

The national board of Science for Life Laboratory

Minutes from board meeting no 64, May 24, 2023

Present members

Ylva Engström (SU) (chair), Martin Bergö (KI), Henrik Cederquist (SU), Lena Eliasson (LU), Mats Larhed (UU), Mikael Lindström (KTH, §§ 1-9e), Carina Mallard (GU), Katrine Riklund (UmU)

Other participants

Olli Kallioniemi (Director), Mia Phillipson (Co-Director), Annika J Jensen (Infrastructure Director), Jenny Alfredsson (Head of Operations/OO), Eva Berglund (§ 8), Marija Cvijovic (§ 12d), Sandra Falck (Vice Head of Operations/OO), Lars Johansson (OO, § 12), Åsa Johansson (§ 8), Anna Lidin (OO, § 12), Josefin Lundgren Gawell (OO, § 12), Heidi T Persson (OO, §§ 9, 12d), Mojgan Seraji (OO, § 12d), Alice Sollazzo (OO, § 10), Ulrika Wallenquist (OO, §§ 9, 12d), Päivi Östling (§ 8), Anna Höglund Rehn (OO, secretary)

1. Meeting formalities

Ylva Engström welcomed all members and opened the meeting.

Decisions:

The SciLifeLab board appointed Lena Eliasson to approve the minutes of the meeting in addition to the chair.

The SciLifeLab board approved the minutes from meeting no. 63.

The item 9g. Cancellation and re-recruitment of a DDLS fellow position at GU was included on the agenda.

2. Update from the Director

Olli Kallioniemi presented the quarterly update from SciLifeLab.

3. Director for SciLifeLab – nomination process VC-2022-0060

The mandate for Olli Kallioniemi as Director for SciLifeLab ends June 30, 2024. In the regulation (Förordning om Nationellt centrum för livsvetenskaplig forskning), 3§, it is stated that the SciLifeLab board appoints the Director for SciLifeLab.

At meeting no. 60, December 6, 2022, the board appointed a nomination committee and established tasks for the committee.

Ylva Engström informed about the work of the committee and about the preliminary timeline.



4. Assignment of members in the SciLifeLab International Advisory Board, IAB

VC-2022-0069

According to the "Arbetsordning för SciLifeLab" (2022) the board should appoint the International Advisory Board, IAB. The main task for the IAB is to give input regarding the development of SciLifeLab. Every second year the IAB is invited to SciLifeLab for a presentation of SciLifeLab developments and discussions on active topics and meetings with key groups of individuals. The next visit is planned for February 7-9, 2024.

The mandate period for the members of the previous IAB has ended and new members need to be appointed.

At the meeting no. 60, December 6, 2022, the board decided to nominate Jan Ellenberg, EMBL, to continue as a chair of the SciLifeLab IAB and to mandate to the chair of the board, together with the SciLifeLab Director and the chair of the IAB, to explore the composition of the SciLifeLab IAB, including possible re-nominations of existing members, but also looking for new names.

At the meeting no. 63, April 12, 2023, the board nominated Jan Ellenberg, Sören Brunak, Jo Bury, Sirpa Jalkanen, Janet Jansson, Svante Pääbo and Sarah Teichmann to continue as members of the SciLifeLab IAB for the period from April 12, 2023, until December 31, 2026.

Olli Kallioniemi informed about the nomination process of new members of the SciLifeLab IAB.

Decision:

The SciLifeLab board approved the candidates to be considered for the SciLifeLab IAB and the backup candidates. The top candidates will now be contacted to see their availability for the IAB task.

The board mandated the chair of the board to make the final nominations, with a total of up to 4-5 new IAB members. The nomination period will be from June 1, 2023, until December 31, 2026.

Assignment of members in the SciLifeLab National Committee, NSC

VC-2023-0028

The mandate period for all members in the National SciLifeLab Committee has ended. At the SciLifeLab board meeting no. 58, September 21, 2022, the role of NSC was discussed and the board decided that the NSC will be composed of members of both host and non-host universities.

NSC reports to the director to emphasize that it is not an alternative advisory function



to the International Advisory Board (IAB), which is reporting directly to the board.

Olli Kallioniemi informed about the nomination process and the suggestions.

Decision:

The SciLifeLab board approved the suggested list of NSC members for the period from June 1, 2023, until June 30, 2026:

Eva Hellström-Lindberg, KI
Cristina Al-Khalili Szigyarto, KTH
Tanja Slotte, SU
Tobias Sjöblom, UU
Anders Fridberger, LiU
Gustav Smith, GU
Gunilla Westergren-Thorsson, LU
Richard Lundmark, UmU
Sara Hallin, SLU

The board nominated Gunilla Westergren-Thorsson as a chair of the NSC. The chair is an adjunct member of the SciLifeLab board.

The board mandated the chair of the board to approve members in the NSC if alternative nominations are needed.

6. New Scientific Director for Uppsala University VC-2023-0026

According to the 4-part agreement, each party should nominate a scientific director. Staffan Svärd, scientific director for Uppsala University, has asked to resign from the assignment due to other assignments at Uppsala University. A nomination of Aristidis Moustakas as new scientific director for Uppsala University from July 1, 2023, has been sent in.

The mandate period for all Scientific Directors ends in December 2023. Decision about Scientific Directors from 2024 will be made at an upcoming meeting.

Mats Larhed informed about the nomination.

Decision:

The board approved the nomination of Aristidis Moustakas as scientific director for Uppsala University for the period from July 1, 2023, to December 31, 2023.

7. Co-lead for capability Pandemic Laboratory Preparedness, PLP VC-2022-0061

SciLifeLab has received funds and a 4-year task from the government for setting up laboratory preparedness for future pandemics. The SciLifeLab board decided at the meeting no 49 on February 3, 2021, to appoint Prof. Staffan Svärd, UU scientific



director, as a lead for the Pandemic Laboratory Preparedness, PLP, and in the meeting no 59 on November 8, 2022, to prolong the appointment until December 31, 2024.

Staffan Svärd has new assignments at Uppsala University from July 1, 2023 onwards, and hence a co-lead for the capability needs to be nominated.

Olli Kallioniemi informed about the nomination.

Decision:

The SciLifeLab board assigned Ulf Ribacke, Karolinska Institutet, as co-lead for the capability Pandemic Laboratory Preparedness, PLP, from July 1, 2023, until December 31, 2024.

The task for the scientific co-lead is expected to be up to 25% effort and will be funded from the pandemic laboratory preparedness budget frame.

8. Roadmap for Precision Medicine Capability VC-2023-0034

The purpose of the SciLifeLab precision medicine capability is to strengthen and coordinate the efforts within the precision medicine field, both internally and in collaboration with external stakeholders. The Precision Medicine Roadmap describes SciLifeLab's contributions towards the vision of Sweden being a world-leading nation in precision medicine.

Päivi Östling, capability lead, informed about the suggested Roadmap for the Precision Medicine capability.

Decision:

The SciLifeLab board approved the Precision Medicine Roadmap.

9. DDLS

9a. Director's status update

Olli Kallioniemi gave an update regarding the DDLS program.

9b. Approval of Fellow profiles, DDLS Fellows phase 2 VC-2023-0029

The second phase of the DDLS Fellow recruitments, where 19 positions are to be announced, will start in April 2024 in compliance with the KAW donation letter. For broad announcements, the generic text describing the DDLS program and strategic research areas (approved on Board meeting no 61, February 2, 2023) that all partners must include is sufficient. Partners who wish to add specific subject descriptions (ämnesbeskrivning) that further define the position(s) and the selection criteria, need to get approval from the SciLifeLab board.



LiU, LU, SU and UU have all confirmed that they will only use the generic texts and therefore will not need board approvals.

Decision:

The SciLifeLab board approved the specific subject descriptions in recruitment texts from the DDLS partners.

9c. WASP-DDLS joint call for research projects VC- 2022-0058

In the donation letter for 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 the life science and data science communities.

A first joint call was launched in June 2021. The SciLifeLab board approved a second joint call in November 2022. The call was launched in December 2022. When the call closed March 31, 2023, 59 applications were submitted and after checking for eligibility and formalities 57 grants were sent for a review.

The suggested funding decision was discussed and approved at the DDLS steering group meeting on May10, 2023.

Olli Kallioniemi informed about the evaluation process and the suggested funding decision. The WASP board has already approved their part of the suggested jointly funded program.

Decision:

The SciLifeLab board approved the funding to the suggested projects (appendix 1).

9d. WASP-HS DDLS call for seed money, funding VC-2023-0011

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 multidisciplinary collaborations and to bridge the gap between the different research communities.

The SciLifeLab board approved of the process for the call and the call text at the meeting on February 2, 2023. When the WASP-HS DDLS call for seed-money was closed on March 31, eight applications had been submitted. After review for formalities, seven were sent for review.



The funding for the projects will be provided fully by the DDLS program since no funding has been allocated for this collaboration to the WASP-HS. Projects are to start in the fall of 2023.

Olli Kallioniemi informed about the evaluation process.

Decision:

The SciLifeLab board approved the funding to the suggested projects.

Proposal	Proposal title	Submitter	Affiliation	Research field	Co-applicant	Affiliation	Research field	Amount applied for (SEK)
23:002	Al4CBT Explainable, Human-Centric, Psychology-Grounded Fine-Grained Assessment and Planning for Cognitive Behavioral Therapy	Sverker <u>Sikström</u>	LU	DDLS	Loïs Vanhée	UmU	WASP- HS	493056
WASPHSDDLS 23:003	Trustworthy Al-based medical treatment	Andreas Kotsios	UU	WASP-HS	Robin Strand	UU	DDLS	500000
WASPHSDDLS 23:007	Mapping the Nexus of Biodiversity, Climate Change, Human Society and Health using Large Language Models	Sonja <u>Aits</u>	LU	DDLS	Emily Grace Kristina Boyd	LU	WASP- HS	500000
							TOTAL	1493056

9e. DDLS steering group nominations

VC-2023-0030

At the SciLifeLab board meeting no. 48, on November 30, 2020, members in the DDLS steering group were nominated for the period from January 1, 2021, until December 31, 2023.

Members of the DDLS steering group should primarily serve as representatives of their scientific field and the research community and they do not (only) represent their host university.

Olli Kallioniemi informed about the nominations.

Decision:

The SciLifeLab board nominated the following scientists to the DDLS steering group for the three-year period from January 1, 2024, until December 31, 2026:

- Oliver Billker, Professor at Umeå University, Director MIMS
- Matts Karlsson, Deputy Vice-Chancellor for Research at Linköping, National Academic Infrastructure for Supercomputing in Sweden (NAISS)
- Erik Kristiansson, Professor at Chalmers/University of Gothenburg
- Janne Lehtiö, Professor at Karolinska Institutet, SD for SciLifeLab, KI
- Erik Lindahl, Professor at Stockholm University
- Tuuli Lappalainen, Professor at KTH Royal Institute of Technology, Director



- of NGI. Joint appointment at NY Genome Center
- Fredrik Ronquist, Professor at Museum of Natural History
- Gunilla Westergren-Thorsson, Professor at Lund University/WCMM, Chair of NSC
- Carolina Wählby, Professor at Uppsala University
- Sara Hallin, Professor at Swedish University of Agricultural Sciences, SLU

The DDLS Director, the DDLS Research School Director and a representative from the Knut and Alice Wallenberg Foundation will also be participating in the DDLS Steering Group.

9f. DDLS Director – prolongation of appointment VC-2023-0031

At the SciLifeLab board meeting no. 46, October 26, 2020; Olli Kallioniemi, Director of SciLifeLab, was appointed as Director of the SciLifeLab and Wallenberg Program for Data-driven Life Science for the period from 2021-01-01 until 2023-12-31.

Ylva Engström informed about the suggestion.

Decision:

The SciLifeLab board decided to prolong the appointment of Olli Kallioniemi as Director for the DDLS program, until June 30, 2025.

9g. Cancellation and re-recruitment of a DDLS fellow position at GU VC-2023-0035

The DDLS fellow at Gothenburg University recruited to the Epidemiology and biology of infection research area has resigned and the DDLS program has been presented with questions on how to support the PhD student and the postdoc that have been hired, reimbursement of costs incurred, and possibilities to re-recruit a DDLS fellow.

Olli Kallioniemi informed about the issue and discussions held.

Decision:

The SciLifeLab board mandated the chair to approve a detailed suggestion.

10. Pandemic Laboratory Preparedness call - funding VC-2023-0032

In December 2020, SciLifeLab was commissioned by the government to build capacity to assist in future pandemics, supported with additional governmental funding to SciLifeLab (40 MSEK in 2021 and 30 MSEK per year 2022-2024, in total 130 MSEK). To meet these aims, SciLifeLab has started the Pandemic Laboratory Preparedness program (PLP) with a national network of laboratory capabilities. The PLP program has decided to support a continuation of the capabilities from PLP at the



major Clinical Microbiology Labs in Sweden (PLPCM).

In the call, REPLPCM, the PLP program aimed to support the continuation of up to 8 capability building projects from PLPCM. The call was open between February 2 and April 17, 2023, and 7 proposals were received. The maximum grant size was 1.5 MSEK.

Alice Sollazzo informed about the evaluation process and funding suggestion.

Decision:

The SciLifeLab board approved to fund the 7 proposals with a total of 5.250 MSEK 2023 and 5.250 MSEK 2024 according to the PLP budget.

Proposal title	Submitter	Suggested funding (MSEK)	
Next generation clinical virology	Tobias Allander, KI	1,5	
Gothenburg Initiative for Pandemic Laboratory Preparedness (GILP)	Magnus Lindh, GU	1,5	
Preparedness for tracking resistant and virulent bacterial and fungal pathogens (TRACK-PATH)	Christian Giske, KI	1,5	
patriogens (110 lot 17 titr)	emistian eiske, ki	1,0	
Rapid typing of emergent virus variants in a clinical setting	Anders Bergqvist, UU	1,5	
Establishing sequencing-based viral diagnostics for pandemic and outbreak diagnostics in the clinical laboratory	Patrik Medstrand, LU	1,5	
Implementation of a targeted metagenomic NGS platform for			
diagnostics and epidemiological surveillance of viral pandemic threats	Lisa Pettersson, UMU	1,5	
Metagenomic sequencing for pathogen identification and analysis	Jenny Welander; LIU	1,5	
		10,5	

The funding is regulated via Conditions for funding.

11. KAW Proof of concept

VC-2023-0023

KAW has invited SciLifeLab to participate in the evaluation of a new Proof of Concept (POC) grant program. These grants are meant to support the bridge from academic excellence to innovations. The POC grants are operated by the Wallenberg Launch Pad (WALP) program, which will make final funding decisions and will offer coaching to help in the innovation process.

Olli Kallioniemi informed about the SciLifeLab involvement in the program.



12. Strategy discussions

12a. Introduction

Olli Kallioniemi introduced the strategy discussions through an update on the current 4-year period, with reflections on the future.

12b. General SciLifeLab strategy

The annual strategy discussion for SciLifeLab is meant to look into the future beyond our usual current (quarterly) topics and annual budget cycles. The information and discussion included:

- Update of the roadmap from 2019.
- IAB visit in early 2024 and focus areas for the visit.
- How to communicate the current and future strategy.
- Research proposition plans.

12c. International evaluation of the SciLifeLab infrastructure (spring 2024)

VC-2023-0033

The SciLifeLab infrastructure will enter a new four-year budget period in 2025, and the SciLifeLab Board decision on the funding of the next-generation infrastructure will be based on an international review carried out by an appointed international evaluation committee (IEC) with a physical meeting in April 2024. The international evaluation will be preceded by i) internal platform strategic work resulting in a platform strategic plan ii) and a national survey where we ask for suggestions on new technologies and existing local infrastructure units that are currently not part of SciLifeLab.

Annika J Jensen informed about the suggested process for the international evaluation.

Decision:

The SciLifeLab board approved the tentative format for the international evaluation in 2024.

The SciLifeLab board approved the described format for the national survey in 2023 with some changes.

12d. DDLS national research school

The national DDLS PhD Program is one of the DDLS long-term initiatives with the mission to train highly skilled and competent professionals who can make a significant contribution to the field of life science research in Sweden. The program is run by DDLS Research Graduate School (DDLS RSG), which will be launched in 2024. More than 250 PhD students, as well as 200 postdocs within academia and



industry, are planned to be enrolled in the DDLS Research Graduate School over the next 10 years.

Marija Cvijovic, DDLS research school Director, informed about the plans for the DDLS research school and models being considered for PhD recruitment.

12e. Financial issues

Ylva Engström

Jenny Alfredsson gave an update and status of the finances in relation to the agreed budget for 2023 and to the surplus at KTH and UU. Discussions on budget framework, short-term and long-term strategic considerations with financial implications.

13.	Other issues
No oth	ner issues were raised.
Upco	ming meetings
•	Tuesday September 26, 8.30-12.00 Zoom Wednesday November 8, 10.00-15.00 in Solna
	Höglund Rehn, secretary
Minute	es approved by:

Lena Eliasson

		Main applicant			Co-applicant							
										Amount applied	DDLS funding	Adjusted amount to fit within max funding
Proposal	Proposal title	Submitter	Affiliation	Position	Program	Full name	Affiliation	Position	Program	for (SEK)	(SEK)	(SEK)
WASPDDLS22:006	Predicting chemotherapy sensitivity	Volker Lauschke	KI	Professor	DDLS	Ming Xiao	KTH	Associate/	WASP	4000000	2000000	2000000
	using graph neural networks based on deep mutational scanning							assistant professor				
WASPDDLS22:009	Topological Data Analysis of Functional Genome to Find Covariation Signatures	Pelin Sahlén	ктн	Associate/ assistant professor	DDLS	Wojciech Chachólskí	ктн	Professor	WASP	3761000	1 760 958	1 760 958
WASPDDLS22:011	Predictive uncertainty estimation in deep learning-based cervical cancer screening at the point-of-care	Nina M Linder	υυ	Associate/ assistant professor	DDLS	Claes Lundström	LiU	Professor	WASP	4000000	2 000 590	2000000
WASPDDLS22:020	Enabling proteoform biomarker discovery	Fredrik Levander	LU	Associate/ assistant professor	DDLS	Lukas Käll	КТН	Professor	WASP	4000000	2000000	2000000
WASPDDLS22:022	Al-driven identification and harvesting of NK serial killer cells	Björn Önfelt	ктн	Professor	DDLS	Mårten Bjökman	КТН	Associate/ assistant professor	WASP	4000000	2000000	2000000
WASPDDLS22:035	Unraveling the secrets of nature's high- performance fiber	Anna Rising	SLU	Professor	DDLS	Hedvig Kjellström	KTH	Professor	WASP	3977598	1 996 598	1 996 598
WASPDDLS22:043	Hyperspectral Imaging and Machine Learning for Precision Skin Tumor Diagnostics	Malin Malmsjo	LU	Professor	DDLS	Victor Olariu Ahnell	LU	Associate/ assistant professor	WASP	3903701	2 068 192	2000000
WASPDDLS22:065	Deep-learning for lineage trees from LUSTRE data	Jonas Frisén	KI	Professor	DDLS	Jens Lagergren	KTH	Professor	WASP	4000000	2 006 078	2000000
WASPDDLS22:067	Al-Driven Design of Cell Type-Specific Regulatory DNA for Next-generation Gene Therapies	Aleksej Zelezniak	СТН	Associate/ assistant professor	WASP	Enric Llorens	КІ	Associate/ assistant professor	DDLS	4000000	2000000	2000000
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WACDDDI C22.025	Marshine Leaguine have ave Calle	Ville Kaila	SU	D	DDLS	Steren Oleren	CTU	DDLS	WASP	3930000	4 000 000	
WASPDDLS22:025	Machine-Learning how our Cells Capture Energy - Data-Driven Studies of Membrane Protein Function, Evolution, and Disease	VIIIe Kalla	SU	Professor	DULS	Simon Olsson	СТН	Associate/ assistant professor	WASP	3930000	1 999 000	
WASPDDLS22:051	Predicting glucose from peripheral nerve signals	Henrik Hult	КТН	Professor	WASP	Peder Olofsson	KI	Associate/ assistant professor	DDLS	4000000	2000000	
WASPDDLS22:066	Synthetic high-dimensional cohorts for studies of neurodegenerative diseases	Niklas Mattsson- Carlgren	LU	Associate/ assistant professor	DDLS	Kalle Åström	LU	Professor	WASP	4000000?	2000000	
WASPDDLS22:068	Enlightening biology: bridging time- resolved experiments in silico	Nanna List	KTH	Associate/ assistant professor	DDLS	Talha Bin Masood	LiU	Associate/ assistant professor	WASP	3836421	1 852 421	
	<u> </u>	·	· ·		· ·			TOTAL DDLS			25 683 837	25 608 977