

Open Science as a new opportunity for Czech academic libraries

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CHARLES UNIVERSITY
Open Science Support Centre

8. Bibliothekskongress Leipzig 2022:
#FreiräumeSchaffen
2.6.2022

Charles University / Karls-Universität

- 1348 - founded in Prague by Charles IV.
- 1409 - Leipzig University founded in 1409 by teachers and students leaving CU
- 1882 - University split into two (Czech and German)
 - Czech closed in 1939, re-established 1945
 - German closed in 1945
- => both Czech and German heritage



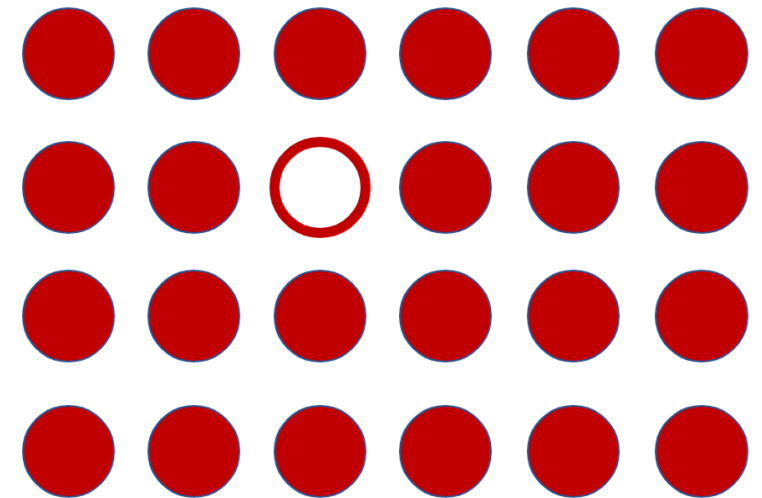
Charles University today

- nearly 50 000 students
- cca 9 000 staff (incl. cca 3 900 academics)
- over 1 000 study programmes
- 17 faculties
 - 3 cities – Prague, Pilsen, Hradec Králové
 - art, science, law, 5 medical faculties, 3 theological faculties, pharmacy, education, humanities, social sciences, mathematics and physics, physical education and sports



Libraries at CU

- decentralized system with faculty libraries (more than 17..)
- Central Library
 - part of CU's Recorate
 - agenda:
 - ILS, discovery system
 - electronic resources
 - repositories – digitization, theses
 - e-learning support



meanwhile:
Open Science
is coming...

EVERYONE ON THE ROAD TO OPEN SCIENCE



OPEN EDUCATIONAL RESOURCES

CITIZEN SCIENCE

OPEN SOURCE



Image by Patrick Hochstenbach CC-BY 4.0

Open Science

- “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.” [project FOSTER]
- open access, open data, reproducible research, open science policies, evaluation and rewards...



Open Science in Czechia


- adaptation of OS policies on national level is very slow in CZE
- Open Access
 - can be funded, but no mandates
 - gold as preferred route, transformative agreements
- Research Data
 - no current policy, DMPs not mandatory (yet), making data FAIR not mandatory (yet)



Situation on CU

- no explicit policies
 - limited infrastructure (O365 & other, heavily decentralized)
 - unknown best practices
 - no real national pressure (changing slowly)
 - most incentives coming from international cooperation (Horizon 2020, Horizon Europe, etc.) and EU policies
- => our goal: *Be ready before new policies are mandatory.*

Relevant experience?

- Central Library's agenda:
 - electronic resources
 - ILS
 - discovery system
 - repositories – digitization
 - repositories – theses
 - e-learning support
 - Open Access
 - digital objects
 - PIDs
 - metadata, protocols, formats
=> FAIR data
 - open educational resources
- 



What to do?

- Open Science Support Centre (since 2020)
 - Open Access & Open Data + Institutional Repository
 - => OA + RDM + FAIR + repo
 - support OA (incl. APC monitoring),
 - prepare analyses, strategic materials for repository, provide support



Analyze



policies
requirements
existing solutions
tools
current practices



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Provide



infrastructure
policies
tools
best practices

Communicate

university

- central level
- faculties

outside world

- national
- international
- + EOSC



Analyze

- policies
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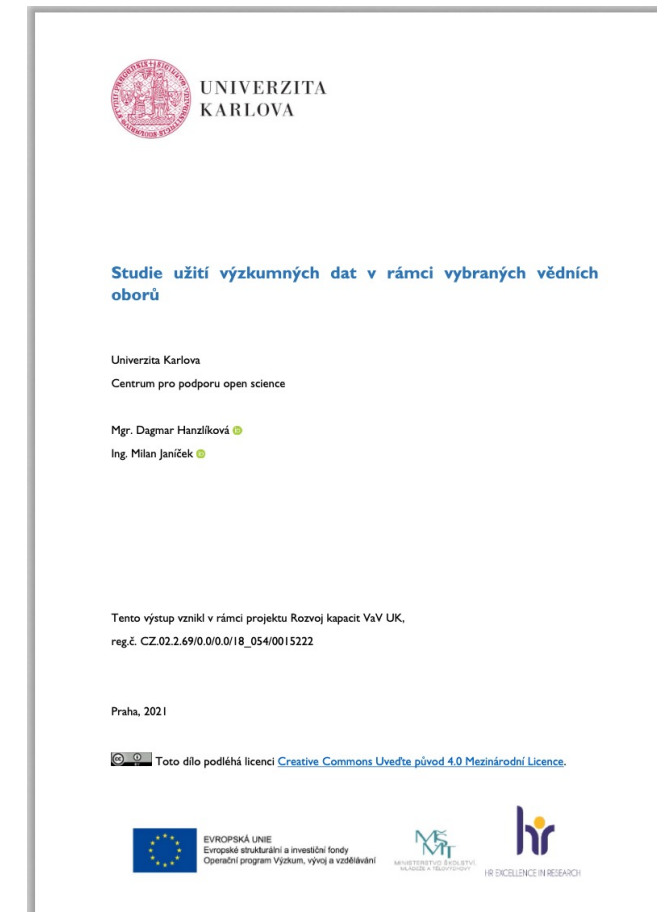
Analyze – CU specific

- data survey (Jun-Jul 2021)
 - what happens to your data during the research cycle?
 - sentiments regarding RDM topics (data security, sharing, reuse..)
 - survey was (to some extent) coordinated accross 3 universities
 - Charles University, Masaryk University, VSB-TU Ostrava
- sharing (in repository) not main issue
- more people would use others data, not much incentive to share theirs
- support would be appreciated



Analyze – CU specific

- results published in Zenodo
 - <https://doi.org/10.5281/zenodo.5841573>
- including data
 - <https://doi.org/10.5281/zenodo.5841574>
- in Czech only (project output)
 - feel free to contact us for more info if interested



Communicate



- university
 - central level
 - faculties
 - outside world
 - national
 - international
- + EOSC

Communicate – Inside University



- researchers
 - mostly interviews, in person, 60-90 mins
 - ← how do you work with data, domain specifics, what are the obstacles, what do you wish to improve, what support do you need
 - FAIR principles, Open Science goals, new requirements in projects, DMP
- people like to talk about their work – even with “librarians”
 - experience with metadata, discovery, digitization helps

Communicate – Inside University



- building support
 - working group on DMP/RDM
 - IT, GDPR, technology transfer, science dept.
- centralizing support makes sense
 - domain specific support would be nice
- existing Research Infrastructures help a lot
 - (LINDAT/CLARIAH-CZ, ELIXIR.CZ..)





Communicate – Outside World

- national cooperation
 - mostly on Open Access basis (not many Open Science people)
- international cooperation
 - 4EU+ Alliance – Open Science part of projects



UNIVERSITÀ
DEGLI STUDI
DI MILANO



+ great Open Science community ;-)



Provide



- support
- best practices, workshops and training
- policies
- infrastructure
- tools





Provide - support

- Open Science Web – <https://openscience.cuni.cz>
 - OA (basic info, APC monitoring, tokens)
 - RDM & FAIR (repository guidelines, data security, DMPs)

The screenshot shows the homepage of the Charles University Open Science Support Centre. At the top left is the university's seal. To its right is the text 'CHARLES UNIVERSITY Open Science Support Centre'. On the top right, there is a search bar with the text 'Text to search' and a 'Search' button, along with social media icons for Facebook, Twitter, YouTube, RSS, and a flag icon. Below the header is a navigation menu with links: ABOUT, OPEN CU, OPEN ACCESS, RESEARCH DATA, SUPPORT, FAQ, and CONTACT. The main banner features a stack of books with wooden blocks spelling 'FAQS' on top. Below the banner is the text 'ANY QUESTIONS ABOUT OPEN SCIENCE? See FAQs section related to open scientific agenda'. The 'NEWS' section contains six items:

- Research data management and Data security (13 May 2022)
- Research data management now included in the tender documentation of GAČR (21 March 2022)
- We invite you to the EOSC Future Open Days (18 November 2021)
- Call for Czech researchers to shape the EOSC Future solutions (9 September 2021)
- Have you noticed internet tracking during the scholarly communication? (24 June 2021)
- Open access e-learning course now available in English (23 June 2021)

An 'All news >' link is located at the bottom right of the news section.



Provide – workshops and training



- 2 multiday workshops:
 - for academics
 - for staff
- topics – OA, DMP, RDM, FAIR, data sharing, licensing, Research Infrastructures, EOSC





Provide – community building

- Open Science Champions
 - academics supporting Open Science
 - short interviews on our web
 - <https://openscience.cuni.cz/OSCIEN-99.html>

=> OS still not mainstream, but growing

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Charles University | Central Library | Repository

Text to search Search

ABOUT OPEN CU OPEN ACCESS RESEARCH DATA SUPPORT FAQ CONTACT

Open CU - Open Science Champions

Policy
Open Access at CU
Open Science Champions

Open Science Champions

Researchers at Charles University are no strangers to open science!

How did they get started with open science? Why do they consider open science important and what would they recommend to their colleagues? You can find the answers to these questions and more in our gallery of **Open Science Champions**.

Gallery

- doc. Mgr. Václav Cvrček, Ph.D.**
"For me, open science is especially an appeal for greater humility towards the scientific methodology a joint effort to reproduce our knowledge of the world."
- prof. JUDr. Jakub Handrlíka, LL.M., Ph.D., DSc.**
"Open science is an open window to the heavens of world science."
- doc. Mgr. Jan Chromý, Ph.D.**
"Open science is a way to make scientific knowledge journey at a faster pace."
- Mgr. Eva Lehečková, Ph.D.**
"Open science for me means focusing on what is important, effective, meaningful without geographic and economic barriers that a beneficial discovery."
- Mgr. Marián Novotný, Ph.D.**
"Open science is a natural approach to doing science that is beneficial. An idea comes, but nobody for some provision."
- Mgr. Radek Šimík, Ph.D.**
"Open science is a path to more valuable scientific knowledge accessible to all who are interested in it."
- Mgr. Ondřej Tichý, Ph.D.**
"Open science means freedom of research and the credibility of science."
- prof. Lucie Doležalová, Ph.D.**
"Open science means an opportunity for dialogue, inspiration and collaboration."

Provide – community building



- Open Science Podcast
 - (in Czech)
 - initiative by OA coordinators
 - interviews about OS related topics
 - 8 episodes so far

A screenshot of the Spotify mobile app interface for the 'Open Science Podcast'. The page is in dark mode. At the top, there's a navigation bar with 'Spotify' logo, navigation icons, and buttons for 'Registrovat' and 'Přihlásit se'. Below the navigation bar is the podcast header with the title 'Open Science Podcast' and the subtitle 'Centrum pro podporu open science, Univerzita Karlova'. A 'SLEDOVAT' button is visible. The main content area is titled 'Všechny epizody' and lists two episodes. The first episode is 'Rozhovory s Open science šampiony UK: prof. Jakub Handrlica' with a duration of 31.5 minutes and 26 seconds. The second episode is 'Rozhovory s Open scienc šampiony UK: Marian Novotný' with a duration of 3.5 minutes and 28 seconds. On the right side, there's a section 'O umělci' with a description of the podcast and a 'Věda' category tag. At the bottom, there's a 'Cookies' notice and a 'Ochrana osobních údajů' link.

Next steps

- help to create data policy
- infrastructure & tools – EOSC CZ implementation
- support new projects (proposals, DMPs)
- be more involved in education (courses for PhD. students)
- help to cultivate scholarly communication (including topics related to Open Access)
- keep an eye on other developing aspects of OS



Conclusions

- Library has natural role in Open Science Support → new opportunities.
- Experience libraries have is relevant (metadata, identifiers, protocols, data interchange, openness, digital objects).
- This is true even in decentralized environment that doesn't actively embrace Open Science.

→ We believe we can help make Charles University better, help to *practice science in such a way that others can collaborate and contribute...*



Thank you for your attention!

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Links

- “Everyone on the road to Open Science“ by Patrick Hochstenbach, CC-BY 4.0: <https://fredvbrug.github.io/images/OA.jpg>
- Výroční zpráva Univerzity Karlovy- https://cuni.cz/UK-8533-version1-uk_vyrocní_zprava_2020_web.pdf
- tapestry: <https://www.lf2.cuni.cz/fakulta/clanky/prohlaseni-nazory-eseje/mezinarodni-den-ptactva-symbol-pelikana>
- UK logo: <https://cuni.cz/UK-6450.html>
- Auszug den Deutschen Studenten... , Public Domain: https://commons.wikimedia.org/wiki/File:Auszug_aus_Prag_1409.jpg

