Research integrity and the ethics of scholarly communication

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Slovak Centre of Scientific and Technical Information

85
ROKOV PODPORY VEDY
CENTRUM VEDECKO-TECHNICKÝCH INFORMÁCIÍ SR

NISPEZ IV

Investment in your future

Foto: Johannes Plenio, unsplash, https://unsplash.com/photos/RwHv7LgeC7s

Slovak Centre of Scientific and Technical Information (SCSTI)

ISIL SK-2KABVA00019

- Founded 1938 as an academic library of Slovak University of Technology

- 1951 – Central technical library, detached from the University

- Since 1996 – Slovak Center of Scientific and Technical Information with many additional functions besides traditional services of scientific library. For all disciplines and the whole scholarly community:

  - management of electronic information resources and scientific databases for Slovak library consortium, free registration for readers, 2023: **transformative agreements with Springer-Nature and IEEE**,

  - complex information systems for science, research and education,

  - popularization of science (Quark magazine, Scientific cafés, Aurelium, Fablab, Laser center...),

  - information on patents, norms and standards,

  - NCP office for Horizon,

  - Our team: **Contact office for open science** – courses and educational resources on open science and scholarly communication, open science web, webinars, workshops, conferences, **National strategy for open science** 2021-2028 (english translation).

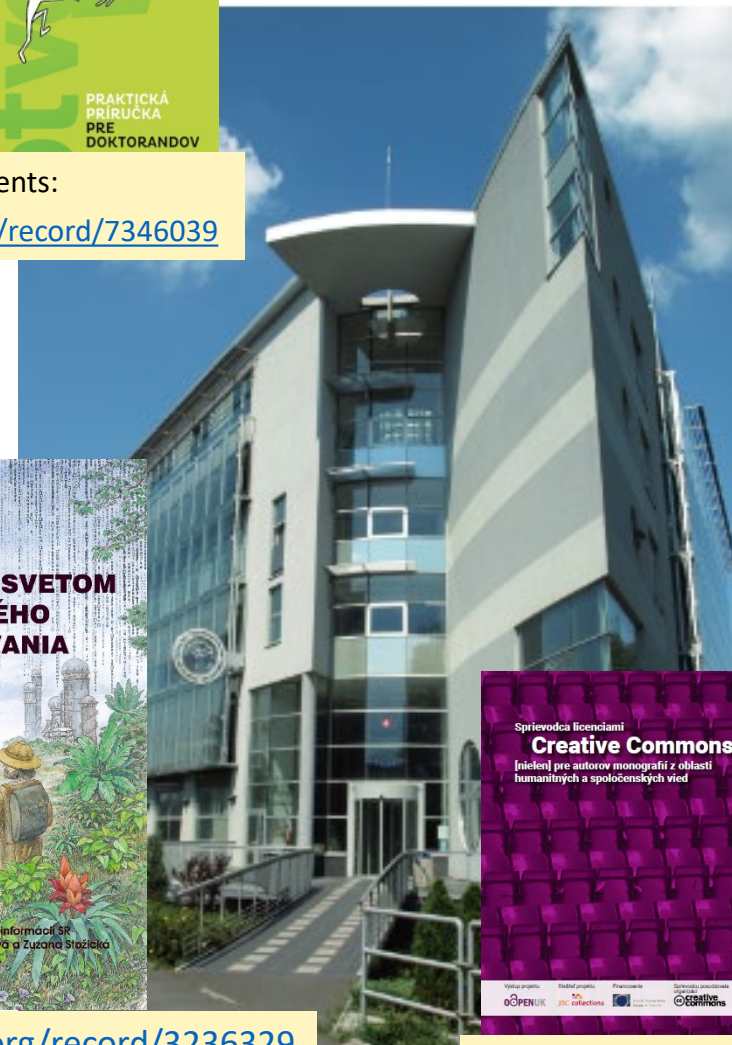Guide for PhD students:
https://zenodo.org/record/7346039

https://zenodo.org/record/3236329
> 2 600 downloads, II.-nd edition

Guide on Creative Commons licences

Research integrity and the ethics of scholarly communication

- Science: key importance for society – but cannot reach its goal / application or societal impact until (properly) communicated

- Science has its specific patterns and laws, its famous self-correcting mechanism, but (as a product of human society) also conflicts and flaws, mostly stemming from the efforts to achieve success by taking shortcuts

- Academy/research environment: complex, constantly evolving, sometimes difficult to navigate

- Lots of choices, unpredictable consequences

- Many different (interdependent) stakeholders – one weak link may compromise work of many others

- Different lines of motivation (advancement of knowledge, but also economic, prestige, ethics considerations...)

FSPL Franklin-Springboro Public Library
@Franklin_Springboro_Library
3 hours ago

My 4-year-old: I can't sleep, Daddy. I'm afraid of Frankenstein.
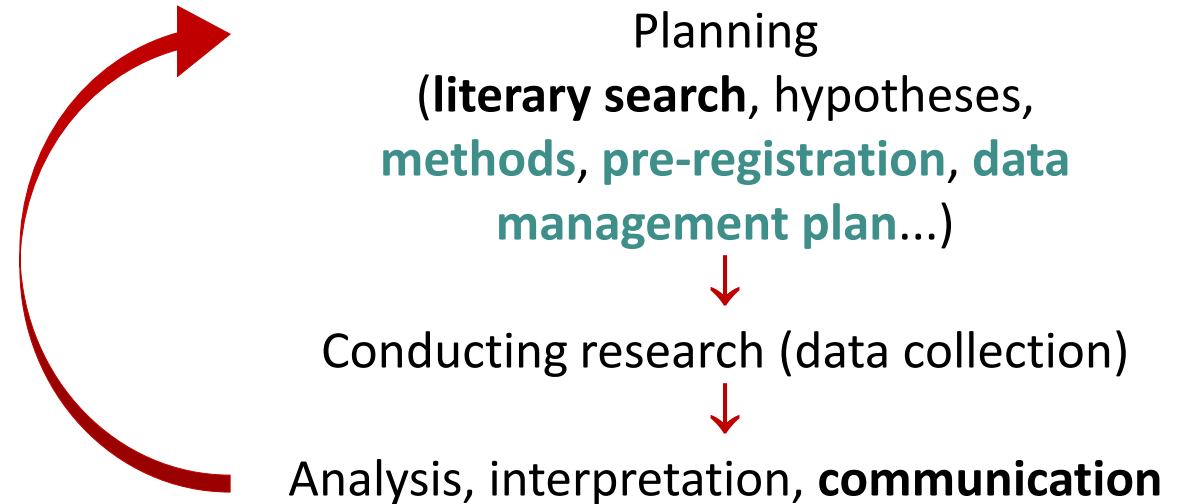
Me: Don't you mean Frankenstein's monster?

My 4-year-old: I do not. Personally, I find unethical and irresponsible scientific practice far more terrifying than any monster and so should you.

library Franklin-Springboro, FB

Research integrity and the ethics of scholarly communication

- Communication: sharing of information, integral part of science, essential throughout the whole research cycle

- Costly and sometimes strenuous

- But the cost is far higher, when the communication is neglected

Aim: **To inform truthfully, clearly and completely** (not to conceal anything important and not to mislead or miscontextualise).
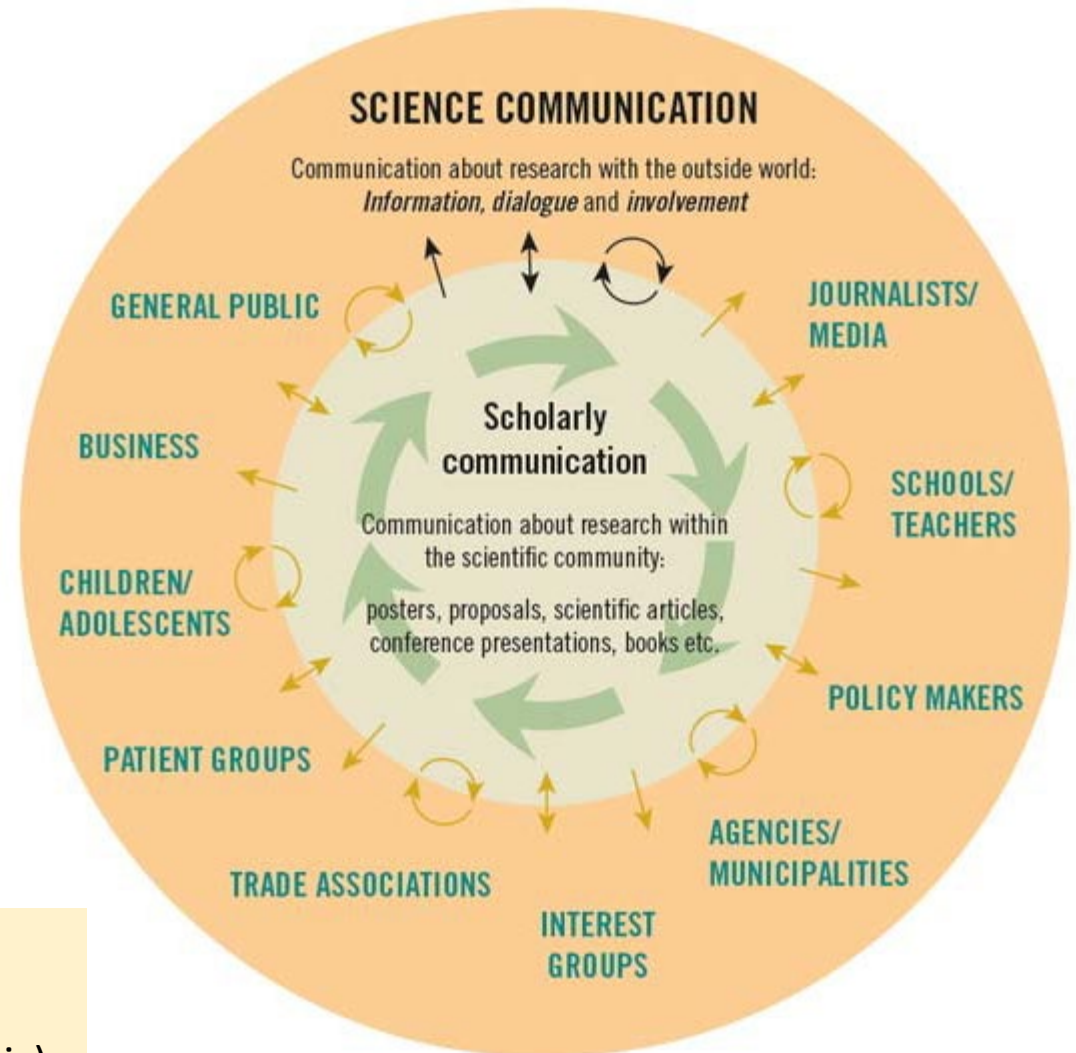Key factor in communication: **trust**.

Planning
(**literary search**, hypotheses, **methods**, **pre-registration**, **data management plan**...)

↓

Conducting research (data collection)

↓

Analysis, interpretation, **communication**

'Science is not finished until it's communicated, Mark Walport

Research integrity and the ethics of scholarly communication

- Communication: consequences (and responsibility) reach beyond scholarly community.

- Scientific communication has to be diverse: each actor uses and needs different means, forms, different degrees of complexity of professional language.

- Scientific terminology increases the effectiveness of communication, but at the same time decreases comprehensibility for other groups (not only the public, but also scientists from other disciplines).

- Importance of **lay abstracts**.

- Importance of quality **popularisation** and **communication of science** (existence of **expert discussion**) in national languages ([Helsinki Initiative](#) for Multilingualism).

Good (effective, truthful) communication pays off for society, bad communication may temporarily lead to benefits for some actors, but the whole society will pay the price (e.g. COVID-19 crisis).

SCIENCE COMMUNICATION

Communication about research with the outside world:
Information, dialogue and *involvement*

GENERAL PUBLIC

JOURNALISTS/ MEDIA

BUSINESS

Scholarly communication

Communication about research within the scientific community:

posters, proposals, scientific articles, conference presentations, books etc.

SCHOOLS/ TEACHERS

CHILDREN/ ADOLESCENTS

POLICY MAKERS

PATIENT GROUPS

AGENCIES/ MUNICIPALITIES

TRADE ASSOCIATIONS

INTEREST GROUPS

Research integrity and the ethics of scholarly communication

Integrity - a set of principles and rules established to make scientific work "hold together", to make sense.

- Honesty,
- Reliability (rigor, quality of research),
- Transparency,
- Care and respect for all involved,
- Accountability.

- Neglect/violation of any of its elements undermines the meaning of research and its value to society.
- At the same time, any misconduct has an impact on other links in the communication chain (society's trust in science and rational worldview).

- **Even if transgressions against ethics and integrity happen only in a small percentage of cases, and the rest - the majority - is honest science, it is the transgressions that will resonate most in the public debate.**
- That is why it is important to approach integrity issues responsibly - not just formally.

Talking about ethics and integrity

Discussing ethics and integrity in an academic setting does not just serve formal purposes. Thinking about potentially problematic situations before the researchers get into them increase their chances of responding appropriately.

- Slovakia (2021): [Declaration] on strengthening the culture of scientific integrity in Slovakia.
- Code of Ethics (2023): currently in the process of approval.

What are the codes supposed to ensure?
- Professional competence,
- Protect the „subjects" (patient/public health in the case of the medical sciences, society in the case of the social sciences),
- Protect the profession (academy),
- To give credit where credit is due.

Research integrity and the ethics of scholarly communication

- Scholarly communication is undergoing a **paradigm shift towards openness**.

- But at the same time (like any change) it requires investment and brings new challenges.

- It is reasonable to try to address these problems, because the global scientific community cannot go back to being closed.
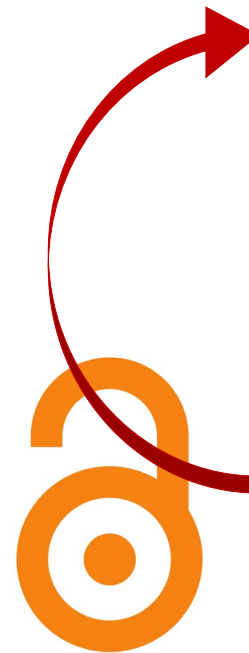
Open communication gives the opportunity to:

- higher efficiency,

- speed,

- fairness (solving the accessibility crisis),

- transparency,

- reproducibility.

How this opportunity will be seized depends on all stakeholders involved in the process of scholarly communication.

Planning
(**literary search**, hypotheses, **methods**, **pre-registration**, **data management plan**...)
↓
Conducting research (data collection)
↓
Analysis, interpretation, **communication**

Integrity issues in the scholarly communication cycle

Search in literature – accessibility crisis

Evaluation

inappropriate use of metrics

unsuitable for „research reality"

Conflicts of interests

weak control mechanisms

Research funders
(EU, states, agencies...)

Illegal copies of articles on academy social networks

Sci-Hub

libraries

Planning

underfunding

Too much competition destroys potential for cooperation

Publishing

Pressure for quantity – publishing for metrics (not meaning)

Abuse of voluntarism (gilft culture – „I do it for science/humankind...")

transfer of copyright

publishers

disadvantageous out-sourcing of publishing to the business sphere

questionable publishers (predátors)

buying/selling of authorship (contract cheating, paper mills)

plagiarism

„tortured phrases" etc

data fabrication/falsification

misuse of artificial intelligence

Researchers

- Publish for impact
- Need access
- „Gift culture"
- Habit of giving up control

researchers

Research conduct

failure of supervision and motivation

peer review crisis

citation cartels

Analysis of results
p-hacking   HARK-ing

overstatement of results

Research integrity crisis

sloppy science

Reproducibility crisis

Integrity issues in the academic environment

The integrity of scholarly communication is based on an overall attitude of integrity within the academic environment.

Students:
- Ignorance and disinterest (motivation issues: to learn as much as possible/do the best job or just put in as little effort as possible?)
- Plagiarism (spectrum), problematic citing
- Citing of unreliable resources
- Contract cheating (selling/buying of theses)
- Misuse of digital tools and artificial intelligence

Faculties:
- Disinterest in needs of students (regarding integrity)
- Theft of authorship, authorship enforced by position of power, sold/bought or gift authorship
- Forced or gifted citations
- Publication in dubious (predatory) journals
- Fraud in the peer review process
- Academic inbreeding
- Misuse of artificial intelligence

Systemic issues affecting ethics:
- Disinterest in science
- Abuse of power
- Favoring "our people" in selection for grants, tenures, academic degrees etc.
- Uncertainty (leading to passivity or resistance to change)
- Underfunding
- Mismanagement
- Potemkin villages
- Gap (in opportunities) between declarations and reality
- Excessive pressure
- Frustration
- Accumulation of tasks and projects, falsification of hours, overworking of employees
- Neglect of sustainability

ENAI Portal to **support victims** of unethical behaviour in the academic environment https://academicintegrity.eu/victims/ (information, guidance)

Attitudes towards issues of publishing ethics are formed as early as the undergraduate...

Open educational resources in Czech language:

/ O projektu

akademickaetika.cz / O projektu

V roce 2020 se devět univerzit spojilo v projektu Posílení prevence plagiátorství ve studentských pracích, jehož cílem bylo zahájení intenzivní debaty a praktické spolupráce v oblasti podpory akademické etiky a prevence podvodných praktik v akademickém psaní. Projekt navrhl definici plagiátorství pro české prostředí a na pomoc studentům a akademikům vznikla příručka pomáhající nedopustit se plagiátorství omylem.

How to prevent plagiarism, a guide for academics

Jak předcházet plagiátorství, příručka pro akademiky
https://karolinum.cz/knihy/foltynek-jak-predchazet-plagiatorstvi-ve-studentskych-pracich-24082

How to prevent plagiarism, a guide for students

Jak se vyhnout plagiátorství, příručka pro studenty
https://karolinum.cz/knihy/foltynek-jak-predchazet-plagiatorstvi-ve-studentskych-pracich-24082

How to prevent contract cheating

Jak předcházet psaní na zakázku
https://www.akademickaetika.cz/aktuality/prirucka-jak-predchazet-psani-praci-na-zakazku/

Academic integrity checklists – for supervisors, doctoral students, maters students

Is it all well-known to you? Use the checklists as a conversation-starter with students – you may find that what is obvious to you may not be perceived in the same way.

European Network for Academic Integrity

ABOUT ENAI   MEMBERSHIP   RESOURCES   PROJECTS   EVENTS   WORKING GROUPS   NEWS

bridge project

BRIDGE Checklists

available also in Slovak translation

Checklists in English

> ABOUT BRIDGE

> NEWSLETTER

> EVENTS

> 2ND MULTIPLIER BRIDGE EVENT

> PRESENTATIONS

> PROJECT OUTPUTS

> GUIDELINES

> CHECKLISTS

Checklists for Supervisors

Checklists for Doctoral Students

Checklists for Master Students

https://www.academicintegrity.eu/wp/bridge-checklists/

ENAI on ethical use of AI

AI can be a valuable and soon to be indispensable research assistant, or can be used for misconduct.

- Acknowledgement

- Alert users

- Learning with purpose

- Teachers training in AI

- National guidance

- Institutional policies

Basics:
- not to be silent about it (students will explore it anyway),
- to set the rules,
- to use its potential to develop students' analytical and critical thinking.

https://www.academicintegrity.eu/wp/

Foltýnek et al., 2023, https://doi.org/10.1007/s40979-023-00133-4

ENAI RECOMMENDATIONS ON THE ETHICAL USE OF AI

European Network for Academic Integrity

ACKNOWLEDGEMENT OF AI
AI tools should be acknowledged when used to influence ideas or generate content.

MISLEADING INFORMATION
Users should be aware that the outputs of AI tools can include biased, inaccurate, or incorrect content.

STUDENTS' LEARNING
Students should learn the purpose of the learning activities and assessment, and how to develop their skills.

TEACHERS' TRAINING IN AI
Teachers should receive training on ethical teaching and learning practices using AI.

NATIONAL GUIDANCE
National guidance should provide overarching advice on what institutions should include in their policies on AI.

INSTITUTIONAL POLICIES
Institutional policies should define when and how the use of AI is allowed and how it should be acknowledged.

Authors: Tomáš Foltýnek, Sonja Bjelobaba, Irene Glendinning, Zeenath Reza Khan, Rita Santos, Pegi Pavletić, Július Kravjar

Plagiarism - solutions

- As an author: write with your own words.

- As a teacher:

  - give interesting, **creative assignments** (reduce monotony),

  - help them to cope with **time management**,

  - focus on students' **intrinsic motivation** and the goal of scholarly communication: communicating something new to the community for a scholarly article, demonstrating the ability to work and use resources properly for a thesis,

  - citation managers can also help: Zotero, EndNote, Mendeley, BibTeX.

  - **Emphasize citation ethics**: Cite what is relevant to the thesis, neither less nor more. Donated/bought citations are not just "a few extra words", but contribute to information noise and distort the evaluation of science.

- As a journal editor: **insist on the originality of manuscripts.** Check for originality within standard editorial procedures - but interpret protocols point by point (percentage of agreement may be increased by methodology, citation of laws, etc.)

- In evaluation of science: **reduce pressure on quantity, focus on quality**.

On self-plagiarism: https://textrecycling.org/resources/best-practices-for-researchers/).
https://textrecycling.org/

ENAI on plagiarism prevention

Panel 1

TEXT-MATCHING REPORT

40%

Layout of matches in the text:

Sources found in total: 123

List of matches:
Source(s) 1
- ICAI, 2021: https://www.academicintegrity.org/fundamental-values/
- Palmer College, 2021: https://www.palmer.edu/about-us/office-of-compliance/student-code-of-ethics/fundamental-values-of-academic-integrity/
- Queen's University, n.d.: https://www.queensu.ca/academicintegrity/general-information/integrity-policies

Source(s) 2
- ENAI, 2018: http://www.academicintegrity.eu/wp/glossary/academic-integrity/

Source(s) 3
- Bretag & Green, 2014, The Role of Virtue Ethics Principles in Academic Integrity Breach Decision-Making: https://www.researchgate.net/profile/Tracey-Bretag/publication/271952268_The_Role_of_Virtue_Ethics_Principles_in_Academic_Integrity_Breach_Decision-Making/links/55123b810cf268a4aae9ec7c/The-Role-of-Virtue-Ethics-Principles-in-Academic-Integrity-Breach-Decision-Making.pdf

These are all matches relevant for the example.

Panel 2

3 Literature review

The topic of academic integrity is becoming very popular nowadays in all academia. We can see universities all over the world dealing with it and preventing academic dishonesty.

This literature review first starts with few definitions of academic integrity coming from international organisations. Subsequently, it continues with the importance of policies and ho it is important to follow.

The International Center for Academic Integrity (ICAI) describes the term academic integrity as following "*honesty, trust, fairness, respect, responsibility, and courage!*" which they call "*the six fundamental values!*" (ICAI, 2021). The European Network for Academic Integrity uses the following definition: "*Compliance with ethical and professional principles, standards, practices and consistent system of values, that serves as guidance for making decisions and taking actions in education, research and scholarship!*" (ENAI, 2018).

The Academic Integrity policy at The University provides the foundation for all decision making in relation to undergraduate student breaches of integrity. This policy has a clause that allows for 'contextual factors' to be considered, and in the database where decisions are filed, these are referred to as 'factors integral to the case'.

Carroll and Appleton (2005) and Carroll and Seymour (2006), emphasise the importance of a 'community of practice' of collegial academics who share information, advice and experience. This links well with one of the central tenets of virtue ethics, which is that one way to determine the appropriate course of action for any situation requiring ethical judgement is to ask, 'What would a virtuous person do in this situation?'

As AIBDMs in our own faculties, and as researchers in the field of academic integrity, we believe that the principles of virtue ethics should be an integral part of any university's academic integrity decision-making process, and that the policy should provide scope for this to occur.

Panel 3

References

Carroll, J. & Appleton, J. (2005). Towards consistent penalty decisions for breaches of academic regulations in one UK university. International Journal for Educational Integrity, 1 (1). Available at: <http://www.ojs.unisa.edu.au/index.php/IJEI/article/viewFile/15/5>. [Accessed 15 February 2021].

Carroll, J., & Seymour, D. (2006). *The effect of a penalty tariff on consistent decision-making in cases of student plagiarism.* Paper presented at the JISC International Plagiarism Conference. U.K.: Gateshead.

ENAI. (2018). *Academic Integrity* [online]. Available at: <http://www.academicintegrity.eu/wp/glossary/academic-integrity/>. [Accessed 15 February 2021].

ICAI. (2021). *Fundamental Values of Academic Integrity* [online]. Available at: <https://www.academicintegrity.org/fundamental-values/>. [Accessed 15 February 2021].

These are all references relevant to the example. There were no other sources in the student's list of references which would be relevant to the text in the example.

It is important to have tools to detect plagiarism, but it is even more important to act in the field of motivation.

ENAI: material on interpretation of similarity reports (Foltýnek a Dlabolová, 2021): https://dev.academicintegrity.eu/wp/materials/interpreting-similarity-reports/

Comperison of antiplagiarism softwares: Foltýnek et al. (2020): https://doi.org/10.1186/s41239-020-00192-4

Questionable/predatory publishing

Abuse of the **golden path to open access**. Journals that generate profit from collecting payments (APC) without providing the serious editorial work and peer review.

There is no incentive to gain readers and subscribers, and no reason to care about quality - on the contrary: it is profitable to attract as many paying authors as possible.

- websites designed as advertising for authors, not to attract readers.
(compare: toll-access magazines with additional fees)
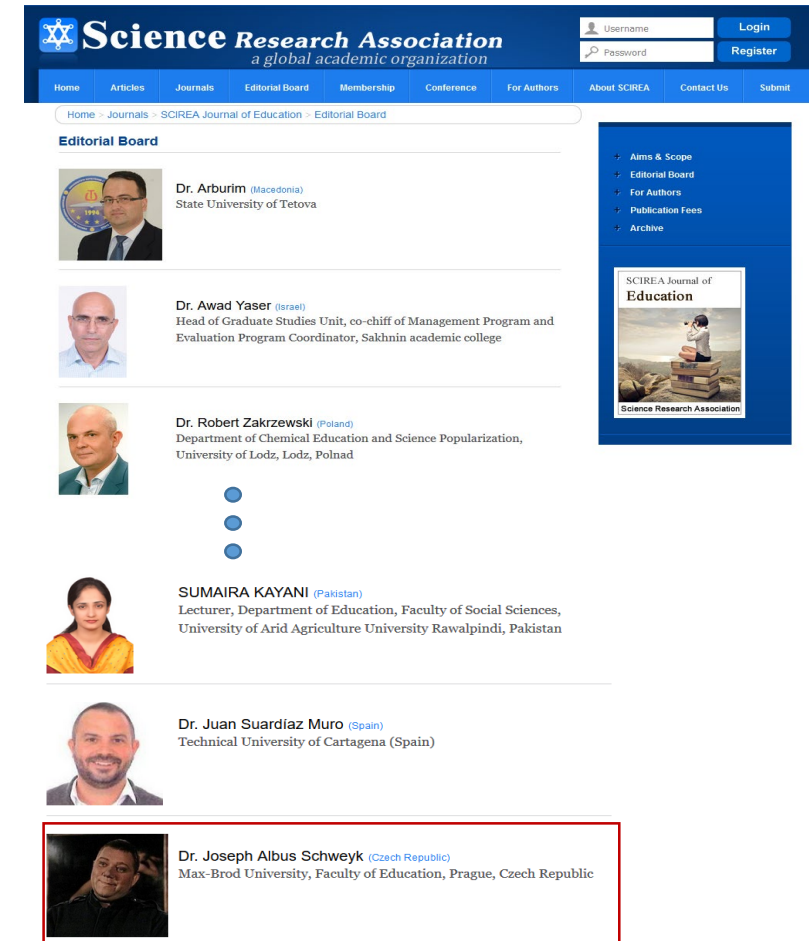
Because of the lack of control, publishing misconduct is frequently found there:
- republication of the same research
- falsification of dataplagiarism
- copying texts without citing the source...

Predatory publishing destroys the most valuable element of scientific communication - trust.

- **Jeffrey Beall**: As University of Colorado Librarian, he created a list of predatory journals and publishers in 2010 (based on tips from scholars and his own assessment). In January 2017, he withdrew the list (publishers threatened him and his employer with lawsuits)
- What remains: **Predatory Reports** (https://predatoryreports.org/)

Report on predatory publishing (2020): https://www.interacademies.org/project/predatorypublishing

Questionable/predatory publishing – solutions:

- Outreach, active mentoring of students and young scholars with emphasis on the spectrum of journals in their field, critical thinking, and the ability to evaluate scholarly text,

- Education, e.g. **Stop Predatory Practices** (online course),

- Support of **open peer review** or systems of post-publishing review independent from the journal (e.g. **PubPeer** https://pubpeer.com/)

- Transparency on every step of the way, in accordance with principles of **COPE** (Committee on Publication Ethics)

- As a **journal**: Differ from non-serious publishers by professionalism, honest approach, absence of spamming or any kind of misleading, membership in **DOAJ** (Directry of Open Access Journals), **OASPA** (Open Access Scholarly Publishers Association), taking part in independent evaluation of journals as **QOAM** (Quality Open Access Marker: https://www.qoam.eu/)...

- Prefer open access model without APC, if possible (**platinum/diamond OA**: the journal is funded by contributions from foundations, learned societies, research institutions...)

- In evaluation of science: **reduce pressure on quantity, focus on quality**.

Identifying predatory academic journals and conferences (2023):
https://www.interacademies.org/publication/identifying-predatory-academic-journals-and-conferences

Stop predatory practices

For those who not believe in lists – teaching module in Czech and English (team of Tereza Šímová, AVČR)

https://www.stoppredatorypractice.com/teaching-module

Transparency and openness according to Open Science Framweork

Transparency and Openness Promotion (TOP) guidelines

- Principles of transparency and openness in journal policies and editorial processes

- In contrast to the principles of COPE/DOAJ/OASPA/WAME (focused more on how the journal communicates about itself) the TOP principles address specific practices with implications for research reproducibility :

  - **Citation** (not only of articles on which the author has drawn, but also of **data, code, materials...**) - **consistently citing the various forms of contributions of other scientists increases their motivation to be open**,

  - Transparency about data,

  - Transparency about analytical methods (code),

  - Transparency about materials,

  - Transparency about design and analysis,

  - Pre-registration of studies,

  - Pre-registration of analyses,

  - Replication of research.

  - In the material itself, there are several versions of the proposed wording at different levels (Level 1, 2, 3), depending on how deeply the journal wants/needs to address the topic in its policies.

  - Journal policies can be evaluated using the TOP factor https://topfactor.org/.

„The journal article is central to the process of scholarly communication. Guidelines for authors define which aspects of the research process should be made available to the community for evaluation, critique, reuse and dissemination. Scientists recognize the value of transparency, openness, and reproducibility. **Improving journal policies can help make these values more evident in everyday practice and ultimately improve public trust in science itself.“**

Nosek et al. 2015: https://europepmc.org/backend/ptpmcrender.fcgi?accid=PMC4550299&blobtype=pdf

Publication integrity

Publication integrity checklist **REAPPRAISED**

- Original (Grey et al. 2020): https://www.nature.com/articles/d41586-019-03959-6

- Slovak translation: https://otvorenaveda.cvtisr.sk/wp-content/uploads/2023/03/nature-comment-integrity-checklist-CC_SK.pdf

KONTROLNÝ ZOZNAM "REAPPRAISED" PRE HODNOTENIE PUBLIKAČNEJ INTEGRITY

Nie všetky položky je možné aplikovať na každú publikáciu,
a pre jednotlivé kategórie budú možno relevantné aj iné otázky.

R — Research governance — Riadenie výskumu
- ☐ Sú špecifikované všetky lokality, kde sa výskum odohrával a sú tieto informácie vierohodné?
- ☐ Je uvedený zdroj financovania?
- ☐ Bol výskum registrovaný?
- ☐ Sú detaily v publikácii (ako dátumy a metódy výskumu) konzistentné s tými v registračných dokumentoch?

E — Ethics — Etika
- ☐ Existuje dôkaz, že bola práca schválená osobitnou, uznávanou komisiou?
- ☐ Vyvstali podozrenia na použitie neetických postupov?

A — Authorship — Autorstvo
- ☐ Spĺňajú všetci autori kritériá autorstva?
- ☐ Sú k publikácii pridané vyhlásenia o miere autorského prispenia (contributorship statements)?
- ☐ Sú tieto vyhlásenia úplné?
- ☐ Je autorstvo súvisiacich článkov konzistentné?
- ☐ Môžu spoluautori potvrdiť dôveryhodnosť článku?

P — Productivity — Produktivita
- ☐ Je objem práce deklarovaný výskumnou skupinou vierohodný, aj pri zarátaní objemu naznačovaného súbežnými štúdiami dotyčnej skupiny?
- ☐ Je deklarované personálne zabezpečenie adekvátne pre realizáciu práce tak, ako sa uvádza v článku?

P — Plagiarism — Plagiátorstvo
- ☐ Existujú dôkazy o kopírovaní častí práce?
- ☐ Existujú dôkazy o recyklovaní textu (vystrihnutí a nalepení častí textu medzi článkami skupiny), prípadne textu, ktorý nie konzistentný s daným výskumom?

R — Research conduct — Realizácia výskumu
- ☐ Je nábor účastníkov reálny v rámci stanoveného časového rámca

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- ☐ 'P-hacking': zaujaté alebo selektívne analýzy, ktoré presadzujú krehké (nedostatočne robustné) výsledky
- ☐ iné nepriznané viacnásobné štatistické testovanie?
- ☐ Je prítomné "prepínanie výsledkov" — teda analýza a diskusia sa sústredia na iné aspekty než sú uvedené v registrovaných plánoch výskumu?

I — Image manipulation — Manipulácia obrázkov
- ☐ Existujú dôkazy o manipulácii alebo duplikácii v rámci obrázkov?

S — Statistics and data — Štatistika a dáta
- ☐ Sú niektoré dáta "nemožné"?
  - ☐ Sú priemerné hodnoty podskupín nekompatibilné s priemernými hodnotami celej kohorty?
  - ☐ Sú vykazované sumárne dáta kompatibilné s vykazovaným rozsahom?
  - ☐ Sú vykazované sumárne dáta identické medzi skúmanými skupinami?
  - ☐ Existujú nezrovnalosti medzi údajmi uvedenými v obrázkoch, tabuľkách a texte?
  - ☐ Sú výsledky štatistických testov kompatibilné s udávanými dátami?
- ☐ Sú niektoré dáta nevierohodné?
  - ☐ Sú hociktoré z východiskových dát nadmerne podobné alebo odlišné medzi náhodne vybranými skupinami?
  - ☐ Sú niektoré z výsledných dát neočakávane odľahlé (outliers)?
  - ☐ Sú frekvencie výsledkov nezvyčajné?
  - ☐ Sú niektoré dáta mimo očakávaného rozsahu pre dané pohlavie, vek alebo chorobu?
  - ☐ Sú nezrovnalosti medzi hodnotami percentuálneho podielu a absolútnymi hodnotami?
  - ☐ Sú nezrovnalosti medzi uvádzanými dátami a kritériami výberu účastníkov do výskumu?
  - ☐ Sú odchýlky biologických premenných prekvapivo konzistentné v priebehu času?

What can you do?

- Stay interested
- Talk about ethics and integrity, don't shy away from ethics committee membership or editorial board duties,
- take back control of academic publishing, don't sell your scholarly journals to big publishers
- Practice openness
- Teach openness and the practice of reproducible research in our courses, introduce courses that are fully dedicated to it (e.g. open science)
- Ethics in relation to students - make them see the importance of why they do things and why it is worth doing them with integrity (same for academics)
- Support system of scrutiny (most people tend to cheat a bit in their favour when no one is looking), but the focus on a system of intrinsic motivation - to see the aim and meaning in what we do.
- Demand a change in how science is evaluated (e.g. make your institution become a COARA member).

New Technologies and Training Needs for Research Ethics Committees
13. 11. 2023, 11.00-12.30

- European University Association
- https://eua.eu/events/290-new-technologies-and-training-needs-for-research-ethics-committees.html
- Focus group,
- online

Improving Research Ethics Expertise and Competencies to Ensure Reliability and Trust in Science (iRECS) project, topics:

- **Extended reality** (broad term for technologies that create virtual and simulated experiences. It includes natural language processing models, like ChatGPT, virtual, augmented and mixed reality),
- **AI for health** (technology that can automate everything from predictions, recommendations and decision-making),
- **Genome editing**, **Biobanking** (ethical and legal issues like consent, privacy and ownership of human biological material).

Upcomming
Conference on open science

- **28. 11. 2023**
- Bratislava, Pálfy palace (Zámocká 47)

- International speakers:
  - Anna Walek (IATUL)
  - Toma Susi (COARA)
  - Vanessa Proudman (SPARC Europe)
  - Jiří Jirát (National Library of Technology, Prague)
  - Eva Hnátková (National Library of Technology, Prague)

- talks on current topics in open science

(open access publishing, open education, how to create resilient and sustainable open science ecosystem)

- **panel discussion on research assessment**

- CALL for posters / lightning talks: share your open science stories, experiences and achievements in Slovak academic environment.

Slovak
Open Science Forum

28.11.2023 od 9:00

EURÓPSKA ÚNIA
Európske štrukturálne a investičné fondy
OP Integrovaná infraštruktúra 2014 – 2020

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NISPEZ°

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More information: https://otvorenaveda.cvtisr.sk/28-11-2023-slovak-open-science-forum/

Thank you for your attention

If you have any questions,
or want to contribute
(poster/lightning talk) in Slovak
Open Science forum,
feel free to write to me at:
zuzana.stozicka@cvtisr.sk