Career Accelerator for Research Infrastructure Scientists

Guide for Applicants
June 2025

Disclaimer: This guide has no legal value in itself. The information contained within may not be used as a ground for appeal.

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Table of Contents

Introduction 3

1. **Programme overview** 4
   1.1 Research Training including practical experience 4
   1.2 Professional competencies and individualised training 5

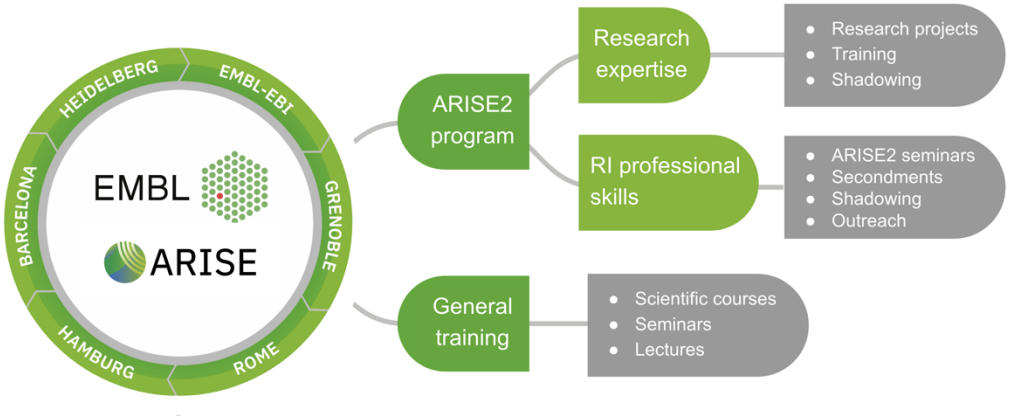
2. **Eligibility criteria and application** 6
   2.1 Eligibility 6
   2.2 Application process 7
   2.3 Call schedule 8

3. **Review process** 9
   3.1 Eligibility, feasibility and ethics checks 9
   3.2 Evaluation of applications 9
   3.3 Interviews 11
   3.4 Results 11
   3.5 Appeal procedure 11

4. **Fellowship conditions** 11
5. **Data protection and ethical considerations** 12
6. **Information webinar for interested applicants** 12
7. **Programme Office contact information** 12

Annex – ARISE2 partners 13

Introduction



The **European Molecular Biology Laboratory (EMBL)** is an intergovernmental research organisation and centre of excellence for life sciences in Europe. EMBL's 6 sites located in 5 countries focus on molecular, cellular and developmental biology (Heidelberg), structural biology (Grenoble, Hamburg), epigenetics and neurobiology (Rome), tissue biology and disease modelling (Barcelona), and bioinformatics (Cambridge). Research at EMBL is supported by excellent core facilities, bioinformatics and structural biology services, training for scientists at all career stages and the EMBL course and conference programme.

ARISE2 is a unique fellowship programme offered by EMBL and the EC's MSCA Cofund programme (grant agreement number 101178241). It provides talented STEM fellows from around the world with the opportunity to develop and improve technologies for Life Science Research while gaining expertise for careers in Research Infrastructures (RI). Research infrastructures encompass core facilities, advanced instrumentation, data resources, and related services utilised by the broader scientific community for research. They offer access to cutting edge techniques and the expertise required to operate them. Typical examples include core facilities at research institutes, such as EMBL, which house advanced instruments and provide access to both internal and external researchers; major scientific facilities, like synchrotrons, found in limited locations globally; and data infrastructures that support data sharing and usage, such as scientific collections, data archives, computing systems, and communication networks. Maintaining and advancing these infrastructures demands interdisciplinary expertise, spanning science, engineering, service provision, and management—skills often not covered by traditional academic or industrial training programmes.

The ARISE2 programme provides a unique combination of advanced training in technology development and service provision specifically tailored for Life Science Research and Research Infrastructures. Unlike traditional fellowship programmes, it provides fellows with a blend of research experience, hands-on service provision skills, and career development opportunities through interdisciplinary training. This includes secondments, mentorship from leaders in their fields, and professional development in RI management, making fellows highly competitive for leadership roles in RIs across academia, industry, and beyond.

ARISE2 will feature three calls in the first three years of its five-year duration (2025–2029), offering an average of 17 fellowships per call. Successful candidates will receive three-year fellowships to develop research expertise through training, user shadowing secondments, conferences, seminars, and courses, alongside RI professional competencies gained through ARISE2 seminars, secondments, service provision practice, and outreach activities.

1. Programme overview

1.1 Research Training including practical experience

Research Projects

Fellows work on self-designed research projects to develop technologies for use in life science research. They optimise their technologies by applying it to the research projects of others, gaining insight into different areas of life sciences, service provision and user needs. They prepare and maintain a **data management plan** for their projects according to EMBL's Open Science Policy with the goal of managing their data according to FAIR and Open standards. Projects should foresee how the developed technology will simplify or even automate FAIR data management for users, throughout the data life cycle.

Supervision set up

The supervision structure for ARISE fellows includes multiple layers of support. Each fellow has a **main supervisor** from EMBL who is either a group or team leader and who oversees their research. In addition, they are assigned an **external co-supervisor**, either from the long secondment host organisation (see below) or a collaborating partner involved in the three-year research project, to provide scientific guidance. For career development, fellows are supported by an **academic mentor**. Fellows working in research groups may additionally have an **advisor** with expertise in service provision to further enhance their training and experience.

Practical Experience: Service Provision and Secondments

In line with ARISE2's focus on **hands-on training**, fellows have the option to participate in the **provision and maintenance of advanced services**. This experience equips them with a deeper understanding of how RIs operate and the processes involved in service delivery. To allow fellows to focus on their own research project, this activity is not mandatory and limited to 10 days/year. Fellows hosted in groups that do not provide a service have a service-providing **advisor** to enable such an experience.

Fellows also complete **secondments and visits (short visits at a partner and in-house at EMBL)** to enhance their interdisciplinary and intersectoral experience and support their scientific training and career development. These include two external secondments and two internal visits, enabling knowledge transfer across different sectors and expanding fellows' professional networks.

Research-supporting secondments
Long secondment (between 2-6 months) at a partner organisation. The partner collaborates on a part of the research project providing access to novel methods, instrumentation and expertise. If the partner is collaborating on the full 3-year research project, fellows may spend up to 11 months on secondment at the partner.
Shadowing of a user at EMBL (5 days in the first 6 months of the fellowship): Fellows gain insight into how users prepare for service access, where and when they need support, their expectations and how they handle data.

Career-supporting secondments
Short visit/job shadowing (1-2 weeks at any time in the fellowship) at a partner or non-partner organization: Fellows gain insight into the operational set ups at other organizations, develop professional skills and build their networks.
Interdisciplinary in-house visit to another EMBL facility (1 week at any time during the fellowship): Fellows learn about provision of service or technology development in complementary disciplines

1.2 Professional competencies and individualised training

RI professional competencies

RI professionals' competencies are developed through a structured curriculum of mandatory ARISE2 seminars and a 1-week school. This is reinforced during secondments, visits, pilot service provision of fellow's technology and practical exercises in service provision (see 1) providing fellows with the skills needed to transition into senior roles within RIs.

The curriculum covers:

- Basic science policy relevant to RI
- Data Science including FAIR and Open research principals
- Service provision and user support
- Communication and outreach
- RI management (including budgeting, costing, impact assessment)
- Technology transfer and entrepreneurship
- Management of projects and people

The one-week **ARISE2 school in the 2nd year of the fellowship** focuses on strategic topics such as RI operations, team management, budgeting, defining and promoting services, collaborating with industry, and leveraging novel developments in RIs.

Outreach and Communication Training

ARISE2 encourages fellows to engage with the broader community through **outreach and communication activities**. Fellows participate in training provided by **EMBL's Science Education and Public Engagement office (SEPE)** and **Communications team**, learning how to effectively promote the importance of life sciences and RI careers. They will take part in activities like public lectures, guided tours, and media interviews, helping them hone their communication skills.

Career development and individualised training

Each fellow creates a **Career Development Plan (CDP)** tailored to their long-term aspirations, supported by the ARISE Competency Framework for RI-specific skills and the ResearchComp from the European Commission for broader research competencies. Fellows meet with an EMBL Career Advisor early in the programme to assess their strengths and training needs and then periodically over the course of the 3-year fellowship. The CDP is reviewed annually to monitor progress and ensure ongoing alignment with career goals. The EMBL Fellows' Career Service also provides guidance on training options, application materials, and workshops that facilitate the transition to fellows to their next professional role.

ARISE2 fellows are part of EMBL's postdoctoral programme with access to additional training needed for their individual scientific and transferable skills development. EMBL provides a wide range of learning opportunities for its staff, including mandatory training in research integrity and data protection, a programme for complementary skills training for scientists and a Professional Development and Training programme.

2. Eligibility criteria and application

2.1 Eligibility

Applicants should be able to demonstrate prior experience in technology or method development, in the academic and/or non-academic sectors, relevant to the EMBL Research Infrastructures and Services.

Academic requirements

Applicants must hold a Ph.D. at the time of the call deadline (September 30, 2025 for the 2025 call). Researchers who have successfully defended their doctoral thesis but who have not yet been formally awarded the degree are eligible to apply. Successful candidates have 4 months to take up their fellowship.

Mobility requirements

The programme is open to experienced researchers from around the world who are interested in the development or improvement of technologies to support life science research. Prior association (including visitor contracts) of an applicant with EMBL is compatible with application to the programme but cannot exceed 12 months within the last 3 years prior to the application deadline. Prior association relates to having worked with a person/group. It can include having done a Ph.D. or Postdoc with the supervisor or having been a visitor in their lab/group. Any previous association must be indicated on the application form.

Programme requirements

Applicants must use the application form and project template, including ethics check form, available in the "How to apply" section on the programme webpages for their applicant to be eligible. At least one reference (up to 3 possible) is due by the call deadline.

2.2 Application process

a) Applicants must complete: 1) an application form (with statement of interests, education and work experience, description of expertise in technology and/or method development, examples of their scientific excellence, research outputs, and other aspects of their training and experience they would like to highlight), 2) project proposal using the programme template, including the ethics self-assessment, and upload these with relevant certificates (e.g., PhD certificate, MSc, BSc, other relevant certificates) to the recruitment platform (available on the programme web pages when the call opens). They are asked to indicate up to 2 hosting groups, their fields of expertise, and the contact details of up to 3 referees.

b) **Project requirements**. Applicants are invited to propose a project which relates to the development of new or improvement of existing methods or technologies and which can be applied to the scientific questions of other researchers as a service and integrated into Research Infrastructures. The proposal should, whenever possible, foresee how the developed technology will simplify or even automate FAIR data management for users, throughout the data life cycle. It should extend beyond local interest, having potential for international transfer or user base. Applicants are also asked to complete an ethics self-assessment (template from Horizon Europe available with the project template) which will be screened by EMBL's Bioethics Office to ensure alignment with EMBL and EC regulations. Project proposals should make use of the dedicated template from the programme which is available for download from the programme webpages (see https://www.embl.org/training/arise2/).

***Important note**: Project proposals not using the provided template or which exceed the page limit (see project template) are ineligible and will not be evaluated.*

c) **EMBL supervisors**. All projects require an EMBL supervisor. The list of EMBL group leaders participating in the call and a description of their research interests relevant to the call are available on the programme pages when the call opens (see https://www.embl.org/training/arise2/). Applicants are asked to get in touch with the supervisors they are interested in during the development phase of their projects and prior to submission to ensure that the group leaders have the expertise and infrastructure to support the project. A letter of support from an EMBL group is not needed for the application.

d) **Collaborating partner**. It is also possible to have an external collaborating partner on your research project. This provides a unique opportunity to work with and benefit from both the EMBL and partner expertise and infrastructure. Fellows with collaborating partners also have the possibility for a longer secondment (see 2e: 11 months instead of 6). If this is interesting for you, please discuss with the EMBL supervisor you have chosen or get in touch with the ARISE2 team (arise2@embl.org).

e) **Secondments**. ARISE2 fellows do two external secondments/visits with ARISE2 Partner organisations and two in-house visits (see 1.1). In ARISE2 there are 17 partner organisations (9 from non-academic and 8 from academic sector) who offer training and support for fellows (see Annex 1). Most of the partner organisations offer possibilities to do long secondments and short visits with them. You can also propose a new partner if the expertise needed is not covered by the partners listed below. You do not need to name your secondment partners at the application stage. If successful you have until the 6th month of your fellowship to confirm who you would like to do your long secondment with.

2.3 Call schedule

ARISE2 has one annual call for applications. The 2025 call is open from June 30 to September 30, 2025. The full call schedule is available below.

2024 ARISE2 Call Schedule	
Description	**Date**
Call opening	June 30, 2025
Call closing	September 30, 2025
Eligibility, Feasibility and ethics checks	Oct. 1 – Oct. 14, 2025
Evaluation of applications	Oct. 14 – Oct. 28, 2025
Short-listing meeting	November 3rd, 2025
ARISE2 Office sends out invitations, application outcomes	November 5th, 2025
Candidates visit labs involved in their projects (organized by recruiting group leaders)	Prior to interviews
Interviews	Week of Dec. 1, 2025 by VC
Decision meeting	Dec. 5, 2025

ARISE2 Office sends out interview results	Within 1 week from interviews

3. Review process

3.1 Eligibility, feasibility and ethics checks

Submitted applications are checked for eligibility by the ARISE Team. Involved group leaders check if they have the expertise and resources for projects in a feasibility check and the EMBL Bioethics Office does an ethics check on the projects based on the submitted Horizon Europe ethics self-assessment that applicants complete.

3.2 Evaluation of applications

ARISE2 is a competitive merit-based fellowship programme. It follows a well-defined weighted scoring system that is unbiased and transparent. Eligible applications that pass the feasibility and ethics checks are independently reviewed by up to 3 external experts. Evaluators are asked to provide an overall impression of a candidate's application in terms of excellence, implementation and impact using the criteria described below.

The following criteria will be used for both the evaluation of the written applications and by the Interview Panels:

Table 1: Evaluation criteria

Category	Criteria (max 5 points per criterion)
1: Excellence of the applicant Weighting 40%	• 1a: The candidate's previous achievements show strong scientific potential • 1b: The candidate has made a significant impact in their research field
2: Excellence and implementation of the proposed project Weighting 40%	• 2a: The proposed project is novel, feasible and of high quality • 2b: The proposed project and candidate's background fit the competencies and infrastructure of the hosting team(s) (& collaborating partners if relevant)
3: Potential and impact of the project implementation on RIs	• 3a: The proposed project has strong potential to be included at a RI • 3b: The expected impact of the possible newly created service is significant

Weighting 20%	

Each criterion (1a-3b) is ranked using the points scale in Table 2.

Table 2: Possible points and their meaning

Point	Meaning
1 (failure)	Relevant criteria are not sufficiently met
2 (poor)	Relevant criteria are met, but weaknesses are clearly visible
3 (satisfactory)	Relevant criteria are met, but with shortcomings
4 (good)	Relevant criteria are fully met
5 (excellent)	Relevant criteria are fully met and exceeded

Scoring system

For each criterion, the applicants can receive up to 5 points (10 per category). Each category of criteria has an assigned weighting (Table 1). The points from all evaluators in one category are summed (max 30 points) and weighted.

Table 3: Final score calculation and thresholds

Applicant Excellence (Max 30 points) Weight 40%		**Project Excellence** (Max 30 points) Weight 40%		**Potential & Impact on RIs** (Max 30 points) Weight 20%		**Total Weighted Points**
Weighted max	Required min	Weighted max	Required min	Weighted max	Required min	Max/Min
12	6 (min 50%)	12	6 (min 50%)	6	3 (min 50%)	30/21 (min 70%)

Candidates must score at least 50% of the weighted points for each individual category and at least 70% of the total weighted points. In the case of *ex-aequo* (candidates with equal scores), the priority is defined by Applicant excellence (Category 1, Table 1).

3.3 Interviews

The interviews will take place by zoom during the week of December 1, 2025. Candidates give a talk on their research accomplishments (20 minutes) and have a closed panel interview (25 minutes per candidate). Candidates visit host labs and collaborating partners if applicable prior to the panel interviews.

3.4 Results

The ARISE2 Executive Committee and the chairs of the Evaluation Board decide on the list of offers and a ranked waiting list using the final rankings of applicants. This is calculated 50:50 based on the scores from the written application and the interview scores. Interviewing candidates are informed of the outcome of their interview by email within 1 week of the official interviews which includes individualised feedback.

3.5 Appeal procedure

Applicants not put forward following the eligibility check or short-listing or who do not receive an offer following the interviews have the right to request an appeal. The details of the appeal procedure are included in the outcome email. Only procedural aspects of the evaluation and selection are open to appeal. The scientific judgement of the evaluators and panels is not. Requests for appeal must be submitted by email to the Programme Manager using the appeal form included with the outcome email within 7 days of a candidate receiving a rejection. Appeal requests will be treated confidentially and are reviewed by an Appeals Committee.

4. Fellowship conditions

Fellowship contracts are for 3 years and may not be interrupted. Fellows may stay a total of 5 years at EMBL if additional funding is identified by the fellow or EMBL host. Successful candidates must start their fellowships within 4 months of it being awarded.

ARISE2 fellows receive employment contracts as EMBL Postdoctoral Fellows, an established member of personnel engaged on Fellowship contracts whose principal aim is research training. The period of a Fellowship contract is three years. Fellows may stay up to 5 years in total provided that the supervisor has funding. All fellows will be subject to relevant employment regulations and receive social benefits. The conditions of employment, as detailed in the work contracts, are summarised below.

Living allowance: Monthly salary calculated based on the EMBL duty site and subject to annual increases.

Social security: Fellows are part of an obligatory social security system consisting of a pension scheme, health insurance, accident at work insurance and unemployment insurance. Both the pension and unemployment insurances are portable.

Leave: Fellows receive 2.5 days of leave per month of service. In addition, they receive sick leave, maternity leave, paternity leave and special leave (i.e., for adoption of a child, fostering a child, entering into a union, death in the family, civil duties, to nurse a dependent child).

Additional insurances: Optional death benefit and long-term care insurances are available.

Allowances: Fellows in a union receive a monthly dependent allowance regardless of the employment status of their partner. For every dependent child, they also receive a children allowance.

5. Data protection and ethical considerations

EMBL ensures a high level of data protection and complies with EU General Data Protection Regulation (GDPR) regulations. The institute's data protection framework including its internal policy on general data protection is available here.

6. Information webinar for interested applicants

The ARISE2 Office offered an interactive webinar for interested applicants prior on June 17th. A recording of the event is available on the programme pages to support applicants in preparing their application.

7. Programme Office contact information

Do you have questions? Get in touch with the ARISE2 Office:

ARISE2 Office

Tel.: +49 6221 387 8329
Email: arise2@embl.org

Annex – ARISE2 partners

	Academic partners	Support offered
1	VIB, Associated, collaborating	• Hosting short secondments • Interested in collaborative projects with EMBL groups and ARISE2 fellows
2	SciLifeLab (KTH), Associated, collaborating	• Hosting short and long secondments • Interested in collaborative projects with EMBL groups and ARISE2 fellows
3	UGA, Associated, collaborating	• Hosting short and long secondments • Interested in collaborative projects with EMBL groups and ARISE2 fellows
4	CRG, associated,	Hosting short and long secondments,
5	ESRF, associated	Hosting short and long secondments,
6	CEITEC, associated	Hosting short and long secondments
7	MUV, associated	Hosting long secondments
8	BIH, associated	Hosting short secondments
	Non-academic partners	**Support offered**
1	Cellzome/GSK, associated, collaborating	Interested in collaborative projects with EMBL groups and ARISE2 fellows
2	Leica, associated, collaborating	• Hosting short and long secondments • Interested in collaborative projects with EMBL groups and ARISE2 fellows
3	Zeiss, associated	Hosting long secondments
4	Cellsense associated	Hosting short and long secondments
5	VBCF, associated	Hosting short and long secondments
6	Thermo Fisher (FEI), associated	Hosting short and long secondments
7	ARINAX, associated	Hosting short and long secondments

8	Luxendo, Bruker, associated	Hosting short and long secondments
9	Bioinovation institute, BII, associated	Participating as lecturers in ARISE2 seminars on technology transfer and entrepreneurship