

# TUBITAK National Initiatives for Open Science

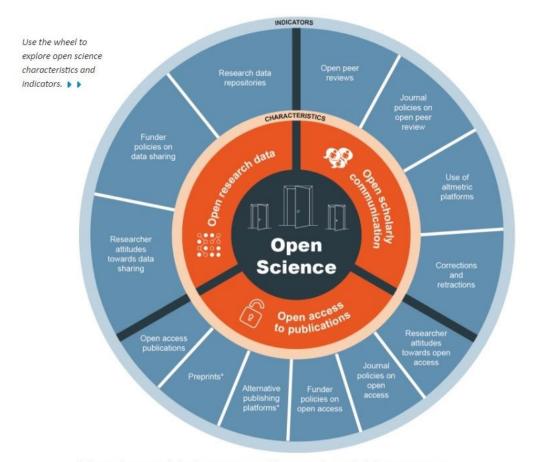
Ebru Soyuyuce Aydın TUBITAK\_ULAKBIM Open Science Contact Point ebru.aydin@tubitak.gov.tr



# Open Science/Open Access

- Open Science is on a good way to becoming the "new normal" of good scientific practice and is growing rapidly.
   Professor Klaus Tochtermann, director of the ZBW - Leibniz Information
- Open Science is the practice of science in such a way that
  others can collaborate and contribute, where research data,
  lab notes and other research processes are freely
  available, under terms that enable reuse, redistribution and
  reproduction of the research and its underlying data and
  methods.

[FOSTER, Open Science Definition: https://www.fosteropenscience.eu/foster-taxonomy/open-science-definition]



<sup>\*</sup> These indicators are for both open access to publications and open scholarly communication

ttp://aims.fao.org/activity/blog/open-science-monitor-access-data-and-trends-open-scienc



# Open Science Activities in TUBITAK

- National Open Science Advisory Committee
- TÜBİTAK Open Science Policy <a href="https://acikveri.ulakbim.gov.tr/wp-content/uploads/2019/03/TUBITAK-Open-sciency-Policy.pdf">https://acikveri.ulakbim.gov.tr/wp-content/uploads/2019/03/TUBITAK-Open-sciency-Policy.pdf</a>
- Aperta, TUBITAK Open Archive <a href="https://aperta.ulakbim.gov.tr/">https://aperta.ulakbim.gov.tr/</a>
- Aperta Turkey Open Archive <a href="https://test.aperta.ulakbim.gov.tr/">https://test.aperta.ulakbim.gov.tr/</a>
- Research Data Management Training Portal <a href="https://acikveri.ulakbim.gov.tr/">https://acikveri.ulakbim.gov.tr/</a>
- Turkish Academic Archive: HARMAN <a href="https://arsiv.ulakbim.gov.tr/index">https://arsiv.ulakbim.gov.tr/index</a>
- Coordination of the Open Access and Open Science studies with the European Union Framework Programs
- Organizing Open Access Workshops / Conferences



# TUBITAK ULAKBIM National Open Science Advisory Committee

- ULAKBIM has assembled National Open Science Committee in order to develop Open Science strategies.
- The Committee is composed of academicians in the area of Open Access studies, experts from Information
  and Library services of the institutions and experts from related units of TUBITAK.
  - The Committee meets up to two times a year and discuss on national Open Access/Open Science strategies.



THE SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TURKEY



About TUBITAK Funds Scholarships R&D Activities

TÜBİTAK

TUBITAK Open Science Policy

Home Page

**TUBITAK Open Science Policy** 

Announcement Archive

#### Policy Title:

The management, storage, archiving, compilation and digital protection of the publications and research data originated from the projects which have been carried out or supported by The Scientific and Technological Research Council of Turkey (TUBITAK) constitute the framework of TUBITAK's Open Science Policy.

#### Purpose:

The concept of Open Access was first introduced in 2002 as "free availability of scientific literature on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, index them, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself" at the Budapest Open Access Initiative, which was created by leading research institutes, science and research libraries and researchers in the world. The stimulating role of open access in scientific developments subsequently emerged with the studies and findings of international organizations.

The European Commission supports open access as a standard method for disseminating the outputs of public-funded research in the European Union and embraces the free movement of information as one of the five priorities of the European Research Area. Open access to all peer reviewed publications produced within the scope of projects supported by the European Union (EU) funds was first enabled by the 7th EU Framework Programme and it was made mandatory within the EU's Horizon 2020 Programme, which is the largest each I. RRO. programme in the

TUBITAK Open Science Policy was discussed and accepted at the meeting of the TUBITAK Board of Directors on March 14, 2019.

The management, storage, archiving, compilation and digital preservation of the publications and research data produced by the projects carried out or supported by TUBITAK constitute the framework of TUBITAK Open Science Policy.

The Green Road Open Access requirement has been adopted with the agreement of the Open Science Policy

within the EU's Horizon 2020 Programme, which is the largest civil RED programme in the world. ¬of which Turkey is a participant and supporter. Turkey in Horizon 2020 | FGT-11: Focus Group Training on Open Science | 19 April 2021

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## **National Studies**



**Turkey Academic Archive HARMAN** 

**TUBITAK Open Archive APERTA** 

Open Data Management Training Portal

- To ensure open access to scientific publications for all scientific products resulting from public grants.
- To support and promote best practices for open and FAIR data and for open research software.
- Continuous training of researchers in open science practices
- Increasing the use of national research infrastructures and interconnection with the European Open Science Cloud.

Araştırma Verileri Yönetimi Eğitim Portalı





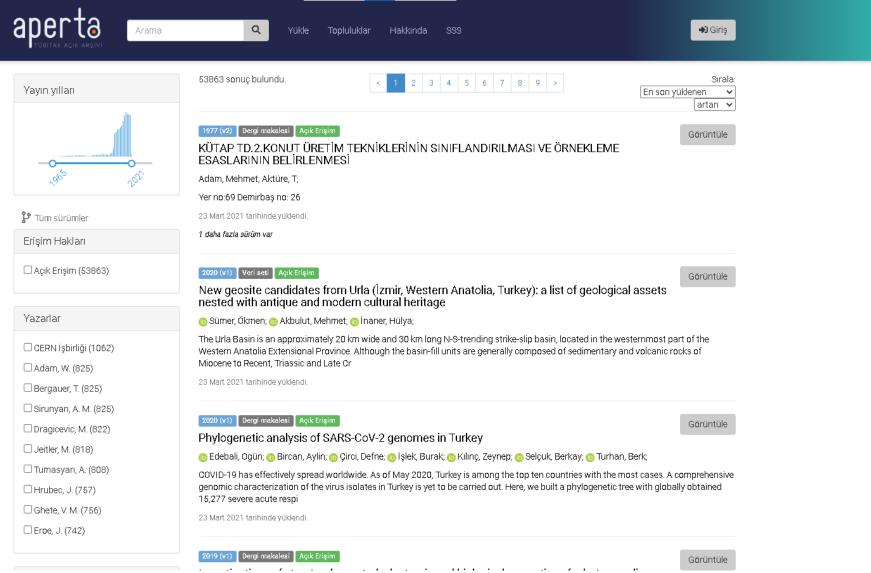






# **Turkey Academic Archive (Harman)**

built to enable
widespread access
from a single center to
scientific academic
contents limited and
suitable for open
access. Harman is
providing easy and
safe access to the
contents in the country
and international
areas.



Latin definition for:apertus, aperta Cloudless, frank/clear/manifest, open/public/free,uncovered/exposed/opened

**Aperta** 

a national open access and open data repository for research data management. Aperta is a multidisciplinary open repository maintained by ULAKBİM. Datasets, documents and other research materials can be located via the Aperta search engine. Scholars from any research discipline can upload data in any file format.

Arama

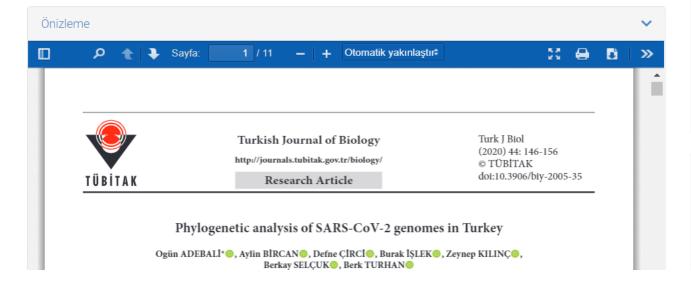
Βő

Dergi makalesi 🛮 Açık Erişim

# Phylogenetic analysis of SARS-CoV-2 genomes in Turkey

苗 2020 🚨 🌀 Edebali, Ogün; 📵 Bircan, Aylin; 📵 Çirci, Defne; 📵 İşlek, Burak; 📵 Kılınç, Zeynep; 📵 Selçuk, Berkay; 📵 Turhan, Berk

COVID-19 has effectively spread worldwide. As of May 2020, Turkey is among the top ten countries with the most cases. A comprehensive genomic characterization of the virus isolates in Turkey is yet to be carried out. Here, we built a phylogenetic tree with globally obtained 15,277 severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) genomes. We identified the subtypes based on the phylogenetic clustering in comparison with the previously annotated classifications. We performed a phylogenetic analysis of the first 30 SARS-CoV-2 genomes isolated and sequenced in Turkey. We suggest that the first introduction of the virus to the country is earlier than the first reported case of infection. Virus genomes isolated from Turkey are dispersed among most types in the phylogenetic tree. We find 2 of the seventeen subclusters enriched with the isolates of Turkey, which likely have spread expansively in the country. Finally, we traced virus genomes based on their phylogenetic placements. This analysis suggested multiple independent international introductions of the virus and revealed a hub for the inland transmission. We released a web application to track the global and interprovincial virus spread of the isolates from Turkey in comparison to thousands of genomes worldwide.



535

415

görüntülenme

**♣** indirilme

Daha fazla ayrıntı...

#### Kayıt Bilgileri

#### Yayınlanma tarihi:

23/06/2020

DOI:

DOI 10.3906/biy-2005-35-sup

#### Bilim dalları:

Sağlık Bilimleri > Tıp

Temel Bilimler > Yaşam Bilimleri

#### Anahtar kelimeler:

SARS-CoV-2 COVID-19 phylogenetics evolution genome sequence

#### Yayınlandığı yer:

Turkish Journal of Biology: pp. 146-156.

#### Lisans:

Creative Commons Attribution Share-Alike

#### Alıntı yap

Edebali, O., Bircan, A., Çirci, D., İşlek, B., Kılınç, Z., Selçuk, B. ve Turhan, B. (2020). Phylogenetic analysis of SARS-CoV-2 genomes in Turkey. Turkish Journal of Biology, (44), 146–156. doi:10.3906/biy-



Repository details

re3data.org

## Aperta TÜBİTAK Open Archive

General	Institutions	Terms Standards
Name of repository		Aperta TÜBİTAK Open Archive
Additional name(s)		Aperta - TÜBİTAK Açık Arşivi
Repository URL		https://aperta.ulakbim.gov.tr
Subject(s)		Engineering Sciences   Natural Sciences   Life Sciences   Humanities and Social Sciences
Description		Aperta is the open access repository of The Scientific and Technological Research Council of Turkey (TÜBİTAK). The publications produced from the projects supported by TUBITAK must be uploaded to TUBITAK Open Archive Aperta. It is recommended that the research data of these publications should be open access.
Contact		aperta@tubitak.gov.tr
Content type(s)		Plain text
Keyword(s)		multidisciplinary
Repository size		48657 record
Repository type(s)		institutional
Mission statement for designated community		https://aperta.ulakbim.gov.tr/about
Research data repository language(s)		tur
Data and/or service provider		dataProvider

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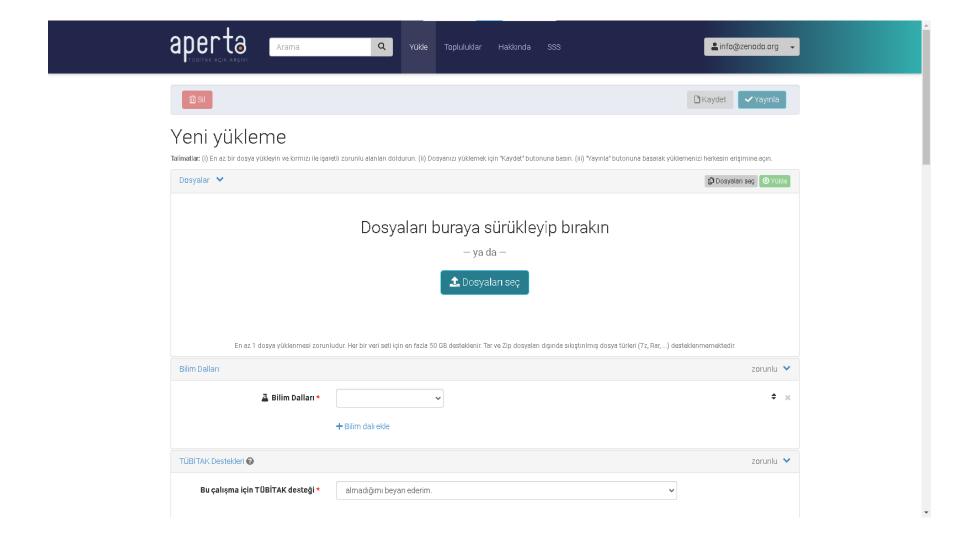
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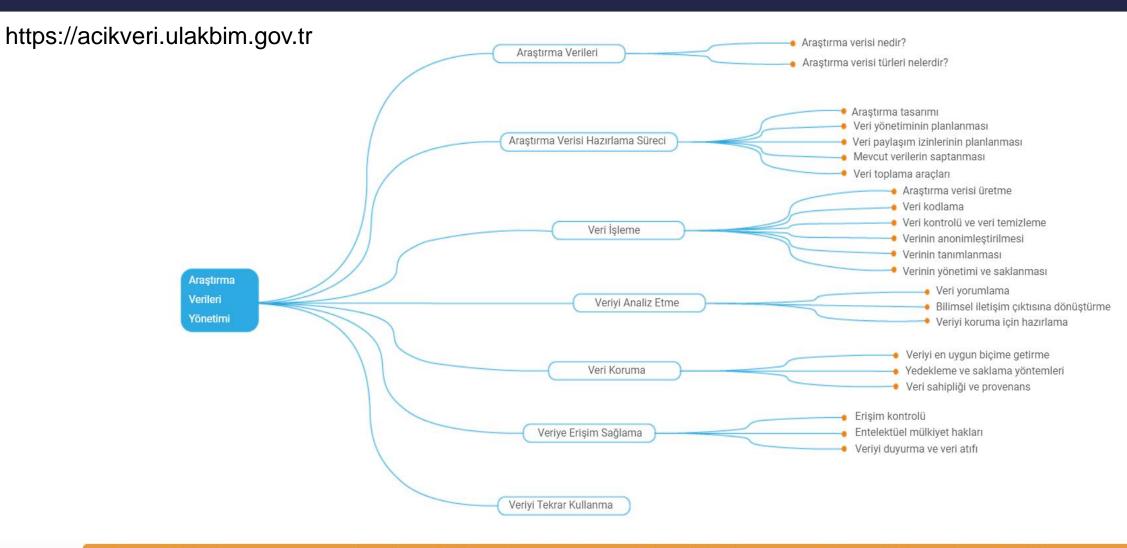


### Cite this re3data.org record:

## https://test.aperta.ulakbim.gov.tr/

## Comming Soon..

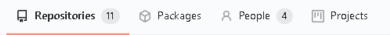




Bu portal Türkiye'de görev yapan araştırmacılar, proje yöneticileri, fon sağlayıcı kurumlar ve akademik kuruluşlar için araştırma verilerinin yönetimi konusunda temel bir rehber sunmayı amaçlamaktadır. Portal kapsamında araştırma verilerinin tanımı, hazırlanması, işlenmesi, analiz edilmesi, korunması, erişim sağlanması ve yeniden kullanılması gibi çeşitli unsurlar hakkında detaylı bilgiler sunulmaktadır.











Language 🕶

Sort +

Search

## -Open-Science-TrainingHandbook\_TUR

In this repository the OSTH will be translated into Turkish.



### Open-Science-Training-Handbook\_PT

Portuguese language version e-book available at https://book.fosteropenscience.eu/pt/

educacao ciencia-aberta

🖁 7 ☆ 15 🕕 0 😘 0 Updated on 3 Sep 2020



## Open-Science-TrainingHandbook\_FR

In this repository the OSTH will be translated into French.

¥4 ☆2 ①0 ╏10 Updated on 3 Sep 2020

## Open-Science-Training-Handbook EN

Main handbook content divided into chapters.

👺 41 🏗 32 🕕 12 👣 3 Updated on 3 Mar 2020



#### Kitabın amacı

"Bütün araştırmacılar Açık Bilimin farkında olduklarında ve tüm kariyer aşamalarında Açık Bilimi uygulamak için eğitildiklerinde, desteklendiklerinde ve yönlendirildiklerinde araştırmanın daha fazla görünürlük kazandığı, daha verimli bir şekilde paylaşıldığı ve gelişmiş araştırma bütünlüğü ile gerçekleştirildiği bilimsel bir ekosistemi teşvik ederek, araştırmanın gerçekleştirilme ve yayılma şeklini temelden değiştirme potansiyeli vardır.." Açık Bilim Becerileri Çalışma Grubu Raporu (2017)

Bilimsel ürünleri ve süreçleri herkes tarafından erişilebilir ve yeniden kullanılabilir hale getirme hareketi olan Açık Bilim, teknoloji ve hizmetlerle olduğu kadar kültür ve bilgi ile de ilgilidir. Araştırmacıları uygulamalarını değiştirmenin faydaları konusunda ikna etmek ve onları bunu yapmak için gereken bilgi ve becerilerle donatmak bu nedenle önemli bir görevdir.

Bu kitap, Açık Bilim eğitmenleri ve eğitmenlerinin yanı sıra şeffaflık düzeylerini ve araştırma uygulamalarına katılımı iyileştirmekle ilgilenen herkes için rehberlik ve kaynaklar sunmaktadır. Bilgisini aktarmak isteyen yeni ortaya çıkan bir Açık Bilim topluluğunu destekleyen ve birbirine bağlayan el

#### Open Science Training Handbook

By Sonja Bezjak, April Clyburne-Sherin, Philipp Conzett, Pedro Fernandes, Edit Görögh, Kerstin Helbig, Bianca Kramer, Ignasi Labastida, Kyle Niemeyer, Fotis Psomopoulos, Tony Ross-Hellauer, René Schneider, Jon Tennant, Ellen Verbakel, Helene Brinken, Lambert Heller

Publication year: 2018 | Open Science | Open Access | Open Data | Open Reproducible Research | Open Science Evaluation | Open Science Tools | Open Metrics and Impact | Open Science Definition | Open Access Routes



## FOSTER Open Science training handbook

By Helene Brinken, Bianca Kramer
Publication year: 2018 | Open Science

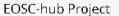












♠ > EOSC-hub Project

#### Services for the European Open Science Cloud



https://www.eosc-hub.eu/

EGI, EUDAT, and INDIGO Data Cloud projects, with unique open access to research data and services through the EOSC-hub project, are planning to lay the foundations of EOSC. The project will present these resources as "Hub".

Regarding the computing and data infrastructures, ULAKBIM has been providing national HPC and data center TRUBA (Turkish Science e-Infrastructure).

TRUBA is a national e-Infrastructure providing high performance, data-intensive, and cloud computing services as well as scientific data warehouses.

The sustainable operation of infrastructures for Open Science must be addressed more strongly by all stakeholders in the science system. Sustainable infrastructure cannot be ensured unless all involved act in concert.



DergiPark



- Total number of academic journals has been estimated to be around 3.000 in Turkey and DergiPark (http://dergipark.gov.tr) hosts 1885 journals of them...
- Around 500.000 records, DergiPark is 11th among OpenAIRE data providers
- Articles in journals included in DergiPark which meet the conditions are assigned DOI (Digital

Object Identifiers) free of charge.

- The Project started in September 2013 and the number of journals was 100 when the Project started
- Number of daily active users: 100.000



# SCOAP3 (Sponsoring Consortium for Open Access Publishing in Particle Physics)

- Turkey is SCOAP3 partner since May 2014
- SCOAP3, is an Open Access Project started with the support of CERN.
- SCOAP3 is a partnership of over three thousand libraries, key funding agencies and research centers in 44 countries and 3 intergovernmental organisations.
- On behalf of Turkey, ULAKBİM has signed a "Memorandum of Understanding", which is the basis of the SCOAP3 partnership.
- SCOAP3 Second Phase studies are supported by ULAKBİM.
- Thus 90% of of High-Energy Physics will be open access worldwide.



# **European Open Science Policy Platform**

- advise the Commission on how to further develop and practically implement open science policy...
- function as a dynamic, stakeholder-driven mechanism..
- support policy formulation by helping to identify the issues to be addressed and providing recommendations..
- support policy implementation...
- provide advice and recommendations ...

TÜBİTAK agrees and shares certain general principles to achieve open science and effectiveness

## **Summary**



**EOSC:** ULAKBIM has registered in the EOSC Association

**Policy:** The Scientific and Technological Research Council of Turkey (TUBITAK) released and Open Science Policy in 2019 that covers Open Access to Publications, Research Data, and advice for DMP.

Forum: ULAKBİM coordinates national discussions, seminars, and hosts meeting

**DMP:** Although there is no national DMP tool currently, TUBITAK is active in this space and is trying to develop a DMPonline service and improving its provision.

**Data centers:** ULAKBIM collaborates with the Virtual Observatory and Polar Datacenter in Turkey. ULAKBİM offers a national repository called Aperta and a Turkish Academic Archive called Harman.

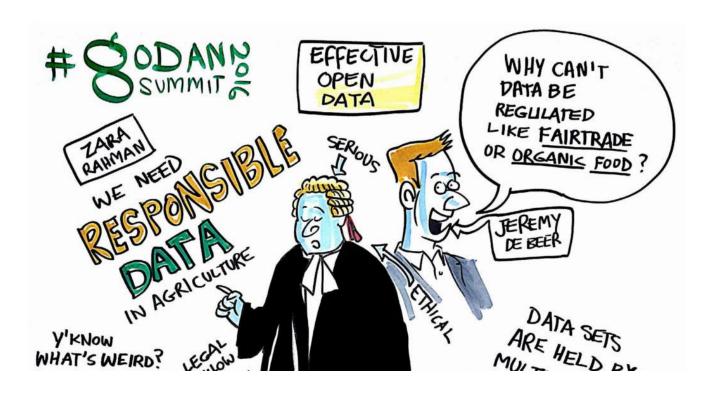
**Other:** The NREN is very comprehensive and addresses the network, HPC, HTC, OSS, grid, cloud & information services. Several planned strands of data work will be conducted by the HPC team, including development on Invenio and collaboration with the Virtual Observatory and Polar Data Centre.

ULAKBİM has prepared "Research Data Training Portal" where sample data management plans are shared to assist the researchers in data management and sharing, to provide researchers' understanding of open access, open data, and open science requirements, and also on compliance with the open-access policies and keep rules of TUBITAK Open Science Policy



# Thank you

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http://www.openair.org.za/open-data-for-agriculture-godansummit/