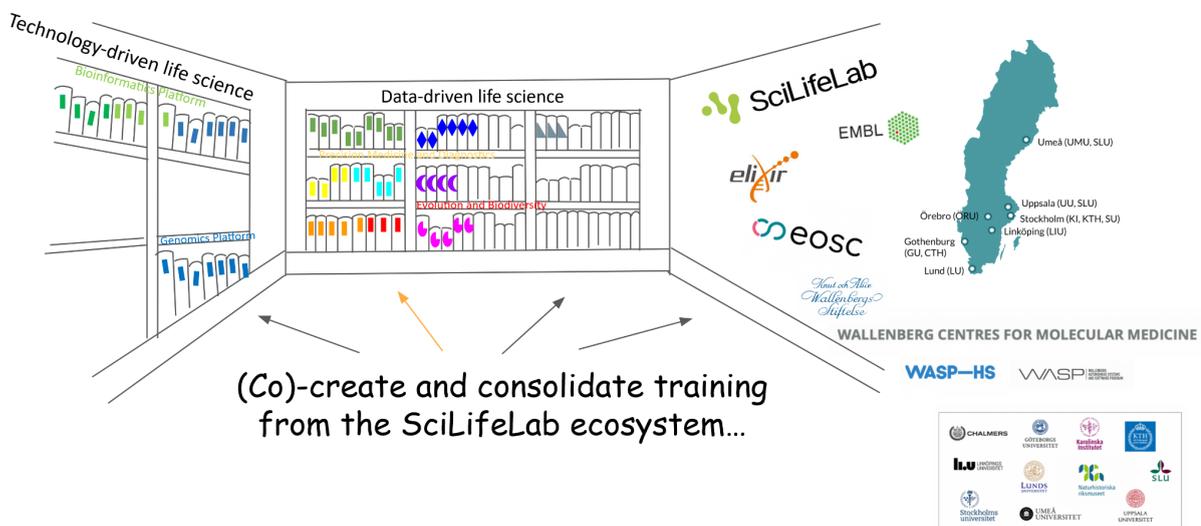# SciLifeLab Training Hub
Work Programme 2023 – 2028

Becoming the national go-to-place for technology- and data-driven lifelong learning

Table of Content

Training Hub Mission

> The vision of SciLifeLab Training Hub is to *Become the national go-to-place for technology- and data-driven lifelong learning.* We will reach this goal by *Consolidating, coordinating and supporting the co-creative training efforts across the SciLifeLab ecosystem*, thus enabling world-class research by providing the life science community with easy access to the SciLifeLab knowledge and skills.

Training Hub core values

> Training Hub strives to;
>
> **Collaborate**
> Provide a co-creative environment for Trainers and learners alike
>
> **Include**
> Be an inclusive community where diversity is key
>
> **Share**
> Willingness to provide knowledge and help. We aim to share!
>
> **Sustain**
> Knowledge and Training Hub outputs are to be as Open as possible following the FAIR principles

Training Hub Organisation

Head of Training, Training manager, Scientific Training Officers, Systems Architects
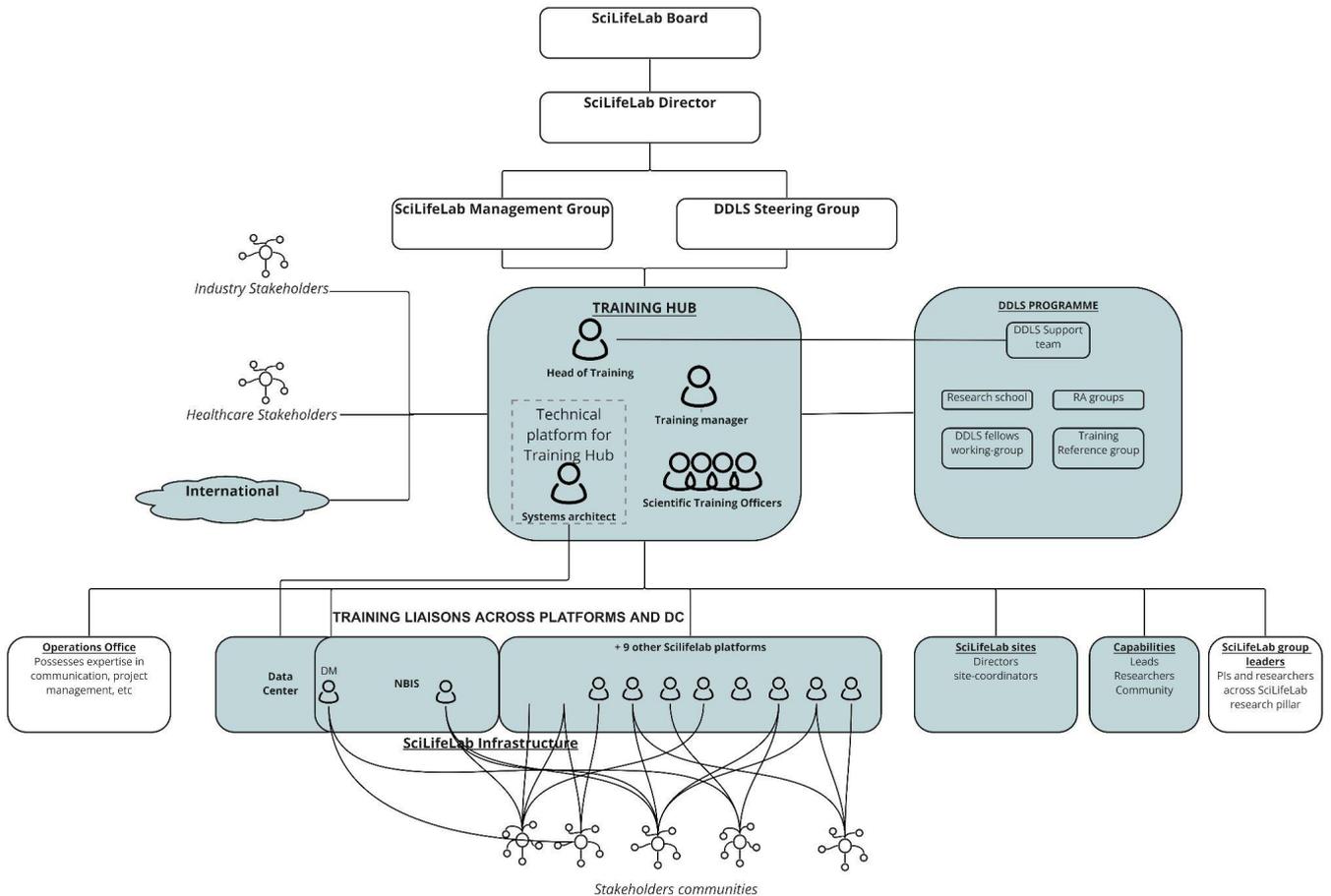

Figure 1: Draft Training Hub stakeholder connections throughout the life science ecosystem. Green represents the Training Hub's primary stakeholder groups across SciLifeLab.

Platform scope and ambition

The national SciLifeLab Training Hub stands on **three pillars** (figure 2);

Support - providing a coherent Training Platform infrastructure, by seamlessly integrating existing technical services and resources together with a sustainable people organisation dedicated to training.

Standards - Promoting Quality and assurance such as policies and best practices for Open Science, Open Education and FAIR.

Community - Building knowledge and skills across the SciLifeLab ecosystem, establishing a Community of Practice dedicated to co-create and deliver openly available and FAIR training collections.

The core values chosen by the Training Hub (see above) permeate the pillars, work environment and tasks performed by the Hub.
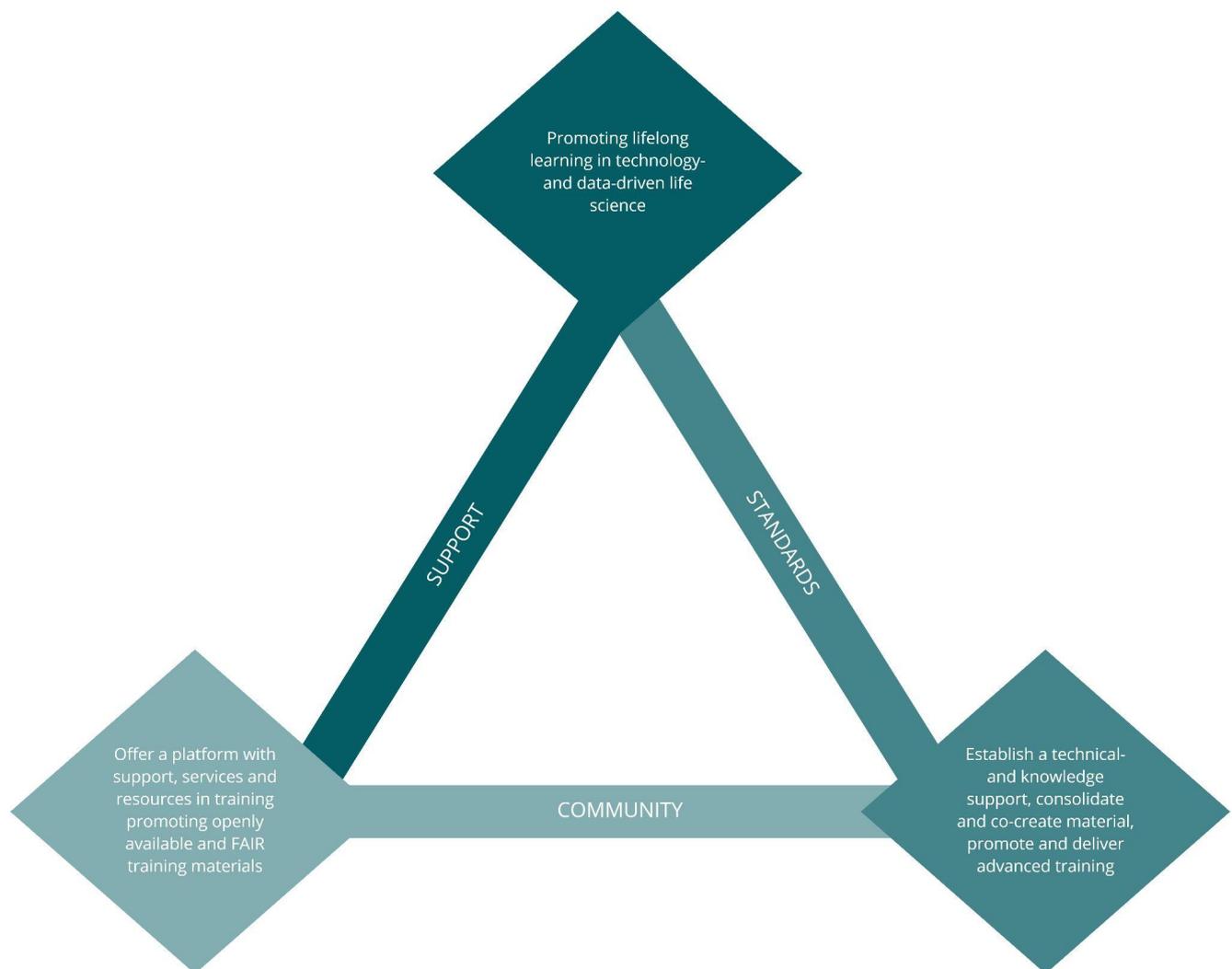
Figure 2: SciLifeLab Training Hub three pillars surrounded by; 1) the WHY (purpose) - Promoting lifelong learning in technology- and data-driven lifescience, 2) the HOW (process) - Establish a technical- and knowledge support, consolidate and co-create material, promote and deliver advanced training, and 3) the WHAT (outcome) - Offer a platform with support, services and resources in training promoting openly available and FAIR training materials.

For the period 2023-2028 we envision four **strategic objectives** for a Training Hub, all which are interlinked and connected to the three pillars.

Objective 1 - Establishing a coherent Training Platform infrastructure, by seamlessly integrating existing technical services and resources

Objective 2 - Building knowledge and skills across the SciLifeLab ecosystem with openly available and FAIR training collections

Objective 3 - Quality and assurance: Promoting standards and best practices for Open Science, Open Education and FAIR

Objective 4 - Establish a sustainable organisation dedicated to training

Each of the strategic objectives have dedicated sub-objectives with detailed tasks, milestones and deliverables. The tasks are stated for the budget period granted from the SciLifeLab board.

By 2028 we aim for the SciLifeLab Training Hub to:
- start to be recognised as a well-established point of reference for those who either seek training or seek to develop new training across the data-driven and the technology-driven life sciences
- offer a seamlessly-integrated technical infrastructure (training platform)
- have started to establish a training handbook containing guidelines, metrics, training descriptors and Train-the-Trainer materials
- offer a Course Portfolio with SciLifeLab topics to support the training needs of the Swedish life science community.
- be a sustainable organisational framework dedicated to training to support the training across the SciLifeLab ecosystem.

Projects anticipated to run over 2023-2028:

Objectives	Aim
1. Establishing a coherent Training Platform infrastructure, by seamlessly integrating existing technical services and resources	Building and establishing a system of connected Training Platform services. The systems are aimed to connect seamlessly in the background enabling the users to get the training support needed for both delivering and consuming knowledge.
2. Building knowledge and skills across the SciLifeLab ecosystem with openly available and FAIR training collections	To capture the knowledge base and delivery mechanisms needed for engaging the SciLifeLab ecosystem, internal and external. Community establishments, working groups and other forums to ensure knowledge transfer.
3. Quality and assurance: Promoting standards and best practices for Open Science, Open Education and FAIR	To develop and implement standards and best practices for Open Science and Open Education in the created training materials and the delivery of the training.
4. Establish a sustainable organisation dedicated to training	1. Establish a core Training Hub people/organisational infrastructure 2. Establish a Training Liaison structure across the SciLifeLab ecosystem 3. Establish a co-production model for training across the SciLifeLab ecosystem

SciLifeLab

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Work Programme 2023 – 2028

Description of Work for 2023-2028
2023-2028 Goal: Establish SciLifeLab national Training Hub as the go-to-place for technology- and data-driven life science lifelong learning
Resources (FTE) 2023: Head of Training, 0.5 Training manager, 1 STO 1, 1 STO 2, 1 Systems architect (located at Data Centre), 1   Resources (FTE) 2024:

Objective 1: Establishing a coherent Training Platform infrastructure, by seamlessly integrating technical services and resources

For Training Hub to be able to reach its vision and mission, a technical infrastructure for co-creation and sharing of course materials is essential. The technical platform will be the natural meeting point between course creators, collaborators, and learners, where all material will be accessible according to the principles of OPEN and FAIR. With this platform we have the opportunity to create a comprehensive collection of materials within data driven life sciences, which will enable Swedish researchers to gain state-of-the art knowledge, within an easy reach.

These services will be the core of an Openly available Training Platform infrastructure that could be effectively used by the broad life science community i.e. both within the SciLifelab ecosystem and externally, moving towards the SciLifeLab Training Hub vision of becoming an established and recognised lifelong learning provider in Sweden for the technology- and data-driven life science community and with this the Training provider for Life Sciences.

Objective 2: Building knowledge and skills across the SciLifeLab ecosystem with openly available and FAIR training collections

The need for training in technology- and data-driven life science evolves constantly, due to the continuous development of new technologies, tools and services, as well as increasing demands for knowledge and skills in team sciences and new cross-disciplines such as data-driven life science. The SciLifeLab Training Hub, jointly with other SciLifelab entities such as Platforms, SciLifeLab sites, Capabilities, DDLS programme as well as international connections such as EMBL, VIB and EBI, will continuously do inventories and landscape analyses to capture the knowledge base existing in the ecosystem.

The SciLifeLab ecosystem, both internally and externally, is composed of experts (staff-scientists, researchers, technical staff and developers, platform managers, etc.) who master the SciLifeLab Services, Resources and scientific domains. In the context of this objective, they have the role of course content providers, producers of training materials, and trainers on SciLifeLab training events. The SciLifelab Training Hub is composed of experts in training research, course design and creation (identification of target audiences, curriculum design, learning design, etc.), training material development, training trainers (Train-the-Trainer) and training impact assessment. All the tasks associated with a training event, from conception to delivery, need a tight collaboration between these two "expertises". Therefore training development will be organised as 'co-productions' between the Training Hub core and the collaborating SciLifelab entity such as the SciLifeLab Platform, Capabilities, SciLifelab site or research community.

Note: There will be no funds to allocate to support any delivery of training from the SciLifeLab Hub entity.

Objective 3: Quality and assurance: Promoting standards and best practices for Open Science, Open Education and FAIR

As part of setting out to become an established and recognised lifelong learning provider in Sweden for the technology- and data-driven life science community, this objective captures the need to continue to develop standards and best practices for Open Science and Open Education. These standards, guidelines and policies will be implemented and adapted by the community as well as new ones will be established when needed. From this processes around quality and assurance such as guidelines, policies and other structures are to be established as a support and service to the trainers and learners across SciLifeLab ecosystem.

Objective 4: Establish a sustainable organisation dedicated to training

This objective is closely linked to the other objectives as it captures the People infrastructure aspects of training, both with regards to the Training Hubs core central organisation and operations and its

connection to key-enabler groups such as Infrastructure platforms and SciLifeLab management group. Also, this objective is a key component towards developing a connection to objective 3 'Promoting standards for Open Science and Open Education' as well as objective 2 'Building knowledge and skills across the SciLifeLab ecosystem with openly available and FAIR training collections', given that the topics are closely linked. One aim is to promote, intensify and support the continued training already delivered by the SciLifeLab ecosystem in addition to implementing the standards, tools and resources Training Hub is establishing. This will help to foster the community in Training best practices and strengthen the community building efforts where peer-to-peer learning will happen, creating healthy, safe and open team-science environments in research.

In order for the Training Hub to be acknowledged as a back-bone to SciLifeLab as a national Research Infrastructure, the Training Hub needs to establish its core people organisation and operations with regards to the SciLifeLab ecosystem. The Training Hub will set-up a central core people infrastructure/organisation that will provide central operations and support to the wider user community, internal and external to SciLifeLab. The aim is to grow organically with core staff-members possessing the skill-sets needed for the demand of the SciLifeLab ecosystem.

The Training Hub team of STOs together with management is responsible for creating and establishing several trusted links across the SciLifeLab ecosystem. This is important as to show the implementation of training as an activity is impactful for the various entities in SciLifeLab. The STO will lead the working groups and be responsible for any outputs and deliveries of the groups and transfer these back to management.