highly valued. Such approaches should aim to maximize the project's scientific and societal impact. Strong value will also be placed on collaborations with research networks and field stakeholders.
- High expectations exist regarding the valorization of results, both scientifically and institutionally. The project must produce quantitative data on disease incidence and prevalence, their **social and societal impact, and associated costs**. These data must be usable both for research purposes (to inform future projects and strategic orientations) and for institutional communication, including awareness-raising activities, dialogue with policymakers, and dissemination of scientific findings. This dual valorization will represent a significant added value of the project.
- The project must address **at least two priority pathologies** within the field of RMDs in France, based on their frequency, clinical severity, and socioeconomic burden (among the most impactful groups: inflammatory rheumatic diseases, low back pain, osteoarthritis, and osteoporosis).
- Particular attention will be given to projects proposing the development of analytical or modelling tools that can be applied to other RMDs not assessed within the project, drawing on shared risk factors or common mechanisms.
- Special consideration will also be given to projects that promote the structuring or enrichment of existing databases, or the creation of interoperable pilot databases that can be used in the longer term for other applications, including epidemiological surveillance.
- The project must follow a clear logic of methodological replicability, with particular attention paid to data interoperability and their potential for reuse.

- The project must be rigorously structured into clearly defined stages, with concrete intermediate and final deliverables that allow data and results to be exploited in the short, medium, and long term. Funding will be progressive and released as deliverables and milestones are achieved, in accordance with the schedule set out in the funding agreement.

Eligibility Criteria

- Application files must be submitted on time, be complete, and follow the required format.
- The research project must address the objective of the call for proposals: assessing the impact of RMDs in France, identifying modifiable risk factors, and prioritizing these factors to guide a future prevention strategy.
- The project must be collaborative and involve at least two teams.
- The total duration of the project must not exceed 3 years.
- The consortium must include at least two eligible French teams bringing together complementary expertise (epidemiology, rheumatology, public health, etc.).
- The project leader and partners must be tenured researchers (university, hospital, or EPST) with expertise in RMDs.
- The project leader must be affiliated with a rheumatology research team listed in the Annual Research List (LAR, link) of the French Society of Consortium members must belong to research laboratories affiliated with a university or a public research organization. Grants cannot be awarded to associative structures.
- Laboratories must be accredited for the Research Tax Credit (CIR) by the Ministry of Higher Education and Research, either by being listed among accredited institutions or by holding a CIR accreditation number. Accredited institutions are listed on the ministry's website (non-exhaustive).
- Only one application is allowed per project-leading team (as defined by HCERES certification).

Only applications meeting all eligibility criteria will be considered.

Funding

The total amount allocated to the project is €400,000 for a three-year period. Funding will be disbursed according to a predefined schedule, with each installment contingent upon the completion of the agreed-upon deliverables and milestones, as well as compliance with the timeline set out in the Gantt chart.
Eligible costs include:

- operational project expenses (including travel expenses, which must not exceed 5% of the total budget),
- costs related to data collection and analysis (databases access, field surveys, analytical or modelling software, etc.),
- tool development costs,
- costs associated with the structuring of databases or registries (establishment or enhancement of databases, secure hosting, anonymization, documentation),
- subcontracting costs, provided they are directly linked to project activities and duly justified in the application,
- publication costs,
- personnel costs for non-tenured staff dedicated to the scientific and technical implementation of the project.

Management, environmental, and administrative overheads may not exceed 10% of the total budget and must be included within the overall €400,000 envelope, which cannot be exceeded under any circumstances.

Submission Procedure

The submission procedure will take place in two stages:

1. **First stage: Letter of Intent (LoI)**

Applicants must submit:

- A letter of intent outlining the main elements of the project, the consortium, the provisional budget, the timeline, the deliverables and the milestones.
- The coordinator's CV (maximum 2 pages)
- The partners' CVs (maximum 2 pages per CV)
- The coordinator's main scientific publications (maximum 10 references)
  The main scientific publications of each partner (maximum 10 references per partner)

2. **Second Step: Full Application (for pre-selected projects)**

Candidates selected after the first step must provide:

- The complete scientific project and the final budget
- CVs of the coordinator and partners
- A narrated PowerPoint presentation (4 to 5 slides)
- The list of deliverables and the project timeline
- Any other relevant document (letters of support, etc.)

The submission of both the pre-applications and the full proposals will be carried out through the dedicated platform: https://arthritis.syntosolution.com/

Evaluation and selection of projects

Applications will be evaluated by an ad hoc selection committee convened by Arthritis and the SFR, which will draw on a panel of independent external experts (national and international).

Funding will be awarded following the committee's report and approval by the management of both partners, based on the following criteria:

- Relevance of the proposal: alignment with the objectives of the RMD call for proposals and its contribution to addressing a significant societal challenge.
- Ambition and impact of the project: scientific and institutional scope; potential for leveraging results; ability to generate usable data and to prioritize modifiable risk factors to inform targeted prevention strategies.
- Project feasibility:
  - Consistency between the objectives, timeline, deliverables, and milestones;
  - Adequacy of the human, technical, and financial resources mobilized;
  - Compliance with ethical and regulatory requirements;
  - Strength of the management plan and the coordination and governance mechanisms;
  - Quality of the project's structuring, including the clarity of the Gantt chart.
- Quality of the work plan: clarity of objectives, methodological structuring, coherence between tasks, timeline and deliverables, realism of deliverables with regard to the three-year duration, inclusion of a detailed retro-planning, rigorous structuring into phases with intermediate and final deliverables, and the mechanisms for monitoring and steering the project.
- Scientific quality: relevance of the scientific questions and objectives; quality of preliminary data and proposed methodology; ability to produce robust, quantitative, and up-to-date epidemiological data (prevalence, mortality, cost, risk factors, healthcare utilization, etc.).
- Methodological coherence with project objectives and assurance of reproducibility.
- Originality, innovation, and cross-disciplinarity: the innovative aspects of the project, including the proposed analytical and modeling tools, as well as its capacity to integrate a cross-cutting and multidisciplinary approach to address the complex challenges of RMDs. Data structuring and interoperability: ability to structure and enrich existing databases or to create pilot databases; methodological replicability and data interoperability; potential for data reuse for epidemiological surveillance or other applications.

- Scientific expertise and adequacy of the teams: quality of participants' track records; relevance of clinical, epidemiological, and methodological expertise; past scientific output (publications, collaborations, etc.).
- Valorization and dissemination: strategy for scientific dissemination (publications, communications); institutional dissemination strategy (awareness-raising, public outreach, dialogue with authorities); capacity to inform future projects or strategic orientations.

All applications are evaluated in compliance with a confidentiality agreement.

Funding agreement

The start of the project and the disbursement of the grant will be contingent upon the signature of a funding and/or collaboration agreement between the project's beneficiaries, Arthritis, and the SFR.

This agreement will specify:

- the key expected results of the project and the associated Gantt chart;
- the detailed schedule annexed to the agreement, outlining the phases, milestones, and deliverables that condition payment releases;
- the terms and conditions governing the co-ownership of the research results;
- the monitoring obligations, including the annual submission of scientific and financial reports, whose approval will condition the continuation of funding;
- the submission of a final scientific and financial report at the end of the project;
- the commitments regarding communication and dissemination of results, including scientific dissemination (publications, conferences), institutional valorization (engagement with decision-makers, awareness-raising activities), and the public visibility of the project (website, communication materials, events).

Funding release schedule

The grant will be disbursed to the beneficiaries according to the schedule defined in the funding agreement, based on the achievement of deliverables and milestones, and compliance with the timeline established in the Gantt chart.

The first payment will be made once the agreement has been signed by all legal representatives of the parties involved. Subsequent payments will be conditional upon the submission and approval of the interim reports and the final project report.

Project monitoring

As part of the funding agreement, the project coordinator commits to submitting the scientific and financial reports according to the defined schedule. These reports must be prepared using the templates that will be provided to the beneficiaries of the selected project.

A scientific project manager affiliated with Arthritis and/or the SFR will be involved in monitoring and supporting the project throughout its duration.

The coordinator also undertakes to respond to any request from Arthritis or the SFR for the entire duration of the project.

Termination of funding

Funding will end upon validation of the final scientific report. However, it may be terminated before project completion, particularly in the event of:

- failure to comply with contractual commitments;

- absence of, or unjustified delays in, the submission of deliverables or reports;
- significant deviation from the initial schedule or objectives;
- withdrawal of one or more key partners from the consortium.

Commitments towards Arthritis and the SFR

The consortium awarded the grant undertakes to comply with the provisions defined by Arthritis and the SFR. These commitments include:

- signing an agreement specifying the terms of collaboration and funding;
- co-ownership of the results in accordance with the provisions set out in the agreement;
- compliance with communication, dissemination, and results valorization requirements, including scientific dissemination, institutional outreach, and project visibility.

The detailed terms and obligations will be formalized in the agreement established between the parties following project selection.

References

1. Estimate based on musculoskeletal disorder prevalence data from the Global Burden of Disease (GBD 2023) and the French population (INSEE, 2023). Source: Institute for Health Metrics and Evaluation (IHME). Global Burden of Disease Study 2023 (GBD 2023) Results. Seattle, WA: IHME, 2025. Available via the GBD Results tool; Insee. Demographic Report 2023. Insee Première No. 1978, January 2024.
2. World Health Organization (2024). Global Health Estimates 2021: Disease burden by Cause, Age, Sex, by Country and by Region (DALY definition). Geneva: WHO. Available at: https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys/
3. Coste, J., Mandereau-Bruno, L., Constantinou, P., Makovski, T. T., Carcaillon-Bentata, L., & Guillemin, F. (2025). Assessing the burden of osteoporosis and clinical fragility fractures in the French general population: Insights from linked healthcare claims and health interview survey data used for surveillance. Archives of Osteoporosis, 20(1), 136. https://doi.org/10.1007/s11657-025-01616-2
4. Bouvard, B., & Legrand, E. (2024). Costs of severe osteoporotic fractures. Revue du Rhumatisme, 91(4).
5. Bailly, F., Badard, M., Beaudreuil, J., Beauvais, C., Cazorla, C., Ohouo, D., Dufour, X., Petitprez, K., Mazza, M., Nizard, J., Petit, A., Pham, T., Rannou, F., Ribinik, P., Rozenberg, S., Schramm, S., Fautrel, B., & Foltz, V. (2023). A national media mass campaign improves beliefs and behaviours about low back pain. Joint Bone Spine, 90(3), 105536.
6. French National Health Insurance (Assurance Maladie) – Occupational Risks Report: "Low back pain at work: what responses to a social, economic and public health challenge?" Santé Travail: Enjeux & Actions, January 2017.
7. Estimate based on data from the French National Health Insurance (Assurance Maladie). Mapping of Diseases and Expenditures, 2023.

LETTER OF INTENT

This letter of intent is an informative document that outlines all sections required for ***submission on the dedicated project call platform****.*

Instructions for Applicants

The Letter of Intent must:

- *clearly address the two components of the call: production of robust epidemiological data and prioritization of modifiable risk factors;*
- *describe the scientific background, methodology, work plan, milestones, and deliverables;*
- *provide an indicative budget and project duration (up to 36 months; requested funding not exceeding €400,000);*
- *outline the scientific and institutional valorization strategy.*

The Letter of Intent must be written in English, and include:

- *a French project title,*
- *a non-confidential summary in French for public communication.*

The Letter of Intent must be accompanied by the following annexes:

- *CV of the Coordinator (maximum 2 pages)*
- *CV of each partner (maximum 2 pages per CV)*
- *A list of major scientific publications for the Coordinator (maximum 10 references).*
- *A list of major scientific publications for each partner (maximum 10 references per partner).*

1. Project overview

Project title	
Project title in French	
Large audience project title	
Large audience project title in French	
Keywords *(5)*	
Pathologies ***(at least two choices)***	☐ **Inflammatory rheumatic diseases** ☐ **Low back pain** ☐ **Osteoarthritis** ☐ **Osteoporosis** ☐ **Other rheumatic and musculoskeletal diseases**
Requested *(Must not exceed €400,000, overheads included)*	
Total cost *(if higher than the requested funding)*	
Co-funding amount: ***(only if total project cost > €400,000)***	

Co-funding source(s): ***(Institution, program, internal funds, etc.)***	
Project duration ***(up to 36 months)***	

2. Scientific coordinator

The project coordinator must be affiliated with a rheumatology research team listed in the Annual Research List (LAR, link) of the French Society of Rheumatology.

Last name	
First name	
Current position	
Institution	
Email	
Phone	
Address	
Laboratory name	
Laboratory director's name	
Laboratory website URL link	

3. Consortium and Complementarity

The consortium must include at least two eligible French teams, bringing together complementary expertise (epidemiology, rheumatology, public health, etc.).

Partner First & Last Name	Position	Institution	Expertise

4. Abstracts

a. **Scientific abstract of the project (3000 characters)**
b. **Non confidential abstract in French (3000 characters)**
c. **Non confidential abstract in English (3000 characters)**

5. Background, Objectives, and Relevance to the call for proposals (This section must not exceed 4000 characters)

Please describe:

1. Context & need;

2. Overall objectives;

3. Specific objectives of the call (Component 1 – Production of robust, up-to-date epidemiological data and Component 2 – Prioritization of modifiable risk factors, including by impact and actionability)

6. **Project Description, Methodology, and Work Plan** (Addressing both components of the project - This section must not exceed 12000 characters)

This section must briefly describe:

- *Study design: type of study and rationale.*
- *Data sources: origin, quality, and standards used to ensure data interoperability.*
- *Analytical approaches: statistical methods, software, and procedures implemented to guarantee reproducibility of results.*
- *Work packages: main tasks, deliverables, and timelines.*
- *Ethics and regulatory compliance: adherence to ethical standards, data protection, and regulatory frameworks.*

7. **Results expected** (This section must not exceed 4000 characters)

This section should briefly outline the main results anticipated from the project, such as key scientific outputs, milestones and deliverables.

8. **Project timeline and partner contribution**

Definitions (for guidance):

- *Deliverable: is a tangible and verifiable output produced during the project (e.g., datasets, reports, analytical scripts, methodological documents). Deliverables demonstrate completion of specific tasks or phases.*
- *Milestone: is a key project checkpoint marking the completion of a significant step in the project. It represents a moment in the project timeline rather than a tangible output (e.g., completion of data extraction, model validation, or protocol approval). Each milestone must be supported by brief and verifiable evidence demonstrating that the step has been achieved. A milestone may also correspond to a "Go / No-Go" decision point, used to confirm whether the project can proceed to the next phase.*

Work Package (WP)	Year	Main Activities	Months	Milestones	Deliverables	Partner/s involved

9. **Impact and Valorization: Anticipated Outcomes and Communication Strategies** (This section must not exceed 4000 characters)

Please briefly outline:

1. Public health and prevention impact

– how the anticipated results could guide and prioritize future prevention strategies for at-risk populations, including examples of prevention studies or actions that could build on the findings.

2. Scientific impact and dissemination.

– expected scientific contributions and planned dissemination (e.g., publications, presentations, communication to scientific or institutional bodies).

3. Data interoperability and reproducibility
– how data transparency, interoperability and reproducibility will be ensured, supporting long-term reuse.
4. Institutional and societal relevance & communication
– the relevance of the project for institutions, healthcare stakeholders and the general public,
– the planned approach for communicating key results to non-scientific audiences

10. Estimated Budget Allocation by Activity and Partner

Projects selected at this stage of Letter of Intent may adjust their budget for the full proposal within a margin of up to 15%, without exceeding the maximum funding limit of €400,000. Applicants must attach a PDF document including a budget table following the model provided below.

Activity/WP	Partner 1 (€)	Partner 2 (€)	Partner 3 (€)	Partner 4 (€)	Total (€)

11. Bibliographic References (This section must not exceed 3500 characters)

12. Annexes

a. **CV of the Coordinator** (maximum 2 pages)
b. **CV of each Partners** (maximum 2 pages per CV)
c. **Major Scientific Publications of the Coordinator** (maximum 10 references)
d. **Major Scientific Publications of each Partner** (maximum 10 references per partner)