Application form

Select what you want to apply for

- 1. Data curation, handling and integration for publishing into the cloud
- 2. Tool interoperability, workflows and containerization
- 3. Cloud deployment and resources
- 4. Sensitive data handling

Please select the themes/area of expertise that are relevant to your project. If your project aligns with more than one of the three topics proposed, save one topic and add another

Project Title

Consortium organisations to be involved in the project and PICs:

To be eligible for funding, you will need to be a member of the EOSC-Life consortium. Please select the organisation(s) and associated PIC number(s) involved in the project from the list of EOSC-Life Beneficiary or Third Parties. If your Institution is not listed here, please contact us to check your eligibility to this open call: <u>opencall@eosc-life.eu</u>

EOSC-Life beneficiaries and Linked Third Parties: EMBL(999988230); VIB(999651931); BBMRI-ERIC(946597878); UMCG(999914801); CRS4(999628069); MUG(999836231); EATRIS(941506445); Lygature(997656350); VHIR(999541642); IMTM(999649506); UH(999994535); IRFMN(999661146); ECRIN(948646712); KKSN(915416743); SCTO(964630469); NorCRIN(998832572); PtCRIN(960782479); SCReN(999477525); EMBRC(909980087); FZJ(999980470); ERINHÀ(910590314); EU-OS(910913033); INFRAFRONTIER(949754646); INSTRUCT(910086981); Diamond(998475612); UNIMIB(999923531); INRA(999993274); CHARITE(999992692); ALU-FR(999841760); UOXF(999984350); SU(909875521); CNRS(999997930); INSERM(999997833); UNITO(999861936); UNIVDUN(999975523); Åbo(999903355); Fraunhofer(999984059); HMGU(9999994729); CERBM-GIE(999993177); FLEMING(999458610); UOULU(999844670); CIRMMP(999516810); CERM(999895789); CSIC(999991722); VU(954530344); KNAW(999518362); UVEG(999953019); USMI(959034442); MU(999880657); LUMC(999990849); CSC(999645820); IMG(999512251); IMIM(999585680); CNR(999979500); UNIMAN(999903840); NIB(999650476); VLIZ(999599939); CCMAR(998611994); UGent(999986096); UPV/EHU(999865234); UVIGO(999630494); UNICAM(999977172); UMAS(999975911); UiO(999975814); GEANT(999579278); SLOVACRIN(999885992); NKI(999984738); WIS(999979306); HE(987006041); UPF(999867077); TUWIEN(999979888); UiO(999975814); HCMR(999577532); EGI(989221715)

Scientific background

Give details about the scientific question you are addressing Max 4000 characters

Technical background

Give details about the technical challenges that will be addressed in your project and what work has already been completed e.g. Dataset already containerised. Max 4000 characters

Planned work

Please include the key deliverables of the planned work with their approximate timings (months) after project initiation. Max 4000 characters

Describe in what way the data involved in your project is considered sensitive data

Max 2000 characters

Do you already have access to the dataset you will be using for the project? Please explain and indicate under what arrangements access to the dataset has been obtained

Max 2000 characters

Are you using anonymised or pseudonymised data in the sense of the GDPR? If yes, indicate if the data are already anonymised or pseudonymised and explain what principles were used in pseudonymisation/anonymisation of the data

Max 2000 characters

Provide documentation on anonymisation / pseudonymisation where relevant

What legal basis is in place for the proposed work?

Provide documentation on relevant legal documents where relevant

If applicable, please detail any ethical approval already received for the work proposed in this application. Relevant documents should be supplied Max 2000 characters

If you are using synthetic datasets, describe your synthetic datasets and explain why these specific datasets represent a good substitute to the sensitive data of interest Max 2000 characters

If the proposed work requires access to genetic resources, you must also comply with the Nagoya Protocol on Access and Benefit Sharing and EU Regulation (EU) No 511/2014 which implements this Protocol. Please check the box to confirm you have understood and agree

Which of the following tools/workflow management systems/registries/infrastructure/standards do you plan to use for your project? Select all that apply.

The tools/workflow management systems/registries/infrastructure/standards listed are included in the EOSC-Life roadmap https://forum.eosc-life.eu/t/eosc-life-wp2roadmap/31 Using the components included in this roadmap will help EOSC-Life to promote interoperability between research infrastructures

Conda/Bioconda	Jupyter	ELIXIR bio.tools	Snakemake
Singularity	RStudio	BioContainers	Common Workflow Language
Docker	OpenStack	EOSC-Life Workflow Hub	EOSC Datasets Minimum Information
OpenAPI	Kubernetes	OpenEBench	Don't know
Galaxy	Amazon Web Services	Galaxy workflow- testing	Other (please specify)
KNIME	Global Alliance for Genomics and Health (GA4GH)	EOSC-Life Life monitor	
Nextflow	RO-Crate (researchobject.org)	Workflow testing tools	

Provide Key features of the data resource/services that you will be using

If relevant to your project, give details regarding data types, dimensions, data models, ontologies, current storage and hardware, containerisation, curation, software and licenses, sensitive data or relevant ethical aspects. Max 4000 characters

Key features of your workflow (if relevant to your project)

Description of the steps to be executed in your workflow, ontologies, containerisation, workflow engine,

software and license, registry, repository. Is your workflow fully established? Is it cloud ready? Describe the limitations and /improvement to be done (e.g. data input/output, runs-only-on-my-computer, user authentication/authorization, compute resources, amount of human intervention, licensing...) Max 4000 characters

Compute and data resources required

What compute and data resources are required for your project? Be explicit with the requirements, e.g. CPUhrs, RAM, GBhr storage, Network, ancillary services (data transfer, workflow execution) etc. Describe the sensitivity of the data that will be processed by your project. For each required resource please state whether you would request access through EOSC-Life or whether you have access in-house or from another source.

Max 4000 characters

Technical expertise in your team

Please list which members of the project team will be responsible for which aspect of the proposed work and detail their expertise. Max 4000 characters

FAIR data (FAIR=Findability, Accessibility, Interoperability, Reusability)

Please describe how your project work will improve upon the current situation with regards to FAIR data standards and how you will ensure that your project adheres to FAIR data principles. Max 2000 characters

Expected Impact

Please include both expected scientific impact and expected impact providing resources for the EOSC and the scientific community. Max 2000 characters

Scientific domain

Select all scientific domain(s) that are relevant to the project. Each domain is associated with an EOSC-Life infrastructure.

- 1. Biobanking
- 2. Bioinformatics
- 3. Chemical biology
- 4. Clinical research
- 5. Functional genomics
- 6. Biological and biomedical Imaging
- 7. Marine organisms
- 8. Microbial resources
- 9. Pathogenic microorganisms
- 10. Plant phenotyping
- 11. Structural biology
- 12. Systems biology
- 13. Translational medicine

Budget

(download the <u>template spreadsheet</u> provided and complete with tasks and budget then upload here)

Relevant publications

Please add here up to 10 publications, either by members of your application team or other external works relevant to your project max 10

Duration

Please give estimated start and end dates for the project. Projects should have a duration of maximum 12 months. Projects should be completed at the latest by 31 December 2022 and reports submitted by February 2023

Sustainability plan

What is the plan for the project after EOSC-Life? Include any Data Management Plan, Software Sustainability Management Plan, Project Output Management Plan. Max 2000 characters

Have you been in contact with an EOSC-Life expert to discuss your project? If "Yes" please give the name of the expert(s) you have been in contact with

Do you require technical support from EOSC-Life experts during your project?:

Yes, from data experts Yes, from workflow experts Yes, from cloud experts Yes, from sensitive data experts No, I don't need support

If you request support from EOSC-Life experts, give details of any requested support.

Technical constraint?

Are there any technical constraints or flexibility to the project? E.g. This service must be deployed in multiple geophysical regions, or require 99.99% availability, etc.

Additional files (optional)

Add any additional documents that you would like to upload (e.g. figures, consent forms)