

SYS-LIFE

**Systemic approaches to improve
cardiometabolic and brain health
during lifespan**

SYS-LIFE

Guide for Applicants



**UNIVERSITY
OF TURKU**



Co-funded by
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1. Purpose of the Guide for Applicants

The aim of this guide is to provide potential applicants with an overview of the SYS-LIFE Programme and SYS-LIFE fellowship, practical information on how to apply, and a description of the evaluation procedure. Concerning applying, this guide should be read in combination with the SYS-LIFE call text. If you require further information about the SYS-LIFE Programme, please consult the contact information in section 7 of this guide.

2. About the SYS-LIFE Programme

2.1 Aims and purpose

Systemic approaches to improve cardiometabolic and brain health during lifespan (SYS-LIFE) is a pioneering COFUND Fellowship Programme, based at the University of Turku in Finland. Its goals are breakthrough advances in human health, scientific renewal and the development of future leaders within the field of cardiometabolic and brain health. SYS-LIFE is jointly funded by the European Union's Marie Skłodowska Curie-Actions (MSCA) COFUND action and the University of Turku (UTU). It is located within the Faculties of Science, Technology and Medicine. SYS-LIFE supports the bottom-up development of excellent early- and mid- career stage academics through the provision of three years of funding. This offers outstanding postdoctoral researchers the opportunity to design and lead innovative research projects of the highest quality, relating to the improvement of cardiometabolic and brain health.

SYS-LIFE builds on UTU's unique infrastructure for, and world class research expertise in, cardiometabolic and brain health. These have already served to deliver breakthrough discoveries within this field. To these, SYS-LIFE connects the model for interdisciplinary excellence applied by UTU's Collegia. SYS-LIFE promotes intersectoral working by enabling all SYS-LIFE Fellows to undertake an optional secondment period of between two and six months within a non-academic organisation, for the purpose of research and/or training.

SYS-LIFE particularly encourages approaches that are : (i) interdisciplinary: located in any field(s) supported by UTU's faculties of Science, Technology and Medicine, including behavioural sciences (e.g. Social Science and Psychology); (ii) intersectoral: engaging knowledge and resources from outside academia; (iii) longitudinal: relating to any point(s) in the human life-cycle; or (iv) systemic: focusing on connections within the human body (e.g. between diseases, pathophysiological mechanisms and organ systems). These four dimensions present an open space for discovery, connectivity and innovation.

Please note that SYS-LIFE is co-funded by the European Union's MSCA action. However, the views and opinions expressed here are those of the author(s) only and do not necessarily reflect those of the European Union or the MSCA programme. Neither the European Union nor the granting authority can be held responsible for them.

2.2 University of Turku

The University of Turku, founded in 1920 and located in Southwest of Finland, is a multidisciplinary, research-intensive, entrepreneurial university, ranked 291st globally (QS Ranking 2023). UTU has 8 research faculties (Science, Technology, Medicine, Social Sciences, Law, Education, Humanities and Turku School of Economics) and 2 independent Units, Turku PET Centre and Turku

Bioscience Centre. It holds the European Commission's HR Excellence in Research award for implementation of the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers (Charter and Code). UTU collaborates with numerous partners in different sectors and supports researcher start-ups and secondments through the UTU Research Affairs Unit (Innovation Services and a Technology Transfer Office) and partner enterprise organisations.

UTU is a modern, international university, well-equipped to operate to a high standard of excellence. UTU's main campus area facilities are located in central Turku and includes most of the University's research and teaching space. At national and international level, UTU is a center of excellence for bioimaging, neurobiology, cardiovascular research and longitudinal population studies. UTU is an attractive destination for cutting-edge researchers in the field of cardiometabolic and brain health. Southwest Finland region hosts Finland's strongest concentration of pharmaceutical research and health technology - there are, for example, over 100 life science and medical companies in the region. A new national Drug Development Centre has also recently been established in Turku.

UTU provides its researchers with access to high-quality research infrastructure, equipment and services (administrative, technical and human resources), including a EURAXESS Service Centre managing international mobility. UTU is well-known for the quality, volume and transparency of its social, psychological and medical databases, including the seven unique, decades-long multigenerational population cohort studies curated and exploited by its new Centre for Population Health Research (POPC), and the extensive image database of the Turku PET Centre, one of the largest imaging centers of its field. SYS-LIFE offers its Fellows the chance to exploit these, using UTU's cutting-edge facilities. The Department of Computing at the Faculty of Technology provides further expertise in e.g. data analytics, artificial intelligence and machine learning. Turku PET Centre's technical assets include a large array of imaging tracers and scanners, and a next generation simultaneous total-body PET scanner. UTU also hosts the headquarters of Euro-Bioimaging (European Research Infrastructure). Furthermore, UTU coordinates two Research Council of Finland research flagships: (i) Innovation Ecosystem Based on the Immune System (InFLAMES), a platform for the development of new drugs and diagnostics for immune diseases; (ii) Inequalities, Interventions, and New Welfare State (INVEST), aimed at developing targeted interventions to enhance welfare state efficiency in areas including mental health. UTU forms part of Health Campus Turku, a multidisciplinary, intersectoral knowledge cluster for medicine, social and health care and technology, which also comprises Åbo Akademi University - Finland's Swedish-speaking university, Turku University of Applied Sciences, Turku University Central Hospital, Business Turku and Novia University of Applied Sciences (Swedish-speaking).

Appendix 4 lists UTU Faculties, departments and units, major partners and strategic theme areas.

2.3 Legislation, UTU policies and MSCA requirements applied during selection and upon recruitment

All applicants and selected Fellows must comply with national and local legislation. As part of the MSCA COFUND action, SYS-LIFE is committed to the principles of Open Science, in line with the FAIR (Findable, Accessible, Interoperable and Reusable) principles. Successful candidates will be required to adhere to these principles (see below for University and MSCA policies on this). UTU maintains comprehensive Open Science, equality, ethics and intellectual property rights (IPR) policies.

3. The SYS-LIFE Fellowship

SYS-LIFE will fund 22 Marie Skłodowska-Curie postdoctoral fellowships during the Programme's lifetime (2024-2028). Each fellowship will have a 3-year duration. During their fellowship, the Fellows will undertake a research project, participate in training and career development activities and possibly undertake a secondment at a partner organisation. All fellowships will be based in Finland within participating UTU faculties of Science, Technology and Medicine.

3.1 Eligibility criteria

Applicants must have completed their doctoral degree by the SYS-LIFE call deadline of 31 January 2024. This date should be taken as being the date at which all work for the PhD is successfully concluded, rather than the date of formal graduation. In cases where the PhD has been successfully completed but the degree certificate has not yet been issued, applicants should provide confirmation from the university where the PhD was undertaken that the PhD has been successfully completed and that no additional work is required. Please note that the doctoral certificate must have been delivered to UTU by the time the employment contract is signed.

Applicants must have completed their **doctoral degree no more than eight (8) years before the call deadline of 31 January 2024**. An exemption to this requirement may only be granted under special circumstances, for example where an applicant has taken parental leave, military service or non-military service, or as a result of a long illness. Applicants who wish to claim such an exemption should highlight this in their CV¹.

Applicants must meet the MSCA mobility rule, in that they must not have resided or carried out their main activity (work, studies, etc.) in Finland for more than 12 of the 36 months immediately preceding the call deadline of 31 January 2024.

There is no restriction on the applicant's age or citizenship(s).

Any application which fails to meet these criteria without justification will be deemed to be ineligible and will not be sent on to external review.

3.2 Role & Tasks

The main task of SYS-LIFE Fellows is to carry out an internationally excellent research project over a three year period, during which the results of the project should be disseminated in a number of ways. SYS-LIFE positions require full time commitment, defined as 1612 working hours per annum.

The positions are located at one of the campuses of the University of Turku and Fellows are required to be resident in Finland. During their SYS-LIFE fellowship, Fellows may spend up to twelve months working outside Finland, generally for a maximum of four months per calendar year.

¹ In calculation of 8-years research experience [this guidance](#) is applied **with the exception** that all applicants that have received their PhD after **31/01/2016** are automatically eligible to apply provided the remaining eligibility criteria are met.

Such work must be related to their SYS-LIFE project and must be approved by the Director of SYS-LIFE.

In addition to undertaking their own research project, SYS-LIFE Fellows are also required to contribute to SYS-LIFE's intellectual and social life via such activities as attending and presenting at SYS-LIFE meetings, events and training, and by undertaking cross-disciplinary work with their co-Fellows. They can also undertake a secondment with an organisation external to higher education for between two and six months.

The working obligations of SYS-LIFE Fellows will be limited. They must be actively committed to interdisciplinary working, knowledge transfer, mobility and training activities. They must participate in regular SYS-LIFE meetings and events. Fellows are required to take part in a mentoring scheme and also to produce and maintain (i) a Personal Career Development Plan (PCDP) document in line with EURAXESS guidelines and (ii) a detailed Data Management Plan that complies with FAIR (Findable, Accessible, Interoperable, Reusable) principles.

All SYS-LIFE Fellows may choose to undertake teaching activities (including the supervision of Masters and PhD theses) up to a maximum of 5% of their annual workload of 1,612 hours and may engage, with up to 5% of their total work time, in other academic and administrative duties. All UTU working contracts fall under Finnish law and are governed by Finland's Employment Contracts Act (55/2001). Fellows therefore benefit from the same extensive statutory rights (e.g. to equality, holiday, trade union membership, unemployment and social security benefits) and obligations as all other employees in Finland. SYS-LIFE Fellows must also adhere to Finnish law and UTU policies in areas such as equality, research ethics and Open Science, and comply with all Horizon Europe requirements applicable to MSCA COFUND fellowships (e.g. concerning mobility and Open Science).

3.3 Working conditions

UTU is an active international community of over 20 000 students and 3 000 staff members. In line with the Charter and Code, it provides Fellows with excellent working conditions, along with high-quality facilities and support.

SYS-LIFE Fellows will receive a workspace on UTU's campus, with modern work equipment (e.g. mobile phone, computer and cloud storage), and access to laboratory space, machine time and consumables. Flexible working arrangements and a range of versatile free training options is also available. Comprehensive, private occupational health insurance from Mehiläinen Oy is provided at UTU, while overseas work travel is covered by If insurance. UTU also provides Fellows with a range of efficient support services including: a Research Affairs Unit, including Innovation Services and a Technology Transfer Office; 6 IT Helpdesks, offering online and in-person support; Legal Affairs service; Research Ethics support; Library Services, with dedicated support for Open Access; a Research Funding Unit offering expert pre-award and post-award support on national and international funding. UTU Human Resources carries out UTU's duties as an employer. It coordinates staff development and training through a Career Services unit, mentoring programmes, secondment schemes and partnerships. It also offers a range of services, including a Work Well-being Unit, an International Office administering international programmes and partnerships, facilitating research mobility (e.g. residence permits, working abroad and emigration), a EURAXESS Service Centre, a University Communications office, offering support with the media and public engagement, as well as a Financial Services unit.

SYS-LIFE offers an attractive remuneration package, comprising of a competitive salary and an additional mobility allowance (100 € per month) to support the Fellow's move to Finland, as well as a family allowance (100 € per month) for Fellows who are married or with a formal status equivalent to marriage, or have dependent children. Fellows are also entitled to travel costs (up to 1200 € per year), research costs (up to 5000 € per year for justified expenses), and other costs (up to 1200 € per year for training and 10,000 € over 3 years for innovation activities, e.g. Proof of Concept).

The salaries of SYS-LIFE Fellows are determined within the university salary system for teaching and research personnel. The salary for a SYS-LIFE Fellow corresponds to a requirement level 6 and the pre-estimated personal performance percentage of 17 % (current gross salary 4299 € per month), and is subject to annual increases. Progress in the researcher's personal performance can be taken into account when determining the salary during employment.

SYS-LIFE Fellows will be based in a university department and meet regularly as a group for structured training workshops. Crucially, Fellows are given the freedom and support to develop a bespoke package of research and training to address their individual needs. This support includes a range of free mentoring and training options at UTU, as well as dedicated funds and a range of secondment options to enable Fellows to undertake research and training, including translational activities, at external academic and non-academic organisations. Secondments and other support will be available from Ghent University, especially via its KERMIT unit (application of Artificial Intelligence to health research), and Turku University Central Hospital, ranked the 58th best hospital in the world and offering a wide range of clinical research options. Business Turku will also connect Fellows with partners at local, national and European-level. A further partner, Siemens Healthineers, is able to offer training and support in its specialist areas of health technology research and innovation.

For each Fellow, SYS-LIFE will appoint (i) 1 academic supervisor (from the Fellow's unit who manages their performance), (ii) 1 personal mentor from inside or outside academia (an experienced figure providing critical guidance to enhance development), and, if applicable, (iii) 1 secondment supervisor (researcher/manager overseeing performance) per secondment.

Fellows will benefit from flexible working conditions, along with comprehensive family support. With regards to disability, UTU is committed to making appropriate adjustments to enable a person with disabilities to have access, on a par with others, to education and work for the advancement of their career. An accessibility planning officer is thus designated to promote accessibility and availability of services to all, and each year an accessibility action plan is created and its implementation assessed in UTU's Annual Report. UTU's Equality Committee promotes and monitors the realisation and development of non-discrimination, social inclusion and equality at the University. The Committee is appointed by the Rector and consists of representatives from personnel units, organisations and students, 2 Equality Officers, an accessibility planning officer and an advisor on equality issues. The advisor on equality issues offers support and guidance to both students and staff on matters concerning non-discrimination, social inclusion and equality, liaising with the Equality Committee. All complaints of discrimination are taken seriously and investigated. The University's intranet site gives guidelines for the handling of harassment and other inappropriate treatment, as well as an electronic harassment report form.

3.4 Mentors

SYS-LIFE Fellows are required to take part in a mentoring scheme. SYS-LIFE assigns each fellow a single mentor for the duration of their fellowship (36 months). Mentors can be proposed by Fellows directly and can also be replaced upon request. Fellows may also select a mentor from outside academia. Mentors will be selected and will meet with Fellows by the end of the third month of their fellowship.

The roles of mentors are aligned to those of academic supervisors, but delineated as follows. The role of a mentor is largely informal and not part of any assessment of performance. Mentors act as a “critical friend”, provide advice concerning career progression and help Fellows to grow their networks. Conversations between mentors and researchers help to identify areas in which skills, knowledge and networks could be developed further. This helps researchers make their own decisions to enhance their development and to prepare them for discussions with supervisors. Mentoring pairs ordinarily meet face to face, 5 to 8 times/year. Mentors will also support SYS-LIFE Fellows in identifying, and making plans to address, development areas and in completing their PCDPs. Mentors can be from any sector or country, but a face-to-face relationship is strongly recommended. Academic mentors are expected to have at least 5 years’ work experience outside academia or 5 years’ experience at a University/Higher Education Institute after receiving their PhD, with a status equivalent to Finnish docent level or above. They are usually at senior lecturer level and may be UTU alumni. Non-academic mentors must be senior figures from outside academia, who have been in working life for at least 5 years and are willing to share their experience, expertise, and networks.

3.5 Secondments

Supported by UTU and its partners, SYS-LIFE may approve and help arrange secondments for Fellows at suitable host organisations. UTU will require secondment supervisors and any other collaborators or partner organisations that host Fellows for research and/or training during their fellowship to demonstrate that their organisation possesses an equality policy equivalent to UTU’s or provide a signed commitment that it will provide a working environment compliant with UTU’s equality policy. SYS-LIFE, academic supervisors and mentors will remain in regular contact with Fellows during their secondment (e.g. via email and pre-scheduled meetings).

Fellows, in consultation with their academic supervisor, and supported by SYS-LIFE, UTU and its partner networks, may arrange 1 or more secondments at an external organisation, subject to approval by SYS-LIFE. SYS-LIFE’s associated partners are available to provide support or offer secondments. In keeping with the MSCA Mobility Rule, researchers must not have spent more than 12 months in the 36 months immediately before the deadline of the call in the country that will host their secondment(s). The purpose of such secondments is to connect the Fellow to additional resources, or to add an international and/or intersectoral dimension that is relevant, feasible, and beneficial for the researcher and their project. Secondments must be implemented between Month 3 and Month 35 of the fellowship.

UTU will require potential secondment hosts to demonstrate that their organisation’s infrastructure and capacity is appropriate to support the proposed research and that the working conditions will comply with the policies of UTU and MSCA (e.g. in areas such as non-discrimination). Secondment supervisors will be invited to support the Fellow throughout their secondment and during the rest of their project. They will also be invited to contribute to the Fellow’s PCDP process, by providing a

list of their available training courses and learning resources, by helping Fellows assess their own training requirements, and by guiding their development plans. They will also confirm the feasibility of aspects of the PCDP that relate to the secondment, and provide a brief report of the Fellow's progress to their academic supervisor upon completion of the secondment. Secondment supervisors will be invited to attend SYS-LIFE events.

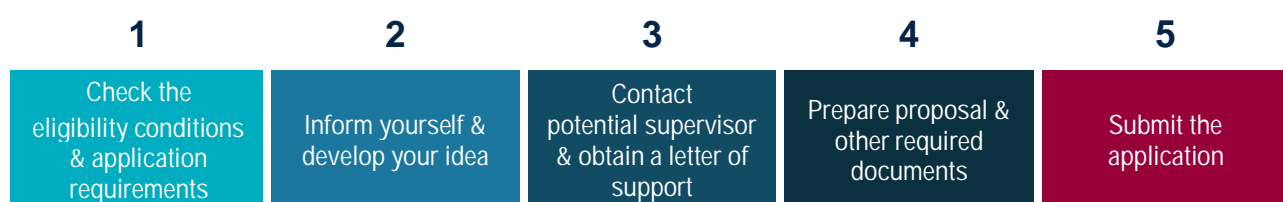
3.6 List of responsibilities & parameters for any non-research activities

SYS-LIFE's primary formal approach to developing research skills will be through its mandatory joint meetings, convened 12 times per year. These will include research presentations by Fellows and high-quality training workshops to develop specific research (e.g. grant-writing) and non-research oriented skills. Training will be led by experts from within and outside academia. SYS-LIFE meetings will thus provide opportunities for interdisciplinary knowledge exchange with other leading researchers and, occasionally, with host institutions, enabling Fellows to learn and practice new ways of doing and organizing research. SYS-LIFE will also sponsor Fellow-led symposia, public engagement, and education activities. To a large extent, however, SYS-LIFE Fellows will lead their own training. They will play a key part in determining the focus of any training workshops that form part of meetings by jointly compiling an overall listing of their desired development areas.

In addition to SYS-LIFE's schedule of meetings, all its Fellows will be required to participate in person at the Programme's induction week, held during the first month of their fellowship. The second mandatory SYS-LIFE conference (1 week) will take the form of a yearly international summer school. This will be hosted alternatively by UTU or an academic partner (e.g. U Ghent) and will include participation from international partners of SYS-LIFE and UTU.

4. How to apply – Application process

SYS-LIFE application process can be described as 5-step:



These steps are described in detail below. Please do not hesitate to contact SYS-LIFE staff at syslife@utu.fi if you require any further clarification.





4.1 Eligibility & Application requirements

In addition to the applicant eligibility criteria described in section 3.1, the following requirements also apply to SYS-LIFE applications:

- Submission of completed application package (see 4.4), in English, by the call deadline.
- Research must aim to improve cardiometabolic and/or brain health.

- Applicants are free to choose any research topic, but this must engage with the core research expertise of the University, and be situated either within UTU's faculties of Science, Technology or Medicine, or in its independent units of Turku Bioscience Centre or Turku PET Centre.
- Compliance with UTU policies (including those on [research ethics](#)) and with local law.
- Full-time dedication (1,612 hours per year) to research and training activities, unless duly justified.
- Maximum permitted duration of research/training away from UTU is 12 months, MSCA requirements.
- Adherence to the principles of Open Science, provision of immediate Open Access (free of charge, online access for any user) to all peer-reviewed scientific publications of their research and ensuring all research data is managed responsibly, in line with FAIR principles (Findable, Accessible, Interoperable, Reusable).

SYS-LIFE particularly encourages applications that are:

			
interdisciplinary	intersectoral	systemic	longitudinal
draw from methods across STEM and beyond	engage knowledge and resources outside academia	whole-body vision, connecting organs, diseases or systems	relate to multiple points in the human life-cycle

In addition, SYS-LIFE values applications that

- ✓ employ approaches that engage with strategic theme areas of UTU
- ✓ exercise further mobility across international borders
- ✓ exploit and connect European and national research infrastructures
- ✓ take advantage of the extensive social, psychological and medical databases of UTU and its partners
- ✓ make use of UTU's cutting-edge facilities for acquisition and analysis of new data
- ✓ plan for innovation and translational medicine, taking a 'bench to bedside' approach.

4.2 Inform yourself & identify a research theme

Inform yourself about SYS-LIFE programme and how to apply by familiarising yourself with our website - www.syslife.fi - and reading carefully this Guide for Applicants. In case of any questions, you can always contact SYS-LIFE staff at syslife@utu.fi – we are happy to offer guidance!

Applicants need to identify at least one suitable research theme/host group for their research topic. For this, visit www.syslife.fi/research for a listing of example host units along with contact e-mails for the contact persons for each research group. A listing of example research topics within the core expertise of these units is also included in this guide as Appendix 3. Whichever host unit you select, you will need to prepare a summary of your research project and chosen research topic, in order to obtain a Letter of Support, confirming that it is feasible for that unit to host your chosen research topic and project concept.

4.3 Letter of support

Before submitting an application, applicants must contact a potential host unit to discuss their proposal and gain support for their application. The rationale for this is to enhance the excellence of applications and ensure that sufficient capacity (e.g. expertise of supervision, research facilities and resources) is available to welcome the selected Fellows to carry out their projects to a high standard. A listing of host units along with contact e-mails, is available on www.syslife.fi/research.

After identifying a suitable research theme/host unit for their research topic, applicants need to email a contact person at that unit, describe their project's needs, and request at least one letter of support at the earliest possible phase. If you do not find a research topic that corresponds sufficiently well with your research concept, you may contact other potential UTU unit(s) that are not listed on the webpage.

A template Letter of Support (available on [SYS-LIFE webpage](#)) must be used and attached to your e-mail to the unit's main contact person. They will evaluate the feasibility of the proposed research and return the letter to you. If the supervisor cannot support the proposed research, they need to give a short explanation of their reasoning. Please note that supervisors require a 2-week lead time to respond to requests for letters of support. That is why we strongly recommend that you contact the potential supervisors as early as possible, and a minimum 2 weeks before the call deadline. Please **copy syslife@utu.fi in all electronic communication with potential supervisors**.

The Letter of Support given by a supervisor is converted into pdf format and attached to the application in the online application system (link provided on [SYS-LIFE website](#)). If you have more than one Letters of Support, compile them together into one pdf document. Please name the document by using the last name of the applicant and the document title (e.g. Smith_Letter of support).

4.4 Prepare your application documents

The application package consists of **completed online application form** and **attached documents**. The required documents comprising the application package are:

- Completed online application, including applicant personal details and undertaking to comply with MSCA mobility rule.
- Curriculum Vitae (maximum 2 pages).
- Research Plan Abstract (maximum 2,500 characters plus spaces, including references).
- List of publications, indicating the 5 most significant. Non-English titles must be translated into English.
- Research Plan with consideration of ethical issues (maximum 25,000 characters plus spaces, including references).
- Copy of Doctoral Certificate (if unavailable, a copy of official confirmation of PhD completion).
- Letter of Support ([template provided](#)).
- Ethics Self-Assessment Form ([template provided](#), based on European Commission checklist and guidance).
- Initial Data Management Plan (maximum 1 page).

All attachments must be in PDF format. All attachments must be written in English with Arial, font size 11, single spaced. This font size must be used throughout the application except for the footnotes which must be font size 9. Any words within maps, pictures etc. must be at least font size 8. Name all the documents using your last name and the document title (e.g. Smith_Curriculum vitae, Smith_Doctoral certificate.)

4.4.1 Detailed instructions for the application documents

Please use the subheadings here and ensure that all parts are completed in order.

1. **Curriculum vitae (maximum 2 pages)** The curriculum vitae must be no more than two pages in length and must include the following information: -Personal data: name and year of birth - Academic education: degrees, dates and places, major subject, topic of doctoral dissertation - Posts and positions of primary importance **including all positions in the three years prior to the call deadline** - Research allocations and grants during the last five years - Most important expert assignments - Most important scientific acknowledgements and awards - Outreach/impact activities. Applicants wishing to claim exemption to rules regarding the length of time which has elapsed since passing their PhD and/or mobility should note this in their CV.
2. **Research Plan Abstract (1 page; max 2,500 characters, plus spaces)** *The name of this attachment in the application system is Cover Letter.* The one-page abstract must contain, in order, the following: - Applicant's name and academic degree - Title of the research - Summary of the research plan (aims, research material and methods) - Key words (maximum 5).
3. **List of publications (maximum 2 pages)** Applicants are required to clearly indicate the 5 most important publications in relation to the research plan. Any non-English titles must be translated into English.
4. **Research plan with consideration of ethical issues (maximum 25, 000 characters, plus spaces Please note that this limit will be strictly enforced)** The research plan must indicate the following in order: - Name of the researcher, title of the research plan and site of research - Background and significance of the research - Research objectives and methods, including specifying the multidisciplinary aspects of the research - Implementation and outputs: The current state and schedule of the applicant's research, a timetable for the research and publications/outputs, dissemination strategy including considerations of open access and the FAIR principles. Please see [open science policy](#) of UTU. - National and international collaboration, including linkage with research conducted at the University of Turku and to the University's research themes - Bibliography (included in the 25, 000 characters).
5. **Letter of Support (template provided)** At least one Letter of Support must be provided by the host unit using the template provided on SYS-LIFE webpage. If you have more than one Letters of Support, combine them into one pdf.
6. **Ethics Self-Assessment form** (template provided, based on European Commission checklist and guidance).

Research ethics The University of Turku is committed to complying with the guidelines on responsible conduct of research and procedures for handling allegations of misconduct, issued by the Finnish Advisory Board on Research Integrity. Consequently, SYS-LIFE requires that applicants commit to complying with responsible conduct of research and adhere to the Advisory Board's guidelines. Please see the [research integrity guidelines 2023](#). In addition, applicants must comply with the MSCA's

requirements for ethical research which can be found in the Horizon Europe Programme Guide https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf

7. **Initial Data Management Plan (maximum one page)** The SYS-LIFE data management plan is based on [the data management plan instructions of the Research Council of Finland](#). Under MSCA rules the Data Management Plan (DMP) should accord to the FAIR - findable, accessible, interoperable and reusable - principles. (See the Horizon Europe Programme Guide above for further details). The Plan should describe the following: - Where the data will be stored and how they will be backed up during the project - How any legal and ethical issues related to the sharing of data (e.g. ownership, copyright, sensitivity) will be resolved - Where the data or a publishable portion of them will be made available after the end of the project - If the project does not collect or produce any data fully or partially suitable for reuse, justify why the data cannot be made available even partially. The DMP thus details the types of data and research outputs to be made available, and how the data will be managed in line with FAIR principles. The DMP must also detail software to be used, curation and storage methods, and estimated costs.
8. **Copy of doctoral certificate** Applicants should upload a copy of their doctoral certificate. If the original degree certificate is not written in English, Finnish or Swedish an official translation in English must also be submitted. In cases where the PhD has been successfully completed but the degree certificate has not yet been issued, applicants should provide confirmation from the university where the PhD was undertaken that the PhD has been successfully completed and that no additional work is required. Please note that by the time the employment contract is signed, the doctoral certificate must be delivered to UTU.

4.5 Submission

Applications must be submitted via University of Turku's electronic application form (see [Instructions for submitting a job application via the eRekry system](#)). Please doublecheck that you have attached all the required attachments. You can refer to Appendix 1 to assist you in this. Applicants will receive confirmation on the submission of an application.

[Link to the application form](#)

Please note that once the application has been submitted the applicant can continue to make further adjustments to the application *up until the end of application period*. We strongly recommended that the application is completed as early as possible.

The application deadline is 31 January 2024 at 16.00 (UTC +2/Helsinki). Processing of applications starts immediately after the end of the application period and therefore late applications i.e. applications sent after the application deadline or changes made to applications after the application deadline will not be considered.

Incomplete applications will not be processed. Applicants who have any questions should contact SYS-LIFE as soon as possible via sysliffe@utu.fi and at least one week prior to submitting their applications.

5. Evaluation and selection process

5.1 Stages and personnel involved

Evaluation and selection process is comprised of following stages:

Stage	Personnel involved
Eligibility check	Director mandated by Selection Committee (SC)
Distribution of applications for evaluation	SC selects 3 external reviewers for each eligible application
External evaluation	External reviewers
Ethical issues check	Chair of one of 3 Ethics Committees that oversee research at UTU
Ranking and final decisions	SC
Appeals	The Redress Committee (RC), which considers and rules on appeals and complaints by applicants, will comprise of 1 internal expert, and 1 external expert.

SYS-LIFE's Selection Committee (SC) will include the SYS-LIFE Board of Management², an external, international Chair, a Vice-Chair, and a representative from outside academia. As a result, the SC will possess the necessary collective expertise to assess SYS-LIFE candidates.

The SYS-LIFE Selection Committee makes final decisions on the successful applications, relying upon the scores and evaluations of external reviewers

5.2 Eligibility check

The eligibility check for all applications will start after the call has closed. Incomplete and ineligible applications will be discarded at this stage. All applicants will get feedback on their eligibility by email: non-eligible applicants will be notified of the results of the eligibility check and reason(s) for ineligibility, while eligible applicants will receive confirmation that they have passed the eligibility check.

All mandatory eligibility criteria are described in part 3.1 of this Guide for Applicants (Eligibility criteria). In sum the eligibility criteria are that:

- ✓ Appointees be within eight years of having received their PhD³
- ✓ Appointees must meet the [MSCA mobility rule](#)
- ✓ All relevant documentation (see 4.4) must be submitted on time

Failure to complete the online form, use the mandatory templates (Letter of Support, Ethics Self-Assessment Form), and upload required files in the correct format (8) by the call deadline will result

² SYS-LIFE's Board of Management will include representatives from UTU's faculties of Science, Technology and Medicine and from UTU's independent units.

³ Only for special reasons, such as maternity, paternity or parental leave, military service or non-military service, or a long illness may more than eight years have passed since the successful completion of the degree. Applicants who wish to plead special reasons should highlight this in their curriculum vitae.

in the application being deemed ineligible. Excess pages will be disregarded. No more than one application per candidate will be considered.

5.3 External Evaluation & Ethical Issues Check

Applications meeting all the eligibility requirements of the SYS-LIFE programme will be sent for external review. In order to ensure international excellence, the majority of reviewers are based outside of Finland. In reviewer selection, SYS-LIFE aims to maintain a gender and geographical balance. Guidance concerning UTU regulations and the EU principles of best practice and equality in recruitment (Charter and Code) will be provided to all those involved in the selection and evaluation process. All those involved in the selection process must also declare any conflict(s) of interest with regard to particular applications. In accordance with UTU policy, these are defined as follows:

- Close collaboration with the applicant (e.g. co-authorship and/or publishing of an article with the applicant over the past 3 years; involvement in the preparation of the application and/or in the exploitation of research results).
- Occupies or has occupied the position of the applicant's superior, subordinate or instructor.
- Concurrent application for the same post as the applicant.
- Close association with the applicant (e.g. spouse, child, sibling, formally or otherwise, or close friend).

5.3.1 Evaluation criteria & scoring

The key evaluation criterion is academic quality. Reviewers are asked to rank, from 1–6 (1 = Poor, 2 = Satisfactory, 3 = Good, 4 = Very good, 5 = Excellent, 6 = Outstanding), the following 4 criteria:

1. Excellence of applicant

- Quality of applicant at international level, in relation to their career stage and research plan

2. Scientific excellence of research project

- Quality and credibility of research project
- Potential of the applicant to reach or re-enforce professional maturity/independence during the fellowship
- Quality and relevance of proposed partners, supervisors and working groups (including any secondments)
- Quality and appropriateness of any planned research, training and knowledge exchange activities outside UTU

3. Impact

- Potential of the plan to result in significant new scientific breakthroughs
- Potential of the plan to enhance the applicant's future career prospects
- Quality of the proposed measures to exploit and disseminate the project results
- Quality of the proposed publication and output plan to communicate the project activities to different target audiences, both within and outside academia

4. Implementation

- Methodological framework, coherence and effectiveness of the work plan
- Appropriateness of the allocation of tasks and resources
- Appropriateness of the management structure and procedures, including risk management
- Appropriateness of the institutional infrastructure and relevance of the secondment in terms of complementarity
- Feasibility of completion within the 36-month duration of the fellowship

The reviewers are asked also to provide short comments (max. 200 words) to the 4 criteria mentioned above. In addition, they will provide an assessment of the strengths and weaknesses of the research proposal as a whole, giving this an overall score. With 5 scores out of 6 points available, the overall score available from each reviewer is therefore out of 30.

Reviewers also comment on any ethical issues around the proposed research, including comments on the Data Management Plan, although these sections do not receive a grade. Instructions for SYS-LIFE reviewers are available for reference at SYS-LIFE webpage www.syslife.fi/application.

All eligible applicants will be sent copies of their external reviews.

5.3.2 Ethical issues check

Applications with declared ethical issues, or deemed by reviewers to contain these (e.g. evidence of bias, maleficence, lack of informed consent or insufficient protection of personal data), which also receive a review score high enough to merit consideration for selection or reserve listing, will be evaluated by the chair of the most relevant of the ethics committees that oversee research at UTU. The chair will consider whether the applicant has addressed ethical questions adequately, following UTU's ethics policy. For each review, a short report detailing the chair's decision to provide ethics clearance or not will be prepared. This will be added to the application by SYS-LIFE.

5.3.3 Ranking production, tie-situations, reserve list system

To produce an initial ranking, the SYS-LIFE SC considers the 3 overall scores (out of 30) provided to each application by its reviewers, the maximum cumulative score being 90.

Where 2 proposals are tied, a final ranking decision is made by inspecting the individual scores and statements of each reviewer. Ranking of tied proposals is at the discretion of the SC and may reflect factors such as equal opportunities and career stage.

Based on scoring and comments by reviewers, and observing any ethics committee decisions, the SC compiles an ordered ranking of reviewed applications, divided into three categories:

- (i) Main List: the highest-ranked applicants are selected for funding
- (ii) Reserve List: the applicants ranked immediately below those selected
- (iii) Not Selected: the remaining reviewed applications.

5.4 Appeals & Redress

Prior to the official publication of results, candidates who have not been selected will be informed of the decision on their application by email. In line with MSCA policies, applicants may appeal on the basis of procedural errors only. Appeals or complaints must be made in writing (maximum 2 pages, A4), and should be sent to the SYS-LIFE Redress Committee (RC) by email (redress-syslife@utu.fi) no later than one week after notification of the refusal to the eligibility status/ranking

decision is issued by email. The communication should have as subject “Redress SYS-LIFE [Applicant Surname] [Applicant Firstname]” and clearly state the reason(s) for the appeal.

The RC will convene to discuss any appeal(s), conduct any enquiries necessary, consulting both with the UTU unit that has rejected the request for a letter and with other experts as it deems necessary, and provide its decision(s) to the Selection Committee (SC), recommending an appropriate course of action, with the candidate(s) notified immediately. If the RC decides that the appeal is justified, the applicant will be offered a letter of support/the opportunity to have their proposal re-evaluated. Applicants will have one week to respond. In consultation with the SYS-LIFE Selection Committee (SC) new reviews and/or ethics reviews will be arranged as necessary and completed within two weeks, at the end of which the SC will meet to re-rank the applicants, if justified by the new scores and/or comments. RC will immediately notify appealing applicants, if not selected, of their decision. If re-ranking affects the selection of another applicant, they will be advised that they have not been selected. Should they too choose to appeal, the RC will process this within an identical 4-week timeframe. Selected applicants will be notified once all other applicants have been notified of their result.

Decisions of the RC are binding. Complaints concerning any UTU activity or employee can also be submitted to UTU’s main offices, in line with its standard procedure.

5.5 Results of the call

The successful candidates will be informed directly by email with an offer of the position. If the offer is declined or ignored for three weeks, positions will be offered instead to the top ranked applicant on the reserve list.

For transparency purposes, the names and project titles of selected Fellows are published on the SYS-LIFE website and the website of the University of Turku, following confirmation that successful candidates have accepted the positions offered to them.

6. Call and selection schedule

Tentative Schedule, subject to change. Follow the www.syslife.fi website for possible changes and clarifications.

Phase	Time	Notification of applicants
1 st call open	5 December 2023–31 January 2024	Applicants receive confirmation of the application submission.
Eligibility check	one week after call deadline	8 February 2024
Evaluation & Selection process	February–April 2024	-
Results	May 2024	May–June 2024
Start of the fellowship	September 2024	

The processing of applicants’ documentation by UTU will comply fully with all relevant legislation. Application and review documents are treated as confidential and stored on a secure server with access limited to authorised personnel. It is anticipated that final decisions about successful applicants will be made in May 2024, with final results appearing on the programme website in June 2024.

7. Further information and contacts

For more information on the SYS-LIFE programme please see the programme website

www.syslife.fi.

Applicants will receive updates about the status of their application at each stage, with advice on the appeals process. Upon submission, UTU online submission system will automatically email applicants to confirm receipt of application. SYS-LIFE will email applicants to confirm if they have passed the eligibility check, noting any reason(s) for ineligibility. We will also email all reviewed applicants to notify them of whether they have been selected or not, sending them anonymised copies of their external reviews, a request for feedback concerning the selection process and details of the process for appeals or complaints.

An information session for applicants will be held online on Tuesday 12 December 2023 between 14.00 and 15.30 (UTC +2/Helsinki). The SYS-LIFE staff will introduce the Call, explain the applications and reviews process and answer questions. A recording/Powerpoint slides of this will be placed online. [Please sign up to the information session in order to get the online meeting link.](#)

All further questions about the SYS-LIFE programme may also be addressed to syslife@utu.fi. We encourage applicants who have any questions about this call to contact SYS-LIFE as soon as possible and at least one week prior to submitting their applications.

7.1 SYS-LIFE staff

Director prof. Markus Juonala

Vice-Director Georges Kazan

Project Management Eeva Rainio

Anni Wärrri, Project Manager

Sanni Helander, Coordinator (application process)

Appendix 1: Eligibility checklist

Applicants may use the following checklist of obligatory requirements and documents before submitting their application.

Requirements

- PhD
Doctoral degree by the call deadline, awarded no longer than 8 years prior to the call deadline (excluding any career breaks, such as parental leave or national service, that are declared in the CV)
- MSCA Mobility Rule
Applicants must not have resided or carried out their main activity (work, studies, etc.) in Finland for more than 12 months in the 36 months immediately before the call deadline.
- Research aims to improve cardiometabolic and/or brain health.
- Research topic situated either within UTU's faculties of Science, Technology or Medicine, and engage with the core research expertise of UTU.
- Compliance with UTU policies (including those on research ethics) and with local law.
- Full-time dedication (1,612 hours/year) to research and training activities, unless duly justified.
- Max. permitted duration of research/training away from UTU 12 months.
- Adherence to the principles of Open Science, provision of immediate Open Access to all peer-reviewed scientific publications of research and ensuring all research data is managed responsibly, in line with FAIR principles.

Documents

- Submitted online application
- Curriculum Vitae
- Research Plan Abstract (Cover Letter)
- List of publications
- Research Plan
- Copy of Doctoral Certificate
- Letter of Support
- Ethics Self-Assessment form
- Initial Data Management Plan

Appendix 2: Mobility track

This table serves to demonstrate the compliance with MSCA Mobility rule. It can be used for the period of 36 months immediately prior to the application deadline.

Position	Institution	Country	Start date/ end date	Duration (months)

Appendix 3: List of example SYS-LIFE research topics and contact persons

Research topic	Contact person(s)
Cardiology	
Novel research on atrial fibrillation – CAREFIB	Tuomas Kiviniemi
Advanced imaging in coronary artery disease	Juhani Knuuti – Antti Saraste
Molecular imaging in heart disease	Juhani Knuuti – Antti Saraste
Quantitative perfusion imaging with total-body PET	Juhani Knuuti – Antti Saraste
Cell Signaling	
Druggability of neurological disease associated cell signalling	Michael Courtney
Exploring the role of SHANK3 in the vasculature and the development of vascular anomalies	Johanna Ivaska
Single-cell immunogenomics	Tapio Lönnberg
Innovations in Diagnostics	
Development of novel PET radiotracers for immunoPET imaging of heart and brain	Anu Airaksinen
Ultrasensitive immunoassays for neurological biomarkers	Tero Soukka
In vitro diagnostic tests for cardiac biomarkers	Saara Wittfooth
Digital Health Technology	
AI driven multimodal point-of-care diagnostics for early detection of CVDs	Matti Kaisti
Novel non-invasive heart monitoring	Tero Koivisto
Internet of things monitoring of health in pregnancy	Pasi Liljeberg
Gut Microbiome	
Computational microbiome research in population cohort studies	Leo Lahti
Gut microbiome and cardiometabolic health	Teemu Niiranen
Metabolism	
Sex specific neurodegenerative effects of endocrine disrupting chemicals	Céline Arzel
Systems medicine and Neurometabolomics groups	Alex Dickens – Matej Oresic
Studies on sedentary behavior, physical (in)activity and exercise at the Turku PET Centre	Ilkka Heinonen
Metabolic regulation of lipid homeostasis: Protection of whole-body adiposity by inhibiting HSD17B12	Matti Poutanen
Human brown adipose tissue - a mediator of cardiometabolic health	Kirsi Virtanen
Sleep apnea caused multiorgan functional changes: unraveling the mechanisms by PET imaging	Xiang-Guo Li
Neuroscience	
Neuroinflammation	Laura Airas

Brain and whole-body insulin resistance in mild cognitive impairment and Alzheimer's disease	Laura Ekblad
Cutting edge clinical neuroscience	Juho Joutsa
PIPARI Project	Liisa Lehtonen
Human Emotion Systems Laboratory	Lauri Nummenmaa
Nutrition	
Metabolic consequences of nutrition and lifestyle	Kati Hanhineva
Early nutrition and health research	Kirsi Laitinen
Oral Health	
Oral cavity and cardiometabolic health	Ulvi Gürsoy
Population Health Research	
Gut microbiota and health across life-span	Linnea Karlsson – Katja Pahkala
Cardiometabolic health and its determinants across life-span	Linnea Karlsson – Katja Pahkala
Cognition and brain health across life-span	Linnea Karlsson – Katja Pahkala
Intergenerational epigenetics	Linnea Karlsson – Katja Pahkala

Appendix 4: UTU Faculties, departments and units, major partners and strategic theme areas

Faculties	Departments	Units
Faculty of Education	Department of Education	Centre for Research on Lifelong Learning and Education CELE Centre for Research on Learning and Instruction (CERLI) Turku Teacher Training School Rauma Teacher Training School
	Department of Teacher Education	
Faculty of Humanities	School of History, Culture and Arts Studies	
	School of Languages and Translation Studies	
Faculty of Law		
Faculty of Medicine	Institute of Biomedicine	Central Animal Laboratory Functional Foods Forum MediCity Research Laboratory Research Centre of Applied and Preventive Cardiovascular Medicine
	Department of Clinical Medicine	
	Institute of Dentistry	
	Department of Nursing Science	
Faculty of Science	Department of Biology	Biodiversity Unit of the University of Turku The Centre for Learning Analytics
	Department of Physics and Astronomy	
	Department of Chemistry	
	Department of Geography and Geology	
	Department of Mathematics and Statistics	
Faculty of Social Sciences	Department of Psychology and Speech-Language Pathology	Multiprofessional Teaching Clinic KiVa Antibullying Program Centre for Learning Research Turku Brain and Mind Center
	Department of Philosophy, Contemporary History and Political Science	
	Department of Social Research	Centre for East Asian Studies CEAS The Finnish Centre for Democracy Research (FinDem) Centre for Parliamentary Studies The John Morton Center for North American Studies Turku Center for Welfare Research
	INVEST Research Flagship Centre	
Faculty of Technology	Department of Computing	
	Department of Life Technologies	
	Department of Mechanical and Materials Engineering	
Turku School of Economics	Department of Management and Entrepreneurship	Turku Centre for Labour Studies TCLS Pan-European Institute Finland Futures Research Centre
	Department of Accounting and Finance	

	Department of Marketing and International Business	TSE Pori
	Department of Economics	Centre for Collaborative Research CCR
		TSE exe
<i>Strategic Partnerships of the University of Turku</i>		
Bayer		
Meyer Turku		
Turku City		
Wärtsilä		
<i>Strategic theme areas</i>		
Biodiversity and sustainability		
Future technologies and digital society		
Cultural memory and social change		
Children, young people and learning		
Health, diagnostics and drug development		
Sea and maritime studies		