# The national board of Science for Life Laboratory

# Minutes from board meeting no 72, May 28, 2024

### Present members

Ylva Engström (SU, chair), Martin Bergö (KI,), Henrik Cederquist (SU), Mats Larhed (UU), Jonas Larsson (LU), Mikael Lindström (KTH), Carina Mallard (GU), Katrine Riklund (UmU), Christoph Varenhorst (AstraZeneca)

### Other participants

Olli Kallioniemi (Director), Mia Phillipson (Co-Director), Annika J Jensen (Infrastructure Director, §§ 7-8), Jenny Alfredsson (Head of Operations/OO), Jan Ellenberg, Sandra Falck (Vice Head of Operations/OO), Anna Frejd (OO, § 15), Disa Hammarlöf (OO, §§ 5, 12-13), Kerstin Jacobsson (University Director KTH, § 16), Lars Johansson (OO, §§ 1-9, 11-19), Åsa Johansson (§ 14), Anna Lidin (OO, §§ 1-9), Heidi T Persson (OO, § 10), Johan Rung (§ 6), Andreas Muranyi Scheutz, Mojgan Seraji (OO, § 10), Ulrika Wallenquist (OO, § 10), Anna Höglund Rehn (OO, secretary)

## 1. Meeting formalities

Ylva Engström welcomed all members, especially Jan Ellenberg as incoming Director for SciLifeLab, and opened the meeting.

Decisions:
*The SciLifeLab board appointed Mats Larhed to approve the minutes of the meeting in addition to the chair.*

*The SciLifeLab board approved the minutes from meeting no. 71, April 19, 2024.*

*The SciLifeLab board approved the agenda after including item no. 19a Update on Campus Solna Beta building.*

Item 14 was handled after item 15, and item 19a was handled after item 14.

## 2. Update by Director

Olli Kallioniemi gave a reflection of the evolution of SciLifeLab during his years as Director and presented a quarterly update from SciLifeLab.

## 3. Financial update

Jenny Alfredsson presented a brief financial overview of the different sources of funding to SciLifeLab and the outcome for the first four months of 2024 in relation to

the agreed budget for 2024, including a year-end forecast of national surplus at KTH and UU.

## 4. SciLifeLab Budget 2025 – process and considerations
VC-2024-0031

The SciLifeLab national budget is divided into three parts: Platforms, SciLifeLab initiatives and National Operating costs, and these define what is planned for each year. 2024 was the last year of the current 4-year Infrastructure cycle as well as the last year of funding from the present Research Bill. The 'Forskningspolitiska propositionen 2024' is presented later this year and the accompanying 'regleringsbrev' where the funding to SciLifeLab becomes clear.
Several assumptions regarding the funding for 2025 will have to be made in order to compile the budget for platforms, SciLifeLab initiatives and the national operating costs.

The aim is that SciLifeLab Infrastructure budget for 2025 will be presented at the November board meeting for a decision, alternatively the final decision will have to be made at an extra meeting in December or even in the beginning of 2025.

Jenny Alfredsson presented the framework based on the main assumptions and with the information at hand.

## 5. Report from the International Advisory Board, IAB, and response on the report
VC-2022-0070

The International Advisory Board (IAB) typically visits SciLifeLab every other year and the latest visit took place in Uppsala February 7-9, 2024.

The final report from the IAB was received at the end of April and six major recommendations were made.

Olli Kallioniemi informed about the IAB recommendations and about an initial response document to be sent to the IAB. With the leadership change taking place, it should be the new director who is in charge of executing a detailed response to the IAB comments. This is to be discussed and processed in the board meeting in the fall of 2024.

Decision:
*The SciLifeLab board approved to publish the IAB report on the SciLifeLab web site, along with short comments to the major points raised by the IAB.*

## 6. Data Centre – compute and storage resources for SciLifeLab infrastructure and research

The recent international evaluations (IAB and IEC) have highlighted the requirements to strengthen data and IT strategies at SciLifeLab. In particular, access to compute and storage infrastructure at the national level was raised as important to address.

Johan Rung, head of Data Centre, presented some background and discussion points and informed about activities planned by the Data Centre regarding needs assessments and further efforts.

## 7. Reflections from the Infrastructure International Evaluation Committee, IEC, meeting and next steps

VC-2023-0033

The IEC panel meeting took place in Uppsala April 16-18, 2024, and the evaluation report from IEC was received in Mid-May. Evaluations have also been sent in by the universities, the National SciLifeLab Committee and Scientific Leads of the SciLifeLab capabilities.

Annika J Jensen gave an overview of the evaluation material and presented the suggested next steps.

## 8. Steering documents for the infrastructure organization from 2025

The document *SciLifeLab Infrastructure - General Terms and Conditions for funding* aims to clarify the conditions and expectations linked to the appointment of Platforms and Units as part of the SciLifeLab infrastructure, the criteria for services provided, funding issues, governance, organizational structure, and other operational principles and policies.

For the next funding period the General Terms and Conditions document should be revised, and a suggestion is to supplement the document with rules of procedure (arbetsordning) for the infrastructure. Annika J Jensen presented the suggestion.

The steering documents for the infrastructure organization will be up for discussion at the board meeting in September and for decision in November.

## 9. Processes to prolong/announce assignments as capability leads and training hub leads

VC-2024-0031, VC-2024-0032

SciLifeLab currently has three strategic thematic focus areas, or capabilities: Planetary Biology, Precision Medicine, and Pandemic Laboratory Preparedness. Leads for the capabilities were assigned or prolonged by the board at meetings no. 59 and no. 64 for

a period until December 31, 2024.

In January 2023 SciLifeLab launched its lifelong learning initiative, the SciLifeLab National Training Hub and the Director for SciLifeLab assigned a lead for the Training Hub (focusing both on national courses and training and DDLS training program). The scope being to provide training support, tools and resources to the life science community and to establish SciLifeLab as the one-stop-shop to technology and data-driven life science training.

The funding for the next 4-year Infrastructure cycle is dependent on the 'Forskningspolitiska propositionen 2024', which is presented later this year and where the accompanying 'regleringsbrev' clarifies the funding to SciLifeLab. The allocated funding to the SciLifeLab initiatives, which encompasses the funding to the capabilities and the Training Hub, will need to be discussed further before any long-term decisions regarding these can be made. There are important strategic discussions coupled to these that need to be held first. New decisions regarding the capability leads, and coordinators will be taken once the SciLifeLab strategy regarding the future of these initiatives has been decided.

The Training Hub is a joint assignment with the DDLS program which funds half of the Training Hub. For 2025 the allocated sum from the DDLS program to the Training hub has already been approved. Additions to the Training Hub can be decided later if needed.

Decision:
*The SciLifeLab board decided to enable prolongation of the assignments of the scientific leads and coordinator roles for the capabilities, but not co-lead(s), for a period of 3 months at half the effort as of 2024, in order to allow for a phase-down of the current capabilities should this be decided.*

*The SciLifeLab board decided to fund the Training Hub from the national SciLifeLab budget 2025 with matching funding as the allocated sum from the DDLS program.*

## 10. DDLS

## 10a. Update from the DDLS Program Director

Olli Kallioniemi gave an update regarding the DDLS program.

## 10b. DDLS arbetsordning (rules of procedure)
VC-2024-0033

There is a need to formally describe the rules of procedure (arbetsordning) for the DDLS program in addition to the DDLS governance and organizational description initially approved by the SciLifeLab board when the DDLS program started. As the

program has developed and expanded, it is important to clarify the organization, mandates, tasks, and support for the DDLS program.

Decision:
*The SciLifeLab board approved the Arbetsordning for SciLifeLab & Wallenberg National Program for Data-Driven Life Science (DDLS), after some linguistic polishing.*

## 10c. Joint WASP DDLS call for NESTs

VC-2024-0034

In the donation letter regarding DDLS from the Knut and Alice Wallenberg foundation (KAW), funds have been allocated for collaboration with another KAW financed research program, Wallenberg AI, Autonomous Systems and Software Program (WASP). The goal is to form multi-disciplinary collaborations and to bridge the gap between life science and data science communities.

A new joint call is suggested to open, inspired by the WASP effort NEST (Novelty, Excellence, Synergy, and Team), multidisciplinary world-leading research environments and networks within AI, Autonomous Systems, and Software. The call for joint WASP and DDLS NESTs, aims at projects that span across the thematic profiles of DDLS and WASP.

Decision:
*The SciLifeLab board approved the process and the call text for the joint WASP and DDLS call for NESTs and delegated to the DDLS program director to finalize any remaining issues with the call text and execute the call together with WASP.*

## 10d. Joint WASP-HS DDLS call

VC-2024-0035

In the donation letter regarding DDLS from the Knut and Alice Wallenberg foundation (KAW), funds have been allocated for collaboration with another KAW financed research program, Wallenberg AI, Autonomous Systems and Software Program – Humanities and Society (WASP-HS). The goal is to form multi-disciplinary collaborations and to bridge the gap between the different research communities.

A new joint call is suggested to open, *Research initiation grants for data-driven life sciences and society*. This call aims to provide funding for research investigating the human and social challenges of data-driven strategies developed and applied within the life sciences.

Decision:
*The SciLifeLab board approved the process and the call text for the WASP-HS and*

*DDLS joint call and delegated to the DDLS program director to finalize any remaining issues with the call text and to execute the call process and evaluation.*

## 10e. Appointment of members in the DDLS Advisory Committee, DAC
VC-2024-0036

There is a need to form an advisory committee with the assignments to act as an advisory committee to the DDLS program director and to the DDLS Steering Group and to evaluate calls for research projects and for supervisors of PhD students and postdocs for DDLS as well as other DDLS grant calls.

Decision:
*The SciLifeLab board approved the appointment of members of the DDLS Advisory Committee:*

*Toni Gabaldon, Institute for Research in Biomedicine, ES*
*Alexander Schönhuth, Universität Bielefeld, DE*
*Lara Urban, Helmholtz Munich, DE*
*Jaume Bacardit, Newcastle University, UK*
*Alexandros Stamatakis, Karlsruhe Institute of Technology, DE*
*Francesca Ciccarelli, King´s College London, UK*
*Julio Saez-Rodriguez, Universität Heidelberg, DE*
*Tero Aittokallio, Oslo University Hospital, NO*
*Sofia Kirke Forslund, Max Delbrück Center, DE*
*Anthony Mathelier, University of Oslo, NO*
*Matti Nykter, Tampere University, FI*
*María Rodríguez Martínez, Yale School of Medicine, USA*

*The task is an initial one-year assignment starting January 2024. This assignment can be extended for up to 3 years and is contingent on KAW continuing to fund the DDLS program. The advisors will be compensated with an annual honorarium of 2500 EUR each, assuming they take part in the grant evaluations.*

## 10f. Terms and conditions for DDLS academic PhD students
VC-2024-0037

The first DDLS PhD student positions will, according to the donation letter, start in Phase II, which then also is the start of the DDLS Research School (RS). The first year of the RS, 27 doctoral students will be recruited and 28 the following year. The agreement stipulates the specific conditions for funding for the DDLS PhD supervisors during Phase II of the program.

Decision:
*The SciLifeLab board approved the Terms and Conditions for funding of the DDLS academic PhD students in the Research School and delegated to the DDLS program director in agreement with the DDLS Research School directors to finalize any remaining minor adjustments.*

## 11. Assignment as chair in the SciLifeLab International Advisory Board, IAB

VC-2024-0038

According to the "Arbetsordning för SciLifeLab" (2022) the SciLifeLab board appoints members in the International Advisory Board, IAB. The main task for the IAB is to give input regarding the development of SciLifeLab.

At meeting no. 63, April 12, 2023, the board assigned members of the IAB for a period until December 31, 2026, and Jan Ellenberg was assigned as chair. Jan Ellenberg did not take part in the IAB meeting in February 2024, and the IAB member Søren Brunak stepped in as IAB chair for the meeting.

As Jan Ellenberg has now been appointed as Director for SciLifeLab, a new chair for the IAB needs to be assigned. Søren Brunak, University of Copenhagen, is suggested as chair and he has agreed to be nominated for this position.

Decision:
*The board assigned Søren Brunak as chair for the SciLifeLab International Advisory Board for the period from 2024-05-28 until 2026-12-31.*

## 12. The SciLifeLab Fellow Introduction and Integration process

VC-2024-0039

A project was initiated in March 2024, with the aim to review and revise the 2018 SciLifeLab Fellow Agreement "Överenskommelse om anställning av SciLifeLab Fellow (namn) mellan SciLifeLab och institutionen för (namn)", signed for each SciLifeLab Fellow.

The document delineates the framework of the SciLifeLab Fellow program, funding, and position specific details (that may vary between the universities) and clarifies the responsibilities of each party involved.

Decision:
*The SciLifeLab board approved the SciLifeLab Fellows Program document (appendix 1).*

*The document should be used for SciLifeLab Fellows starting from June 1, 2024.*

## 13. SciLifeLab Group Leaders – new process

VC-2023-0066

In 2019, the SciLifeLab Board defined the national SciLifeLab Group Leader role to streamline community profiling across Sweden's scientific landscape. With now over 300 SciLifeLab Group Leaders across Sweden, the criteria for selection needed clarification.

The SciLifeLab Board had tasked the Management Group, in collaboration with SciLifeLab committees and Site Directors/committees, with executing the new process for SciLifeLab Group Leader nominations and evaluations in 2024, taking into account any additional recommendations from the International Advisory Board and the new SciLifeLab Director.

Following any additional comments from the new SciLifeLab Director, the SciLifeLab Group Leader Principles and Guidelines document will be approved at the Board meeting in September. Subsequently, the call for nominations of SciLifeLab Group Leaders will commence at the end of September, inviting both existing Group Leaders and new nominees to submit their applications.

Decision:
*The SciLifeLab board approved the report as basis for a SciLifeLab Group Leader Principles and Guidelines document.*

## 14. Grants for Clinical Technology Development Projects - funding

VC-2024-0014

At meeting no 68, on February 13, 2024, the board approved the suggestion from the SciLifeLab capabilities for Precision Medicine (PM) and Pandemic Laboratory Preparedness (PLP) to launch a joint call for Clinical Technology Development Projects. The call should support adaptation of technologies at the SciLifeLab infrastructure and PLP units for well-defined clinical applications. Projects were expected to advance diagnostics, treatment, or follow-up and to have a specified timeline for clinical implementation.

The total budget for the call is 4.2 MSEK.

Åsa Johansson, Scientific Lead of Precision Medicine, informed about the call process, evaluation, and suggested funding.

Decision:
*The SciLifeLab board approved to fund 10 proposals for Clinical Technology Development Projects, with a total of 4.2 MSEK according to the PM and PLP budgets.*

| Proposal title | Submitter | Affiliation | Bioinformatic support (h) | Amount applied for (kSEK) | Suggested funding (kSEK) |
|---|---|---|---|---|---|
| Innovative Biomarker Assay for PD and Atypical Parkinsonism Using MALDI-MSI Technology | Anna M Nilsson | UU | | 500 | 500 |
| CRISPR-based diagnostics for AML hotspot mutations | Bernhard Schmierer | KI | | 500 | 500 |
| A multi-virus assay on dried blood spots (DBS): a powerful tool for enhanced screening and prevention of hepatitis. | Claudia Fredolini | KTH | | 500 | 400 |
| 3D pathology with diagnostic AI support | Hans Blom | KTH | | 450 | 450 |
| Rapid diagnostic metagenomic sequencing | Tobias Allander | KI | | 400 | 300 |
| From cytogenetics to cytogenomics: Implementing high-fidelity long-read-based genome sequencing in clinical routine to provide comprehensive characterization of complex cancer genomes. | Robert Månsson Welinder | KTH | 100 hours | 500 | 500 |
| Absolute quantification of HER2 using mass spectrometry to guide anti-HER2-low therapy in breast cancer | Maria Pernemalm | KI | 100 hours | 500 | 500 |
| Evaluation of a novel rapid diagnostic platform for infectious diseases | Mikael Åberg | UU | | 500 | 300 |
| Nanopore sequencing for methylation-based diagnosis of brain tumors | Malgorzata Lysiak | LiU | | 500 | 400 |
| Shotgun metagenomic sequencing in clinical diagnostics for rapid sepsis diagnosis | Bianca Stenmark | ÖrU | | 500 | 350 |

*The funding is regulated via Conditions for funding.*

## 15. SciLifeLab Strategy (Roadmap)

VC-2023-0054

SciLifeLab has developed substantially since the launch of the Roadmap in 2019 and there have been major changes in the life science community and society. To stay relevant and aligned with the scientific community's and research infrastructures' goals and objectives, the strategy document needs to be revised. The aim of the revision is to reflect emerging research and infrastructure developments globally; organizational changes (e.g. SciLifeLab sites); and the new challenges. The goal is to increase clarity about SciLifeLab's strategic orientation and to prioritize strategic actions.

At meeting no. 65 on September 26, 2023, the board approved the suggested outline and strategic objectives for the revision of the Roadmap.

Olli Kallioniemi informed about steps taken since the meeting and suggested a process forward.

Decision:
*The SciLifeLab board approved the presented SciLifeLab Strategy document and approved that it can be made publicly available (appendix 2).*

## 16. Organisationsutredning verksamhetsstödet SciLifeLab/KTH – next steps

VC-2023-0042

In August 2023 an investigation was commissioned into the operational support for SciLifeLab within the KTH University Administration. The goal of the project was to develop a proposal on how the support services within KTH should be organized to be

able to support SciLifeLab on a national level (and then in close collaboration with Uppsala University), for the part of the support services that support the local activities at Campus Solna, as well as to develop proposals for the work and delegation of authority for the support services for the board of SciLifeLab and the director of SciLifeLab.

The investigator's final report was submitted in March 2024. The report presents considerations and proposals for areas of development, the rules of procedure and delegation of authority for the support services at KTH, and changes in the current governing documents.

Jenny Alfredsson presented the report’s considerations and proposals and some suggestions.

Discussion will continue at the next board meeting.

## 17. Legal prerequisites for SciLifeLab collaborations with externa actors

SciLifeLab is a collaboration between universities and does not have a legal status as an organizational unit. Hence, SciLifeLab cannot enter into agreements with a third party. Also, processing legal agreements between the universities has been cumbersome and slow. To address this, a lawyer group (Samrådsfora för juridik, fyrpartsöverenskommelsen punkt 11.5) was established with the task to look at current possibilities and potential processes for SciLifeLab partnering ability.

The SciLifeLab lawyer group has provided a report describing different alternatives for partnering ability.

Sandra Falck presented the report, ongoing discussions between the founding universities and the ongoing progression towards faster and better handling of legal matters.

## 18. Mandate periods for SciLifeLab board members

In section 4 of the Ordinance on the Science for Life Laboratory it is stated how members of the SciLifeLab board are appointed. The board was informed about the upcoming appointments.

## 19. Other issues

## 19a. Campus Solna Beta building – next steps

Mats Larhed raised a question on what had happened regarding the Campus Solna Beta Building since the board meeting in April.

Jenny Alfredsson gave an update on what has happened and on the next steps to be taken.

## 20. Closure of the meeting

Ylva Engström thanked Olli Kallioniemi for all his work during his period as Director for SciLifeLab and closed the meeting.

## Upcoming meetings

- Tuesday September 17, 2024, 8.30-12.00 via Zoom
- Thursday November 7, 2024, 10.00-17.00 in Solna

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Anna Höglund Rehn, secretary

Minutes approved by:

_____ _____
Ylva Engström Mats Larhed

# The SciLifeLab Fellows Program

## Purpose of this document

This document outlines the framework for the SciLifeLab Fellows Program with specific conditions for each position as specified in the Appendix. The program is enabled by the funding for the Strategic Research Area for Molecular Life Sciences (Strategiskt forskningsområde inom molekylär biovetenskap; SFO). The funds are distributed to and administered by each of the four participating universities. The framework is the same for all SciLifeLab Fellows, although some aspects, such as the length of the employment and funding level, may vary between the universities. All matters related to the employment of the individual Fellow are regulated by the Higher Education Ordinance (SFS 1993:100) and any local agreements at the host university. An *Integration & Introduction document for the SciLifeLab Fellows program*[1] has been developed to support the management thereof, including recruitment, follow-up and exit processes. This is a reference guide for all involved stakeholders and builds on university decisions and agreements.

Although this document has a non-binding status, abiding to the framework is important for the success of the program and for the SciLifeLab Fellows. The parties involved are i) the hosting university hiring the Fellow, represented by the Head of Department, ii) the hosting university role who has the mandate to guarantee the SFO or equivalent central funding for the Fellow position, and iii) SciLifeLab, represented by the Head of Operations. The hiring university has the personnel and work environment responsibility of the SciLifeLab Fellow. In addition, the host university and the SciLifeLab Fellow are expected to adhere to the expectations outlined in this document.

## Purpose of the program

To further strengthen the academic environment at SciLifeLab, the four founding universities Karolinska Institutet (KI), KTH Royal Institute of Technology (KTH), Stockholm University (SU) and Uppsala University (UU) have agreed to recruit early career research group leaders to SciLifeLab (“SciLifeLab Fellows”) within the framework of the SFO funding initiative. Candidates are selected through international competition and are provided with generous financial support with the purpose to build and develop high quality technology-driven molecular life science research in Sweden.

## Expectations of the SciLifeLab Fellow

A SciLifeLab Fellow is expected to build a research group and act as its group leader. The Fellow is also expected to contribute to the SciLifeLab environment, for example by participating in joint SciLifeLab and Fellow activities, including the Program for Academic Leaders in Life Science (PALS). The Fellow is expected to actively interact with other SciLifeLab Fellows, SciLifeLab Group Leaders, researchers, and staff, and additionally, contribute by engaging with the SciLifeLab research infrastructure and local facilities. The Fellow is required to include their SciLifeLab affiliation, in

[1] https://www.scilifelab.se/wp-content/uploads/2024/03/SciLifeLab-Fellows-Introduction-Integration-Document_2024.pdf

addition to the university affiliation, in publications and at research presentations and popular science appearances. The Fellow is expected to follow the SciLifeLab Code of Conduct[2] and other relevant SciLifeLab guidelines and policies. The Fellow is welcome and encouraged to continue to be active as SciLifeLab Fellow alumni within the SciLifeLab scientific community after the program-specific funding expires.

## Funding of the fellowship

### Assistant Professor/Associate Senior Lecturer (*biträdande lektor*)

The SciLifeLab Fellow's employment is funded by the respective university's SFO funding and/or other funding, see Appendix for details. To ensure that the SciLifeLab Fellow positions are internationally competitive and strategically supported, the recommended funding level of a SciLifeLab Fellow position should be considerable and generous. The hiring university decides on the funding level. This funding can be used for all types of costs e.g. salaries, premises, instrument purchases or other expenses directly related to the field of research, as well as for department and university overhead. The position is for a maximum of 6 years, with the option to extend in cases of e.g. illness or parental leave (according to The Higher Education Ordinance (SFS 1993:100).

In the Appendix, the host university and employment specific details are defined.

## Responsibilities of the Department

The hosting Head of Department is responsible for ensuring that both a pedagogic and a scientific development plan are prepared in accordance with the guidelines of the respective university, as well as in conjunction with the employment. The Head of Department is responsible for ensuring that the SciLifeLab Fellow is given the opportunities needed to meet the eligibility requirements for promotion. The Head of Department is also responsible for ensuring that the SciLifeLab Fellow has sufficient administrative support and feels well-integrated into departmental activities and functions. It is the responsibility of the Head of Department to convey pertinent information concerning SciLifeLab Fellows active in the program to their successors.

## Responsibilities of SciLifeLab Scientific and Integration Directors

The respective university SciLifeLab Scientific and Integration Directors should, together with SciLifeLab Operations Office, coordinate with the Head of Department to help ensure that each Fellow is well-informed regarding expectations, and proactively work to facilitate their establishment, introduction, integration process and advanced professional development. These processes are detailed in the *Integration & Introduction document for the SciLifeLab Fellow program*.

## Premises

The host department and SciLifeLab have a shared responsibility for ensuring that each SciLifeLab Fellow has appropriate facilities, e.g. lab and office space. At UU, each SciLifeLab Fellow is based in premises at the hosting department. The SciLifeLab Fellows in Stockholm are based at SciLifeLab

[2] https://www.scilifelab.se/wp-content/uploads/2024/03/SciLifeLab-Code-of-Conduct–Final.pdf

Campus Solna. In this document, Campus Solna refers to the SciLifeLab premises shared by KI, KTH and SU at Tomtebodavägen 23, Solna.

### SciLifeLab Stockholm site at Campus Solna

According to previous decisions and recommendations, SciLifeLab Fellows in Stockholm are strongly encouraged to establish their activities at Campus Solna (SciLifeLab board no. 30, § 8 (180522), CSC no. 45, § 4 (231123). The Integration Director of the recruiting university is responsible for initiating a discussions with the Campus Solna Committee as early as possible regarding specific needs for premises of each new Fellow. The Campus Solna Committee, based on recommendations from the Campus Solna Director and Campus Solna Facility Manager, is responsible for ensuring that the Fellow has access to suitable laboratory and office space, as well as room to accommodate a normal sized research group, typically in an open office landscape. Fellows can apply for additional space to accommodate developing experimental needs as the group grows. Additional space is allocated by the Campus Solna Committee following recommendations by the Campus Solna Director.

No later than 15 months before the SciLifeLab fellowship ends, a discussion should be initiated between the Fellow, the Campus Solna Director, the relevant university Scientific and Integration Directors, and the hosting Head of Department regarding the continued localization of the Fellow's activities at Campus Solna. Fellows are encouraged to consider relocating to their host departments or university campus, when applicable. However, the Fellow and the hosting department may have strong reasons for the Fellow to remain at Campus Solna. Considerations regarding the most beneficial location after the fellowship period include availability of space, the Fellow's contribution to the SciLifeLab Campus Solna community, infrastructure needs (e.g. if the research depends on specialized equipment), responsibilities at the host university and/or department, etc. An agreement between all parties should be reached for the continued localization of the Fellow. The Campus Solna Committee makes the decision regarding space allocation at Campus Solna.

### SciLifeLab Uppsala site

The SciLifeLab research community and infrastructure units in Uppsala are distributed across the UU campus. However, there is a main hub for SciLifeLab in Uppsala – the Meeting place Navet at Biomedical Center, BMC. Navet offers meeting rooms, networking opportunities, and many SciLifeLab training and research events are organized and held within these premises. Although the SciLifeLab Fellows at UU are physically based in premises at their host department, the Fellows also benefit from the variety of events and opportunities at Navet, Biomedical Center, Husargatan 3, Uppsala.

## Appendix

The following information should be included as Appendix to the above document, to define host university and employment specific details.

Diarie number for host university documentation for the SciLifeLab Fellow: [Diarie number]

### Organizational University placement and management

- Name of Fellow: [Name Surname]
- Name of University: [Write here]
- Name of host Department: [Name of Department (no abbreviations)]
- Name of Head of Department: [Name Surname]
- Name of Contact person at host department (if other than Head of Department): [Name Surname]

### Start and length of the position

- Start date: [Year-Month-Day]
- Length of Fellowship position: [N years]

### Funding

- SFO funding (total amount for fellowship): [MSEK]
- Other funding (total amount for fellowship, if applicable): [MSEK]
- Funding model: [X MSEK/year Y]
- Administrative contact person for SFO funding at host university (functional email address if available): [Name Surname]

### Other relevant local conditions

Free text and references to complementary documents.

## Signatures

[Stockholm/Uppsala] [Year-Month-Day]

…….

Signature

[Name Surname]

Head of Operations

SciLifeLab

[Stockholm/Uppsala] [Year-Month-Day]

……

Signature

[Name Surname]

Head of Department

[Name of Department (no abbreviations)]

[UNIVERSITY]

[Stockholm/Uppsala] [Year-Month-Day]

…….

Signature

[Name Surname]

[Title/Role: Integration Director/Vice-Rector/equivalent]

[UNIVERSITY]

*Read and agreed by the SciLifeLab Fellow*

[Stockholm/Uppsala] [Year-Month-Day]

……..

Signature

[Name Surname]

[UNIVERSITY]

SciLifeLab

Version 2024-05-20

# SciLifeLab Strategy

## Table of Contents

# Introduction

As the national research infrastructure for molecular life sciences in Sweden, SciLifeLab has a unique opportunity and mandate to promote biology-, technology- and data-driven excellence in life science and its implementation in health care, environment, industry and other sectors of society. In 2019, following a national stakeholder hearing and with input from the life science community, SciLifeLab published a roadmap for the years 2020-2030. Many of the goals originally envisioned have either been reached or are well underway. In addition, many other unforeseen developments have taken place, such as a global pandemic and an AI revolution, and SciLifeLab's role has evolved, and the strategy needs to be revised.

In the 2024 evaluation by the SciLifeLab International Evaluation Committee, the committee remarked, "What began as a Swedish flagship project has evolved into the European benchmark for national research infrastructures in life sciences."

Since 2019, SciLifeLab has:

- launched SciLifeLab sites in Lund, Gothenburg, Linköping and Umeå, creating a stronger local presence and national connection and reach.
- launched a new model on platform-based infrastructure organization and new service units to provide timely infrastructure offerings.
- improved national coverage of the infrastructure units and an expanded user base towards different stakeholders (academia, healthcare, and industry).
- progressed in translational infrastructure on e.g. clinical genomics and proteomics as well as in drug discovery, worked on pipelines for samples and data from the health care to the infrastructure.
- repositioned the infrastructure and coordinated research, technologies and data handling during the Covid-19 pandemic.
- published on average of 1600 publications annually, including many high-profile and highly cited publications.
- recruited 24 new SciLifeLab fellows and over 20 DDLS fellows into tenure-track positions. The fellows have acquired 21 ERC grants (May 2024).
- launched the thematic area, SciLifeLab capability in Pandemic Laboratory Preparedness
- launched the thematic area, SciLifeLab capability in Planetary Biology to expand on the opportunity to study life in an environmental context.
- launched the thematic area, SciLifeLab capability in Precision Medicine to push the paradigm shift in health with new technologies and large data.
- launched the SciLifeLab & Wallenberg National Program for Data-Driven Life Science to create recruitment, training, and collaborations with a new data-driven approach to life science.
- improved life science data handling, created prerequisites for open and FAIR data sharing and initiated new national Data Science Nodes for different research areas.
- actively taken part in and coordinated EU-funded projects for efficient and sustainable use of health data on national- and European-level.
- set up a comprehensive collaboration with the European Molecular Biology (EMBL).

SciLifeLab has proved to be able to rapidly adjust when needed and is thus well positioned to contribute to lead the Swedish life science community, health care, environmental communities and industry towards technological and data opportunities that would not otherwise exist.
This document describes the overall strategy, which is to be supplemented by specific roadmap documents from the various areas of activity, such as capabilities, data handling and training.

At the 2024 meeting, the International Advisory Board (IAB) was "pleased to see that the implementation of the new SciLifeLab strategy is very well underway – first and foremost, now formally including four additional geographical sites, Gothenburg, Linköping, Lund, and Umeå, complementing the existing and founding sites in Stockholm and Uppsala. This is a major step forward that increases the competitiveness of Sweden within the life sciences and underscores the national mission of SciLifeLab."

# About SciLifeLab

SciLifeLab is a national infrastructure and collaborative community for molecular and computational life science research. It stands out internationally as a unique actor, offering an attractive platform for collaboration across Swedish universities and disciplines. This strategy aims to enhance the life science ecosystem in Sweden by maximizing its capacity.

SciLifeLab was founded in 2010 as a strategic and collaborative life science research effort in Stockholm and Uppsala between the four founding universities (KTH, KI, SU and UU), supported by strategic research funding from the government (SFO). In 2014, SciLifeLab was appointed a national research infrastructure for life science by the government, with dedicated funding to make the infrastructure accessible nation-wide. In 2020, the SciLifeLab & Wallenberg National Program for Data-Driven Life Science (DDLS) was launched. This national 12-year research program involces 11 partner organizations, collaborators nationally and internationally, the Swedish life science community, industry, healthcare, and other stakeholders in society at large, is funded by 3.1 billion SEK through a generous donation by Knut and Alice Wallenberg Foundation.

In 2024, the SciLifeLab International Advisory Board stated in their evaluation report: "The IAB was pleased to observe that SciLifeLab clearly is maturing but at the same time acquiring entirely new, national roles. The implementation and advancement of the SciLifeLab Wallenberg National Program for Data-Driven Life Science (DDLS) was another highlight in this respect. With the new developments in artificial intelligence, the competition for talent in this domain has become fierce and the IAB found it impressive that SciLifeLab has so successfully recruited a large number of excellent group leaders internationally. The coordinated manner in which this recruitment is carried out would be an excellent model for all SciLifeLab-related recruitments."

## Vision and mission

The SciLifeLab **vision** is for Sweden to be a world-leading nation in life science.
The overall **mission** for SciLifeLab is to enable life science research in Sweden that is beyond what is possible for an individual researcher, an individual university, or an individual research discipline.

The SciLifeLab Code of Conduct guides responsible conduct in research infrastructure services and research. The SciLifeLab Diversity Equity and Inclusion Committee of SciLifeLab address was founded by researchers at SciLifeLab Campus Solna, and the SciLifeLab Coaching in Science Initiative are to provide tools for better mental health.

### Governance

SciLifeLab has infrastructure units at all major universities in Sweden and infrastructure users all over the country. Campus Solna and Uppsala were the initial SciLifeLab sites, but to further enhance the national assignment, SciLifeLab launched additional sites in Lund, Gothenburg and Umeå (2021) and Linköping (2022). SciLifeLab works actively to align SciLifeLab's governance to ensure proper management of the distributed collaborative infrastructure.

- SciLifeLab is governed by a national board, which represents the host universities, other universities, as well as industry. The Chair of the Board and the Industry representative are both appointed by the Government, the remaining members by the universities.
- SciLifeLab host universities manage their SFO-funded research contributions via local SciLifeLab committees.
- A National SciLifeLab Committee representing all Swedish universities and stakeholders contributes with a national perspective to the operations.
- SciLifeLab's International Advisory Board ensures that SciLifeLab evolves in accordance with international trends and developments and provides recommendations on strategies for developing SciLifeLab every other year.
- Every four years, an international evaluation of the infrastructure is organized, with additional feedback sought from all universities. This evaluation focuses on new technologies and new units to be incorporated into the infrastructure platforms
- Many SciLifeLab platforms have their own advisory boards, as do the SciLifeLab capability programs and the DDLS program.

SciLifeLab is thus stringently and systematically evaluated internationally and is a nationally well anchored research infrastructure and research community in Sweden. SciLifeLab aligns its operations with national research policy and Sweden's international competitiveness. Moreover, its research infrastructure plays a vital role in addressing the UN Global Sustainable Development Goals and other global challenges.

## Strategic objectives

Through five interrelated objectives, SciLifeLab will work towards synergistic benefits for life science both in Sweden and globally. SciLifeLab mission to maintain and advance the national research infrastructure and services, are foundational to all other objectives. This infrastructure supports strong research and communities, while new discoveries and innovations enhance it in a reciprocal cycle.

**As Sweden's National Infrastructure for Molecular Life Sciences, SciLifeLab aims to:**

Develop and provide excellent life science infrastructure.
Strengthen scientific communities, capabilities, and international collaborations.
Transform life science data into knowledge.
Attract and foster scientific excellence and provide advanced training.
Support innovation and bridge-building for the benefit of society.

## Strategic objective: Develop and provide excellent life science infrastructure

SciLifeLab's infrastructure and expertise provide unique opportunities within a multitude of molecular technologies such as genomics, proteomics, metabolomics, imaging, structural biology, bioinformatics, single cell biology, chemical biology, and gene editing. There are dedicated infrastructure platforms for clinical diagnostics development and for academic drug discovery, promoting translation and innovation. Both the technologies and the dedicated expertise available within SciLifeLab are always available to all researchers throughout Sweden, including researchers active in the private sector, healthcare, and government entities.
As demonstrated during the pandemic, a national life science research infrastructure such as SciLifeLab, with in house technology and expertise in combination with broad networks, can be repositioned to address an acute challenge and to promote research projects, data, and collaborations. Thus, SciLifeLab is well positioned to modify its infrastructure in times of a crisis to serve the needs of a particular task, and then return to a normal infrastructure operation.
Key to SciLifeLab's success as a research infrastructure is attracting and keeping dedicated expert staff scientists. However, infrastructure scientist's career development is not aligned with traditional career paths within academic environments. In close dialogue with the universities SciLifeLab promotes establishment of career paths for infrastructure scientists.

### Ensure that infrastructure technologies and services remain cutting-edge

SciLifeLab is committed to providing access to cutting-edge technologies and multiple infrastructure services, by means of highly skilled staff scientists with technology expertise, for its broad national user community. This will empower research endeavours across universities, health care, industries, and other life science disciplines in Sweden that would not otherwise be possible. SciLifeLab will keep the national infrastructure up to date through technology development and agile adoption of new technologies as well as regular evaluations,
The process of how units and platforms are managed, launched, and operated is well established around the 4-year international review-cycle. Given the rapid developments in life science, SciLifeLab continuously develops the SciLifeLab infrastructure due to its life-cycle, from early-stage technology development, scaling-up services from local to national scale, equipment renewals and upgrades, training, strategic collaborations as well as translation and national dissemination.

### Promote Good Infrastructure Practice

SciLifeLab has guidelines and expectations for what is required to be funded as a national unit. Maintaining standards for Good Infrastructure Practice ensures quality, reproducibility,

transparency and delivery in operations and the data produced. These conditions apply to all national SciLifeLab facilities, ensuring broad accessibility, quality and integrity of data. Today, there are over 550 staff active at the SciLifeLab infrastructure units (450 FTEs), supporting about 1800 unique users and 3600 projects annually. About 60% of the users come from outside the founding universities reflecting a truly national user base, a testament to SciLifeLab's national accessibility and its successful implementation as a national research infrastructure. Indeed, SciLifeLab infrastructure users are identified world-wide.
Critical to the advancement of the SciLifeLab infrastructure is SciLifeLab's scientific community, which is tightly linked to the development of research- and data infrastructure technologies.

## Strategic objective: Strengthen scientific communities, capabilities, and international collaborations

About 300 SciLifeLab associated group leaders, form a vibrant and successful scientific community. SciLifeLab will continue to develop the infrastructure in the best research environments, and conversely, strong research infrastructures promote cutting-edge research.

### Strengthen scientific communities

At SciLifeLab's largest physical site, Campus Solna, over 1000 SciLifeLab-associated researchers from Karolinska Institutet, KTH and Stockholm University are co-located with the national infrastructure units. In Uppsala SciLifeLab activities are integrated within established university departments and across several campuses at Uppsala university and are connected virtually, but the physical meetingplace Navet in Uppsala works as a networking site for both national and local SciLifeLab activities. The same model of having SciLifeLab activities integrated within established university departments is also true for the most recent SciLifeLab sites at Gothenburg, Linköping, Lund and Umeå. SciLifeLab is a highly prosperous community, where engaged researchers have a good track record for international granted funding.

### Fellows

SciLifeLab hosts a successful program focusing on recruiting and hosting young tenure-track SciLifeLab fellows at KTH, KI, SU, and UU where host universities select tenure-track scientists and assume responsibility for their tenure after their fellowship is over. The aim is to engage SciLifeLab fellows in a recruitment program for young PIs to ensure that Sweden hosts future global research leaders. In addition, the DDLS program is recruiting and hosting 39 DDLS fellows that are anticipated to have a broad impact by bringing data-driven life science expertise and training to all the local research environments at the 11 partner organizations. SciLifeLab will also provide joint networking and training programs to the various national fellow communities aiming at leveraging scientific advancements from the different disciplines represented by the fellows. An example is the Program for Academic Leaders in Life Science (PALS), an official collaboration aiming to connect the fellows of SciLifeLab, DDLS, and Wallenberg Centers for Molecular Medicine (WCMM).

### Strengthen capabilities (thematic research areas)

SciLifeLab's strength is connecting the research community with the research and data infrastructure, thereby catalyzing technological advancements that drive scientific breakthroughs. To enhance this synergy, SciLifeLab has established capabilities – thematic areas dedicated to collaboratively addressing global challenges – aiming at advancing precision medicine, planetary biology, and pandemic laboratory preparedness. These capabilities integrate SciLifeLab's scientific community with the research and data infrastructures and foster connections with external stakeholders.

### Strengthen international collaborations

SciLifeLab is primarily focused on serving the national user community and promoting Swedish life science research. However, science is international, and global networks and collaborations are essential. SciLifeLab infrastructure and research communities form an attractive international partnering opportunity. SciLifeLab will continue to identify mutually beneficial partnerships with international organizations, such as SciLifeLab's partnership with EMBL. SciLifeLab will continue to promote involvement in initiatives at both international and European levels.

## Strategic objective: Transform life science data into knowledge

Life science is in a major transition as the data-driven research paradigm is here. As life science becomes more and more data-centric, SciLifeLab contributes to enable this data-driven research approach. SciLifeLab focuses on services toward infrastructure, data driven life science research, operations, and management as well as expertise and support. There is a need to continue harmonization of data handling across the platforms and develop a unified order and data management system that tracks samples across platforms for systems biology analyses. Also, meta-data tracking for samples submitted to SciLifeLab would be needed to help generate next-generation reusable data. SciLifeLab expects to have a major impact on research data handling practices.

### Provide and operate services and e-infrastructure for data-driven life science

SciLifeLab Data Centre will strengthen SciLifeLab platforms and develop computational capabilities and data services that are part of a national e-infrastructure, including FAIR data, bioinformatics, and AI tools. Strategies for data mining and data sharing will be developed and a simplified access to services through data-centric integration and coordination nationally through thematic Data Science Nodes will be built.

### Develop processes for safe, secure, and ethical ways of handling sensitive research data

SciLifeLab develops processes for safe, secure, and ethical handling of sensitive research data. By implementing robust protocols, SciLifeLab ensure that data are treated with the utmost confidentiality and respect for privacy. Additionally, SciLifeLab promotes research data sharing and analysis, recognizing the transformative potential of collaborative efforts in advancing research and healthcare. Through FAIR and responsible data management practices, SciLifeLab supports research while upholding ethical standards.

**Coordinate and develop The SciLifeLab & Wallenberg National Program for Data-Driven Life Science**

SciLifeLab coordinates the national 12-year Data Driven Life Science program (DDLS) funded by the Knut and Alice Wallenberg Foundation. The program seeks to change how life science is practiced, energized by data- and AI-driven opportunities. This includes recruitment, training, a research school, and collaborative programs as well as promoting open, real-time data sharing and rapid data cycles. As the program is hosted by SciLifeLab it derives benefits from the links to the data-producing infrastructure.
The program focuses on how data science and computational approaches enable and energize life science, as well as applications in health, environment, and industrial research. The DDLS program has four research areas that are well aligned with the SciLifeLab capabilities to maximize synergies and output:

- Molecular and Cell Biology
- Precision Medicine and Diagnostics
- Biology and Epidemiology of Infection
- Biodiversity and Evolution

## Strategic objective: Attract and foster scientific excellence and provide advanced training

**Attract and further scientific excellence**

SciLifeLab works to attract and train talent and for advancing scientific research communities. The SciLifeLab scientific community is populated by excellent group leaders, some initially recruited as fellows, postdocs, PhD students and infrastructure specialists. To further this community SciLifeLab will continue to support internationally competitive recruitments. In addition, SciLifeLab will mentor young group leaders as well as provide national networking and career professional development programs for young junior/early-stage scientists. Another important task is to promote career- and competence development for infrastructure staff scientists in close dialogue with the universities. The expertise acquired while working within the SciLifeLab infrastructure supports the entire life science ecosystem through providing access to these highly qualified experts.

**Provide advanced training**

SciLifeLab infrastructure organizes training events for Swedish academia, and up to 3000 people take part in such training events annually. The SciLifeLab training hub works to consolidate and coordinate the training efforts across the SciLifeLab ecosystem, giving the life science community easy access to the SciLifeLab infrastructure knowledge, skills, and expertise. The aim is to establish a culture where training is a natural component of all dimensions at SciLifeLab.

By providing an infrastructure built around both the technical platforms and their expert staff, the SciLifeLab community has all the support needed to co-create, deliver, and take part in openly

available lifelong learning. This enables continuous research and technology development. Affirming that all training provided by SciLifeLab is both relevant and of the utmost quality, adhering to the principles of OPEN and FAIR. The quality and assurance of the training is achieved through providing policies, guidelines and best practices in training and learning. The training hub will provide pedagogical training to the trainers to upskill and expand the community of trainers. The vision is that SciLifeLab becomes the national go-to-place for technology- and data-driven lifelong learning.

In connection, SciLifeLab will through the DDLS program, coordinate a program on advanced training and education in technology- and data-driven life science. In addition, a national PhD and postdoc program and a research school will be launched.

## Strategic objective: Support innovation and bridge-building for the benefit of society

SciLifeLab's ability to meet societal challenges was demonstrated during the pandemic, and interactions with the general public, as well as with governmental bodies, are increasingly important. As a national research infrastructure, SciLifeLab offers its services to users from academia, health care, government, international and industrial organizations, but also as contributors and collaborators. Some of the SciLifeLab platforms focus primarily on translational and clinical research towards health care and industry applications.

### Support Innovation for the benefit of society

SciLifeLab contributes to innovation through initiatives within the Swedish universities, the national innovation system, as well as through private initiatives within life science innovation support. Continuous technology development is at the core of a cutting-edge infrastructure, and several key technologies within life sciences have been invented and developed at SciLifeLab. SciLifeLab Innovation – Pharma & Biotech and BRIDGE are current examples of projects put forward to leverage academic discoveries to enhance innovations within life science. With the proof-of-concept grant (funded by Knut and Alice Wallenberg Foundation and coordinated by SciLifeLab) opportunities towards expanding the pipeline of projects moving forward to benefit of society are further explored.

### Further academic discoveries to support innovations

The Drug Discovery and Development (DDD) Platform, launched in 2015, is instrumental in translating academic research into successful innovations. By screening numerous drug discovery leads, it has facilitated the licensing or venture backing of dozens of early-stage drug leads. This platform harnesses fundamental academic research to validate drug discovery targets and create lead molecules, attracting future investment opportunities. Given the trend of pharmaceutical companies relying more on academic collaborations for research and development, DDD has thrived in developing therapeutic discoveries through partnerships with academic groups nationwide, leading to licensing agreements and the establishment of new spin-off companies. DDD continues to promote academic discoveries in industrial drug discovery and engaging in joint programs with SMEs and large pharma companies. Recognizing the growing

importance of biological therapies and new modalities, SciLifeLab collaborates with national research communities, exemplified by initiatives like Oligo-Nova in Gothenburg. The overarching goal is to bridge the gap between academic drug discovery and commercial development, fostering effective licensing and the transfer of early drug leads to the private sector through close collaboration among research infrastructure, academic scientists, innovation funders, healthcare, and industry stakeholders.

**Promote translation advanced diagnostics from research to healthcare**

With the success of the DDD platform, planning is underway to launch a similar platform for biomarker development (or Discovery and Development for diagnostics). It will be essential to find diagnostic, and predictive biomarkers for building assays aiming to be implemented in healthcare and for industry-driven biomarker development. Biomarkers are the main drivers of precision medicine. To tailor prevention, screening, diagnostics, prognostic, or therapeutic actions to people and patients, clinical laboratory-compatible biomarkers remain the key driver and facilitator.

**Support Bridge-building for the benefit of society**

SciLifeLab aims to further increase the infrastructure users and collaborators from academia, industry, and healthcare to ensure that the national research infrastructure is utilized in a way that maximizes the benefit to society. Bridge-building efforts within SciLifeLab ensures that scientific research translates into real-world applications to contribute to the development of applications such as new diagnostic tools and biomarkers, that in the long run improve human and planetary health. Examples are the development of new diagnostic tools and biomarkers, as well as biomonitoring and studies of ecosystems, stemming from discoveries from users of the SciLifeLab infrastructure.

**Industry users and industry collaboration**

A national infrastructure is an important hub in connecting various life science stakeholders. SciLifeLab infrastructure serves more than 100 projects for the industry users yearly. In addition, companies use SciLifeLab infrastructure through collaboration with academic researchers. Furthermore, companies develop technologies and methods with SciLifeLab infrastructure, for example through beta testing instruments or protocols. The SciLifeLab model, funded by the government is well suited to continue to take on the national role to leverage Sweden’s life science capacity. Offering a wide range of services and expertise, SciLifeLab is well set-up for to translate knowledge into benefit for the society through close collaboration with academia, healthcare, and industry. To increase accessibility, efforts to streamline processes for industrial and healthcare accessibility will be pusued.

**Healthcare users and healthcare collaboration**

Specific SciLifeLab platforms focus on translational and clinical research towards health care applications. These include clinical genomics and the clinical proteomics and immunology platforms that promote diagnostic development across the country. The Clinical Genomics platform will continue to implement new diagnostics into routine health care applications. The

Clinical Genomics platform, with its national coverage, was the catalyst for the Genome Medicine Sweden (GMS) initiative where the Clinical Genomics platform still functions as the technological backbone. SciLifeLab will engage with health care system and clinical diagnostics via the precision medicine capability and pandemic laboratory preparedness capability in order to develop and mature novel methods towards clinical use.

**Coordination with other infrastructures**

SciLifeLab technologies are complementary to university core facilities, other national research infrastructures and strategic research initiatives in life science. Examples include structural biology and imaging facilities (e.g. MAX-IV, ESS), healthcare infrastructures (e.g. Genome Medicine Sweden, Biobank Sweden, quality registries), environmental infrastructure initiatives (Swedish Biodiversity Infrastructure and Swedish Infrastructure for Ecosystems Science), protein production and purification centres (e.g. Testa Center, Protein Production Sweden) and initiatives within artificial intelligence (e.g. WASP, various AI initiatives). SciLifeLab will complement and collaborate with these strategic research initiatives, launch joint research efforts, promoting interdisciplinary science and thereby leverage Sweden's combined national infrastructure. The WASP-DDLS collaboration is a prominent and significant example of such initiatives.

**Public engagement and policy**

SciLifeLab recognize the importance of public engagement and policy advocacy in advancing the impact of life sciences research. Through public outreach and policy initiatives, SciLifeLab strives to bridge the gap between academia and society, ensuring that knowledge and discoveries generated in our units and platforms are effectively communicated and utilized for the benefit of all. By engaging with a broad range of stakeholders, including policymakers, industry leaders, and the general public, SciLifeLab aims to foster informed decision-making and promote evidence-based policies that addresses pressing societal challenges in health, environment, and sustainability. SciLifeLab participates in the data-driven life science ecosystem through national collaborations linked to the European Health Data Space, with the goal of integrating molecular and clinical data for improved precision health, for example TEF-Health, EUCAIM, and the DIGIfor1HealthSE coordination project.

# Final remarks

SciLifeLab's strategy focuses on maximizing the impact of national life science infrastructure through collaborative research, recruitment, training, translation, innovation, and data-driven strategies. This approach yields synergistic benefits for the entire life science ecosystem, with SciLifeLab playing a pivotal role. Its expanding role aims to ensure that universities and stakeholders directly benefit from the infrastructure, making it a versatile ecosystem for technology- and data-driven life science research would otherwise not be possible. Through focused efforts, SciLifeLab has established national programs for pandemic laboratory preparedness, precision medicine, and planetary biology, as well as the development of drug candidates through the SciLifeLab Drug Discovery and Development platform.
SciLifeLab, as a strategic national research infrastructure in the molecular life sciences, is in a unique position to continue to contribute to Sweden's ability to conduct internationally

competitive research and innovation with its broad repertoire of advanced technologies, technology experts, and excellent researchers.

## Acknowledgements

This strategy was developed by the SciLifeLab Management group with input from the International Advisory Board, members of the SciLifeLab Board, Data Centre, Operations Office, host university leadership and SciLifeLab Committees, the National SciLifeLab Committee, and in dialogue with infrastructure platforms and the overall SciLifeLab community.