

ORCID iDs in Czech Current Research Information Systems

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Outline

- ORCID iDs in the National CRIS
 - Summary figures
- ORCID iDs at institutions
 - Example: Czech Technical University
- Opportunities

The national context

- National CRIS since 1994:
 - Projects with public funding (CEP)
 - Results of research (RIV, since 1998)
 - Calls for proposals (VES, since 2000)
- Managed by the R&D&I Council
 - Advisory body to the Government
 - Operated by the Office of the Government
- ORCID iD field introduced in data collection year 2018 (optional)
- October 2020:
The R&D&I Council issued a call to institutions to include ORCID iDs in their result records in RIV

National CRISes in [FI], [SE], [NO],
[BE] (Flanders), [PT], [PL], [SK],
[HU], [SI], ...

Emerging in [FR], [NZ],
[DE] (Bundesländer level), [CR], ...

RIV/IS VaVal Data Feed

Researchers

- Publications & other research outputs reporting
- ORCID iD + possibly other researcher identifiers



Institutions

- Metadata collection
- Submission in the RIV
- Other internal & external reporting



Funders

- Validation



RIV/IS VaVal, the National CRIS

- Integration
- Presentation at <https://www.isvavai.cz/riv>

Results per researcher
(4-year window):
Median = 3
75th Percentile = 9
90th Percentile = 20
Maximum = 553

Czech Academy of Sciences:
15K–16K records/year

Charles University:
11K–12K records/year

Masaryk University:
5K–7K records/year

Ministry of Education,
Youth and Sports:
45K–48K records/year

Czech Science Foundation:
9K–11K records/year

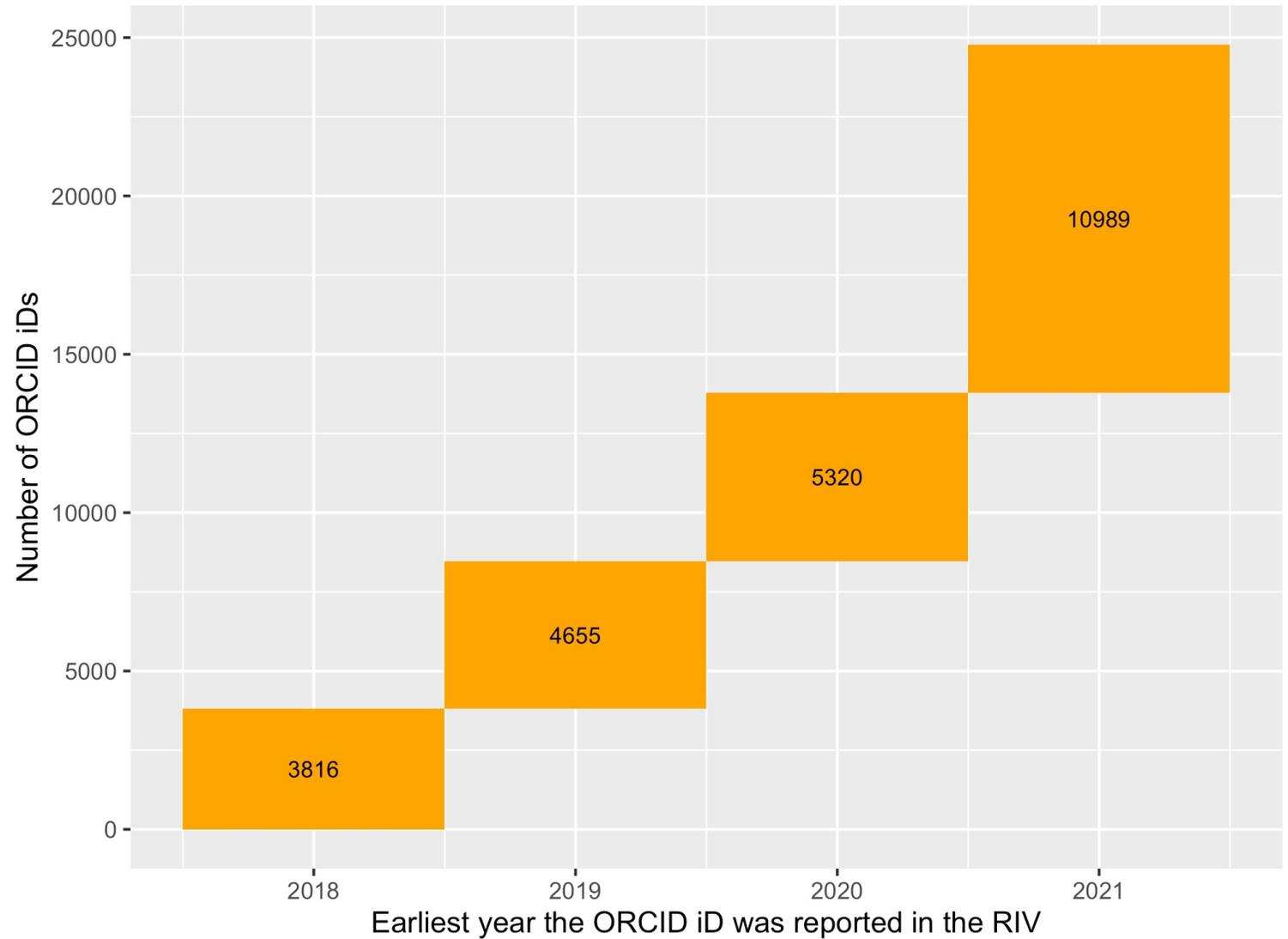
80K–85K records/year
55K–60K distinct results/year

ORCID iDs in RIV

ORCID iD field optional since collection year 2018, recommended since 2021
4 years of data now:

- 24,780 distinct ORCID iDs in IS VaVal/RIV
 - 21,573 (=87%) were found in the 2020 ORCID Yearly Data Dump (documents ORCID as of 2020-08-31)
 - 3,207 (=13%) were created after that

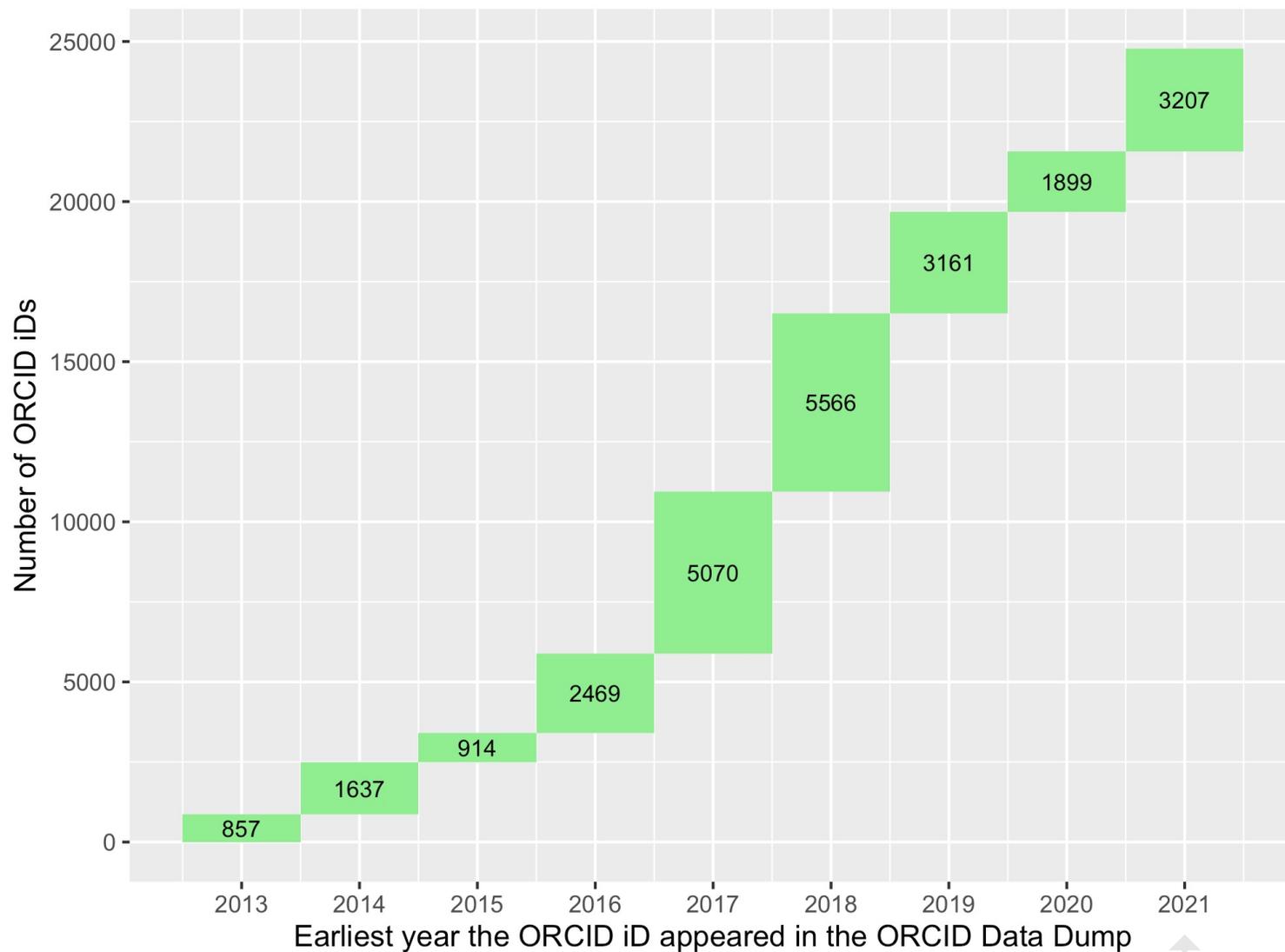
When were these ORCID iDs first reported?



Observation #1

ORCID adoption in Czechia, as seen in the national CRIS, is rising.

When were these ORCID iDs created?



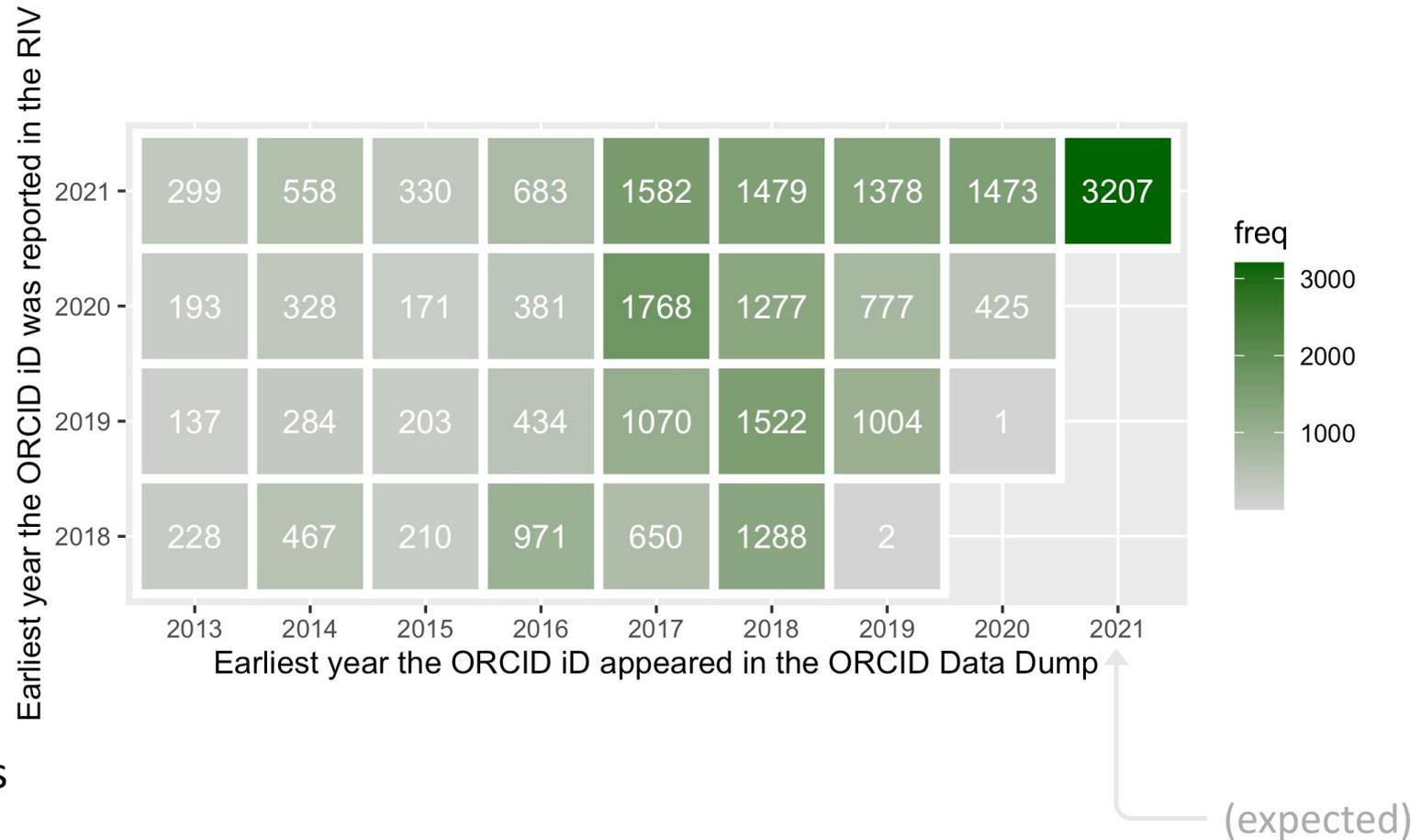
(expected)

When were the ORCID iDs reported vs created

In 2021:

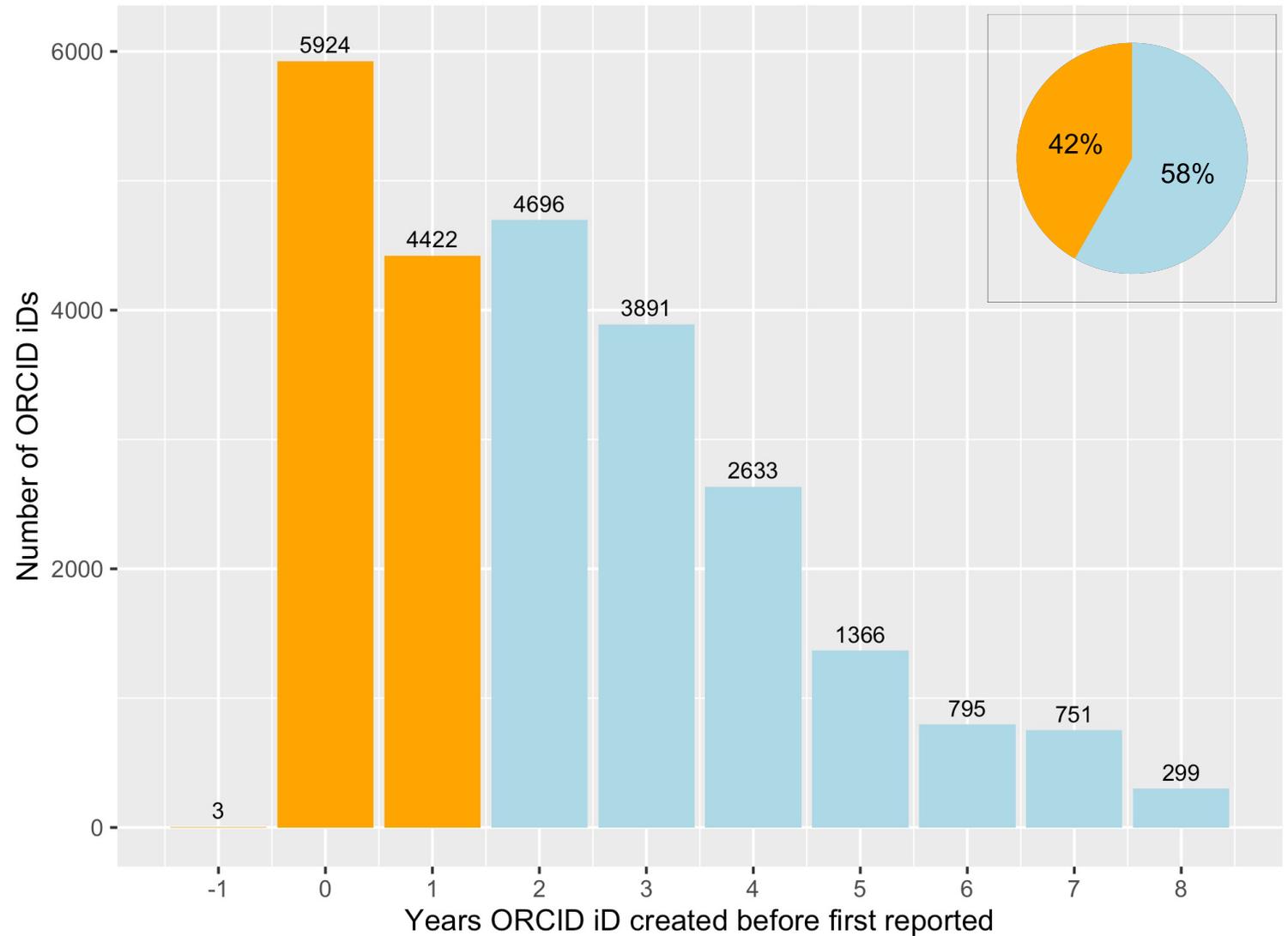
3,207 (=29%) newly created ORCID iDs

7,782 (=71%) pre-existing ones



Difference in years between ORCID iD creation and first report in RIV

42% ORCID iDs were reported in RIV within one year of their creation



Observation #2

Most the ORCID iDs reported in RIV were created more than a year before they were first reported

Possible reasons:

- Researchers learned about ORCID iD independently, and signed up
- Ways for researchers to communicate their ORCID iDs to their institutions are only emerging
- Researchers did not have enough support from their institutions
- Researchers did not see this as important enough

What proportion of researchers have already reported their ORCID iDs in RIV?

We need to estimate the total number of researchers

RIV collects the national administrative IDs (birth number = *rodné číslo*)

- Citizens of the Czech Republic
- Persons with residence permit in the Czech Republic

In RIV they get pseudonymized into a specific national "researcher id" (*vědíík*)

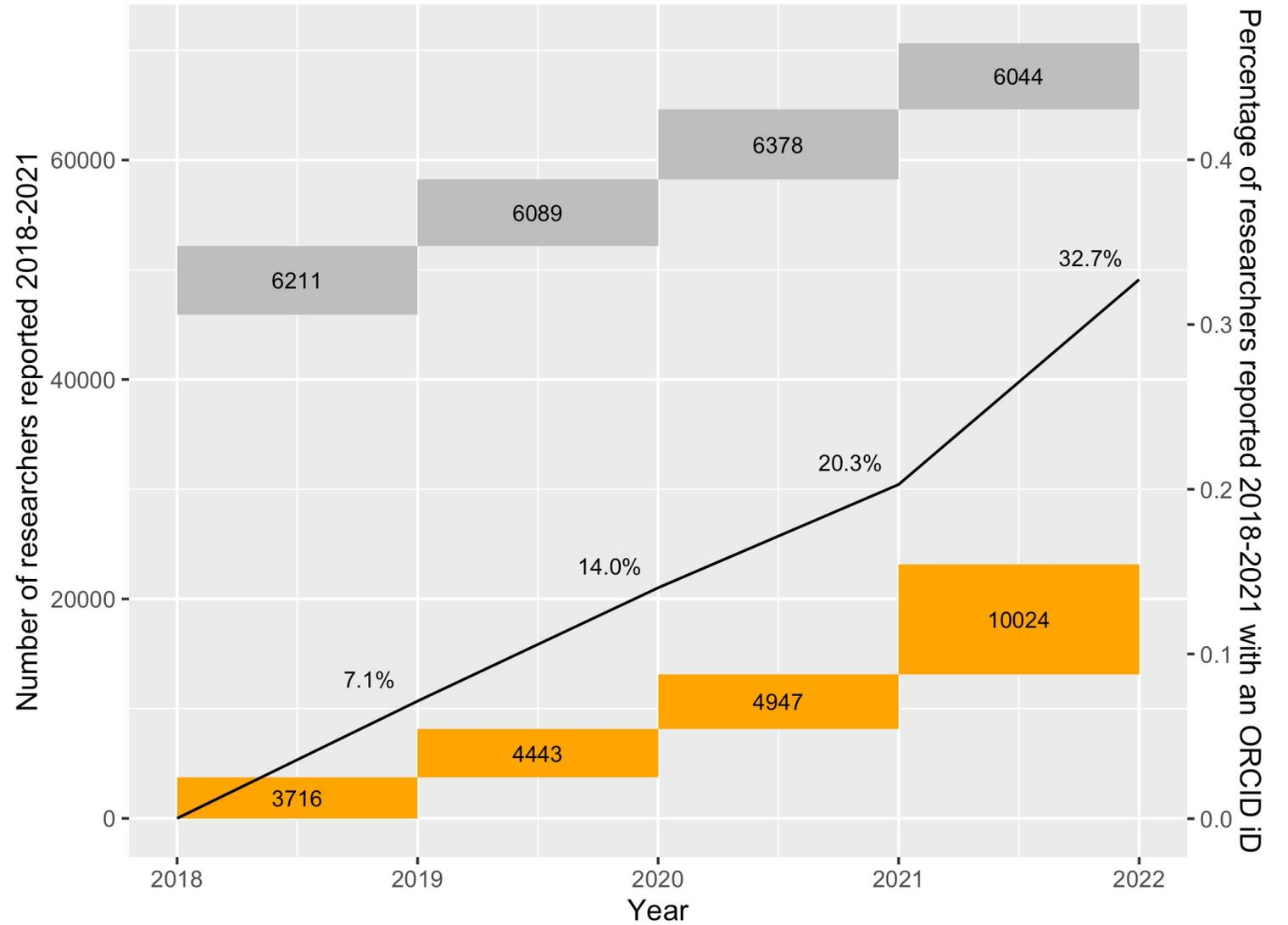
Out of the 24,780 ORCID iDs in RIV

23,130 (=93%) occur together with the administrative ID

- We'll limit our analysis to these ORCID iDs

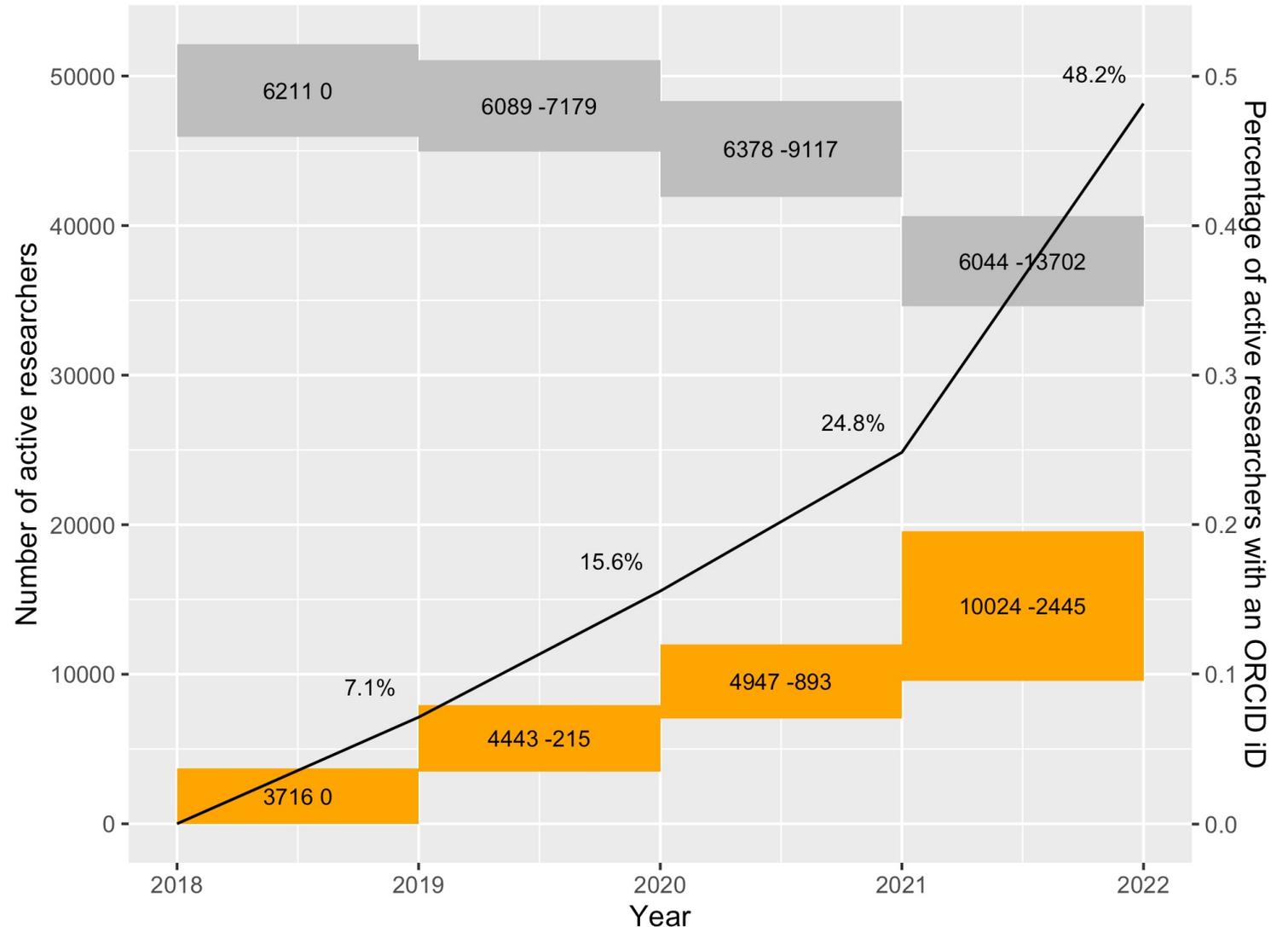
More on counting researchers --> [ORCID iDs & Admin iDs](#) presented at PIDapalooza 2020

Proportion of researchers reported 2018–2021 with an ORCID iD



Proportion of active* researchers reported with an ORCID iD

* Active = reported on the particular year or both before and after that



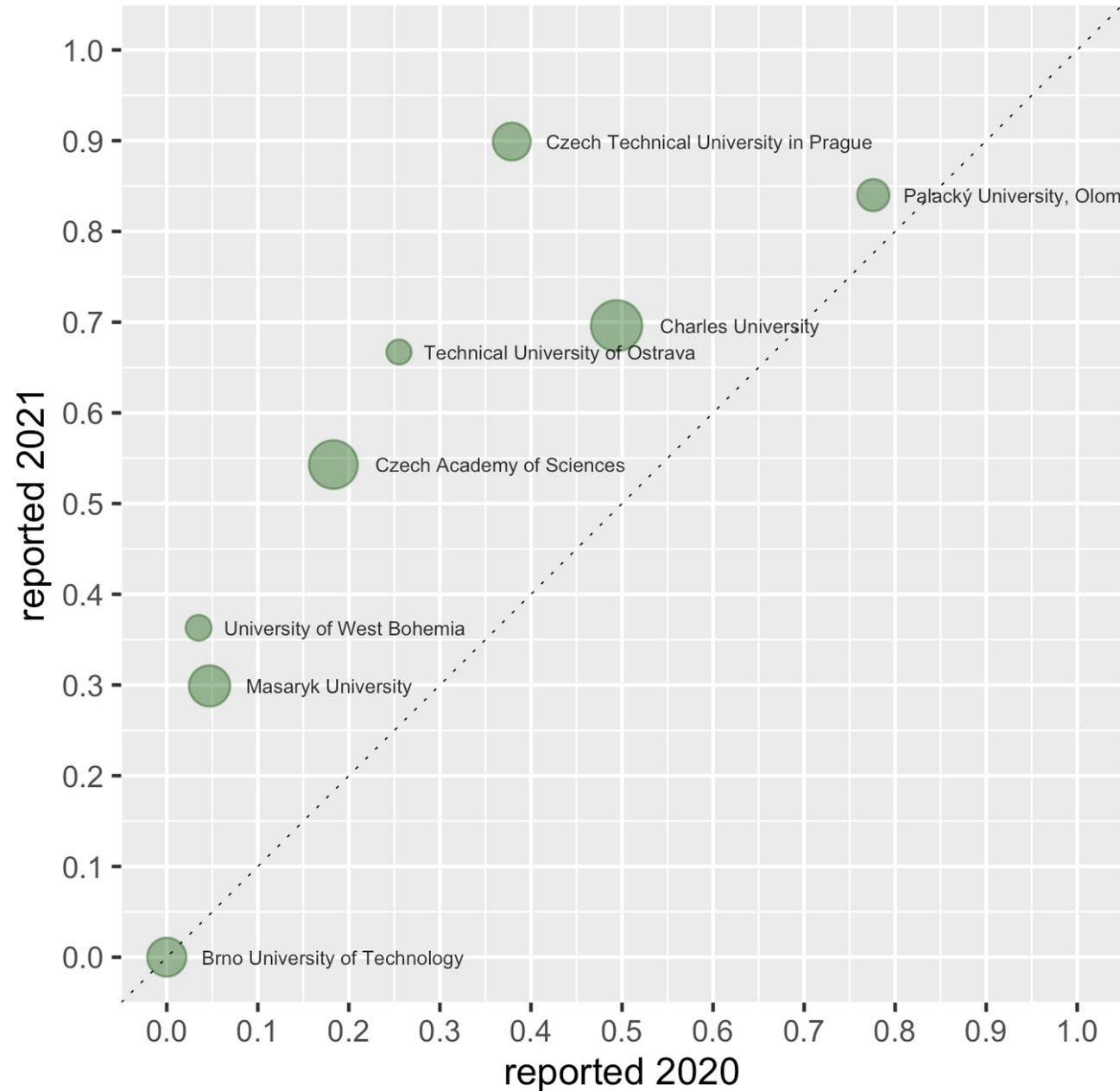
Reason for the drop of the total number of researchers in 2021:
researchers who either haven't published in 2020 or whose results have not been reported yet

Observation #3 & #4

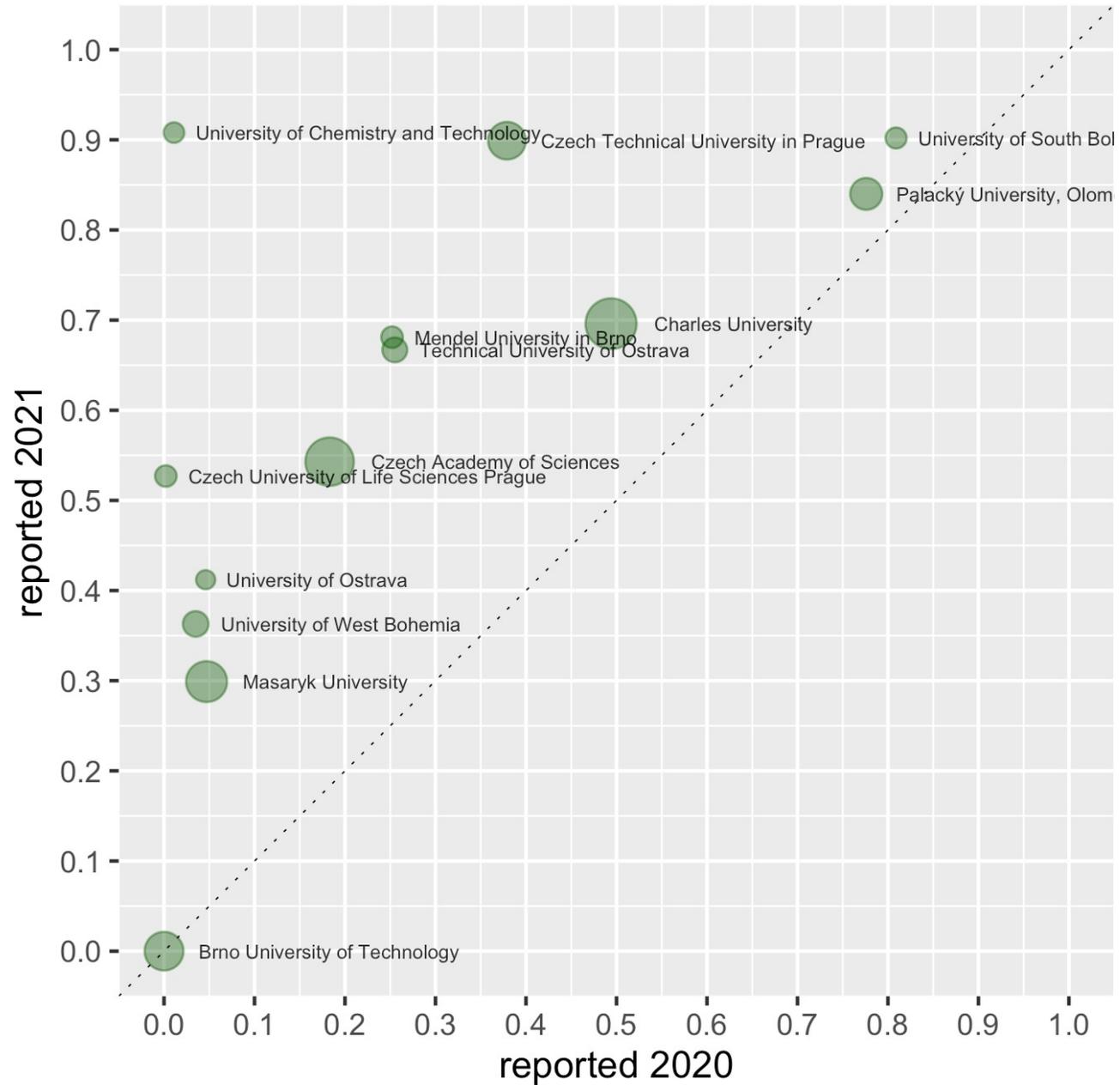
- In the 4-year window 2018–2021, results of nearly a third of Czech researchers (32.7%) were reported with an ORCID iD
- In 2021 alone, results of nearly a half of Czech researchers (48.2%) were reported with an ORCID iD
 - A radical increase of reported ORCID iDs following the R&D&I Council
 - Some researchers haven't published in 2020 or these results have not been reported yet

Institutions

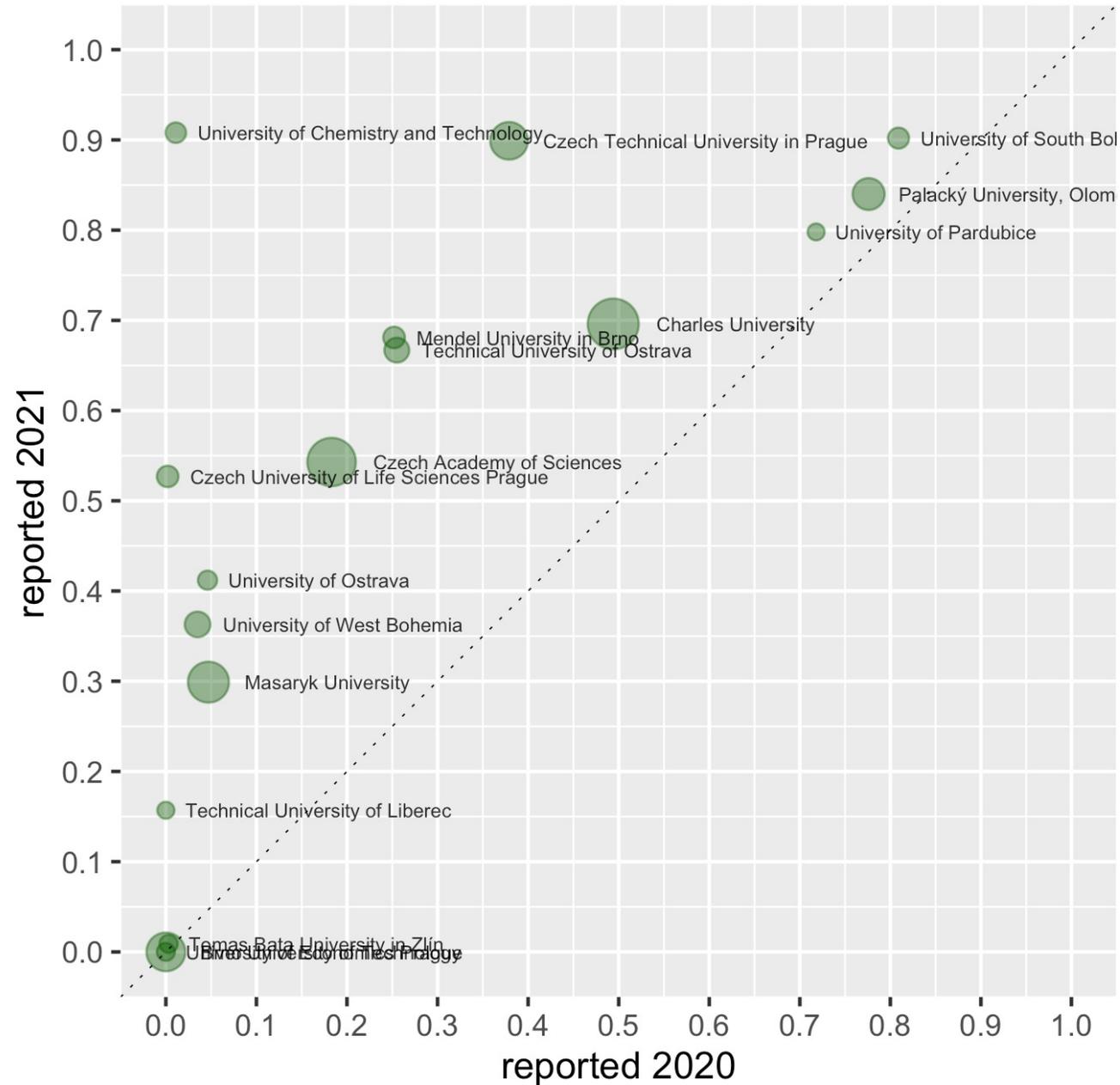
Change in proportions of active authors with ORCID iD in RIV (institutions with at least 3000 results reported over the two years)



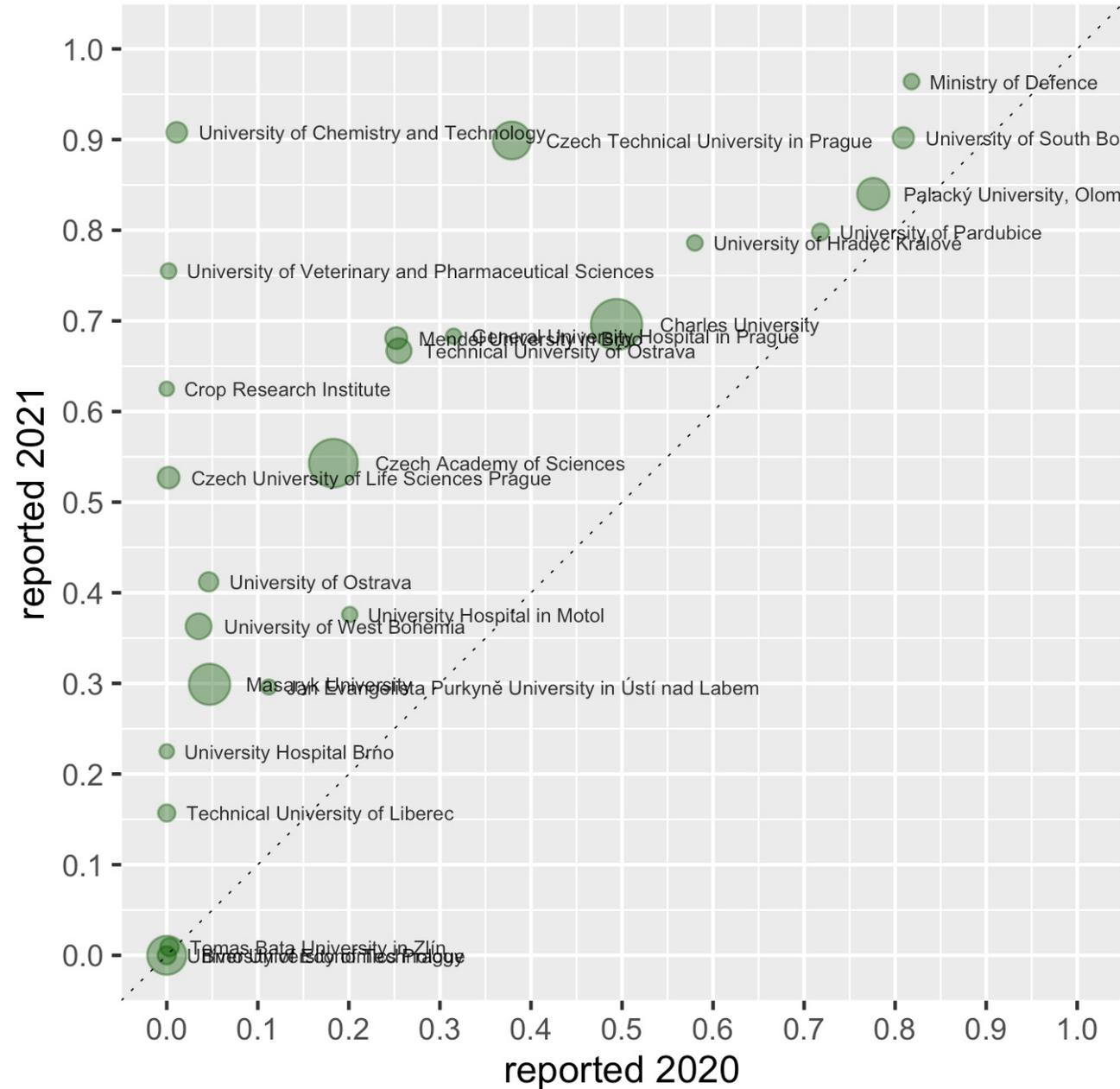
Change in proportions of active authors with ORCID iD in RIV (institutions with at least 2000 results reported over the two years)



Change in proportions of active authors with ORCID iD in RIV (institutions with at least 1500 results reported over the two years)



Change in proportions of active authors with ORCID iD in RIV (institutions with at least 1000 results reported over the two years)



Practices

Collecting ORCID iDs from the researchers

Authenticated ORCID

The user:

- Logs in to an internal system
- Is forwarded to the ORCID login page
- Logs in to ORCID
- Ticks the institution is trusted
- Goes back, ORCID reports back the user's ORCID iD to the calling page

Pro: reliable, scalable, automated

Con: requires an integration

Internal Communication

- Emailing, spreadsheets, db loading

Laborious, error-prone

Detached Guessing

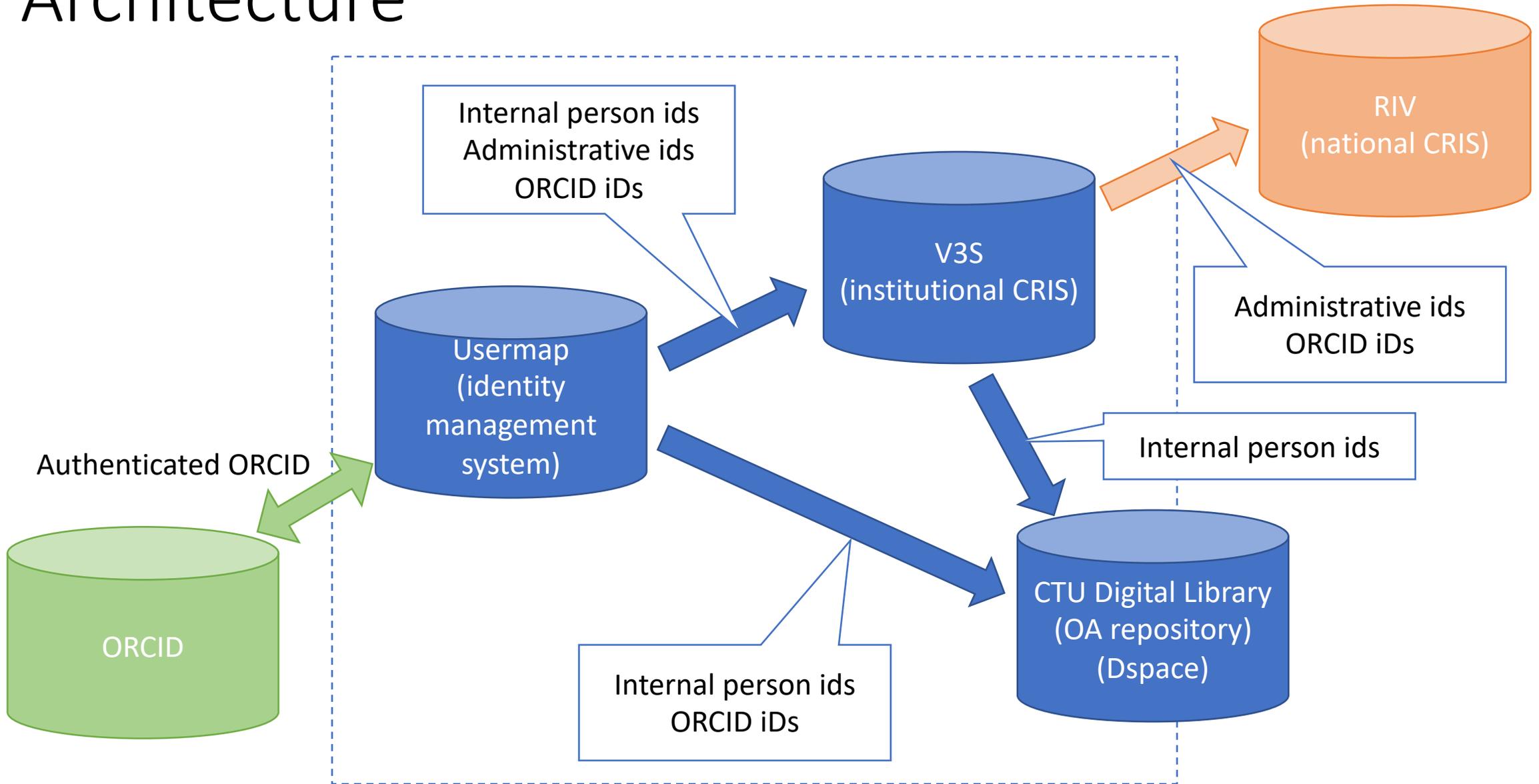
- Googling for ORCID iDs

Very error-prone!

Example:

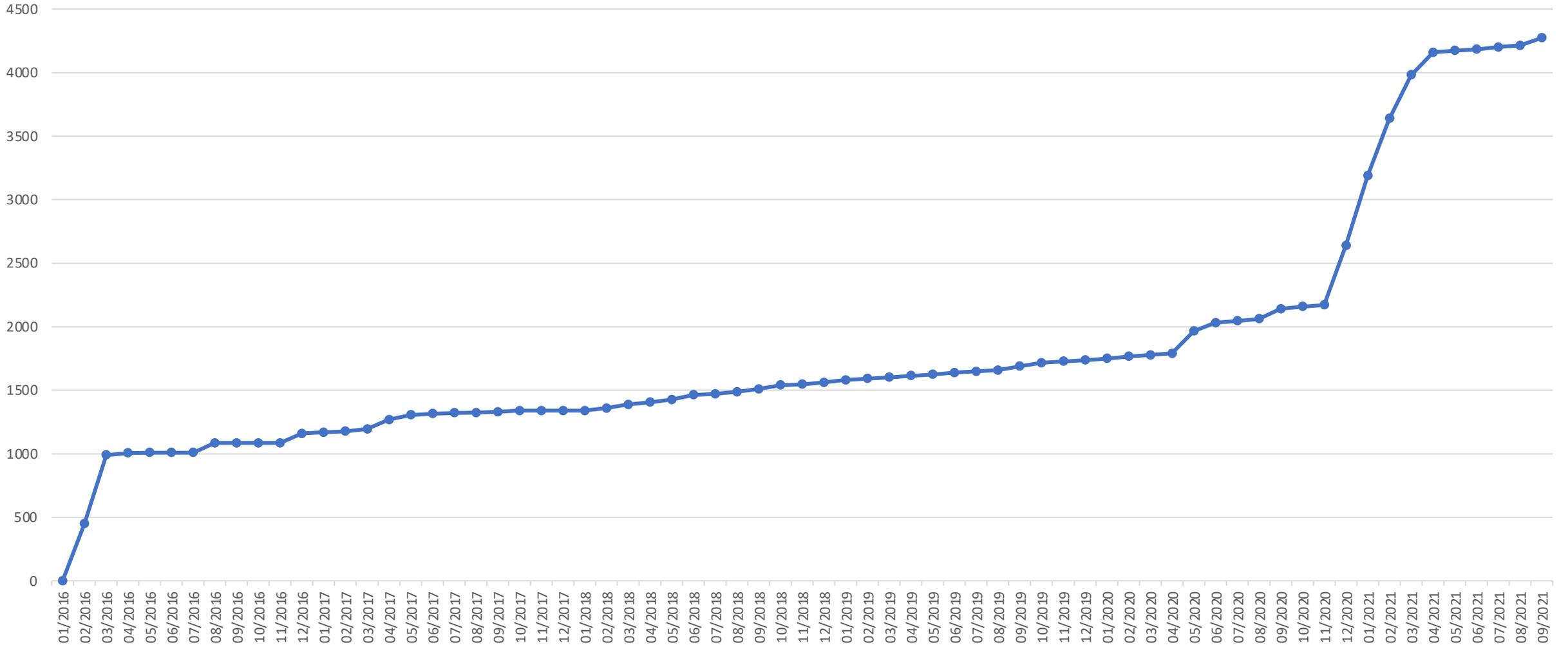
Czech Technical University

Architecture

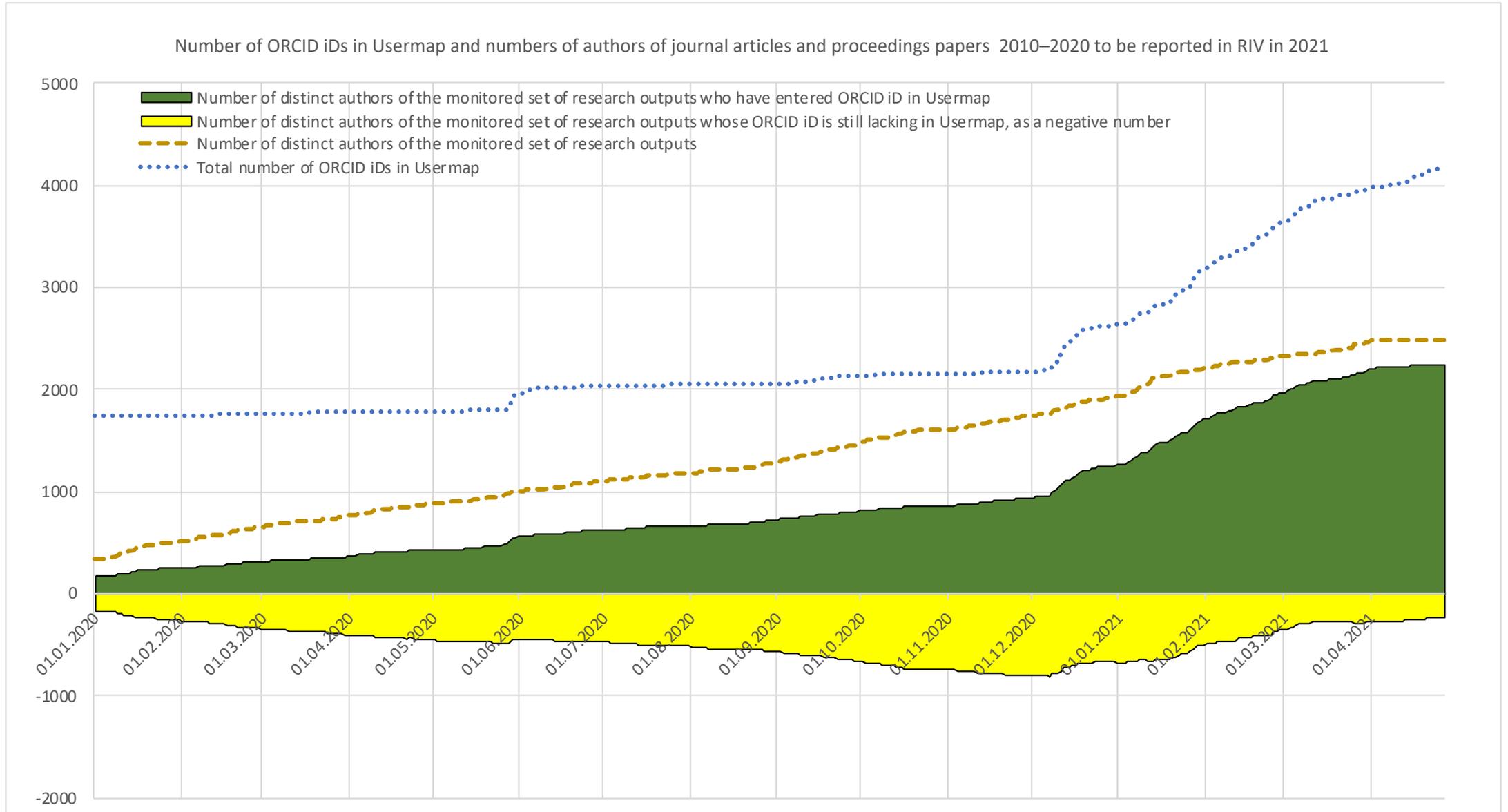


CTU: ORCID member since 2015

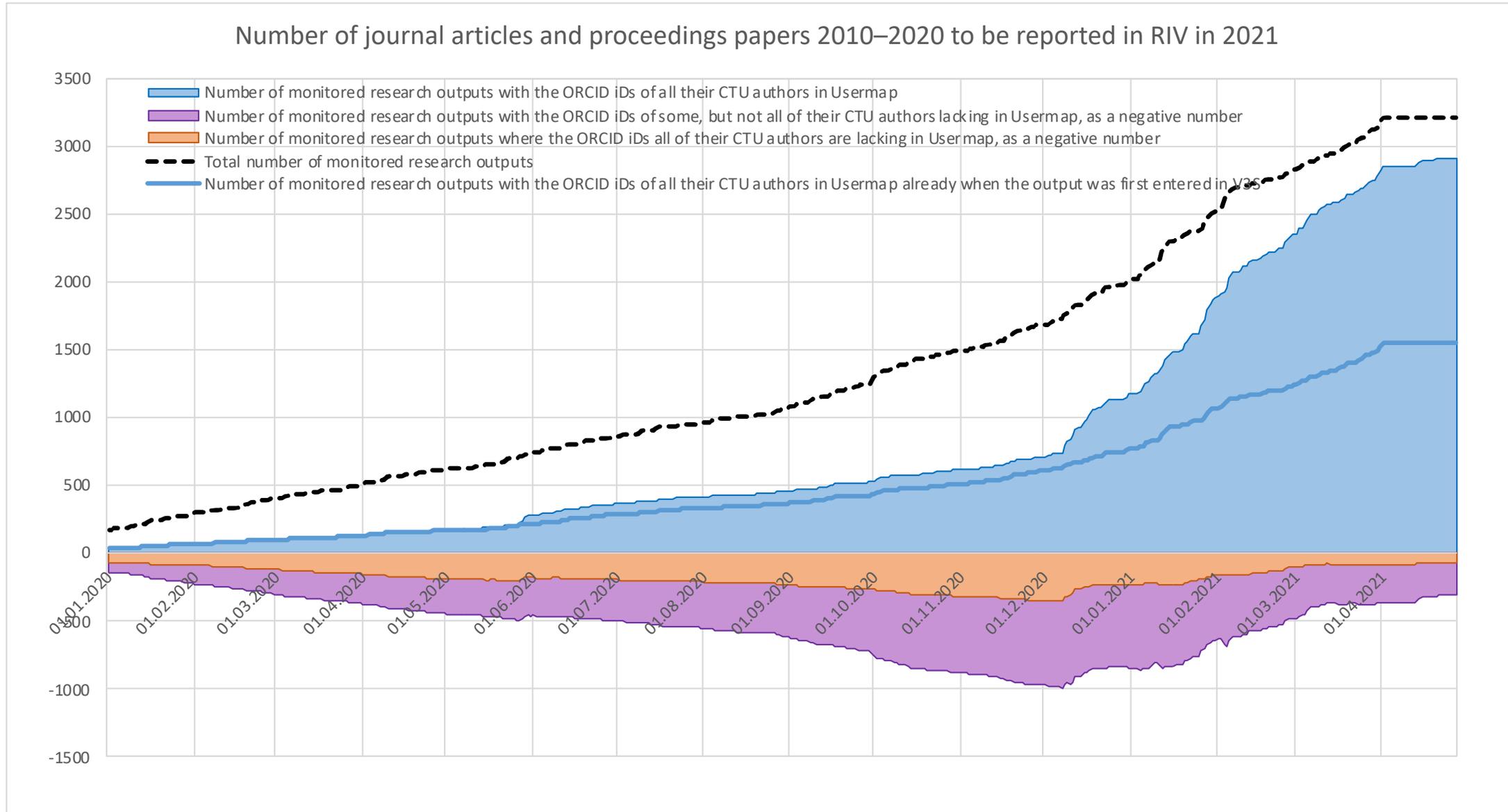
Number of ORCID IDs entered in Usermap by the end of the month
(September 2021 incomplete, status as of 29-Sep-2021)



Monitoring during the research output reporting



Monitoring during the research output reporting



Opportunities

To populate the ORCID records & keep them up-to-date

Affiliation statements in ORCID records made by the institutions

Why:

- Considered much more authoritative
- Uniform names of the institution + its units

Options:

- Identity management system through the ORCID API (preferred)
- Affiliation Manager (by ORCID: only offered to Consortium members)

Researchers, set up Crossref Auto-update!

Manuscript submitted incl. authors' ORCID iDs



Text published, assigned a DOI, Crossref metadata include the authors' ORCID iDs



ORCID is notified of the DOI registration, works are inserted automatically in the authors' profiles



Institutional CRIS is notified of the new work, it can set up its record based on the Crossref & ORCID metadata



Researcher approves the record

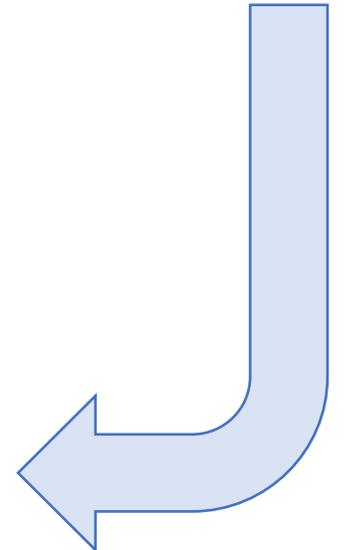
Provided the publisher collects this rich metadata

Provided the publisher registers this rich metadata

Provided the record owner has enabled this

Provided the institutional CRIS is integrated with ORCID

Time savings for the researchers
Potentially better quality metadata



Institutions to push past publications to their researchers' ORCID records

- With an integration, the institutional CRIS can push publication metadata to the ORCID records of their researchers

Alternative:

- Researchers can feed their publications to their ORCID records from Web of Science and Scopus
- Also trusted librarians can do that on behalf of the researchers

Using ORCID iDs to support academic hiring

The candidate's ORCID record may help:

- How does the candidate's expertise fits that of your team?
- Verify the claims in the candidate's CV
- Any previous collaborations?

Other related topics

Funders. Research infrastructures. Collaborations between Czech institutions.
Multiple affiliations. Data quality. Researchers' trust. Handling researcher mobility.

Conclusions

- ORCID adoption in CZ is rising
- Most researchers had their ORCID records already, but getting the ORCID iDs up to the national CRIS is still non-trivial at some institutions
- Both institutions and researchers would benefit from integrations of institutional systems with ORCID:
 1. To make authoritative affiliation statements in ORCID records
 2. To harvest information about new publications from ORCID records
 3. To populate ORCID records with past publications