



FindingPheno

Project Number: 952914

Project Acronym: FindingPheno

Project Title: Unified computational solutions to disentangle biological interactions in multi-omics data

D1.5 Second report on dissemination, training and networking activities in FindingPheno

WP1 TRAINING, DISSEMINATION, AND OUTREACH

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Dissemination level: Public



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DOCUMENT HISTORY

Version	Date	Description	Changes
1.0	29/04/2022	Submitted	Report generated and submitted

1 Executive summary

The purpose of this report is to describe and summarise the dissemination, training and networking activities conducted in FindingPheno during the second reporting period (M19-M36) and their impact. We build on the strategic planning outlined in the Plan for Dissemination and Exploitation of Results (PDER, D1.1).

FindingPheno's primary goal is to develop computational solutions for the challenges posed by the vast amount of multi-omics data. We aim to make these solutions widely known and applicable across the biotechnology industry with specific focus on the role of the microbiome in biological processes. With this in mind, we have many strategies for dissemination and communication. Included in these efforts are stakeholder events, training courses, networking meetings, and public outreach. We have also leveraged the interest in the project and our growing network to form new collaborations and foster existing ones. Learnings from these experiences will be incorporated into the updated PDER.

2 Introduction

This document has been prepared in the frame of Tasks 1.1-1.4 in Work Package (WP) 1 – *Training, dissemination, and outreach*. It has been produced at the end of the first reporting period (M19-M36) for FindingPheno and is the second in a series of three deliverables reporting on the status of communication and dissemination activities. The planned dissemination, training and networking activities have been described in great detail in the PDER, submitted in M6 and updated annually, including a comprehensive strategy for all areas and practical plans for implementation. In addition, the first report summarized activities on both the visual identity and branding of the project, and the kick-off and 1st stakeholder meeting. This document is a follow up document detailing the second stakeholder meeting, training events – both for within project and external ECRs, and networking efforts, including new collaborations and outreach events.

3 Dissemination and Communication Plan

3.1 Dissemination and Exploitation

3.1.1 Overview

FindingPheno's major objective is to develop better computational solutions for the challenges posed by the vast amount of multi-omics data that is currently being produced. Our main communication aim is for these solutions to become widely known and applicable across the biotechnology industry, with specific focus on the role of the microbiome in biological processes. The first dissemination and communication report (D1.4) includes a systematic overview of the dissemination and exploitation plan, including details from the impact section of the application. It also includes a mapping of the various target audiences for the dissemination and exploitation plan, including identifying the target audiences and the best dissemination strategies and communication plans for reaching the different target audiences. Finally, the initial report also contained a list of European funded and other projects that would for the core set of users for the output from FindingPheno. In the interest of conciseness, this report will only include details on the activities that have been undertaken in the second reporting period (M19-36), unless there have been substantial changes in the information presented in the previous deliverable (D1.4).

3.1.2 Dissemination and Communication Channels

The following dissemination and communication channels have been maintained and updated in the second reporting



period. Table 1 has been updated from the previous report to indicate the launch of a new more streamlined version of the project website.

Table 1: Dissemination and communication channels

Channel	Target audiences	Details
Digital Channels		
Website	Data donators, distributors, potential collaborators, academic community, students, practitioners, funders, policy makers, public	Static material explaining the project, updates about events or new resources as required NOTE: A new version of the project website has been launched.
Twitter	Data donators, distributors, potential collaborators, academic community, students, public	Short written updates, videos, images, retweets of relevant content
LinkedIn	Data donators, distributors, potential collaborators, industry early adopters, industry mid/late adopters, microbiome projects, students, public	Short written updates, videos, images, reshares of relevant content
Blog	Data donators, distributors, potential collaborators, academic community, students, practitioners, public	Monthly blog posts about topics of relevance
Email newsletters	Potential collaborators, academic community, students, practitioners, public, project partners	Mailchimp newsletter to external subscribers – varying frequency, intermittent internal email newsletter to all project participants
Videos	Potential collaborators, industry early adopters, microbiome projects, academic community, students, public	Short videos uploaded to youtube for wider distribution
Events and Networking		
Midway stakeholder symposium	Data donators, distributors, potential collaborators, industry early adopters, microbiome projects, academic community	One day, in person scientific symposium, followed by steering committee meeting to discuss impact of symposium
Project meetings	Project partners, funders	Internal meetings, in person or online
Direct contact	Potential collaborators, industry early adopters, industry mid/late adopters, microbiome projects	Email conversation, online meetings or in person meetings with specific stakeholders
Scientific Publications		
Conference presentations	Data donators, potential collaborators, microbiome projects, students, academic community, policy makers	Peer viewed conference posters or oral presentations
Journal publications	Distributors, potential collaborators, microbiome projects, students, academic community	Peer reviewed journal articles or reviews
Training		
Internal webinars	Project partners, data donators	Online training for project partners
Lectures, workshops	Data donators, potential collaborators, microbiome projects, students	Online training material for project partners made widely available.
Online training materials	Microbiome projects, students, academic community, public	Training materials hosted on the FindingPheno website



3.1.3 Action plan & timing

The Global Action Plan includes the main events and actions to be carried out during the FindingPheno project execution, with focus on communication, dissemination, knowledge sharing and exploitation (Table 2). The status and evaluation of these activities is reported in the following sections of this report.



Table 2: FindingPheno Global Action Plan with event descriptions.

Proposed Action	Yr 1	2021										2022Year 2										2023Year 3										2024Year 4										2025							
	Mar 1	Apr 2	May 3	Jun 4	Jul 5	Aug 6	Sep 7	Oct 8	Nov 9	Dec 10	Jan 11	Feb 12	Mar 13	Apr 14	May 15	Jun 16	Jul 17	Aug 18	Sep 19	Oct 20	Nov 21	Dec 22	Jan 23	Feb 24	Mar 25	Apr 26	May 27	Jun 28	Jul 29	Aug 30	Sep 31	Oct 32	Nov 33	Dec 34	Jan 35	Feb 36	Mar 37	Apr 38	May 39	Jun 40	Jul 41	Aug 42	Sep 43	Oct 44	Nov 45	Dec 46	Jan 47	Feb 48	
Static content																																																	
Website Dynamic content																																																	
Blog posts																																																	
Social Media Twitter																																																	
Media LinkedIn																																																	
Videos																																																	
Public newsletter Brochures, posters, Comm. etc																																																	
Material Press releases / interviews																																																	
Peer reviewed articles Databases / open source software																																																	
Facilitate / lead external events																																																	
Events Internal events																																																	
Participate in external events																																																	
Conference presentations																																																	
Other Reports for EU																																																	

Abbrev.	Deliv.	Type	Respons.	Description
KOM	D8.1	Internal Event	UCPH	Kick Off Meeting minutes
GA		Internal Event	UCPH	General Assembly
StSyn	D1.3	External Event	UCPH	Stakeholder Synergy Meeting
DMP	D2.1	Report	EBI	Data Management Plan
ML train		Internal Event	UTU	Training: machine learning and statistical models for multi-omics data
STC1	D8.2	Report	UCPH	Steering Committee Meeting minutes
		Video	UCPH	Video aimed at school children
CWL train		Internal Event	EBI	Training: Common Workflow Language
DTE1	D1.4	Report	UCPH	Dissemination, training and exploitation report
MM train		Internal Event	CER	Training: mechanistic models of microbiomes

Abbrev.	Deliv.	Type	Respons.	Description
MidSyn		External Event	UTU	Midway Stakeholder Symposium
STC2	D8.3	Report	UCPH	Steering Committee Meeting minutes
STC3	D8.4	Report	UCPH	Steering Committee Meeting minutes
DTE2	D1.5	Report	UCPH	Dissemination, training and exploitation report
P2	P2	Report	UCPH	Second period reporting
STC4	D8.5	Report	UCPH	Steering Committee Meeting minutes
		Video	UCPH	Video about FindingPheno aimed at industry
CLC	D7.3	External Event	Qia+Nbio	CLC workbench end-user training
EmC	D2.4	External Event	EBI	Embassy Cloud public webinar
DTE3	D1.6	Report	UCPH	Dissemination, training and exploitation report
FinSymp		External Event	UCPH	Final Symposium



3.2 Learnings and Updates

3.2.1 Continuing stakeholder assessments

The continued implementation of the strategy outlined in the PDER has highlighted that the field of multi-omics, especially in the agriculture, and food production fields, has matured a lot since the beginning of the project. This has resulted in some changes in our communication strategy.

- The widespread use of multiomics studies has meant that the amount of data that is now available for inferences as detailed in the FindingPheno project has exploded, which further necessitates the development of statistical and computational solutions such as those being developed in this project. At the very least, this has meant that stakeholders both in the industry and academia working on multi-omics projects are already very well aware of the need for these methods, and do not need focused messaging strategies to convince them of the need for new computational methods.
- Our interactions with industrial stakeholders, including those engaged in providing computational solutions for similar problems further strengthens our belief that well curated, high quality data is the key to developing high quality methods. In that regard, we have reached out to other projects and stakeholders who are data generators to ensure that we look beyond the set of data originally planned to be used in FindingPheno to ensure a lasting legacy for the project.

Our messaging and communication strategy has been updated to reflect these changes in both data availability and community perceptions.

3.2.2 Updates and Additions to the PDER

The PDER first draft was submitted in April 2021 (M2), followed by an updated PDER presented at the year two STC meeting in May 2022. We plan to update the PDER after our annual meeting in Portugal this summer. The annual meeting has been moved to summer 2024, due to the initial delays in holding the first in-person kick off meeting.

4 Status of Actions

4.1 Focus in Reporting Period 2

The second reporting period of the project has been dominated by development of new methods which have over the course of the last year and a half matured, and are ready to be applied to various multi-omics datasets. Leveraging on the availability of these new methods, much of our communication and dissemination activities in the second reporting period has been focused on highlighting the utility of these methods to both academic and industry stakeholders. This has been done both through our communication channels and through the midway stakeholder symposium, and through publicly available training material.

4.2 Launch of new website

Over the course of the last few months, our project manager has been working towards migrating our project website to a new platform (<https://khhvppidz2.mobirisesite.com/>), with much better visual arrangement and accessibility. Figure 1 shows the new website, and this website will soon be migrated to the domain name findingpheno.eu.

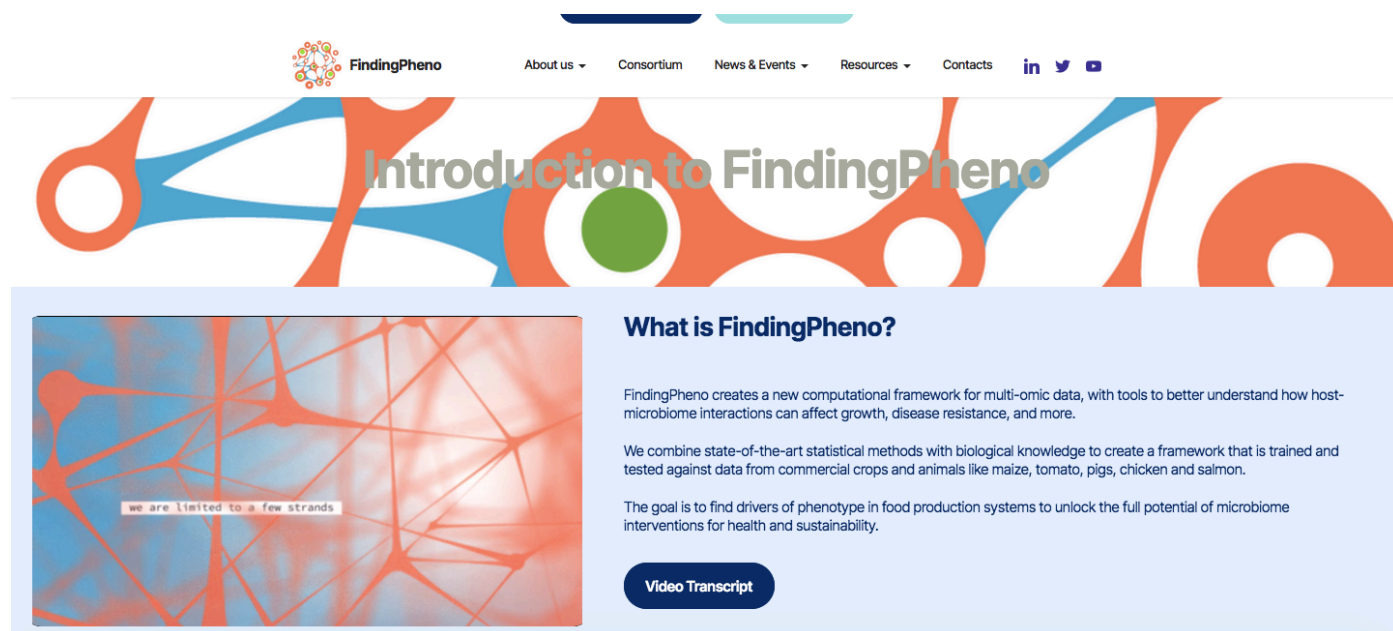
The new FindingPheno website is currently divided into five main sections:

1. About us: describing the project goals and aims.
2. Consortium: describing the project consortium.
3. News and events: including updates and blog posts.



4. Resources: Project files, deliverables and other resources.
5. Contacts

Figure 1: New website design



4.3 Social media activity and engagement

The FindingPheno website includes links to our social media profiles prominently featured as part of the main page header (see Figure 1). The FindingPheno social media profiles are regularly updated by the Outreach Manager with input from other project partners. Our main focus has been on Twitter and LinkedIn as the most relevant to our outreach objectives and target audiences, while YouTube has been used to upload and store our project videos, including training videos from project partners on techniques underlying the newly developed methods. Although Facebook and Instagram profiles exist for the project, they have not been actively used for communications and engagement with the broader audience.

4.3.1 Twitter

Twitter is the main social media outlet for the project and the account is kept active with both original posts and regular reshares of related content, focusing on projects with similar interests and also focusing on activities from the various partners. We generally follow back any account which follows us as long as it is not clearly off topic or looks like a spam account. In the second reporting period of the project, our twitter activity, just like much of our other SoMe activity has diminished, and the focus for the rest of the project is going to be to get our twitter activity back to levels resembling the first reporting period (4 tweets/reshares a week).

4.3.2 LinkedIn:

The LinkedIn account is also kept active, mostly as a support to Twitter, and to reflect the activities posted on the project website. Similar to the twitter activity, project engagement on linkedin has also flagged in the second reporting period, but our aim is to revive this activity in the last year of the project, now that results and methods are ready to be reported.



SoMe Campaign

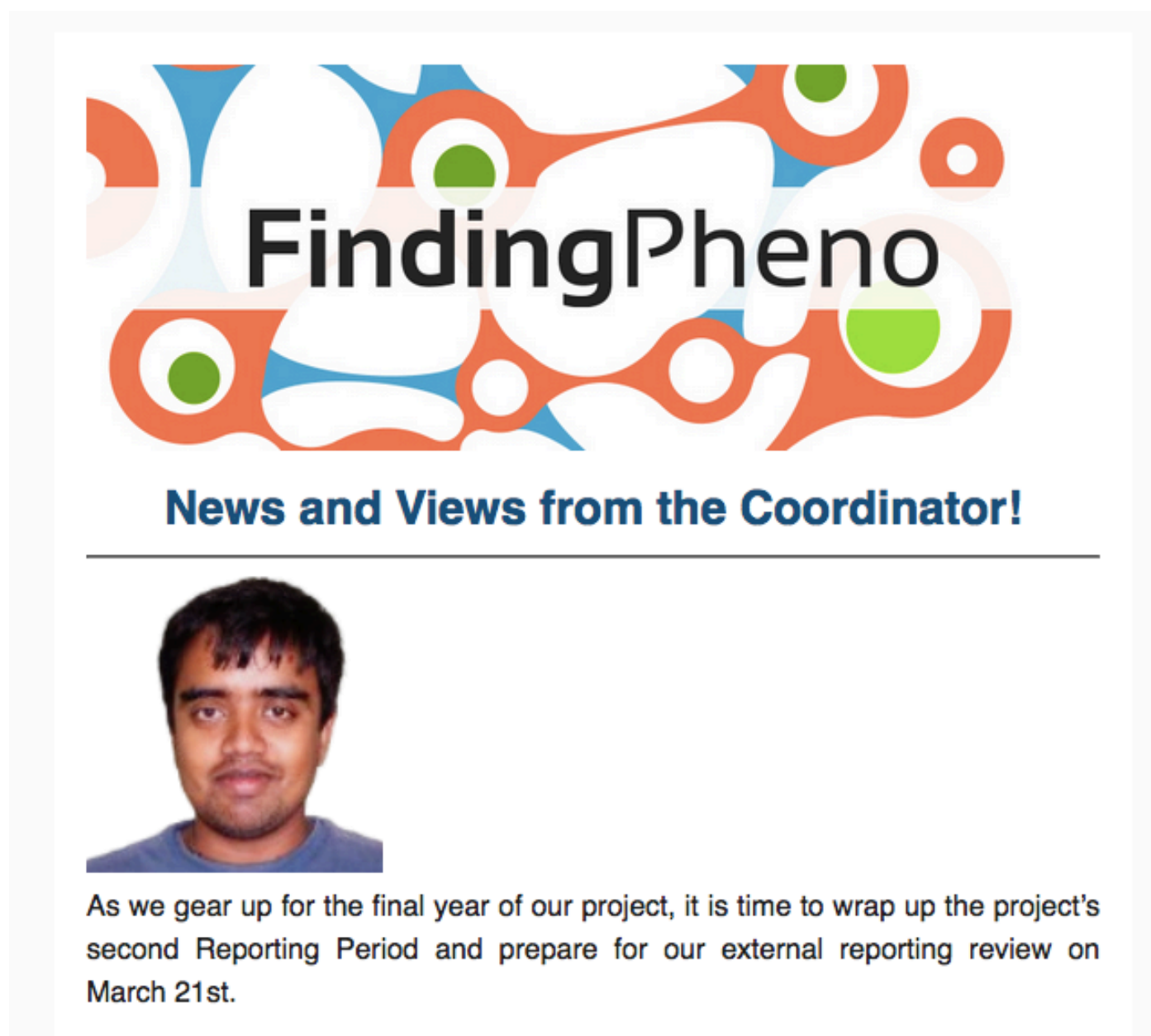
The SoMe platforms were used for a campaign to advertise and engage stakeholders for the midway stakeholder symposium held in Cambridge on the 1st of November 2023.

- **Midway Stakeholder symposium:** A series of tweets were written introducing the the MSS event and the speakers at the MSS event. These were posted in the days leading up to the event as advertising and giving a place for attendees to engage with us.

4.3.3 External newsletter

The annual newsletter of the project detailing our progress and a summary of our outreach and training activities was sent out to subscribers at the beginning of 2024 (<https://mailchi.mp/21e6ed856581/findingpheno-newsletter?e=7499392c96>). Figure 2 shows the newsletter.

Figure 2: Annual newsletter

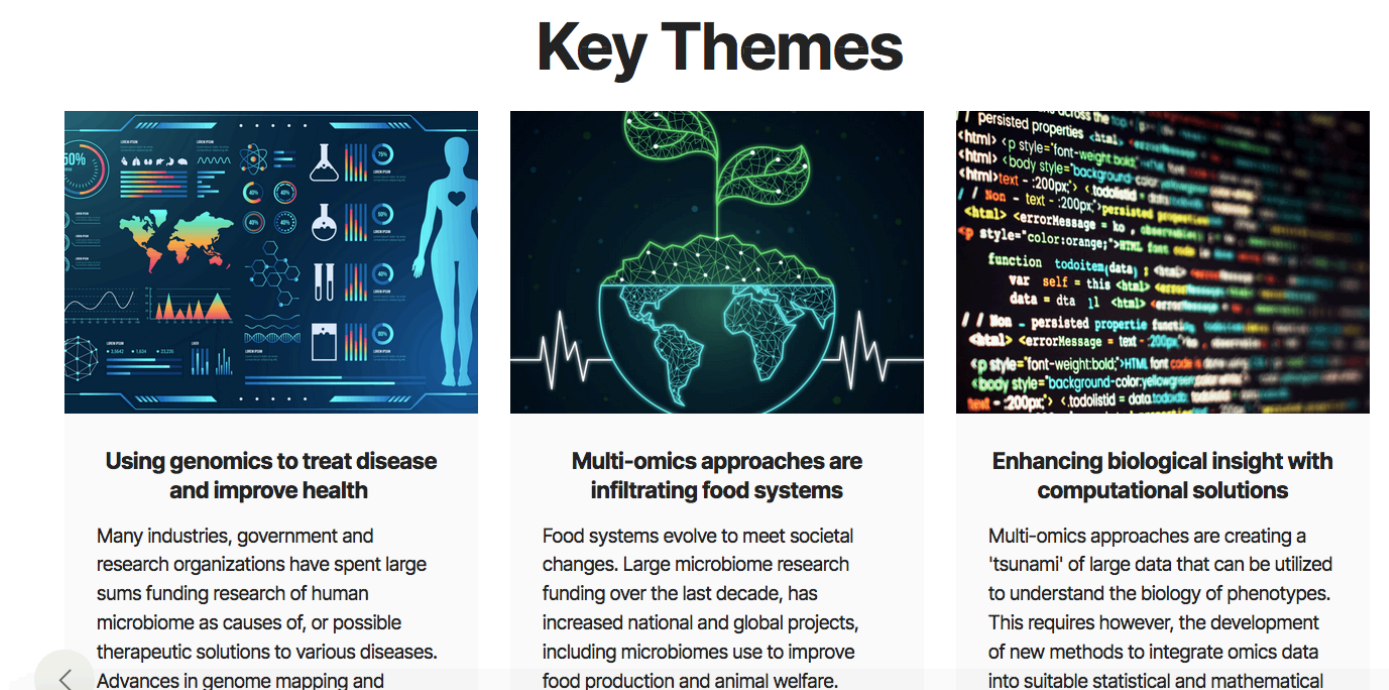


4.4 Events and networking

4.4.1 Midway stakeholder symposium

The FindingPheno MSS was originally slated to be held in Turku along with the annual project meeting in summer 2023, but the steering committee decided to postpone the meeting to November 2023, and decided to hold it in Cambridge in the shadow of project partner EMBL-EBI's offices. The stakeholders included industry partners, researchers from the project and academic partners who were engaged in similar projects. Further details on the meeting, its participants and highlights can be found at the meeting website (<https://hzrrclcz9e.mobirisesite.com/>). Figure 3 shows the program website highlighting the 4 major themes of the program.

Figure 3: Program themes for MSS



4.4.2 Project Meetings

FindingPheno held three meetings during the Reporting Period 1, as shown in Table 5.

Table 3: Project-wide meetings.

No.	Meeting	Dates Location	Purpose	Deliv.	Attendees
1	Annual project meeting	23-25 May 2023, Turku, Finland	Bring together all participants for annual update on the project progress.	D8.3	All project partners
2	Hackathon	25 May, Turku, Finland	Bring together researchers to find ways to integrate work from UTU and EMBL, esp. mgnify API integration.	-	Primarily participants from EMBL-EBI and UTU.
3	In person meeting following MSS	Nov 2, 2023, Cambridge, UK	Steering Committee Meeting.	-	All project partners.

In addition to these meetings, we have a bi-monthly project update meetings to keep abreast of the progress of the project.

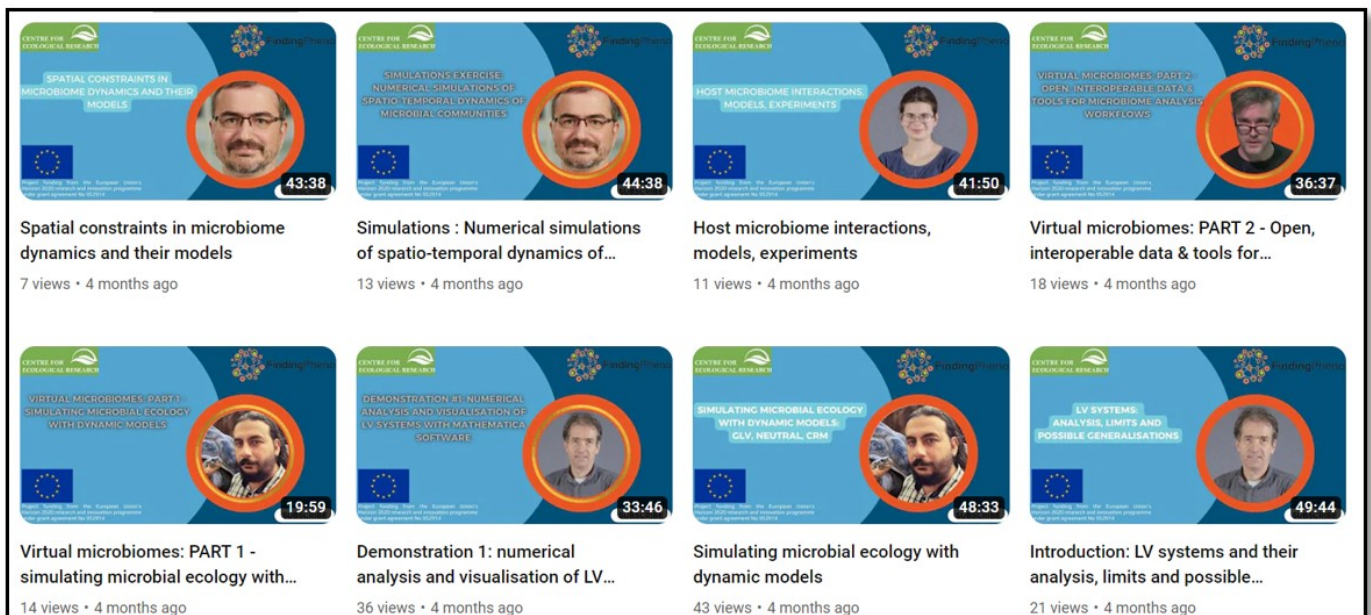
4.5 Training activities

In this section, we have described in detail the courses led by FindingPheno participants (internal and external).

4.5.1 Workshop and teaching videos

In February 2023, CER organized an internal online two-day Mechanistic Modeling Training for 15-25 participants, including MSc students, PhD students and faculty. The recorded lectures are accessible on [FindingPheno's YouTube channel](#). Training targeted persons unfamiliar with theoretical and mechanistic modeling techniques, focusing on microbial ecosystems. The presentations aimed to transfer fundamental modeling knowledge and offer hands-on experience with various methods. Topics included generalized Lotka-Volterra model, network models, invasion analysis, and individual-based models with spatially explicit structures. Figure 4 shows the videos on the project's youtube page.

Figure 4: Videos of workshop on mechanistic modeling on FindingPheno's youtube channel



4.5.2 Other training activities

In addition to internal training activities, project participants also organized several courses in collaboration with other educational institutions. Further information on the courses can be found in the annual newsletter (<https://mailchi.mp/21e6ed856581/findingpheno-newsletter?e=7499392c96>)

5 Impact and outlook

5.1 Achieved in Reporting Period 2

FindingPheno achieved important steps towards representing and communicating the work done by the consortium, using a wide range of opportunities to present the project to relevant stakeholders. As the project develops and new results and resources are generated, the communication and dissemination strategies are being updated to change the focus of the messaging. The PDER has been updated to reflect the changes in strategy.

5.2 Planned activities and objectives for the final year

Planned activities

As the project nears its completion and the results and methods from the project get ready to be disseminated to the broader community, we have planned 3 major activities in the final year.

1. Training webinar for the academic community: The tools will be introduced to be used by the academic community using a webinar from EMBL-EBI on the deployment of these tools on various cloud platforms.
2. Training event for industry stakeholders: Led by Qiagen, this event will target industry users and encourage the uptake of the output of FindingPheno in the relevant multi-omics driven research projects in the industry.
3. Final symposium of the project: The end of the project is marked by a final symposium which showcases the output of the project, inviting stakeholders to participate and encourages the uptake of the results from the project.

Objectives

In the final year of the project, our objective is to increase the visibility of the project. To accomplish this, we will increase our social media presence by targeted SoMe campaigns concurring with project activities. In addition to SoMe campaigns, we aim to increase the impact of the project outcomes by extending our collaborations into new projects where the newly developed methods will become part of the standard toolkit to work with multi-omics data for host-microbiome systems.

6 Conclusions

Dissemination, training and networking activities during Reporting Period 2 of the project were executed as planned in the PDER. Internal training has progressed as planned leading to good knowledge sharing and generation of new ideas within the consortium. Together all activities have resulted in significant networking within and beyond the project, with new collaborations, strengthening of existing collaborations, and exploration of new funding and deployment opportunities.