The national board of Science for Life Laboratory

Minutes from board meeting no 56, March 9, 2022

Present members

Ylva Engström (SU)(chair), Fredrik Elinder (LiU), Anders Gustafsson (KI), Anders Karlhede (SU), Göran Landberg (GU), Lotta Ljungqvist (Cytiva), Katrine Riklund (UmU), Stellan Sandler (UU), Annika Stensson Trigell (KTH)

Other participants

Olli Kallioniemi (Director), Mia Phillipson (Co-Director), Annika Jenmalm Jensen (Infrastructure Director, absent § 5), Gunilla Westergren-Thorsson (chair NSC, from § 6), Jenny Alfredsson (Acting Head of operations/OO), Stefan Bertilsson (part of § 6), Markus Cartas-Johansson (§§ 11-12), Sandra Falck (Acting vice Head of Operations/OO), Lars Johansson (§§ 9-10), Heidi T Persson (§ 8), Johan Rung (§ 8), Andreas Muranyi Scheutz (GMS, until § 9), Alice Sollazzo (§ 6), Staffan Svärd (§ 4), Olga Vinnere Pettersson (part of § 6), Anna Höglund Rehn (secretary)

1. Meeting formalities

Ylva Engström opened the meeting.

Decisions:
The SciLifeLab board appointed Anders Karlhede to approve the minutes of the meeting in addition to the chair.

The SciLifeLab board approved the minutes from meeting no. 54 and meeting no. 55.

2. Update from the Director

Olli Kallioniemi presented the quarterly update from SciLifeLab.

3. Financial update

Jenny Alfredsson presented a financial overview of the funding of SciLifeLab and a preliminary forecast for the year 2022.

4. Pandemic Laboratory Preparedness, PLP

4a. Call for Technology Development Projects at Clinical Microbiology Laboratories – funding (PLP-CM)

VC-2021-0066

In December 2020, SciLifeLab was commissioned by the government to build capacity to be equipped to assist in future pandemics, supported with additional governmental funding to SciLifeLab. The assignment was to through research, competence and technology development optimize SciLifeLab operations to support

and complement other societal functions such as authorities, municipalities and regions in pandemic laboratory preparedness. The development of these activities should take place in consultation with the Swedish Public Health Agency (FoHM).

To meet these aims, SciLifeLab has started the Pandemic Laboratory Preparedness program (PLP) with a national network of laboratory capabilities. In order to expand this network and to get closer to clinical microbiology labs in Sweden the PLP program invited suggestions of Technology Development Projects (TDPs) that can develop services and capabilities with the potential to generate important capabilities within the PLP network at the major Clinical Microbiology laboratories in Sweden.

Eleven proposals were received and evaluated. Of these, eight applications are suggested to be funded.

Staffan Svärd, lead of Pandemic Laboratory Preparedness, informed about the call and suggested funding.

Decision:
The SciLifeLab board approved to fund eight proposals (appendix 1) with a total of 7.96 MSEK.

The funding will be regulated via Conditions for funding.

4b. Call for new PLP capabilities, PLP-2

VC-2022-0013

Staffan Svärd informed about the suggestion of a call for new Pandemic Laboratory Preparedness capabilities, the evaluation process and timeline.

The aim of this Expression of Interest (EoI) call is to develop services and capabilities that will facilitate laboratory pandemic preparedness and to address big questions within infectious diseases like antimicrobial resistance. In this call the PLP program will support 4-5 new capability building projects that will become part of the PLP network. The maximum grant size that can be applied for is 4 MSEK (2 MEK/year).

The board approved the plans for a new call. Decision of funding of the projects is expected at the SciLifeLab board meeting on 31 May 2022.

5. Infrastructure Director – expansion of assignment

VC-2022-0014

Olli Kallioniemi informed about the suggestion to expand the assignment of SciLifeLab Infrastructure Director Annika Jenmalm Jensen. The new effort is suggested to be 75%. The financial implication is 0.5 MSEK/year, which fits within board-approved budgets.

Decision:
The SciLifeLab board approved the increased engagement of Annika Jenmalm Jensen as an Infrastructure Director to a level of 75% effort starting 1 March 2022.

6. Capability for Planetary Biology scientific leads
VC-2021-0060

SciLifeLab aims to build a capability for Planetary Biology, connecting the unique competencies of SciLifeLab infrastructure platforms, technologies, and data-driven life science with the research communities in the field of planetary biology.

At the SciLifeLab board meeting no 53, 11 November 2021, the board decided to launch a call for a scientific lead for the planetary biology capability. 13 applications were submitted (three teams and five single applicants).

Mia Phillipson informed about the evaluation process and the nominated candidates, Olga Vinnere Pettersson, UU, and Stefan Bertilsson, SLU, who introduced themselves and their views on Planetary Biology.

Decision:
The SciLifeLab board approved the assignments of Olga Vinnere Pettersson, UU, and Stefan Bertilsson, SLU, as scientific leads for the Planetary Biology capability, starting 1 April 2022, for an initial period of one year. This assignment can be prolonged assuming that the budget for 2023 is approved accordingly.

The board gives a mandate to the Director Olli Kallioniemi, in consultation with the evaluation panel and the two above-nominated leads to choose up to 4 additional co-leads for the Planetary Biology capability in order to expand the expertise and host university and career diversity of the PB program. Each co-lead will have 0,1 FTE assignment (bringing the total to 1 FTE).

7. Extended funding for SciLifeLab National Fellow year 5+6
VC-2022-0015

In 2014 the SciLifeLab board decided to initiate a SciLifeLab National Fellows program. As for the SciLifeLab Fellow positions at the host universities, it was suggested, but not decided, that the candidates should be evaluated for a permanent position after 3.5 years with the possibility of extension for another 2 years with SciLifeLab national funding in the case of a positive evaluation. Three SciLifeLab National Fellows have since been appointed.

At the SciLifeLab Board meeting no 36, 29 May 2019, the Board decided to fund two of the three SciLifeLab National Fellows with 1 MSEK annually for year 5 and 6, provided that they received a positive evaluation and were offered employment and additional funding from the host university of 1 MSEK per year. No decision was taken previously for Jonas Barandun, UmU.

Mia Phillipson informed about the suggestion to fund Jonas Barandun.

Decision:
The SciLifeLab board decided that Jonas Barandun will be funded 1 MSEK annually for year 5 and 6, provided that he receives a positive evaluation and is offered employment and additional funding from the host university of 1 MSEK per year for year 5 and 6.

8. SciLifeLab and Wallenberg National Program for Data-Driven Life Science, DDLS

Olli Kallioniemi gave a brief update regarding the DDLS program.

8a. Terms and conditions for DDLS Fellows' funding
VC-2022-0017

The purpose of the DDLS program is to recruit and train the next generation of data-driven life scientists and to create globally leading computational and data science capabilities in life science in Sweden. As part of this program, a total of 39 internationally outstanding early career group leaders will be recruited in total, whereof 20 during phase one of the program.

Olli Kallioniemi informed about the document Terms and conditions for DDLS Fellows' funding which stipulates the specific conditions for funding for each of the 20 recruitment packages during phase one of the program.

Decision:
The SciLifeLab board approved the Terms and conditions for DDLS Fellows' funding agreement version 1 with some adjustments (appendix 2).

8b. SciLifeLab/DDLS Data Policy
VC-2022-0016

FAIR is about data quality, research integrity, reproducibility and transparency, and it can be expected that SciLifeLab in a transparent way expresses the principles that motivates its activities towards Open Science and FAIR. Therefore, the Data Centre and the Bioinformatics Platform (NBIS) has developed such a document, a Data Policy, that details these principles, states the ambition to let them motivate future SciLifeLab activities, and concretely exemplifies potential actions that may involve research or infrastructure.

The SciLifeLab/DDLS Data Policy is a reference document, which can be used for communicating the principles that are important regarding data, and may have concrete future consequences at SciLifeLab through their application in different contexts, such as terms and conditions for funding, project prioritization, or evaluation criteria. The document will be updated and revised on a regular basis, and subsequent versions will be brought for decisions at the board.

Johan Rung, head of SciLifeLab Data Centre, gave a background to the suggestion.

Decision:
The SciLifeLab board approved the SciLifeLab/DDLS Data Policy version 1 (appendix 3) and requested the Director and the Data Centre/NBIS chair to finalize the document according to the comments, and after consultation with MG and SciLifeLab platforms.

The board mandated the Chair of the board to approve the next revised document and to bring the final version to the board's attention in the May 2022 meeting.

8c. DDLS Fellows SU – approval of KAW funding to top candidates
VC-2022-0011

At the board meeting no. 49 on 3 Feb 2021, the board approved the general recruitment process and conditions for funding for the recruitment of DDLS Fellows. In the meeting on 19 May 2022, the board approved the final recruitment profiles and recruitment timeline.

At the board meeting no. 52 on 22 September 2021, the board approved the suggested process for approval of DDLS Fellow candidates and gave the chair the mandate to approve them.

SU had two positions open in Cellular and Molecular Biology. Due to potential conflict of interest, the chair has lifted the final decision for the board to make.

Olli Kallioniemi informed about the process and suggestion.

Decision
The SciLifeLab board approved the statement of the DDLS-steering group regarding the two top-ranked DDLS fellow candidates at Stockholm University.

9. Response to the IAB report
VC-2020-0031

In October last year, SciLifeLab finalized the report to the International Advisory Board (IAB), and a virtual IAB visit took place on October 19-22, 2021. The IAB has now finished their strategic evaluation, and has compiled a report with recommendations aiming to further strengthen SciLifeLab as a leading national research infrastructure. The IAB requested that SciLifeLab prepares an initial response to these suggestions. The IAB comments have previously generated action groups and the board is suggested to consider these for executing specific complex tasks.

At the board meeting no 53 on 11 November 2021, the board was informed about the preliminary feedback from Jan Ellenberg, chair of IAB. The final report was received on 21 January 2022.

Olli Kallioniemi informed about the draft response to the IAB report. The draft will be sent out to stakeholders for comments. At the next board meeting discussion will follow on action items.

Decision:
The SciLifeLab board approved the process for sending the response to the IAB and mandated the Chair and the Director to finalize the document after consulting the stakeholders.

10. SciLifeLab Infrastructure

10a. General update

Annika Jenmalm Jensen presented an update about the SciLifeLab Infrastructure.

10b. Reflections of the IAB report
VC-2020-0031

Annika Jenmalm Jensen commented on the IAB report and response regarding the SciLifeLab Infrastructure

10c. Platform steering groups
VC-2022-0018

At the meeting on 19 May 2021 the board approved the infrastructure organization, names of platforms and units and the "next-to-final" general steering document SciLifeLab Infrastructure General Terms and Conditions for Funding. The board delegated to the Director and Infrastructure Director to finalize the document. At the same meeting Platform Directors, Platform Co-Directors and Platform Coordination Officers were approved.

In the document "SciLifeLab Infrastructure General Terms and Conditions for Funding" it is regulated that each platform should appoint external bodies to ensure unbiased, SciLifeLab-independent, input on the infrastructure operations. The arrangement of external bodies may differ between platforms and should consider any terms and conditions for funding from other significant financiers and/or specific needs for the platform.

For Platforms/Units receiving major funding from other bodies (e.g. the Swedish Research Council (VR)), the funder typically expects the appointment of a Steering Group. Such Steering Groups can, if agreed with the SciLifeLab Board, assume responsibility for the steering of SciLifeLab funded operations as well (according to SciLifeLab terms and conditions for funding agreements).

Annika Jenmalm Jensen informed about the suggestion.

Decision:
The SciLifeLab board approved the Platform Steering Groups for NGI and NBIS Platforms to act as a platform steering group also for the SciLifeLab Genomics and Bioinformatics Platforms for the funding period 2021-2024 (members in appendix 4). Replacements during the funding period should be approved by the SciLifeLab Director.

The SciLifeLab board approved the Platform Steering Group for CBCS to act as a platform steering group also for the Chemical Biology and Genome Engineering Platform pending the individual members' acceptance (members in appendix 4) for the funding period 2021-2024. Replacements during the funding period should be approved by the SciLifeLab Director.

11. SciLifeLab steering documents revision – update

Annika Stensson Trigell informed about the ongoing revision of SciLifeLab steering documents.

12. Presentation KTH SciLifeLab lawyer

Markus Cartas-Johansson, new KTH SciLifeLab lawyer, introduced himself.

13. Other issues

13a. Board member changes

The mandate period for some members of the SciLifeLab board ends in April and outgoing members were thanked for all the work they have done in the Board.

Upcoming meetings

- Tuesday May 31, 10.00-17.00 in Uppsala (dinner afterwards)
- Wednesday September 21, 10.00-15.00 ZOOM
- Tuesday November 8, 10.00-16.00 in Solna

_____
Anna Höglund Rehn, secretary

Minutes approved by:

_____ _____
Ylva Engström Anders Karlhede

Appendix 1

Approved TDP projects at Clinical Microbiology Laboratories (PLP-CM)

Proposal title	Submitter	Affiliation	Amount funded
Next generation clinical virology	Tobias Allander	KI, Clin Micro KS	1 000 000
Establishing sequencing-based viral diagnostics for future clinical use: towards pandemic and outbreak preparedness in the clinical laboratory	Patrik Medstrand	LU, Clin Micro Lund	1 000 000
Gothenburg Initiative for Pandemic Laboratory Preparedness (GILP)	Magnus Lindh	GU, Clin Micro Gbg	1 000 000
Pre-analytics for Pandemic Preparedness	Martin Sundqvist	ORU, Clin Micro Örebro	1 000 000
Preparedness for tracking resistant and virulent bacterial and fungal pathogens (TRACK-PATH)	Christian Giske	KI, Clin Micro KS	1 000 000
Development of a targeted metagenomic NGS platform for diagnostics and epidemiological surveillance of viral pandemic threats	Lisa Pettersson	UMU, Clin Micro Umu	1 000 000
Rapid typing of emerging variants in a clinical setting	Anders Bergqvist	UU, clin Micro UU	960 000
Metagenomic sequencing for pathogen identification and analysis	Jenny Welander	LIU, Clin Micro Liu	1 000 000
			7 960 000

SciLifeLab

SciLifeLab & Wallenberg National Program for Data-Driven Life Science (DDLS)

- Conditions for funding of DDLS fellows in phase 1

Background

The SciLifeLab and Wallenberg National Program for Data-Driven Life Science (DDLS) is a 12-year initiative funded with a total of 3.1 billion SEK (about 300 MEuro, 350 MUSD) from the Knut and Alice Wallenberg Foundation. The purpose of the program is to recruit and train the next generation of data-driven life scientists and to create globally leading computational and data science capabilities in life science in Sweden. As part of this program a total of 39 internationally outstanding early career group leaders will be recruited in total, whereof 20 during phase one of the program, to the following four strategic data-driven research areas:

- Cell and molecular biology
- Evolution and biodiversity
- Precision medicine and diagnostics
- Epidemiology and biology of infection

Purpose of this agreement

This agreement stipulates the specific conditions for funding for each of the 20 recruitment packages during phase one of the program. The funding for the DDLS program is provided by the Knut and Alice Wallenberg Foundation (KAW) and is regulated by the KAW donation letter (KAW 2020.0239) and all decisions regarding allocation of funds are taken by the SciLifeLab Board as outlined in the donation letter.

Even though this agreement has a non-binding status, abiding by it is of importance both for the program and the DDLS fellows to be successful. The parties of this agreement are the hosting department/University/Swedish Museum of Natural History (NRM) hiring the fellow and SciLifeLab and KTH Royal Institute of Technology (KTH) representing the program.

The hiring department/University/NRM have the personnel and work environment responsibility of the DDLS fellow. In addition, we expect the hired DDLS fellow to commit to the Terms and Conditions of funding of the DDLS program that are outlined in this agreement and connected to the funding received.

All questions regarding the DDLS fellow's position and this agreement must be directed to KTH/SciLifeLab using this email address: ddls@scilifelab.se.

Conditions for funding: DDLS Fellow recruitments, phase 1

By signing this agreement, the following terms and conditions are approved:

1. Each DDLS Fellow/Recruitment package is supported by 17 MSEK of KAW funding for a 5-year period. The host organization guarantees co-financing of the DDLS fellow package for the entire period in accordance with the terms and conditions stated in the KAW donation letter (2020.0239).

2. The host organization recruits and hires the DDLS fellow as Biträdande lektor according to the Higher Education Ordinance (Högskoleförordningen (1993:100 chapter 4, §4a)), (corresponding positions at NRM are regulated differently where DDLS fellows are hired as researchers), and agrees to this commitment in accordance with these regulations. The position at universities will be tenure-track with a right to be evaluated for promotion to tenured associate professor. The position at NRM (which is not a university) will not formally be a tenure-track appointment, but is in practice guaranteed to have a similar promotion process.
3. The DDLS fellow is expected to contribute to this program at full-time effort. Part-time arrangements will only be possible during the first 6 month to enable transitioning at the start of the DDLS fellow, otherwise Swedish labor law is applicable. Each DDLS fellow position formally belongs to and is placed in one of the four DDLS research areas.
4. Each DDLS fellow's funding package will be financed for a maximum of 5 years in accordance with the funding conditions in the KAW donation letter. The maximum requested KAW funding cannot exceed 17 MSEK. Extension of the 5-year funding limit is only possible based on leave acceptable according to Swedish labor law.

   If there is a need for 6-year positions before tenure evaluation, the funding of this last year is the responsibility of the department/University/NRM. Long-term commitment of salaries of tenured group leaders is also the responsibility of the hosting department/University/NRM.

   Costs within the DDLS program covered by the support from KAW could typically include: direct salary costs for each DDLS fellow for 5 years, two full-time PhD positions for 4 years and two full-time postdoc positions for two years, as well as running costs, depreciation and part of payroll taxes and social security contributions (LBK/LKP/LKT), premises and overhead/indirect costs. Though KAW limits the usage of funds for payroll taxes and social security, premises and overheads. For all cost and budget related details see Appendix A.
5. Each DDLS Fellow and their group members are expected to be active participants in the national DDLS program and in the DDLS research community, including the specific DDLS research area in question. The Fellows and their teams should make efforts to contribute to a variety of activities in DDLS, such as collaborative research programs, national training activities, policy actions, and outreach.
6. Each DDLS Fellow will be expected to participate in teaching and organizing courses for the national DDLS network, including participation as faculty for the national DDLS research school. The PhD students of the fellows are expected to register and participate in the same school.
7. The DDLS fellow's host department is expected to provide the DDLS fellow with a supporting research environment with possibilities for local research interaction, research collaborations and adequate space for the research group. The

department is expected to support the fellow to set up the necessary working conditions and infrastructure for carrying out their work, including fulfilling the expectations of fellows outlined in points 5 and 6 above. It is possible and recommended to engage the DDLS fellow in teaching at the home department and organization. Though the teaching load must not interfere with the research tasks or the DDLS fellow's expected participation in national DDLS training and community actions. In Stockholm, the DDLS fellows from KTH, KI and SU will have their primary location at the SciLifeLab Campus Solna.

8. The DDLS fellows will join the national DDLS fellow program, and will in addition to the local host university career development programs be offered mentoring, as well as interactions with other Swedish Fellow programs (e.g. SciLifeLab and WCMM fellow programs).
9. The DDLS fellows are expected to follow the SciLifeLab data policy (Appendix B), including FAIR principles for research data, as well as making all data generated as part of the program as openly available as possible (with restrictions for e.g. sensitive human data or industrial collaborative programs). DDLS fellows are responsible for ensuring that all their DDLS-funded team members also abide by the data policy.
10. All DDLS fellows are expected to include SciLifeLab as an affiliation as part of their primary affiliation (e.g. Department, SciLifeLab, University), and they must include the following sentence: "This work was supported by the SciLifeLab & Wallenberg Data Driven Life Science Program (grant: KAW 2020.0239)", as an acknowledgement in all publications, research and educational presentations, popular science appearances and press releases. Acknowledgments are expected as long as the fellow is associated with the DDLS program, or if their research is otherwise funded by the program, or the KAW grant.
11. DDLS fellows and their host departments are expected to provide bibliometric, personnel and financial data (national and international grants etc.) upon request to KTH/SciLifeLab for annual and other reporting, as well as take part in international evaluations and advisory meetings regarding DDLS/SciLifeLab.
12. Once the DDLS fellow has become tenured by the host department/university/NRM the DDLS fellow will transition to become a the senior DDLS fellow of the DDLS alumni community and will enjoy continued affiliation with the DDLS program. Senior alumni fellows will take part in peer mentoring of the next-generation of DDLS fellows and other DDLS scientists (during the years 5-12 of the DDLS program). The senior alumni fellows are expected to continue to be active members in the program (where the points 4-8 above will apply to some extent but these details will be available once applicable).
13. The DDLS fellow and the representatives of the host organization/department have read and agree to the terms and conditions of this agreement. The department will forward the financial /requisitioning information in the attached appendix to the person responsible for the project finance and accounting processes at the host organization/department (Appendix A. Financial specifications and instructions for requisition of costs).

Date: _____ Date: _____

_____ _____

Director of the DDLS program *Head of department/NRM*

Date: _____

_____

Chair of the Board at SciLifeLab

Read and agreed by the DDLS Fellow

Date: _____

_____

DDLS Fellow

Appendices:

A. Financial specifications and instructions for requisitioning of costs

B: SciLifeLab data policy

Appendix A. Financial specifications and instructions for requisitioning of costs

1. The KAW funding allows a maximum of 18 % of the approved KAW funding (17 MSEK) to be used for overhead (indirect costs) and premises costs. Additionally, there is a maximum coverage of 50% for LKP (payroll overhead) on gross salary costs.

2. The DDLS program and KTH/SciLifeLab will not provide additional funding if the costs of the entire fellow package exceed the approved KAW funding amount.

3. During the DDLS fellow package funding period large deviations (+/- 10% per cost type) that may occur from the submitted budget needs to be communicated to KTH/SciLifeLab. The cost distribution across different direct cost items can only be modified after approval.

4. Only KTH/SciLifeLab can contact KAW regarding the DDLS budget and requisition questions.

5. The DDLS fellow's hosting department will appoint a finance officer who will report the financial results for the DDLS fellow package to KTH/SciLifeLab twice a year according to each reporting period defined below in point 10.

6. The grant will be transferred retroactively twice a year corresponding to the reported actual costs, provided that all the cost elements and the supporting documentation are approved. At the end of the 5th year, the requested total funding should not exceed the approved 5-year budget of the DDLS fellow package (17 MSEK).

7. The requisitions will be supported by actual DDLS fellow package cost information (profit and loss statement/resultaträkning) that is extracted from the universities'/NRM's accounting system for each reporting period defined below.

8. Every unit that cooperates within the same DDLS fellow package will have its own dedicated and single project number created in the partner's accounting system.

All related costs that incur for that specific fellow package at the cooperating unit need to be registered on that single and unit-based project number.

9. In the case the DDLS fellow's position is discontinued, or if the DDLS fellow leaves the program before the end of the 5-year funding period, a case-by-case decision will be made by the SciLifeLab board on the continued support. We expect that continued support to the DDLS fellow's research group members may be possible until the end of their contracts, with minimal running support and other fixed costs. No new hires or major costs can be made after the DDLS fellow is no longer employed and/or supported by the DDLS program. If the DDLS fellow transitions elsewhere, but wishes to continue part-time, this will need to be considered case-by-case and approved by the SciLifeLab board.

10. Only one requisition and cost reporting per DDLS fellow package will be compiled biannually and sent to the KTH/SciLifeLab (ekonomi.ddls@scilifelab.se):

- For the period January 01 – June 30 by August 20 the same year the latest
- For the period July 01 – December 31 by February 20 the following year the latest

KTH/SciLifeLab can at any time during the year ask for additional financial reports for the DDLS fellow package if needed.

SciLifeLab Data Policy (version 1.1.)

As the national infrastructure for life science and operator of the large life science research program (KAW-funded Data Driven Life Science, DDLS), SciLifeLab has a leading role in shaping the future of research data practices. In line with this responsibility, we hereby express our firm commitment to the values of 1) Open Science, 2) Transparent research, and 3) FAIR (Findable, Accessible, Interoperable, Reusable) principles as described in the following documents:

1) The EU open science policy: https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/open-science_en

2) Research Transparency definition https://www.ucl.ac.uk/research/strategy-and-policy/research-transparency

3) Wilkinson, M., Dumontier, M., Aalbersberg, I. et al. The FAIR Guiding Principles for scientific data management and stewardship. Sci Data 3, 160018 (2016). https://doi.org/10.1038/sdata.2016.18

SciLifeLab will contribute to the international life science research community according to these principles, and engage with Open Science/FAIR initiatives. This document will refer to all research programs driven or coordinated by SciLifeLab, including services operated by SciLifeLab infrastructure platforms and research carried out in the context of the DDLS program.

This document lays down our guiding principles, expectations and assurances towards pursuing the highest standards of scientific research and data management. We prioritise these principles in our interactions with researchers, infrastructure users, and SciLifeLab stakeholder organizations, and these principles shape our expectations on the service units and users of the national SciLifeLab infrastructure services. A fundamental principle is that data and results from publicly funded research should be made publicly available to the greatest extent possible, as open as possible, as closed as necessary.

SciLifeLab is a collaboration between Swedish academic organizations, and while this document is not legally binding upon the academic community, it will set up expectations for SciLifeLab associated programs. This document does not override or take precedence over current data policies, regulations or obligations that may be in place by other organisations or funders, including data policies at the Swedish universities hosting SciLifeLab.

The commitments and expectations outlined here will have concrete consequences through their application in different contexts, such as terms and

conditions for funding, project prioritization, or evaluation criteria. The principles outlined aim to ensure conformity with other legal and ethical obligations as well as official recommendations including;

- Swedish Government's Research and Innovation Bill
  Forskning, frihet, framtid – kunskap och innovation för Sverige (prop. 2020/21:60)
- UNESCO Recommendation on Open Science
  https://unesdoc.unesco.org/ark:/48223/pf0000379949.locale=en
- Swedish Research Council recommends open access to research data
  https://www.vr.se/english/mandates/open-science/open-access-to-research-data/the-swedish-research-councils-recommendation.html
- Swedish Research Council recommendation on data management according to FAIR
  https://www.vr.se/english/mandates/open-science/open-access-to-research-data/fair-research-data.html
- EU General Data Protection Regulation
  https://gdpr-info.eu/

SciLifeLab will support national infrastructure units, research programs, affiliated researchers, and users of SciLifeLab services in making their data more widely available "as open as possible, as closed as necessary", in accordance with the European Commission for Open Data principle. We strive to achieve the highest level of reusability of SciLifeLab generated data in line with the FAIR principles.

We will work with our infrastructure, its users and SciLifeLab research programs (including DDLS) to define how these guiding principles can be integrated in future SciLifeLab operations.

SciLifeLab commits to providing the IT services, resources and support required to facilitate adherence to this policy and further promoting high quality, open and reproducible research practices.

SciLifeLab expects all activities organized or funded by SciLifeLab to contribute to building broad national capabilities for life science, such as through making all research output available and as open as possible, including; research data, any material created in the course of research work, output from services platform, records, source research, experiments, samples, measurements, surveys and interviews, methods/protocols, metadata, software and code.

Examples of potential activities motivated by this Data Policy, that may be developed in the future:

National platforms - part of SciLifeLab infrastructure:

- Require supported projects to commit to FAIR data sharing, and maintain Data Management Plans (DMPs).
- Provide the support and tools necessary for user projects to adhere to FAIR data sharing, including providing platform specific meta-data required for reproducibility and data sharing.
- Make methods and software workflows publicly available.
- Operate in a way that ensures reproducibility and the ability to trace and audit projects.
- Make operational data publicly available when specified in SciLifeLab reporting requirements.

Research programmes, including the DDLS program, projects, and users of infrastructure:

- Manage research data with re-use and reproducibility in consideration throughout the entire research process, and as open as possible, as closed as necessary.
- Ensure that research involving human biomaterial and data is performed at the highest level of integrity, with appropriate protection mechanisms and ethics review, and in a manner that enables FAIR sharing of data and results through access control mechanisms on secure IT infrastructure.
- Ensure that projects have an active Data Management Plan.
- Commit to FAIR data sharing, and ensure necessary resources (funding and staff) for this.
- Publish research results as Open Access, when these have been achieved through SciLifeLab research programs, including DDLS, or through support by SciLifeLab infrastructure[1].

SciLifeLab board, management and operations office functions:

- Transparently provide information about operations, including publicly sharing formal protocols, decisions, evaluations and strategies.
- Make operational data publicly available.
- Steer research activities towards Openness and FAIRness

[1] https://www.vr.se/english/mandates/open-science/open-access-to-publications.html

Document information:

Version	1.1
Date of this version:	2022-03-01
Date for original version:	2022-03-01
Host Departments:	Data Centre & NBIS
Status:	Under Review
Comment:	This policy will be reviewed and adjusted to reflect recent advances in the field.

Approved by the Board after revisions:

SciLifeLab board no. 56, 220309

Appendix 4

Bioinformatics/NBIS Platform

Chair: Ulf Gyllensten, Uppsala University (suggested replacement from April 2022 Carl-Johan Rubin, Uppsala university.

Leif Andersson, Uppsala University
Anna Arnqvist, Umeå University
Laura Elo, University of Turku
Eivind Hovig, University of Oslo
Tanja Slotte, Stockholm University
Therese Sørlie, Oslo University Hospital
Helena Westerdahl, Lund University

Genomics/NGI Platform

Chair: Stefan Bertilsson, SLU

Goncalo Castelo-Branco, Karolinska Institute
Åsa Johansson, Uppsala University
Marc Friedländer, Stockholm University
Anna Hagstrom, Lund University
Pelin Sahlén, KTH
Elisabet Carlsohn, Gothenburg University

CBGE/CBCS Platform

Chair: Thomas Lundbäck, Astra Zeneca Mölndal

Krister Wennerberg, BRIC Copenhagen University
Margit Mahlapuu, Gothenburg University
Ulrika Berglund Warpman, Oxcia (on leave from Karolinska Institute)
Fredrik Almqvist, Umeå University
Marjolein Thunnissen Max4; Lund University
Johan Evernäs, Redglead