

# SHAPING THE FUTURE OF RESEARCH: THE CASE FOR OPEN ACCESS AND OPEN SCIENCE AT FUT MINNA

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## Presentation Outline



- Setting the Stage
- Introduction
- How can Open Science drive Research Excellence
- Open Publishing Models
- APCs and Commodification of Research
- Open Access and Science in FUT Minna
- Conclusion



Until the lion tells his side of the story, the tale of the hunt will always glorify the hunter.

African Proverb





Knowledge generation is perceived as a prerogative of the developed countries.

Africa is looked at as mostly an area to be studied not a place from which to speak or write (Sengupta, 2020).

Nigeria has over 107 universities offering postgraduate programmes; and research findings in the form of theses and dissertations are churned out annually.

In addition, there are approximately 987 research journals in Nigeria. *Olyhoek*, 2023





Although African research is on the increase, its presence within the global scientific research ecosystem is weak. Africa is said to have contributed to only 2.2% of the world's scholarly articles. *UNESCO Science Report*, 2020.

So, what are the issues?





## INTRODUCTION



### **Research Culture**

We love to hoard information! We do not have an open research culture where we openly share our research process from start to finish within ethical limits.



The research community have outsourced research publishing standards to outsiders, due to lack of commitment, priority or both.



Inadequate open science infrastructure to disseminate research. Open science infrastructure are tools, technologies, and resources needed to support openness. E.g.- repositories (data or preprints), persistent identifiers, Open access journals or books.



## HOW CAN OPEN SCIENCE DRIVE RESEARCH EXCELLENCE?



#### What is open science?

Open science a set of principles and practices of making the entire research lifecycle, from inception to dissemination, as transparent and accessible as possible within ethical limits.

Open science is about making sure not only that scientific knowledge is accessible but also that the production of that knowledge itself is inclusive, transparent, equitable and sustainable. *UNESCO Declaration on Open Science* 



## HOW CAN OPEN SCIENCE DRIVE RESEARCH EXCELLENCE?

## Benefits of open science



Efficiency



Collaboration and societal benefits



Quality



**Ethical Research** 



Visibility



## HOW CAN OPEN SCIENCE DRIVE RESEARCH EXCELLENCE?

Research Excellence



Openness

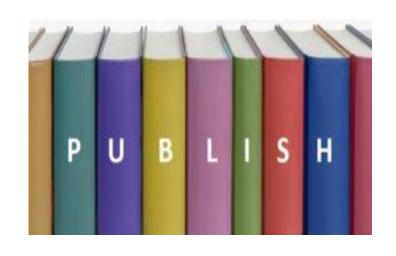
Research advances knowledge, addresses critical societal challenges and fosters a culture of continuous learning and improvement within the scientific community.

To achieve excellence for a concept like research, the process and outputs should be *widely accessible* (open research articles, data articles etc), *rigorously conducted* (open methods, open data) and built upon a foundation of *transparency and collaboration* (open peer review).

A concept that Open Science underpins



## OPEN ACCESS PUBLISHING MODELS



#### **Gold/APC-OA Publishing Model**

Institutions, funders, researchers pay Article Publishing Charges (APCs) to have research outputs openly published with commercial publishers.

### Diamond/No-fee/Non-APC OA Publishing Model

Research-community driven and no APCs is paid by either the author or reader.

#### **Green OA Publishing Model**

Researchers don't pay APCs, but can share pre-peer reviewed manuscript. Researchers don't own the final copyright and readers must pay to read the final published version



# Article Publishing Charges-Based Model of OA and Commodification of Research

One of the controversies of Open Access publishing is the exorbitant APCs charged by journals outside Nigeria. (When research excellence metrics are driven by profit interests).

## Consequences of transferring the burden of APCs on authors

Exacerbates the dominance of the global north as knowledge generators, because authors from Africa would opt to publish and cede their copyright in closed access format.

APCs have led to some form of academic-colonialism, where what is being published [mostly] comes from that part of the world that can afford to pay the publication costs. (Sengupta 2020).

ii. Encourages research malpractices in the guise for sustainability.



### Journals from the Global North

Rank	Gross Annual Salary (NGN)	Approx Amount in USD
Graduate Assistant	2327557	1521
Assistant Lecturer	2599713	1699
Lecturer II	2887448	1887
Lecturer I	3511653	2295
Senior Lecturer	4765058	3114
Associate Professor	5699772	3725
Professor	7328847	4790



#### Journal of Academic Librarianship

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Consolidated Universities Academic Salary Structure (CONUASS). Source: National Salary, Income and Wages Commission (2024)

Impact Factor CiteScore Time to 1st decision 72 days — Acceptance Acceptance 72 days — Subscription

Subscription

Subscription

No publishing charge (APC), excl. taxes Your article will be made publicly available upon publication Figure 1. Time to acceptance Acceptance Acceptance 72 days — No publishing charge Your article can be shared according to this journal's article sharing policy

The alternative here is to publish the article and cede the copyright to the publisher in a paywalled journal.

# Article Publishing Charges-Based Model of OA and Commodification of Research

## Journals within Nigeria or Africa

The APCs are modest compared to the journals from the global north, however, these charges are sometimes beyond the reach for some researchers.

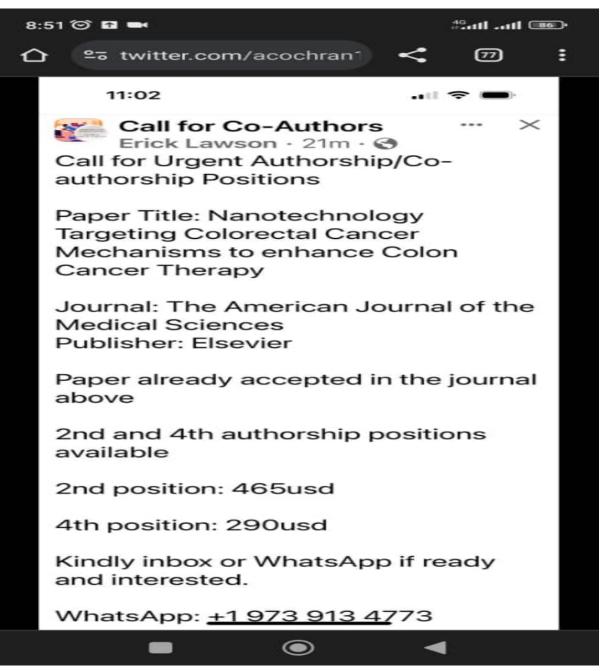
Nigeria is home to many researchers who struggle with financial constraints, so a practice like 'add my name syndrome' is a common parody for research collaboration (Afebuameh, 2021). Most times, in reality, it is just a guise for shared cost.



For the very few regional journals that don't charge APCs, they adopt the pay-per-view article access. Again, access to articles are restricted because users researchers can't afford it.



Article Publishing
Charges-Based Model of
OA and
Commodification of
Research





Article
Publishing
Charges-Based
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## Norway university committee recommends probe into the country's most productive researcher

In 2019, Filippo Berto was hailed as Norway's most productive researcher, publishing a new study on average every two to three days.

Five years on, a committee appointed by the Norwegian University of Science and Technology (NTNU), where Berto, a



nature > news > article

NEWS | 12 December 2023

## More than 10,000 research papers were retracted in 2023 – a new record

The number of articles being retracted rose sharply this year. Integrity experts say that this is only the tip of the iceberg.

#### Elsevier investigating geology journal after allegations of pal review

Elsevier is investigating the journal *Geoscience Frontiers* after a PubPeer thread flagged an editorial advisor whose articles in the journal were edited by his frequent co-authors.

The <u>editorial advisor</u>, <u>M. Santosh</u>, is a professor at the University of Adelaide in Australia and a "Highly Cited Researcher" with



M. Santosh

more than 1,500 published articles, according to Clarivate's Web of

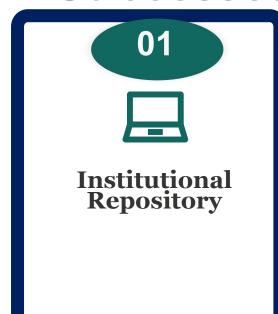


## Open Access & Science in Federal University of Technology Minna



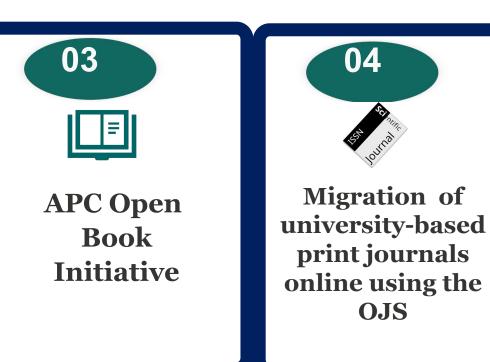
## Open Access & Science in FUT Minna-

## Successes





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## Open Access & Science in FUT MinnaThreats

- Institutional Ownership of Research Process and Infrastructure
- Research Commercialisation
- Data Security
- Open Access Funding
- Disparity in Research Procedures of Disciplines for Assessment



## Open Access & Science in FUT Minna-Call to Action

#### **Research Policy**

The university should position itself among public universities as a leader in open science by adopting an open science policy OR incorporating open research practices into parts of the institutional research policy. The policy shall inform the governance of open research in FUT Minna

#### **Institutional-Based Journals**



Strengthen and support the funding of the institutional based journals to publish using the no-fee publishing model.



## Open Access & Science in FUT Minna-Call to Action

### **Open Access Publishing**



Open access publishing of all outputs emanating from university-funded researches, either as pre-prints or articles in OA journals

#### **Research Assessment Reforms**



Incentivise open science practices and publishing in the no-fee publishing journals, with emphasis on the quality of research rather than quantity.



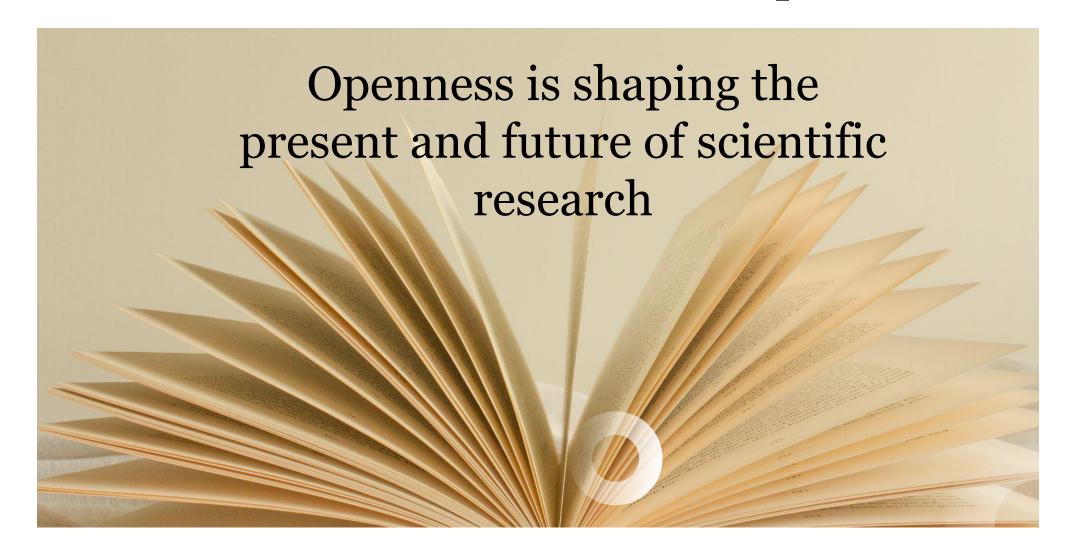
## CONCLUSION

Ultimately, the goal of research is to generate knowledge that improves society and the life of people. What is the essence of tons of research outputs churned out if they are of no benefit to the society?

Therefore, we must embrace practices that underpins the essence of research. We must embrace openness in our research practices!



## The Future of Science is Open





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