



D10.5

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Call for first science challenge based on anonymised
project dataset

UHC



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Executive Summary

The D10.5 “Call for first science challenge based on anonymised project dataset” is issued by Work Package (WP) 10, and is part of the ORCHESTRA dissemination. In the aspects of anonymisation and data selection it is linked to the D10.4 and MS54, which elaborate the Scientific Use File, an anonymised data set tailored to specific research questions. The content and organisation of the Science Challenge is left to the organisers, whereas the data sharing part is bound to the terms of the Grant Agreement, the Publication Policy and the Consortium Agreement. Hence, any other than scientific motives, in particular commercial motives are excluded from participation.

A dedicated protocol will be developed for data sharing on this contest. The concept of the Science Challenge follows the cooperative approach of ORCHESTRA and pursues the goal of both, promoting broad cooperation within the project and reaching out to a diverse scientific community. The playful approach offered by a format like a scientific challenge brings with it the opportunity to collaborate outside of the WP setting, which strengthens team spirit and promotes creative solution finding.

Accredited and established research groups are eligible to participate in the challenge. Applications are subject to a background verification.

1. Cornerstones

The Science Challenge Concept entails an ORCHESTRA wide “cross-work-package” collaboration. It is designed to promote both, the collaboration with external scientists as well as the internal collaboration. The vision is to create a “win-win-win” situation.

1.1 Background

The brain storming process around the science challenge was organised by UHC in two meetings at the beginning of 2022. Colleagues from APHP, Charité, CINECA, INSERM, University of Bologna, and University of Verona participated in the calls. The discussions around the topics for the Science Challenge led to the decision to follow a free approach, in which ORCHESTRA would provide topics but not defined research questions. Thus, to avoid to have participants conducting the same research project simultaneously and answering the same research question. Instead, the definition of the research question will be part of the assessment protocol. It is intended to propel out-of-the-box-thinking by just providing a topic. WP 10's main task was to create a concept for the Science Challenge.

1.2 Objectives

As the European Union largest research project on COVID-19, ORCHESTRA is set up as a sustainable and growing research infrastructure. ORCHESTRA, with its already successfully established structures, is intended to serve the scientific community not only in terms of

collaboration and available expertise. The core of ORCHESTRA are the cohorts with their patient data, which allow to find rigorous scientific evidence on treatment and prevention measures of COVID-19. Scientific collaboration means “sharing for multiplying”, which is linked to data in particular in the case of ORCHESTRA.

In order to be part of the international research community, it is important to make some of this data available to the scientific community. A Science Challenge pursues the explicit goal of generating inspiration and solutions that are beyond the familiar paths.

The main objectives of the Science Challenge are:

- Providing points of contact for the scientific community
- Gaining an external perspective on the research
- Strengthening the scientific perception around ORCHESTRA
- Promoting scientific collaboration
- Propelling creative research

1.3 The Science Topics

The three COVID-19 topics that were selected during the preparative meetings are:

1. Fragile population
2. Therapy algorithms
3. Vaccination Efficacy

1.4 Assessment Criteria

Research questions should be:

- Concise
- Relevant
- Beneficial

Evaluation criteria will include:

- Quality of the research question
- Study conduct
- Thoroughness and scientific standards
- Impact
- Novelty

1.5 Target Group

The target group is exclusively the scientific community. Participation is subject to a dedicated revision process of the applicants to prevent misuse of the data. Applicants will have to fill in a questionnaire stating their full name, nationality, affiliation, vocational field and previous publications.

1.6 Dissemination

The dissemination of the science challenge will be carried out via different channels:

- Blog on website and social media channels
- EU Horizon 2020 projects and partners will be asked to share via their social media channels
- Communication departments of partners will be asked to share the information via their intranets
- Scientific journals/platforms will receive press release

1.7 Who is eligible?

Accredited and established research groups are eligible to apply. Researchers are expected to apply with a research group of four participants minimum. Individuals will not be granted access.

1.8 Compliance with Publication Policy, Grant Agreement, and Consortium Agreement

To ensure that the Science Challenge complies with the publication policy, the Grant Agreement, and the Consortium Agreement at all times, a specific protocol will be developed by the dedicated Committee.

1.9 Data: The Scientific Use File (SUF)

The SUF is tailored to the specific research questions. The risk of re-identification is reduced by an anonymization pipeline and additionally the risk of misuse is reduced by a data use and access statement. The anonymisation concept is described in D10.4.

2. The Science Challenge: Implementation

The implementation of the Science Challenge can be divided in an internal part (preparations from ORCHESTRA's side) and an external part (communication measures towards the scientific community and applicants).

2.1 Internal Organisation

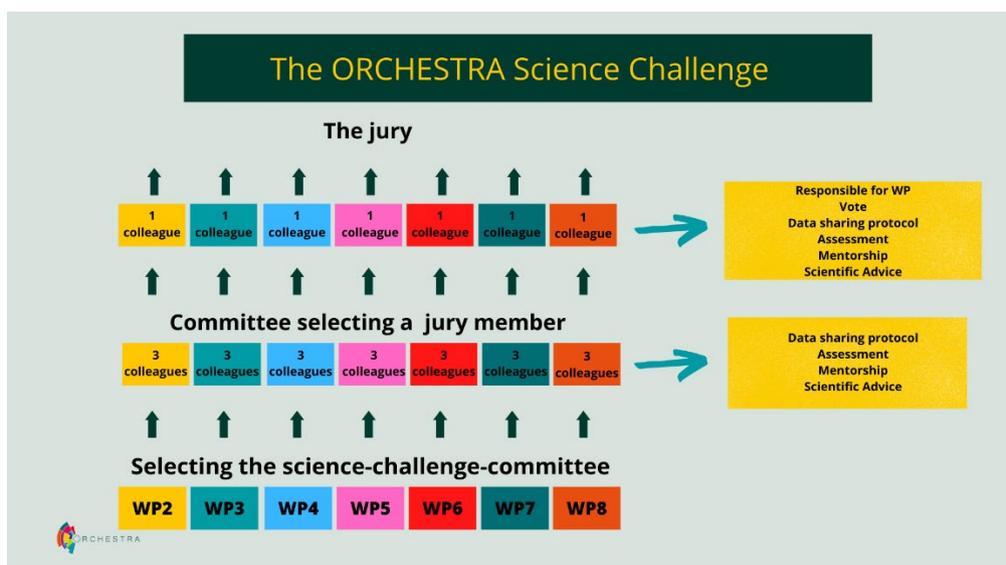
The science challenge relies strongly on teamwork. This is why a broader team with strong participation from the WPs is foreseen. Each of the WPs 2, 3, 4, 5, 6, 7 and 8 is asked to select at least three colleagues to the Science Challenge Committee. The number of participants in the committee is still negotiable, though. It does not necessarily have to be three. This is to be defined during the first meeting and needs to be adjusted according to the capacities of the WPs. These colleagues consult internally and define one person as a jury member. The chosen jury member will be responsible for the Science-Challenge-Team. However, scientists of all WPs are invited to participate in Science-Challenge-Teams of the other WPs. The Science Challenge Committee supervises that the data sharing protocol is being applied.

The Science Challenge Committee's responsibilities are:

- Create dedicated data sharing protocol
- Assessment
- Mentorship
- Scientific Advice

The jury's responsibilities are:

- Representing the respective WP
- Vote
- Create dedicated data sharing protocol
- Assessment
- Mentorship
- Scientific Advice



2.1.1 Flyer: Call for colleagues



SCIENCE CHALLENGE D10.5.

Become a member of the Science-Challenge-Committee





- Fragile population
- Therapy algorithms
- Vaccination Efficacy



ORCHESTRA has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016167.



Dear Colleagues,

time to get creative - we have a Science Challenge coming up.

Please become part of the Science Challenge Committee. We kindly ask the WPs 2,3,4,5,6,7 and 8 to nominate three colleagues to the Science Challenge Committee. The committee will be responsible for the data sharing protocol, the assessment and some scientific mentoring. Furthermore each WP committee appoints one person as a jury member.

The application process will start on 15 August and the Science Challenge starts on 15 September with a duration of six weeks.

Questions? Please refer to WP10:
marlene.nunnendorf@orchestra-cohort.eu

Yours, WP 10

Thank you for having defined the topics with us.

2.1.2 ORCHESTRA Portal Group and mailing list

The Science Challenge Committee members will be organised via a dedicated group and mailing list within the ORCHESTRA portal.

2.1.3 Science Challenge Committee meetings organised by WP 10

For internal coordination and setting up the assessment and the data sharing protocol, there will be dedicated meetings organised by WP 10.

2.2 External Communication

2.2.1 Press Release: Call for Participation

PRESS RELEASE

ORCHESTRA announces Science Challenge

Accredited scientists are eligible to research with data

Verona [date of release]. Inviting researchers to participate in a science challenge around the COVID-19 related research topics: Fragile Population, Therapy Algorithms and Vaccination Efficacy, ORCHESTRA challenges the scientific community to find creative research questions around the given topics and to pursue them with data provided by the international cohort research project. As part of the European Union's Horizon 2020 research and innovation funding programme, ORCHESTRA aims to create rigorous scientific evidence on treatment and prevention measures of COVID-19, vaccination efficacy, transmission ways and on the impact of the pandemic in different areas.

Applications can be submitted from 15 August 2022 to 30 August 2022 on the ORCHESTRA website: www.orchestra-cohort.eu. The Science Challenge will start on 15 September 2022 with a duration of six weeks.

ORCHESTRA is a multidisciplinary European based international cohort research project bringing together different cohorts to join patient data to create a broader clinical picture of COVID-19. Led and initiated by Professor Evelina Tacconelli and her team from the University of Verona, ORCHESTRA meanwhile has established a veritable research infrastructure and has overcome several major collaboration challenges such as data harmonisation between the different countries involved. Altogether 37 partners from 15 share expertise in ORCHESTRA in the service of a better understanding of the clinical expression of the SARS-CoV-2-Pandemic. Research groups are eligible to apply, participation is subject to compliance with ORCHESTRA data sharing protocol.

"Collaboration is key in ORCHESTRA. We are very excited to open our doors to the participation of external scientists with this Scientific Challenge," says Professor Evelina Tacconelli. A dedicated committee will ensure that the application process and data sharing follow a specific protocol.

The Science Challenge provides a great opportunity for external scientists to conduct their own research project with patient data generated by ORCHESTRA's cohorts. The Science Challenge is designed to promote scientific collaboration and out-of-the box-thinking.

Press contact:

Marlene Nunnendorf

Email: marlene.nunnendorf@orchestra-cohort.eu

2.2.2 Clinical Survey for application

The application is conducted via a questionnaire created with Clinical Survey. The questionnaire will ask the following questions:

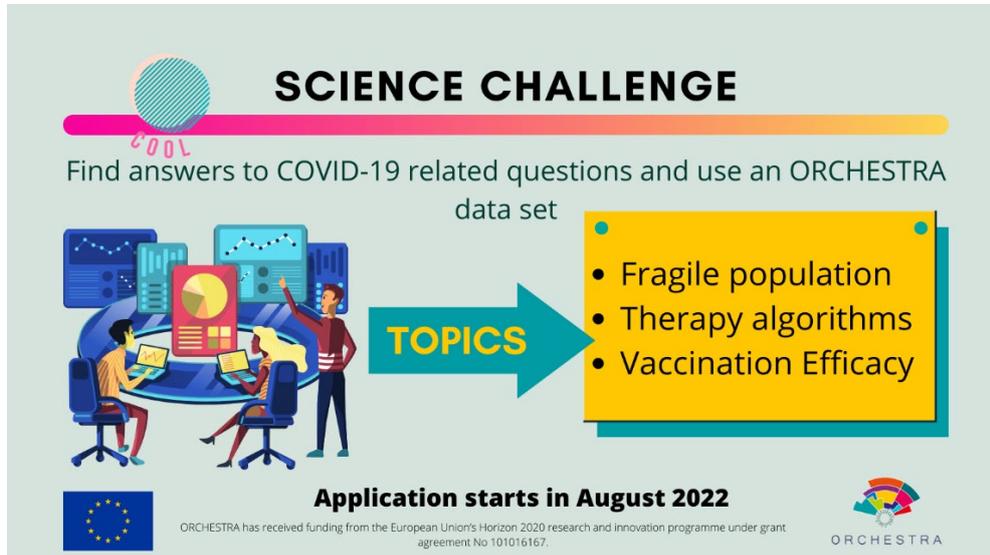
1. **Name**
2. **Address**
3. **Contact data**
4. **Occupation**
5. **Field of employment**
6. **Field of research**
7. **Affiliations**
8. **Publications**
9. **Research question**
10. **Explanation of scientific interest**

The questionnaire will allow ORCHESTRA to perform a background check to ensure that applicants meet the requirements and are eligible to apply.

2.2.3 Regular calls for scientific exchange

During the six weeks of the Science Challenge, there will be one opening session and weekly meetings for scientific exchange. Organised and hosted by WP 10, Committee-Scientists will be alternatingly asked to participate in the scientific discussions.

2.2.4 Call for Participation



SCIENCE CHALLENGE

Find answers to COVID-19 related questions and use an ORCHESTRA data set

TOPICS

- Fragile population
- Therapy algorithms
- Vaccination Efficacy

Application starts in August 2022

ORCHESTRA has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016167.

ORCHESTRA

Dear Scientists and Researchers,

You are invited to participate in the ORCHESTRA Science Challenge.

We offer you a customised, anonymised dataset of high-quality patient data from our international cohorts to find answers to your COVID-19-related research question. An ORCHESTRA committee assesses the scientific suitability of the research project and ensures that accepted participation is handled in compliance with the publication policy and that a dedicated protocol for data sharing on this contest will be followed.

The research topics are:

- Fragile population
- Therapy algorithms
- Vaccination efficacy

Please formulate your own research question, which should be:

- Concise
- Relevant
- Beneficial

Evaluation criteria will include:

- Quality of the research question
- Study conduct
- Thoroughness and scientific standards
- Impact
- Novelty

The enrolment period starts after the summer holidays. We wish to give you enough time to fit the Science Challenge into your schedule. The Challenge itself starts on 01 September, due date for submitting your work will be 15 October. Accredited study groups of scientists are eligible. The jury consists of ORCHESTRA members.

With kind regards on behalf of the entire ORCHESTRA team,

Work Package 10

Action	Time	Actors	Medium
Informing Work Packages about Science Challenge	First week of June	WP 10	Leaders Meeting Internal Newsletter WP-Mailing-Lists
Dissemination via social media and press release	Second week of June	WP 10	Twitter, LinkedIn, Facebook, Instagram, press distribution list Partner's communication departments
Dedicated Meeting with Work Packages, setting up committee	Mid June	Hosted by WP 10	Zoom
Dedicated Science Challenge and Data Sharing Protocol outline	Until mid July	Science Challenge Committee	ORCHESTRA portal
Dedicated Science Challenge and Data Sharing Protocol finalised	Until mid September	Science Challenge Committee	ORCHESTRA portal
Science Challenge Process online	Mid September	WP 10	Website
Questionnaire for application on website	Mid Sept	WP 10	Website
Kick-off event	Beginning October	Committee hosted by WP 10	Zoom
Weekly science meetings	Beginning October	2 Committee members each, hosted by WP 10	Zoom
Research project presentations	End of November	Committee/WP 10	Zoom
Assessment Meeting	End of November	Committee hosted by WP 10	Zoom
Awards Ceremony	Beginning December	Committee	Zoom

Attachments	
1.	Graphic on Jury and Committee
2.	Flyer for Colleagues

3.	Text and visual on Website
4.	Time table

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Paolo Boffetta, Chiara Dellacasa, Anna Gorska, Jade Gosn, Cédric Laouenan, France Mentré, Massimo Mirandola, Eugenia Rinaldi, Gabriella Scipione, Caroline Stellmach.