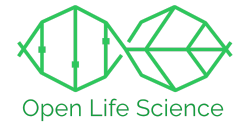


DOI: [10.5281/zenodo.4778472](https://doi.org/10.5281/zenodo.4778472)



# Open Life Science Project and Community report

**Authors:** Malvika Sharan, Yo Yehudi, Berenice Batut

**Board of Directors, Open Life Science**

*This report was published online on the Open Life Science website on 1 October 2020 in three parts: <https://openlifesci.org/posts/2020/10/01/annual-report-part-1/>.*

## Year one of Open Life Science (OLS)

Around June 2019, OLS was originally dreamed up. Mozilla had launched a call for applications to [Open Leaders X](#), the program that incubated OLS and several other related open leadership initiatives. In July 2019, we submitted a collaboratively prepared application written at the [BOSC 2019 CoFest](#) (see [the draft](#)), and in September we were delighted to learn we had been accepted to create our program as a part of Open Leaders X. Slightly more than a year has now passed, and we would like to share the first **annual OLS project and community report** with you.

Since the report is quite elaborative, we are publishing them in 3 parts:

1. we start by looking back at where we started
2. we give an account of how far we have come
3. we end this report with where we want to go.

## OLS timeline so far

- **September 2019:** OLS team joined Mozilla Open Leaders X as an accepted project
- **October 2019:** OLS is launched at [MozFest 2019](#) with 30 mentors and 40 experts
- **November 2019:** OLS-1 call for application opens
- **January 2020:** OLS-1 launched with 22 participating projects
- **May 2020:** OLS-1 graduates - 29 applicants graduated across 20 projects
- **July 2020:** OLS-2 call for application opens
- **September 2020:** OLS-2 launched with 32 participating projects
- **December 2020:** OLS-2 expected graduation
- **January 2021:** OLS-3 call for application is expected to open

## Inclusiveness designed at the core of OLS

DOI: [10.5281/zenodo.4778472](https://doi.org/10.5281/zenodo.4778472)



# Open Life Science Project and Community report

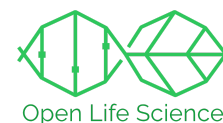
We designed our project to be inclusive of different demographics, by intentionally targeting researchers from countries, identities and genders who are traditionally underrepresented in Open Science. We personally reached out to all the mentors and experts from diverse domain knowledge, personal backgrounds and identities. Our mentors represent scientific communities from Australia, Brazil, Canada, China, Ethiopia, France, Germany, Ghana, Kenya, South Africa, Spain, Switzerland, The Netherlands, UK, and the USA. We started our first cohort with mentees who came from equally diverse countries from 5 continents, representing low, middle and high economy countries equally. 29 individuals joined from Kenya, Netherlands, Brazil, Canada, Thailand, Spain, UK, Japan, Russian, India, USA, Norway, Germany, and Nepal. Our mentors represented research communities from China, Greece, the UK, the USA, South Africa, Germany, Kenya, Netherlands, and Brazil.

We use welcoming and open channels for community participation. We have a cohort-based Slack channel and a public-facing Gitter channel (details: <https://openlifesci.org/ols-2#resources>). We strive to avoid jargon and other non-inclusive languages that can alienate, and make underrepresented people feel excluded. We use simple and jargon-free English in our communications, website and training resources (see an example from one of the cohort calls: <https://openlifesci.org/ols-1/week04/>). On our website, pronouns are listed for every participant in their profile (<https://openlifesci.org/ols-1/projects-participants/#participants>). At the beginning of each cohort call, we remind our [Code of Conduct](#) and use roll call where participants are asked to list their names and pronouns so others address them respectfully. We encourage and recognize the quietest voices, and not just those with the most confidence, and volume. During the cohort calls, we facilitate breakout discussions and encourage silent note-taking in shared notes. In OLS-2, cohort calls are live-transcribed using [Otter.ai](#), and some breakout rooms are non-verbal, to ensure that people with varying language skills or ability can still get an interactive and full experience.

We are still learning and are extremely grateful for the community members for sharing their experiences and resources with us to improve accessibility in the program. Over the last year, we've grown massively, from a hopeful idea co-founded by three people who set out to organise this program backed by their extremely generous and inspiring Open Science friends as mentors and experts. That idea has evolved into a thriving open science community - weekly emails to our 32 OLS-2 projects and mentors lists reaches over 100 people, and Zoom cohort calls now boast 40+ participants, despite being staggered across different times of day to accommodate time zones across the six different continents. In addition to the countries in OLS-1, OLS-2 participants also represent Australia, Austria, Bangladesh, Indonesia, Mali, New Zealand, Nigeria, Switzerland, Turkey, and Uganda in our cohort.

## Timeline of organisation support and partnerships

DOI: [10.5281/zenodo.4778472](https://doi.org/10.5281/zenodo.4778472)



# Open Life Science Project and Community report

The project has been supported by many organisations that have helped promote the program in their network allowing access to a wider research community (see here: <https://openlifesci.org/about#partners-and-sponsors>).

- **November 2019:** Non-financial partnership from Mozilla Open Leaders, Backofen Lab, Software Sustainability Institute, ELIXIR, de.NBI, EMBL Bio-IT, Freiburg University, Manchester University. These partnerships represented our employers, advisors, and professional networks - no official partnership agreements or memorandum of understanding was signed.
- **June 2020:** 'OLS-2 for Turing' collaboration with *The Turing Way* to support Open Source projects from The Alan Turing Institute and The Turing Way community
- **August 2020:** OLS was awarded the EOSC-Life Training grant to build a cohort with the EOSC Research Infrastructure community in **2021**
- **August 2020:** OLS registers as a Limited company with **£1 (GBP 1) in assets**
- **May-September 2020:** Software Sustainability Institute Fellowship pays for OLS-2 communication platform cost and mentorship training by [360 Training UK](#)

Bonus trivia: In July 2020, OLS was also shortlisted as one of the two projects as “best innovation in Open Source Technology” by CogX - a global festival for AI and technology (<https://cogx.co/cogx-awards/cogx-awards-2020-shortlisted/>). Though we did not win the award, we attracted the attention of early stage researchers interested in building their projects on AI and data science.

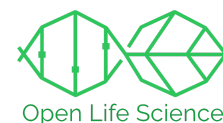
## Cohort expense and cost

Our website helps to give us an incredibly professional face thanks to Bérénice’s tireless and utterly incredible efforts (including during her maternity leave). But, as shiny as our site might look, we’re still operating on a shoestring budget - most of the preparation work we do is out of hours and on our own time, and many of the expenses required to run this project effectively have come from the founders’ own pockets. Likewise, OLS mentors and experts are all currently unpaid.

We would like to make this more sustainable - as such it probably comes as no surprise that the OLS team is currently actively seeking funding and applying for external fund sources.

Two co-founders are fellows of the Software Sustainability Institute (UK), which provided small fellowship funds with which we manage to support the communication and application management platforms required for the program. We are grateful to receive personal and organisational support in redirecting this fellowship towards OLS infrastructure needs. However, claiming these expenses can sometimes be a challenge – not all items can be funded and

DOI: [10.5281/zenodo.4778472](https://doi.org/10.5281/zenodo.4778472)



# Open Life Science Project and Community report

administrative formalities and a blog post is required for each item funded. As much as we like publishing written content from each activity we do, we've unfortunately become extremely time-poor whilst running a non-profit organisation outside of our day jobs.

**Budget:** Estimated real cost for 1 cohort (4 months): GBP £25,000 in founder, mentor, and expert time, as well as some infrastructure costs. A pdf copy of the budget sheet has been attached with this report and can be browsed online on the [published google sheets](#).

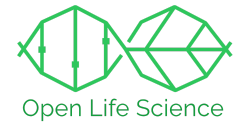
For one cohort in 2021, OLS was awarded EOSC-life (<https://www.eosc-life.eu/>) open call training funding of up to 20,000 Euros to develop a special call to train and mentor up to 15 projects from within the EOSC-life research infrastructure. This will partially cover costs for OLS-3. This call for applications will be designed over the next few months, widening the accessibility of our service and resources within the European research community. Thanks to Neil Chue Hong, Bastian Greshake Tzovaras, Mateusz Kuzak, Andrew Stewart, Naomi Penfold, Fotis E. Psomopoulos, and Emmy Tsang for providing references and generous testimonials about the program. You can find a copy of our grant application on [Zenodo](#).

## OLS-1 to OLS-2 - cohort doubled in size

The post-cohort survey from the first round was overwhelmingly positive, despite the fact that most of the training and project development took place during the lockdown.

[The graduation calls were live-streamed](#) and reports were shared widely through social media. As a result, more members with interest and expertise in Open Science reached out to join the next cohort. Many of those projects have established themselves as valuable resources in their communities ([short report](#)). Particularly, our heartiest congratulations to the [Bioinformatics HUB of Kenya](#) project, who with incubator funding provided by OLS-1 has successfully established itself as a non-profit organisation in Kenya.

In OLS-2, a total of 32 projects by a group of 52 mentees were selected, which is a ~50% increase in project numbers and participants over the previous cohort. These project leads will be trained and mentored between September and December of 2020 with the support of 32 mentors and 67 members in the expert community. These members represent several countries from 6 continents and will advance the knowledge of Open Science in their communities. 6 projects from [The Turing Way](#) affiliated with [The Alan Turing Institute](#) joined the project in the second cohort (<https://openlifesci.org/ols-2#collaborators>). Through this collaboration, the international community of The Turing Way will be able to access mentoring and training support through OLS. Read more details about this cohort in [this blog post](#).



# Open Life Science Project and Community report

We continue to invite feedback from our participants to ensure that they feel adequately supported and find their experience of working with OLS mutually rewarding. We encourage participants to develop their projects on their GitHub repositories and share with others in the program through a centralised GitHub-based issue tracker. They explore and discuss each other's projects and share feedback on [OLS-2 GitHub issues](#) and shared HackMds. They also volunteer to host coworking sessions to work and build connections with others in the program. We have pathways for our graduates to return as mentors and experts (many OLS-1 graduates have returned to OLS-2) and continue to gain support from the OLS even after they have finished their training.

## Shifting “volunteer culture” of Open Science

The value we create in OLS is impossible without the hard work of our participants (co-founders/lead trainers, mentors, expert guest speakers and project leads), who engage with OLS beyond their usual responsibilities. The first cohort was run entirely on their volunteer-work.

We teach self-care and mental health awareness as part of OLS, but without the resources to sustain us, it's very hard to actually practice what we preach. In 2021, we want to run two cohorts with a fairer reward system that empowers our volunteer members and ensures they are able to contribute to Open Science in a sustained manner. We would like for them to receive an honorarium or small support stipend.

We would also like to offer small-scale funding to our mentees from low-income backgrounds by offering them access to basic logistics that can improve their experience. For example, headsets, broadband, and other supplies will ensure equitable access to our calls and additional incubator funding for projects. Often a “sticker and biscuits” fund can be incredibly impactful, paying the small expenses needed to kick off a new organisation, whether this is an organisation's legal registration, support to buy domain names, Zoom rooms, or swag as thank-yous for your community members.

This positive culture change is necessary to prevent unnecessary emotional burden and unfair treatment of contributing members in Open Science caused by unpaid volunteer work.

## OLS curriculum: *not just ‘Open’, but ‘community-minded’*

From the beginning, OLS has been encouraging interested applicants to design their project ideas to not just be ‘Open’ but community-minded. Documentation, reproducibility, transparent reporting and public engagement aspects are strongly integrated into our curriculum and we accept projects with both technical and non-technical scopes. In the first round, many leads of technical projects also reported that their work benefited from the community-mindset we teach in OLS. We intend to



# Open Life Science Project and Community report

strengthen our curriculum to add technical skill-up training (as we currently do for version control), but continue to run the current and next cohorts of the program to support community-oriented projects. We hope this will create momentum in the community, and help us enhance the quality of the training through feedback from the participants.

With the support of the EOSC-Life Training grant, we are developing a new module on [FAIR principles](#). We have also improved the FAIR-ness of the way we work by moving our shared note-taking from google-docs to HackMD, which can be integrated with cohort-specific GitHub repositories. All the website content is designed in a way that information inconsistencies and backlogs can be avoided.

## Reaching communities who are not here ‘yet’!

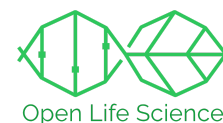
With the conclusion of the first cohort, OLS has established itself as a globally inclusive initiative and a unique mentoring program for life science researchers. Participants of our program come from different backgrounds, identities, domain knowledge, nationality, career-stage and institutional affiliation. We conduct our work under a respectful and inclusive environment and enforce our Code of Conduct in all its activities. We share our training materials, cohort call videos and all OLS resources under CC-BY license and actively promote them to reuse, remix, adapt and share.

We also understand that the passive advocacy of diversity and inclusion is not sufficient. Therefore during our break between OLS-1 and OLS-2 we continued to actively deliver workshops, public resources and seminars in order to reach out to researchers who are traditionally underrepresented in open science.

We hosted 2 webinars before launching the OLS-2 call for application and presented the project report of the pilot program at the following international computation and education-related conferences (virtual conferences due to COVID-19 pandemic):

- [Bioinformatics Community Conference 2020](#): short talks and [3 workshops](#) (3 hour-long each) across 3 time zones.
- Open Science Seminar at Eastern Africa Network for Bioinformatics Training (EANBiT) 2020: Participated in a training panel
- Collaboration Workshop 2020 by Software Sustainability Institute, UK: lightning talk and a workshop (1.5 hours)
- CarpentryCon @ Home 2020: 2 workshops on [Open Leaders Fundamentals](#) and [Ally skills](#) (1.5 hours each)
- Research Data Alliance Early Career and Engagement IG 2020: Webinar (1 hour)

DOI: [10.5281/zenodo.4778472](https://doi.org/10.5281/zenodo.4778472)



# Open Life Science Project and Community report

These engagements helped OLS become more visible across different research and open source communities. We will continue to do so to connect with those who are currently not in OLS, and Open Science at large.

## Offering participation support and planning long-term sustainability

We have learned the hard way that non-profit projects like OLS come with financial and personal challenges.

Going forward, we aim to develop a long term funding model and business strategy to ensure the sustainability of this project.

In the short term, we have planned to offer an Ally Skills training session that will be open to public registration as a way to raise some ready cash for the organisation. Attendance is free to OLS members, with varying ticket prices for individuals who are able to pay, and fee waivers available if interested members otherwise could not attend.

(A separate post will follow about our Ally Skills workshop to raise funding for the OLS community.)

In the long term, we are exploring partial funding resources for the founders to run and expand this program to its full potential (currently, founders' time is not funded and is largely after-hours). Finally, we would work towards expanding and improving our resources to develop customisable training and mentoring programs to cater to the need of researchers with different personal and institutional support and resource availability.

We want to end this report expressing our gratitude to everyone who has been involved in the program and this community in any way.

See you all online (and hopefully, someday in person, after the COVID-19 pandemic).

***Malvika, Yo, Bérénice***

***1 October 2020***